

ELENCO DELLE PUBBLICAZIONI di

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1. Vinciguerra A., Venturi A., Ceccarelli M., "On the Computer Simulation Path of a Spin-Axis Point in Gyro-Compasses", International Symposium on Design and Synthesis, Tokyo, 11-13 July 1984, pp. 825-829.
2. Vinciguerra A., Lee T.W., Ceccarelli M., "Utilità nell'uso di coordinate sferiche per la risoluzione di alcuni problemi di cinematica applicata", VII Congresso Nazionale AIMETA, Trieste, 2-5 Ott. 1984, Vol.III, pp. 1-12.
3. Ceccarelli M., Nieto N. J., Vinciguerra A., "Some Kinematic Considerations on a Chebyshev Four-Bar Approximate Straight-Line and Quasi-Circular Mechanism", Anales de Ingenieria Mecànica, Associazione Spagnola di Ingegneria Meccanica, Gijon, Año 2, Vol.II, Dic. 1984, pp. 358-363.
4. Ceccarelli M., Nieto N. J., Vinciguerra A., "On the Coupler Curves of Watt Four-Bar Approximate Straight-Line Mechanisms", Anales de Ingenieria Mecànica, Associazione Spagnola di Ingegneria Meccanica, Madrid, Año 3, n.3 Dic. 1985, pp. 125-135.
5. Ceccarelli M., Nieto N. J., Vinciguerra A., Venturi A., "Kinematic Characteristics of Some Evans Mechanisms", Anales de Ingenieria Mecànica, Associazione Spagnola di Ingegneria Meccanica, Madrid, Año 3, n.3, Dic. 1985, pp. 137-142.
6. Venturi A., Vinciguerra A. Nieto N. J., Ceccarelli M., "The Rocker Oscillations of Hypocycloid Mechanisms", Anales de Ingenieria Mecànica, Associazione Spagnola di Ingegneria Meccanica, Madrid, Año 3, n.3, Dic. 1985, pp. 519-524.
7. Ceccarelli M., Cuadrado I.J., Fuenmayor F.F., "A Synthesis Method of Some Circle-Tracing Four-Bar Linkages", Anales de Ingenieria Mecànica, Associazione Spagnola di Ingegneria Meccanica, Madrid, Año 3, n.3, Dic. 1985, pp. 119-123.
8. **Vinciguerra A., Aulisa L., Ceccarelli M., "Stabilità e comportamento elastico del rachide", *Minerva Ortopedica e Traumatologica*, Vol.37, n.11, Nov. 1986, pp. 717-723.**
9. Ceccarelli M., "Analytical Design of Circle-Tracing Four-Bar Linkages", II Convegno Italiano di Meccanica Computazionale, Roma, Giu. 1987, pp. 235-239.
10. Vinciguerra A., Nieto N. J., Ceccarelli M., Venturi A., "On a Mechanical Model of an Unmanned Deep Ocean Remote Operated System", VII IFToMM World Congress, Sevilla, Sett. 1987, Vol.2, pp. 1163-1166.
11. Nieto N. J., Vinciguerra A., Brach del Prever E., Ceccarelli M., "Estimate of Torsional Stiffness and Shear Moduli of Human Cervical Spine Discs", Anales de Ingenieria Mecànica, Associazione Spagnola di Ingegneria Meccanica, Murcia, Año 5, n.2, Dic. 1987, pp. 193-197.
12. Ceccarelli M., Vinciguerra A., "A Design Method of Three Revolute Open Chain Manipulators", VII CISM-IFTToMM Symposium on Theory and Practice of Robots and Manipulators, Hermes, Paris, 1990, pp. 318-325.
13. Vinciguerra A., Venturi A., Ceccarelli M., "A Method to Introduce Momentary Higher-Order Dwells in Hypocycloidal Reciprocators", IX Congresso Nazionale AIMETA, Bari, Ott. 1988, Vol.I, pp. 197-200.
14. Ceccarelli M., Nieto N. J., "Kinematic Evaluation of a Robotic Gripper", Anales de Ingenieria Mecànica, Associazione Spagnola di Ingegneria Meccanica, Valencia, Año 6, n.1, Dic. 1988, pp. 159-164.
15. Ceccarelli M., "On the Workspace of 3R Robot Arms", Fifth IFTToMM International Symposium on Theory and Practice of Mechanisms, Bucharest, 1989, Vol.II-1, pp. 37-46.
16. Ceccarelli M., Vinciguerra A., Venturi A., "On the Accuracy of Chebyshev's Approximate Circle-Tracing Mechanisms", X Congresso Nazionale AIMETA, Pisa, Ott. 1990, Vol.2, pp. 605-610.
17. Ceccarelli M., Cuadrado I.J., "North Pointing Stability in Gyrocompasses", Anales de Ingenieria Mecànica, Associazione Spagnola di Ingegneria Meccanica, Zaragoza, Año 8, n.1, 1990, pp. 69-73.
18. **Vinciguerra A., Ceccarelli M., Nieto N.J., "El Movimiento de los Dedos en el Diseño de las Pinzas de Robots", *Revista de Robotica y de Automatizacion Integrada*, Ed. Pulsar, Barcellona, 1991, n.57, pp. 99-103.**
19. Ceccarelli M., "Grasping Force Capability of Gripper Mechanisms", VIIIth IFTToMM World Congress, Prague, Ago. 1991, Vol.4, pp. 1181-1184.
20. Aulisa L., Robles M., Vinciguerra A., Ceccarelli M., "Biomechanical Principles in Segmental Spinal Instrumentation", Fourth International Symposium on Biomedical Engineering, Peñíscola, Sett. 1991, Vol.1, pp. 67-69.
21. Mata V., Ceccarelli M., Valero F., "Diseño Optimo de un Manipulador Espacial con Tres Pares de Revolucion", Segundo Congreso de la Asociación Española de Robotica, Saragozza, Nov. 1991, pp. 213-220.
22. **Ceccarelli M., Cuadrado J.I., Mata Amela V., "Cómo Proyectar la Cadena Cinemática de Robots Manipuladores", *Rivista Progetto 2000*, Ed. Pulsar, Barcellona, Feb. 1992, n.74, pp. 67-77.**
23. Ceccarelli M., Vinciguerra A., "Workspace Evaluation of General 4R Manipulators", 3rd International Workshop on Advances in Robot Kinematics, Parenti Castelli V. & Lenarcic J. (Editors), Ferrara, Sett. 1992, pp.313-317.
24. Ceccarelli M., "A Synthesis Algorithm of Three-Revolute Manipulators by means of the Workspace Contour Algebraic Formulation", 22nd ASME Biennial Mechanisms Conference, Scottsdale, Sett. 1992, DE-Vol.45, pp.397-403.
25. Ceccarelli M., Mata V., Valero F., "An Optimization Formulation of Three-Revolute Manipulator Synthesis", XI Congresso Nazionale AIMETA, Trento, Sett. 1992, Vol. Meccanica delle Macchine, pp.91-96.
- 25bis. Ceccarelli M., Mata V., Valero F., "Optimal Synthesis of Three-Revolute Manipulators", AIMETA International Journal Meccanica, Kluwer, Dordrecht, 1994, Vol.29, n.1, pp.95-103.
26. Ceccarelli M., Gradini G., Papa L., "On the Design of Driving Mechanisms in Two-Finger Grippers", 23rd International Symposium on Industrial Robots, Barcellona, Ott. 1992, pp.568-571.
27. Ceccarelli M., Gradini G., "Gripper a due dita: classificazione ed ottimizzazione", Convegno SIRI-UCIMU "Il Montaggio Automatico", Milano, 26 Nov. 1992, pp. 13.1-13.15.
- 27bis. **Ceccarelli M., Gradini G., "Meccanismi per pinze di robot", rivista dell'Associazione Italiana Progettisti Industriali "Progettare", 1994, n.167, pp.76-81.**
28. Ceccarelli M., Garcia-Lomas J., "On the Dynamics of Two-Link Manipulators", Sixth IFTToMM International Symposium on Theory and Practice of Mechanisms, Bucharest, Giugno 1993, Vol.II, pp.45-52.
29. Ceccarelli M., Carrino L., "Designing Manipulator Structures for Robotized Manufacturing", 2nd International Workshop on Robotics in Alpe Adria Region, Krems, Giugno 1993, SU 3.1-pp.1-8.
- 29bis. Ceccarelli M., Carrino L., "Designing Manipulator Structures for Robotized Manufacturing", Robotics in Alpe Adria Region, P.Kopacek (Editor), Springer-Verlag, Wien, 1994, pp.84-88.
30. Ceccarelli M., "Optimal Design and Location of Manipulators", NATO Advanced Study Institute on Computer Aided Analysis

- of Rigid and Flexible Mechanical Systems, Troia, Luglio 1993. Vol.II, pp.299-310.
- 30bis.Ceccarelli M., "Optimal Design and Location of Manipulators", in: Computational Dynamics in Multibody Systems, M.F.O.S. Pereira and J.A.C. Ambrosio (Editors), Kluwer, Dordrecht, 1995, pp.131-146.
31. Ceccarelli M., Nieto N.J., "El Agarre con Pinzas de Dos Dedos", 1° Congreso Iberoamericano di Ingegneria Meccanica, Madrid, 21-24 Settembre 1993, Vol.4, pp.171-176.
32. Mata A.V., Ceccarelli M., "Funciones Objetivo para la Optimizaciòn de la Cadena Cinemática de Robots", 1° Congreso Iberoamericano di Ingegneria Meccanica, Madrid, 21-24 Settembre 1993, Vol.3, pp.47-54.
33. Ceccarelli M., Ferraresi C., Sorli M., "Stiffness Evaluation of a 6 D.o.f. Platform Prototype", Third International Symposium on Measurements and Control in Robotics, Torino, Sett. 1993, pp.Bm.III 19-20.
34. Ceccarelli M., "A Boundary Formulation for General Hyper-Rings in 5R Manipulators", Sixth International Conference on Advanced Robotics, Tokyo, Nov. 1993, pp.631-636.
35. Sorli M., Ceccarelli M., "On the Workspace of a 6 D.o.f. Platform with Three Articulated Double-Parallelograms", Sixth International Conference on Advanced Robotics, Tokyo, Nov. 1993, pp.147-152.
36. Vinciguerra A., Ceccarelli M., "A Pitch Device for Dexterity Improvement of SCARA Robot", 24th International Symposium on Industrial Robots, Tokyo, Nov. 1993, pp.761-766.
37. Carrino L., Ceccarelli M., Anamateros E., "A Feasibility Study for the Automation of a Filament 3D Winding with an Advanced Composite Material", in: Advancing with Composites '94, CrivelliViscontiI. (Editor), Woodhead Publ., Cambridge, 1994, Vol.II, pp. 425-435.
38. Ceccarelli M., "Determination of the Workspace Boundary of a General N-Revolute Manipulator", in: Advances in Robot Kinematics and Computational Geometry, Lenarcic J. and Ravani B. (Editors), Kluwer, Dordrecht, 1994, pp.39-48.
39. Valero F., Cuadrado J.I., Mata V., Ceccarelli M., "Collision-Avoidance Robot Path Planning Using Fully Cartesian Coordinates", in: Advances in Robot Kinematics and Computational Geometry, Lenarcic J. and Ravani B. (Editors), Kluwer, Dordrecht, 1994, pp.485-494.
40. Ceccarelli M., "Design Problems for Industrial Robot Two-Finger Grippers", 3rd International Workshop on Robotics in Alpe-Adria Region, Bled, Luglio 1994, pp.117-120.
41. Belforte G., Ceccarelli M., Sorli M., "A Concurrent Design Formulation for a Two-Finger Gripper", Third World Congress on Computational Mechanics, Chiba, 1994, Vol.II, pp. 1735-1736.
42. Iacoviello F., Ceccarelli M., "A Fatigue Design for a Robot Arm", Third World Congress on Computational Mechanics, Chiba, 1994, Vol.II, pp. 1034-1035.
43. Ceccarelli M., "An Algebraic Formulation of the Workspace Determination of General 4R Manipulators", 10th CISM-IFTToMM Symposium on Theory and Practice of Robots and Manipulators, Morecki A. Bianchi G. and Jaworek K. (Eds), Springer-Verlag, Wien, 1995, pp.39-48.
44. Ceccarelli M., Cuadrado J.I., Mata V., Sorli M., "An Algorithm for the Inverse Kinematics of a Turin Platform", Anales de Ingenieria Mecànica, Associazione Spagnola di Ingegneria Meccanica, Valencia, Año 10, n.1, Nov. 1994, pp. 27-34.
45. Ceccarelli M., Iacoviello F., "A Fatigue Approach for Material Selection and Dimensional Design of Robots", Anales de Ingenieria Mecànica, Associazione Spagnola di Ingegneria Meccanica, Valencia, Año 10, n.1, Nov. 1994, pp. 19-25.
46. **Ceccarelli M., Vinciguerra A., "On the Workspace of General 4R Manipulators", International Journal of Robotics Research, The MIT Press, Cambridge, 1995, 14:2, pp.152-160.**
47. Cigola M., Ceccarelli M., "On the Evolution of Mechanisms Drawing", IXth IFTToMM World Congress, Milano, 1995, Vol.4, pp.3191-3195.
- 47bis.Ceccarelli M., Cigola M., "Evoluzione della rappresentazione grafica nel progetto dei meccanismi", Il Disegno nel Progetto: dalle origini al XVIII secolo, Docci M. (Editor), Gangemi, Roma, 1997, pp.427-433.
48. Vinciguerra A., Ceccarelli M., "Analysis and Synthesis of Chebyshev's Approximate Circle-Tracing Four-Bar Mechanisms", IXth IFTToMM World Congress, Milano, 1995, Vol.1, pp.311-315.
49. Ceccarelli M., "Screw Axis Defined by Giulio Mozzi in 1763", IXth IFTToMM World Congress, Milano, 1995, Vol.4, pp.3187-3190.
50. Ceccarelli M., Scaramuzza G., "Analytical Constraints for a Workspace Design of 2R Manipulators", Computational Kinematics '95, Merlet J.P and Ravani B. (Eds), Kluwer, Dordrecht, 1995, pp.173-182.
51. Ceccarelli M., Iacobone F., Carrino L., Anamateros E., "On the Manipulation of a Composite Material Roving for a 3D Winding Manufacturing", 26th International Symposium on Industrial Robots, Singapore, 1995, pp.597-602.
52. **Ceccarelli M., "A Synthesis Algorithm for Three-Revolute Manipulators by Using an Algebraic Formulation of Workspace Boundary", ASME Journal of Mechanical Design, Vol. 117, June 1995, pp.298-302.**
53. Ceccarelli M., Gabriele E., "Determining Primary and Secondary Workspaces of Industrial Robots", 4th International Workshop on Robotics in Alpe-Adria Region, Portsach, 1995, Vol-II, pp.259-262.
54. Ceccarelli M., Sorli M., "Effetto dei parametri geometrici del robot parallelo Piattaforma di Torino sullo spazio di lavoro", XII Congresso Nazionale AIMETA, Napoli, 1995, Vol.III - Meccanica delle Macchine, pp.93-98.
55. Ceccarelli M., "Mecanica en la automatizaciòn industrial: un caso de estudio para la separaciòn de ladrillos", CD 2° Congreso Iberoamericano di Ingegneria Meccanica, Belo Horizonte, 1995.
56. Ceccarelli M., Vinciguerra A., "Fiabilidad de una nueva Plataforma Romana", CD 2° Congreso Iberoamericano di Ingegneria Meccanica, Belo Horizonte, 1995.
57. Vinciguerra A., Ceccarelli M., "Geometria de manipulaciòn robotica durante el movimiento de cabaceo", CD 2° Congreso Iberoamericano di Ingegneria Meccanica, Belo Horizonte, 1995.
58. **Ceccarelli M., Valero F., Mata V., Cuadrado J.I., "Generation of Adjacent Configurations for a Collision-Free Path Planning of Manipulators", International Journal ROBOTICA, 1996, Vol.14, pp.391-396.**
59. **Ceccarelli M., "A Formulation for the Workspace Boundary of General N-Revolute Manipulators", IFTToMM Journal Mechanism and Machine Theory, Vol.31, 1996, pp.637-646.**
60. Ceccarelli M., "A Study of Feasibility for a New Wrist", Robotic and Manufacturing Systems, Vol.3, TSI Press, Albuquerque, 1996, pp.161-166.
61. Figliolini G., Marotta F., Ceccarelli M., "Analyzing Gripping Mechanisms for Two-Finger Grippers", 5th International Workshop on Robotics in Alpe-Adria-Danube Region RAAD'96, Budapest, 1996, pp.339-343.

62. Ceccarelli M., Luyckx I., Vanaelten W., "Grasp Forces in Two-Finger Grippers: Modelling and Measuring", 5th International Workshop on Robotics in Alpe-Adria-Danube Region RAAD'96, Budapest, 1996, pp. 321-326.
63. Ceccarelli M., "Feasible Workspace Regions for a Two-Revolute Manipulator Design", Recent Advances in Robot Kinematics, Kluwer, Dordrecht, 1996, pp.189-198.
64. Figliolini G., Ceccarelli M., "A Mechanical Design of an Electropneumatic Antropomorphic Walking Robot", 11th CISM-IFTOMM Symposium on Theory and Practice of Robots and Manipulators Ro.Man.Sy.'96, Springer-Verlag, Wien, 1996, pp.189-196.
65. Ceccarelli M., Volante G., Carrino L., Anamateros E., "A Feeding Device for Composite Material Rovings in a Robotized 3D Winding Manufacturing", 27th International Symposium on Industrial Robots, Milano, 1996, pp.987-992.
66. Ceccarelli M., Figliolini G., "A Modular Mechanical Design of a Two-Finger Gripper for Industrial Robots", 27th International Symposium on Industrial Robots, Milano, 1996, pp.695-700.
67. Ceccarelli M., "A Workspace Analysis for RRP Manipulators", Proc. of 1996 ASME Design Engineering Technical Conferences, 24th Biennial Mechanisms Conference, Irvine, 1996, paper 96DETC-Mech1012.
68. **Ceccarelli M., "Displacement Analysis of a Turin Platform Parallel Manipulator", International Journal Advanced Robotics, Vol.11, n.1, 1997, pp.17-31.**
69. **Valero F., Mata V., Cuadrado J.I., Ceccarelli M., "A Formulation for Path Planning of Manipulators in Complex Environments by using Adjacent Configurations", International Journal of Advanced Robotics, Vol.11, n.1, 1997, pp.33-56.**
70. Figliolini G., Ceccarelli M., "A Mechanical Design of an Articulated Finger Mechanism", Anales de Ingenieria Mecànica, Associazione Spagnola di Ingegneria Meccanica, Bilbao, Año 11, n.1, Vol.3, Feb 1997, pp. 259-266.
71. Ceccarelli M., "Diseño Optimo de Brazos Manipuladores respecto al Espacio de Trabajo", Anales de Ingenieria Mecànica, Associazione Spagnola di Ingegneria Meccanica, Bilbao, Año 11, n.1, Vol.3, Feb 1997, pp. 243-250
72. Deibe A., Cardenal J., Cuadrado J., Ceccarelli M., "Sintesis optima de mecanismos para pinzas roboticas", Associazione Spagnola di Ingegneria Meccanica, Bilbao, Año 11, n.1, Vol.3, Feb 1997, pp. 235-242.
73. Ceccarelli M., Pacitto D., Jimenez J.M., "A Dynamic simulation of Cassino Parallel Manipulator by means of COMPAMM Software", 6th International Workshop on Robotics in Alpe-Adria-Danube Region RAAD'97, Cassino, 1997, pp.277-282.
74. Moroni G., Carrino L., Ceccarelli M., Anamateros E., "Robotized Filament Winding Manufacturing: Some Experiences", 6th International Workshop on Robotics in Alpe-Adria-Danube Region RAAD'97, Cassino, 1997, pp.535-540.
75. Ceccarelli M., "An Optimum Design for a Gripping Mechanism", International Symposium Machines and Mechanisms ISMM'97, Beograd, 1997, pp.23-26.
76. Ceccarelli M., Figliolini G., "Trajectories Traced by a New Rome Platform", International Symposium Machines and Mechanisms ISMM'97, Beograd, 1997, pp.19-22.
77. Figliolini G., Ceccarelli M., "Easy Programming of an Electropneumatic Walking Robot", 5th International Symposium on Robot Control SYROCO'97, Nantes, 1997, Vol.3, pp.793-800.
78. Ceccarelli M., Figliolini G., "Proyecto de un mecanismo para un robot bipedo", 3° Congreso Iberoamericano di Ingegneria Meccanica, CD Proceedings, La Habana, 1997, paper 3-286.
79. Ceccarelli M., Cuadrado I., "Sobre el Essai sur la Composition des Machines por Jose Maria De Lanz y Augustin de Betancourt en 1808", 3° Congreso Iberoamericano di Ingegneria Meccanica, CD Proceedings, La Habana, 1997, paper 6-177.
80. Ceccarelli M., Figliolini G., "Progettazione di un meccanismo per gambe robotiche antropomorfe", XIII Congresso Nazionale AIMETA, Siena, 1997, Vol.II - Meccanica delle Macchine, pp.243-248.
81. Ceccarelli M., Figliolini G., "Mechanical Characteristics of CaPaMan (Cassino Parallel Manipulator)", 3rd Asian Conference on Robotics and Its Application, Tokyo, 1997, pp.301-308.
82. **Ceccarelli M., "A New 3 D.O.F. Parallel Spatial Mechanism", IFTOMM Journal Mechanism and Machine Theory, 1997, Vol.32, n.8, pp.895-902.**
83. Ceccarelli M., "Manipulation Analysis and Programming for Optimum use of Industrial Robots", World Automation Conference WAC'98, Anchorage, 1998, paper ISORA-033, pp.1-6.
84. Ceccarelli M., Figliolini G., Simon A., "Designing a Robotic Gripper for Harvesting of Horticulture Products", 28th Int. Symposium on Robotics ISR'98, Birmingham, 1998, pp.175-178.
85. Ceccarelli M., Ottaviano E., Besa A., "Experimental Determination of Robot Workspace by Using a Laser System", 7th International Workshop on Robotics in Alpe-Adria-Danube Region RAAD'98, Smolenice, 1998, pp.203-208.
86. Ceccarelli M., Figliolini G., "Electropneumatic Systems for Force Control for Two-Finger Grippers in Robots", 7th International Workshop on Robotics in Alpe-Adria-Danube Region RAAD'98, Smolenice, 1998, pp.197-202.
87. Ceccarelli M., "An Analytical Design of Telescopic Manipulator Arms for Prescribed Workspace", Advances in Robot Kinematics: Analysis and Control, Kluwer, Dordrecht, 1998, pp.247-254.
88. **Ceccarelli M., Sorli M., "Effect of Design Parameters on the Workspace of Turin Parallel Robot", International Journal of Robotics Research, Vol.17, n.8, 1998, pp.886-902.**
89. Figliolini G., Ceccarelli M., "A Motion Analysis for One Dof Anthropomorphic Finger Mechanism", CD Proc. of 1998 ASME Design Engineering Technical Conferences, 25th Biennial Mechanisms Conference, Atlanta, 1998, paper DETC98-Mech-5985.
90. Ceccarelli M., "A Stiffness Analysis for CaPaMan (Cassino Parallel Manipulator)", Proc. of Conference on New Machine Concepts for Handling and Manufacturing Devices on the Basis of Parallel Structures, VDI 1427, Braunschweig, 1998, pp.67-80.
91. Ceccarelli M., Lanni C., Mata V., "Problemas numericos en la evaluacion del Espacio de Trabajo de robots", Anales de Ingenieria Mecànica, Terrasa, Año 12, Vol. 1, Dic. 1998, pp.265-269.
92. Besa A.J., Rubio F. J., Ottaviano E., Ceccarelli M., "Utilizaciòn de un sistema de rastreo laser para la calibraciòn cinemàtica de un robot PUMA 500", Anales de Ingenieria Mecànica, Terrasa, Año 12, Vol. 1, Dic. 1998, pp. 225-231.
93. Figliolini G., Ceccarelli M., "Simplifying dynamic equation for planar mechanical systems", Anales de Ingenieria Mecànica, Terrasa, Año 12, Vol. 1, Dic. 1998, pp.304-309.
94. Ceccarelli M., "Workspace Analysis and Design of Open Chain Manipulators", Computing Anticipatory Systems, Dubois D.M. (Editor), American Institute of Physics, New York, 1998 pp.338-355.

95. **Ceccarelli M., "Mechanism schemes in Teaching: A Historical Overview", ASME Journal of Mechanical Design, 1998, Vol.120, pp.533-541.**
96. Ceccarelli M., "On the Workspace of Telescopic Manipulators", International Journal ROBOTICA, 1998, Vol.16, pp.691-696.
97. Figliolini G., Ceccarelli M., "Epicyclic Gearings and Timing Belts for an Articulated Finger", 4th World Congress on Gearing and Power Transission, Paris, 1999, Vol.3, pp 2533-2538.
98. **Ceccarelli M., "Analyzing a Robotized Workcell to Enhance Robot's Operation", Journal of Robotics and Mechatronics, 1999, Vol.11, n.1, pp.67-71.**
99. Ceccarelli M., Toti M.E., Ottaviano E., "CATRASYS (Cassino Tracking System): A New Measuring System for Workspace Evaluation of Robots", 8th International Workshop on Robotics in Alpe-Adria-Danube Region RAAD'99, Munich, 1999, pp. 19-24.
100. Ceccarelli M., Pugliese F., Carvalho J.C.M., "An Experimental System for Measuring CaPaMan Characteristics", 8th International Workshop on Robotics in Alpe-Adria-Danube Region RAAD'99, Munich, 1999, pp.31-36.
101. Ceccarelli M., "Cinematica della Biella Piana by Lorenzo Allievi in 1895", Xth IFToMM World Congress, Oulu, 1999, Vol.1 , pp. 37-42.
102. Ottaviano E., Ceccarelli M., Lanni C., "A Characterization of Ring Void in Workspace of Three-Revolute Manipulators", Xth IFToMM World Congress, Oulu, 1999, Vol.3, pp.1039-1044.
103. Lanni C., Ceccarelli M., Ottaviano E., Figliolini G., "Mechanisms for Pantograph Legs: Structures and Characteristics", Xth IFToMM World Congress, Oulu, 1999, Vol.3, pp.1196-1201.
104. Carvalho J.C.M., Ceccarelli M., "A Dynamic Analysis for Cassino Parallel Manipulator", Xth IFToMM World Congress, Oulu, 1999, Vol.3, pp.1202-1207.
105. **Ceccarelli M., Lanni C., "Sintesis optima de brazos manipuladores considerando las características de su espacio de trabajo", Revista Iberoamericana de Ingenieria Mecanica, Vol.3, n.1, 1999, pp.49-59.**
106. Ceccarelli M., "Grippers as Mechatronic Devices", Advances in Multibody Systems and Mechatronics, Duisburg, 1999, pp.115-130.
107. **Figliolini G., Ceccarelli M., "Walking Programming for an Electropneumatic Biped Robot", Journal of Mechatronics, 1999, Vol.9, pp.941-964.**
108. Ceccarelli M., Ottaviano E., Toti M., Lanni C., "Progettazione e Sperimentazione di CaTraSys (Cassino Tracking System)", XIV Congresso Nazionale AIMETA, Como, 1999, CD Proc., Meccanica applicata alle macchine - Paper 17.
109. Ceccarelli M., Carvalho J.C.M., Pugliese F., Lanni C., "CaPaMan as Sensored Earthquake Simulator, International Conference on Intelligent Robots and Systems IROS'99, Kyongju, 1999, Vol. 3, pp.1501-1506.
110. Lanni C., Ceccarelli M., Carvalho J.C.M., "An Analytical Design for Two-Circular Cams", 4° Congreso Iberoamericano di Ingenieria Mecanica, Santiago de Chile, 1999, Vol. 2.
111. Carvalho J.C.M., Ceccarelli M., "Earthquake Simulation by means of CAPAMAN", 4° Congreso Iberoamericano di Ingenieria Mecanica, Santiago de Chile, 1999, Vol. 2.
112. Gutiérrez A.G., Rozas R.R., Ceccarelli M., Figliolini G., "Estudio Comparativo de los Robots Bipedos de Santiago de Chile y EP-WAR de Cassino", 4° Congreso Iberoamericano de Ingenieria Mecanica, Santiago de Chile, 1999, Vol. 2.
113. Simon A., Ceccarelli M., E., Figliolini G., Cabrera J., "Organo aprehensor para la recoleccion de productos hortofructícolas", 4° Congreso Iberoamericano de Ingenieria Mecanica, Santiago de Chile, 1999, Vol. 2.
114. **Carvalho J.C.M., Ceccarelli M., "Seismic Motion Simulation Based on Cassino Parallel Manipulator", XVth Brazilian Congress on Mechanical Engineering COBEM99, Campinas, 1999, CD Proc., paper AAACEF-S22; Journal of the Brazilian Society of Mechanical Sciences, Vol.25, n.3, july 2002, pp.213-219.**
115. Ceccarelli M., Fino P.M., Jimenez J.M., "A Dynamic Analysis of Cassino Parallel Manipulator in Natural Coordinates", The International Workshop on Parallel Machines, Milano, 1999, paper PKM37, pp.87-92.
116. Ceccarelli M., "A Manipulation Analysis for Robot Programming", Int. Journal Robotica, 1999, Vol.17, pp.529-541.
117. Ceccarelli M., "Numerical Simulation and Experimental Determination of Manipulator Workspace", Vth International Conference on Simulation and Artificial Intelligence, Mexico City, 2000, Invited Lecture, pp.81-84.
118. **Ceccarelli M., E., Figliolini G., E. Ottaviano, Simon Mata A., Jimenez Criado E., "Designing a Robotic Gripper for Harvesting of Horticulture Products", Int. Journal Robotica, 2000, Vol.18, pp.105-111.**
119. **Ceccarelli M., "Screw Axis defined by Giulio Mozzi in 1763 and Early Studies on Helicoidal Motion", Mechanism and Machine Theory, 2000, Vol.35, pp.761-770.**
120. Ottaviano E., Toti M., Ceccarelli M., "Grasp Force Control in Two-Finger Grippers with Pneumatic Actuation", International Conference on Robotics and Automation ICRA2000, San Francisco, 2000, paper R0095, pp.1976-1981.
121. Ceccarelli M., Angeles J., "A Numerical Evaluation of the Workspace of a Seven-Axis, Redundant Manipulator", International Conference on Robotics and Automation ICRA2000, San Francisco, 2000, paper R0096, pp.2551-2556.
122. Ceccarelli M., "Italian Kinematic Studies in XIXth Century", International Symposium on History of Machines and Mechanisms HMM2000, Kluwer, Dordrecht, 2000, pp.197-206.
123. Ceccarelli M., Paglia R., Lanni C., "Analysis and Optimization of a Robotized Workcell in Fiat Plant", 9th International Workshop on Robotics in Alpe-Adria-Danube Region RAAD2000, Maribor, 2000, pp.361-366.
124. Ceccarelli M., Park F.C., E. Ottaviano, Kim J., "Workspace Analysis of the Eclipse Robot", 9th International Workshop on Robotics in Alpe-Adria-Danube Region RAAD2000, Maribor, 2000, pp.269-274.
125. Ceccarelli M., "Early Studies in Screw Theory", Advances in Robot Kinematics: Analysis and Control, Kluwer, Dordrecht, 2000, pp.451-460 .
126. Figliolini G., Lanni C., Ceccarelli M., "On the Kinematic Synthesis of non-circular gears", International Journal on Gearing and Transmissions, 2000, Vol.3, pp.90-98.
127. Ceccarelli M., "Preliminary Studies to Screw Theory in XVIIth Century", Ball Conference, Cambridge, CD Proceedings, July 2000.
128. Ottaviano E., Herrera Tobarvela D., Figliolini G., Ceccarelli M., Simon Mata A., "Experimental Validation of a Force Control System for Robotic Two-Finger Grippers", 7th Mechatronics Forum Int. Conference, Atlanta, 2000, paper 092.
129. Ceccarelli M., Ottaviano E., "An Analytical Design for CaPaMan with Prescribed Position and Orientation", 2000 ASME Biennial Mechanisms and Robotics Conference, Baltimore, 2000, paper DETC2000/MECH-14099.

130. Figliolini G., Ceccarelli M., "Mechanical Design of One D.O.F. Articulated Finger Mechanism", 2000 ASME Biennial Mechanisms and Robotics Conference, Baltimore, 2000, paper DETC2000/MECH-14132.
131. Ceccarelli M., "An Overview of History of Robotics with an Eye to the Future", Proc. Of 2000 IEEE International Conference on Intelligent Engineering Systems, Portoroz, 2000, Plenary Paper 4, pp.25-33.
132. Figliolini G., Ceccarelli M., M.T. Llorens, "Logical Sensors and PLC Programming for Autonomous Biped Walking Robot", International Conference on Intelligent Robots and Systems IROS2000, 2000, Vol.2, pp.1346-1351.
133. Ceccarelli M., Figliolini G., Lanni C., Ottaviano E., "A Study of Feasibility for Rickshaw Type Mobile Robot", 2000 IEEE Int. Conference on Industrial Electronics, Control and Instrumentation, Nagoya, 2000, paper MT9-MRC-2.
134. Ceccarelli M., Figliolini G., Lanni C., Altrui A., "Simulation and Optimization of an Industrial Automatic Packing", 2000 IEEE Int. Conference on Industrial Electronics, Control and Instrumentation, Nagoya, 2000, paper FNI3-MAS-1
135. Ceccarelli M., Avila Carrasco C., Ottaviano E., "Error Analysis and Experimental Tests of CATRASYS (Cassino Tracking System)", 2000 IEEE Int. Conference on Industrial Electronics, Control and Instrumentation, Nagoya, 2000, paper SPC11-SP2-4.
136. Figliolini G., Ceccarelli M., Di Cocco V., "Binary Pneumatic Actuators for a Leg Mechanism of Walking Robot", 3rd Int. Conference on Climbing and Walking Robots ClaWar2000, Madrid, 2000, pp.575-582.
137. **Ceccarelli M., Vinciguerra A., "Approximate Four-Bar Circle-Tracing Mechanisms: Classical and New Synthesis", Mechanism and Machine Theory, 2000, Vol.35, n.11, pp.1579-1599.**
138. Ottaviano E., Ceccarelli M., "An Optimization problem for optimum design of CaPaMan (Cassino Parallel Manipulator) with prescribed workspace", Anales de Ingenieria Mecànica, Año 13, Leganes, 2000, Vol. 4, pp. 2361-2366.
139. Ceccarelli M., Figliolini G., Ottaviano E., Herrera D.T., Simon A.M., "Experimental results on the grasping of a two-finger gripper", Anales de Ingenieria Mecànica, Año 13, Leganes, 2000, Vol. 2, pp. 1495-1500.
140. Carvalho J.C.M., Ceccarelli M., "A Closed Form Formulation for the Inverse Dynamics of Cassino Parallel Manipulator", Journal Multibody System Dynamics, 2001, Vol.5, pp.185-210 and 2001, Vol.6, pp.303.
141. Ceccarelli M., Ottaviano E., Toti M. "Experimental Determination of Robot Workspace by means of CATRASYS /Cassino Tracking System)", 13th CISM-IFTOMM Symposium on Theory and Practice of Robots and Manipulators Ro.Man.Sy.'2000, Springer-Verlag, Wien, 2000, pp.85-92.
142. Valero F., Mata V., Ceccarelli M., "Path Planning in Complex Environments for Industrial Robots with Additional Degrees of Freedom", 13th CISM-IFTOMM Symposium on Theory and Practice of Robots and Manipulators Ro.Man.Sy.2000, Springer-Verlag, Wien, 2000, pp.431-438.
143. **Ceccarelli M., Cigola M., "Trends in the drawing of mechanisms since the early Middles Ages", Proceedings of the Institution of Mechanical Engineers, 2001, Vol.215, Part C, pp. 269-289.**
144. Ceccarelli M., Carbone G., Kerle H., "Designing Mechanisms for Two-Finger Microgrippers", 10th International Workshop on Robotics in Alpe-Adria-Danube Region RAAD2001, Wien, 2001, CD-Proc., paper RD-021.
145. Ottaviano E., Gosselin C. M., Ceccarelli M., "Singularity Analysis of CaPaMan: A Three-Degree of Freedom Spatial Parallel Manipulator", IEEE International Conference on Robotics and Automation ICRA2001, Seoul, 2001 pp.1295-1300.
146. Figliolini G., Ceccarelli M., "Climbing Stairs with EP-WAR2 Biped Robot", IEEE International Conference on Robotics and Automation ICRA2001, Seoul, 2001, pp.4116-4121.
147. **Ottaviano E., Ceccarelli M., "Optimal Design of CAPAMAN (Cassino Parallel Manipulator) with Prescribed Workspace", 2nd Workshop on Computational Kinematics KC2001, Seoul, 2001, pp.35-43.; IFTOMM Electornic Journal of Computational Kinematics EJCK, Vol.1, May 2002, paper no.4, www.sop.inria.fr/coprin/EJCK/EJCK.html.**
148. **Carbone G., Ceccarelli M., Teolis M., "A Numerical Evaluation of the Stiffness of CaHyMan (Cassino Hybrid Manipulator)", 2nd Workshop on Computational Kinematics KC2001, Seoul, 2001, pp.145-154 IFTOMM Electornic Journal of Computational Kinematics EJCK, Vol.1, May 2002, paper no.14, www.sop.inria.fr/coprin/EJCK/EJCK.html.**
149. **Cuadrado J., Naya M.A., Ceccarelli M., Carbone G., "An optimum Design Procedure for Two-Finger Grippers: A Case of Study", 2nd Workshop on Computational Kinematics CK2001, Seoul, 2001, pp.21-33 IFTOMM Electornic Journal of Computational Kinematics EJCK, Vol.1, May 2002, paper no.3, www.sop.inria.fr/coprin/EJCK/EJCK.html.**
150. **Provenzano S., Mata V., Ceccarelli M., Suner J.L., "Efficient Computation of the Generalized Tensor of Robots by Using the Gibbs-Appell Equations", 2nd Workshop on Computational Kinematics CK2001, Seoul, 2001, pp.85-92 IFTOMM Electornic Journal of Computational Kinematics EJCK, Vol.1, May 2002, paper no.4, www.sop.inria.fr/coprin/EJCK/EJCK.html.**
151. **Carvalho J.C.M., Ceccarelli M., "The Inverse Dynamics of Cassino Parallel Manipulator", 2nd Workshop on Computational Kinematics CK2001, Seoul, 2001, pp.301-308 IFTOMM Electornic Journal of Computational Kinematics EJCK, Vol.1, May 2002, paper no.28, www.sop.inria.fr/coprin/EJCK/EJCK.html.**
152. Ottaviano E., Lanni C., Ceccarelli M., "Experimental Determination of Workspace Characteristics of Human Arms", 9th International Conference on Control and Automation MED 2001, Dubrovnik, 2001, CD Proceedings, paper n.017.
153. Ottaviano E., Ceccarelli M., "Optimal Design of CaPaMan (Cassino Parallel Manipulator) With Prescribed Position and Orientation Workspace", 9th International Conference on Control and Automation MED 2001, Dubrovnik, 2001, CD Proceedings, paper n.009.
154. Lanni C. Pugliese F., Ceccarelli M., "Experimental validation of CaPaMan as Earthquake Simulator", IEEE/ASME International Conference on Advanced Intelligent Mechatronics AIM'01, Como, 2001, CD Proceedings, paper E-059-ZV.
155. Lanni C., Ceccarelli M., 2001, Figliolini G., "An Analitical Formulation for Two Circular-Arc Cams", CSME Transactions on Mechanical Engineering, Vol.25, N.1, pp.29-49.
156. Ottaviano E., Figliolini G., Lanni C., Ceccarelli M., Herrera D., Simon A., "Validazioni sperimentali di un controllo della forza di presa in gripper a due dita", XV Congresso Nazionale AIMETA di Meccanica Teorica e Applicata, Taormina, 2001, paper SP-ME44.
157. Ottaviano E., Gosselin C.M., Ceccarelli M., "Singularity Analysis of CaPaMan: A Three Degree-of-Freedom Spatial Parallel Manipulator", Extended Abstract, EUROMECH 427 – Computational Techniques and Applications in Nonlinear Dynamics of Structures and Multibody Systems, Cachan, 2001.
158. Figliolini G., Ceccarelli M., "Gait analysis of EP-WAR2 Biped Robot for Walking and Climbing Stairs", 4th Int. Conference

- on Climbing and Walking Robots ClaWar2001, Professional Engineering Publ., London, 2001, pp.827-834.
159. Lanni C., Ceccarelli M., Figliolini G., Ottaviano E., Carbone G., "A Study of Feasibility of a Laboratory Test-Bed for Brake Systems in Industrial Vehicles", V Congresso Iberoamericano di Ingegneria Meccanica, Merida, 2001, CD Proceedings, pp.645-650.
 160. Sinatra R., Pappalardo N., Ceccarelli M., "Dynamic Analysis of a New Robotic System for Surgical Application", V Congresso Iberoamericano di Ingegneria Meccanica, Merida, 2001, CD Proceedings, pp.689-695.
 161. Carbone G., Lanni C., Ceccarelli M., Lopez-Cajun C., "Dynamic effects of Curvature Change in the Profile of Two-Circular-Arc Cams", V Congresso Iberoamericano di Ingegneria Meccanica, Merida, 2001, CD Proceedings, pp.1247-1252.
 162. Ceccarelli M., "Low-Cost Robots for research and teaching activity", Keynote lecture, 5° Congresso Iberoamericano de Ingenieria Mecanica, Merida, 2001, CD Proceedings, 2nd Plenary Keynote.
 163. **Lanni C., Saramago S., Ceccarelli M., "Optimum Design of General 3R Manipulators by Using Traditional and Random Search Optimization Techniques", Proceedings of COBEM2001, Uberlandia, 2001, Robotics and Control, Vol.15, pp.107-116; Journal of the Brazilian Society of Mechanical Sciences, 2002, Vol. XXIV, n.4, pp.293-301.**
 164. Mendes Carvalho J.C., Ceccarelli M., "Numerical Simulation and Experimental Validation of Dynamic Characteristics of CAPAMAN (Cassino Parallel Manipulator)", Proceedings of COBEM2001, Uberlandia, 2001, Robotics and Control, Vol.15, pp.117-125.
 165. Carbone G., Ceccarelli M., Penisi O., "An Optimum Design of a Mechanism for Microgrippers", Proceedings of COBEM2001, Uberlandia, 2001, Mechanical System Design and Optimization, Vol.13, pp.194-203.
 166. Ceccarelli M., "The Challenges for Machine and Mechanism Design at the Beginning of the Third Millennium as Viewed from the Past", Proceedings of Brazilian Congress on Mechanical Engineering COBEM2001, Uberlandia, 2001, Invited Lectures, Vol.20, pp.132-151.
 167. **Ceccarelli M., "A Historical Perspective of Robotics Toward the Future", Fuji International Journal of Robotics and Mechatronics, 2001, Vol.13, No.3, pp.299-313.**
 168. **Carbone G., Ceccarelli M., Kerle H., Raatz A., "Design and Experimental Validation of a Microgripper", Fuji International Journal of Robotics and Mechatronics, 2001, Vol.13, No.3, pp.319-325.**
 169. Carbone G., Ceccarelli M., Takanishi A., Lim H., "A Study of Feasibility for a Low-Cost Humanoid Robot", Humanoids 2001, Tokyo, pp.351-358.
 170. Ceccarelli M., "From TMM to MMS: a Vision of IFToMM", Bulletin IFToMM Newsletter, 2001, Vol.10. Nr.1. (<http://www.caip.rutgers.edu/IFTOMM/>).
 171. Figliolini G., Ceccarelli M., Di Cocco V., "Walking stability of EP-WAR2 biped robot", CD Proceedings of the Fourth European Workshop on Advanced Mobile Robots EUROBOT'01, Lund, 2001.
 172. **Ceccarelli M., Fino P.M.D., Jimenez J.M., "Dynamic Performance of CAPAMAN by Numerical Simulations", Mechanism and Machine Theory, 2002, Vol.37, n.3, pp.241-246.**
 173. **Figliolini G., Ceccarelli M., "A novel articulated mechanism mimicking the motion of index fingers", International Journal Robotica, 2002, Vol.20, pp13-22.**
 174. **Ottaviano E., Ceccarelli M., "Optimal Design of CAPAMAN (Cassino Parallel Manipulator) with Specified Orientation Workspace", International Journal Robotica, 2002, Vol.20, pp.159-166.doi:10.1017/S026357470100385X**
 175. **Ceccarelli M., Carbone G., "A Stiffness Analysis of CaPaMan (Cassino Parallel Manipulator)", Mechanism and Machine Theory, 2002, Vol.37, n.5, pp.427-439.**
 176. Carbone G., Wolf A., Ceccarelli M., Shoham M., "Application of Serial-Parallel Robot Architectures for Surgery Tasks: A Study of Feasibility" ISACAS02 5-th Israeli Symposium on Computer-Aided Surgery, Medical Robotics, and Medical Imaging, Tel-Aviv, May 2002.
 177. Ceccarelli M., "An optimum design of parallel manipulators formulation and experimental validation", Proceedings of 1-st Int. Colloquium "Collaborative Research Centre 562", Braunschweig, 2002, invited lecture, pp. 47-63.
 178. Ceccarelli M., Cigola M., Ottaviano E., Gallozzi A., Carbone G., Pelliccio A., "A study of Feasibility of Using Robots in Architecture Analysis and Survey of a Historical Pavement", 11th International Workshop on Robotics in Alpe-Adria-Danube Region RAAD2002, Balatonfured, 2002, Proceedings, pp.113-118.
 179. Ottaviano E., Ceccarelli M., Sbardella F., Thomas F., "Experimental Determination of Kinematic Parameters and Workspace of Human Arms", 11th International Workshop on Robotics in Alpe-Adria-Danube Region RAAD2002, Balatonfured, 2002, Proceedings, pp.271-276.
 180. Thomas F., Ottaviano E., Ros L., Ceccarelli M., "Uncertainty Model and Singularities of 3-2-1 Wire-Based Tracking System", Advances in Robot Kinematics, Kluwer, Dordrecht, 2002, pp.107-116.
 181. Carbone G., Marini G., Ceccarelli M., "Experimental Validation and Tests of Operation Characteristics of a Parallel-Serial Manipulator", 14th CISM-IFTOMM Symposium on Theory and Practice of Robots and Manipulators Ro.Man.Sy.'2002, Udine, 2002, Preprints CD; Proceedings of 14-th Ro.Man.Sy., Springer Verlag, Wien, 2002, pp. 331-338.
 182. **Ceccarelli M., Ottaviano E., "A Workspace Evaluation of Eclipse Robot", International Journal Robotica, 2002, Vol.20, pp.299-313.doi:10.1017/S0263574701003812**
 183. **Ottaviano E., Ceccarelli M., Toti M., Avila Carrasco C., "CaTraSys (Cassino Tracking System): A Wire System for Experimental Evaluation of Robot Workspace", Fuji International Journal of Robotics and Mechatronics, 2002, Vol.14, No.1, pp. 78-87.**
 184. Penisi H.O., Carbone G., Ceccarelli M., "Optimum Design and Testing of Mechanisms for Two-Finger Grippers", Int. Symposium on Multibody Systems and Mechatronics MUSME2002, Mexico City, 2002 CD Proceedings, paper n. M03; International Journal of Mechanics and Control, Vol.3, n.1, pp.9-20, 2002.
 185. Ottaviano E., Carbone G., Ceccarelli M., "Workspace Analysis and Performances of a Binary Actuated Parallel Manipulator with Flexural Joints", Int. Symposium on Multibody Systems and Mechatronics MUSME2002, Mexico City, 2002, CD Proceedings, paper n. M10.
 186. Saramago S.F.P., Ceccarelli M., "Effect of Numerical Parameters on a Path Planning of Robots Taking into account Actuating Energy", Int. Symposium on Multibody Systems and Mechatronics MUSME2002, Mexico City, 2002, CD Proceedings, paper n. M14.
 187. Carbone G., Teolis M., Ceccarelli M., "Experimental validation and tests of CaHyMan's operation", Int. Symposium on

- Multybody Systems and Mechatronics MUSME2002, Mexico City, 2002, CD Proceedings, paper n. M15 .
188. Saramago S.F.P., Lanni C., Ottaviano E., Ceccarelli M., "An Experimental Validation of an Optimum Path planning of Robots with Grasping Force Constraints", Proceedings Seventh Pan American Congress of Applied Mechanics, PACAMVII, Temuco, 2002, Vol.9, pp.445-448.
189. **Lanni C, Saramago S.F.P., Ceccarelli M., "Optimal Design of 3R Manipulators by Using Classical Techniques and Simulated Annealing", Journal of the Brazilian Society for Mechanical Sciences, 2002, Vol.XXIV, pp. 294-302.**
190. Saramago S., Ottaviano E., Ceccarelli M., "A Characterization of the Workspace Boundary of Three-Revolute Manipulators", Proceedings of DETC'02 ASME 2002 Design Engineering Technical Conferences and Computers and Information in Engineering Conference, Montreal, 2002 , paper DETC2002/MECH-34342.
191. Carbone G., Civitillo R., Ceccarelli M., "Design and test of an articulated mechanism for 1 dof anthropomorphic finger", Proceedings of DETC'02 ASME 2002 Design Engineering Technical Conferences and Computers and Information in Engineering Conference, Montreal, 2002 , paper DETC2002/MECH-34300.
192. Ottaviano E., Ceccarelli M., "Optimum Design of Parallel Manipulators for Workspace and Singularity Performances", Proceedings of the Workshop on Fundamental Issues and Future Research Directions for Parallel Mechanisms and Manipulators, Quebec City, 2002, pp.98-105.
193. Ceccarelli M., Ottaviano E., Carbone G., Progettazione ed esperienze di laboratorio di un manipolatore parallelo per varie applicazioni", 1ª Conferenza Nazionale Sistemi Autonomi Intelligenti e Robotica Avanzata, ENEA Frascati, ottobre 2002.
194. **Lanni C., Ceccarelli M., Figliolini G., "An Analytical Design for Three Circular-Arc Cams", Mechanism and Machine Theory, 2002, Vol. 37, N.9, pp. 915-924.**
195. **Ceccarelli M., Ottaviano E., Carbone G., "A Study of Feasibility for a Novel Parallel-Serial Manipulator",Fuji International Journal of Robotics and Mechatronics, Vol. 14, No.3, 2002, pp.304-312.**
196. **Ceccarelli M., "Designing Two-Revolute Manipulators for Prescribed Feasible Workspace Regions", ASME Journal of Mechanical Design, 2002, Vol., 124, pp.427-434.**
197. Ceccarelli M., Ottaviano E., Galvagno M., "A 3-DOF Parallel Manipulator as Earthquake Motion Simulator", Proceedings of the 7th International Conference on Control, Automation, Robotics and Vision ICARCV 2002, Singapore, 2002, paper P1534.
198. **Saramago S.F.P., Ceccarelli M., "An Optimum Robot Planning with Payload Constraints", International Journal Robotica, 2002, Vol.20, pp.395-404.**
199. Ceccarelli M., "An Illustration Overview of Mechanism Classifications over the Time", Seminar on History of Science and Technology, Technical University of Kursk, 2003, pp.151-179.
200. Lanni C., Pugliese F., CeccarelliM., "A Study of Feasibility for a Robotized Workcell with Press Machines at ITCA Plant", 12th International Workshop on Robotics in Alpe-Andria-Danube Region RAAD 2003, paper 005RAAD03, Cassino, 2003.
201. CarboneG., CeccarelliM., Ottaviano E., Checcacci D., Frisoli A., AvizzanoC.A., BergamascoM., "A Study of Feasibility for a Macro-Milli Serial-Parallel Robotic Manipulator for Surgery Operated by a 3 Dofs Haptic Device", 12th International Workshop on Robotics in Alpe-Andria-Danube Region RAAD 2003, paper 006RAAD03, Cassino, 2003.
202. Ceccarelli M., Jauregui Becker J.M., Nava Rodriguez N.E., Parada Puig J.E., Lanni C., Carbone G., "Experimental Activity for Designing a Hand with 1 Dof Anthropomorphic Fingers of Human Size", 12th International Workshop on Robotics in Alpe-Andria-Danube Region RAAD 2003, paper 009RAAD03, Cassino, 2003.
203. Carbone G., Lim H.O., Takanishi A., Ceccarelli M., "Optimum Design of a New Humanoid Leg by Using Stiffness Analysis", 12th International Workshop on Robotics in Alpe-Andria-Danube Region RAAD 2003, Cassino, paper 045RAAD03, 2003.
204. Carbone G., JeckelM.,HavlikS., Ceccarelli M., "An Optimum Multi-Objective Design Procedure for Microgripping Mechanisms", 12th International Workshop on Robotics in Alpe-Andria-Danube Region RAAD 2003, Cassino, paper 055RAAD03, 2003.
205. Ottaviano E., Ceccarelli M., Thomas F., "Singularity Configurations of a 6-Wire Parallel Architecture", 12th International Workshop on Robotics in Alpe-Adria-Danube Region RAAD 2003, Cassino, 2003, CD Proceedings, Paper 007RAAD03.
206. Figliolini G., Ceccarelli M., "Novel binary pneumatic actuation for EP-WAR3 biped robot", 6th International Conference on Climbing and Walking Robots CLAWAR2003, Eds. G. Muscato and D. Longo, Professional Engineering Publishing, London, 2003, pp.853-860.
207. **Ottaviano E., Carbone G., Ceccarelli M., "Workspace Analysis and Performances of a Binary Actuated Parallel Manipulator with Flexural Joints", Journal of Mechanical Engineering Science, 2003, Vol. 217, pp. 313-330.**
208. Ceccarelli M., Ottaviano E., "Design Problems for Parallel Manipulators in Assembling Operations", Keynote Lecture, IFAC Workshop in Intelligent Assembly and Disassembly IAD03, Bucharest, 2003, pp. 13-26.
209. Carbone G., Ottaviano E., Acevedo M., Ceccarelli M., "Validación Experimental del Modelo Dinámico del Manipulador Paralelo Capaman 2", VI Congreso Iberoamericano de Ingeniería Mecánica CIBEM 6, Coimbra, pp.869-874, 2003.
210. **Penisi O., Ceccarelli M., Carbone G., "Clasificación de Mecanismos en Pinzas Industriales de Dos Dedos", Revista Iberoamericana de Ingeniería Mecánica, vol.7, n.1, pp.59-75, 2003.**
211. Acevedo M., CarboneG., Aguilar M.F., Ceccarelli M., "Simulación de una Pinza Controlada en Fuerza Empleando Simulink", Revista Iberoamericana de Ingeniería Mecánica, vol.7, n.1, pp.77-85, 2003.
212. CarboneG., Sugahara Y., Lim H.O., Takanishi A., Ceccarelli M., "Stiffness Performances Estimation for Biped Locomotor WL-15", IEEE/ASME International Conference on Advanced Intelligent Mechatronics AIM 03, Kobe, pp.956-961, 2003.
213. Carbone G., Lim H.O., Takanishi A., Ceccarelli M., "Numerical and Experimental Estimation of Stiffness Performances for the Humanoid Robot WABIAN-RV", IEEE/ASME International Conference on Advanced Intelligent Mechatronics AIM 03, Kobe, pp.962-967, 2003.
214. Figliolini G., Ceccarelli M., Di Gioia M., "Descending stairs with EP-WAR3 biped robot", IEEE/ASME International Conference on Advanced Intelligent Mechatronics AIM'03, Kobe, 2003, pp.747-752.
215. CarboneG., Takanobu H., Ceccarelli M., Takanishi A., Ohtsuki K., Ohnishi M., Okino A., "Stiffness Analysis for the 6-Dofs Mouth Training Parallel Robot WY-5", IEEE/ASME International Conference on Advanced Intelligent Mechatronics AIM 03, Kobe, pp.1234-1238, 2003.
216. Carbone G., Lim H.O., Takanishi A., Ceccarelli M., "Stiffness Analysis of the Humanoid Robot WABIAN-RIV: Modelling", IEEE International Conference on Robotics and Automation ICRA 2003, Taipei, pp.3654-3659, 2003.

217. Thomas F., Ottaviano E., Ros L., Ceccarelli M., "Coordinate-free Formulation of a 3-2-1 Wire-based Tracking Device using Cayley-Menger Determinants", *Proceedings of the IEEE International Conference on Robotics and Automation ICRA03*, Taipei, 2003, pp.355-361.
218. Carbone G., Ceccarelli M., Ogura Y., Lim H.O., Takanishi A., Numerical Simulation for an Optimum Design of a Humanoid Leg Through Stiffness Analysis", 3rd IEEE International Conference on Humanoid Robots HUMANOIDS2003, München and Karlsruhe, paper 3bWalking03, 2003.
219. Carbone G., Teolis M., Ceccarelli M., Ottaviano E., "An Experimental Performance Evaluation of a Parallel-Serial Manipulator", *International Journal of Mechanics and Control*, vol.04, n.01, pp.29-39, 2003.
220. Ceccarelli M., "Low-Cost Robots for Research and Teaching Activity", *IEEE Automation & Robotics Magazine*, Vol.10, n.3, 2003, pp.37-45.
221. Carbone G., Ogura Y., Lim H.O., Takanishi A., Ceccarelli M., "Dynamic Simulation and Experiments for the Design of a New Biped Walking Leg Module", *Robotica: An International Journal*, vol.22, n.1, pp.41-50, 2004.
222. Wolf A., Ottaviano E., Shoham M., Ceccarelli M., "Application of Line Geometry and Linear Complex Approximation to Singularity Analysis of the 3-DOF CaPaMan Parallel Manipulator", *Mechanism and Machine Theory*, Vol. 39, n.1, pp. 75-95, 2004.
223. Ceccarelli M., Lanni C., "Multi-Objective Optimum Design of General 3R Manipulators for Prescribed Workspace Limits", *Mechanism and Machine Theory*, Vol. 39, N.2, pp.119-132, 2004.
224. Saramago S.F.P., Ceccarelli M., Effect of Numerical Parameters on a Path Planning of Robots Taking into account Actuating Energy, *Mechanism and Machine Theory*, 2004, Vol. 39, N.3, pp. 247-270.
225. Ceccarelli G., Ottaviano E., Carbone G., "Progettazione e validazione sperimentale di camme a profilo policentrico presso il LARM di Cassino", Workshop 2004 del progetto PRIN "Progettazione e validazione di sistemi di trasmissione a camma", Cassino, Articolo PRIN-CAMS2004-01, 2004
226. Lanni C., Bianchi A., Carbone G., Ceccarelli M., "Numerical and Experimental Performance Analysis of Cam Profile in Two-Circular-Arc Cams", 11th World Congress in Mechanism and Machine Science IFToMM 03, Tianjin, Vol.3, pp.1060-1064, 2004.
227. Carbone G., Ottaviano E., Ceccarelli M., "Experimental Stiffness Evaluation of a Serial-Parallel Macro-Milli Manipulator for Medical Applications", 11th World Congress in Mechanism and Machine Science IFToMM 03, Tianjin, Vol.4, pp.1862-1867, 2004.
- 227 bis **Giuseppe Carbone and Marco Ceccarelli (2004). A stiffness analysis for a hybrid parallel serial manipulator. *Robotica*, 22, pp 567- 576; doi:10.1017/S0263574704000323**
228. Acevedo M., Aguirre G., Carbone G., Ottaviano E., "A Dynamics Simulation of a 3 Dof Parallel Manipulator", 11th World Congress in Mechanism and Machine Science IFToMM 03, Tianjin, Vol.4, pp.1674-1678, 2004.
229. Ottaviano E., Lanni C., Ceccarelli M., "Numerical and Experimental Analysis of a Pantograph-Leg with a Fully-Rotative Actuating Mechanism", IFToMM2004, Proceedings of the 11th World Congress in Mechanism and Machine Science, IFToMM 03, Tianjin, Vol.4, pp.1537-1541, 2004.
230. Lopez-Cajun C.S., Cuadrado Iglesias J.I., Ceccarelli M., "Early Modern Activity on TMM by Lanz and Betancourt before 1830", 11th IFToMM World Congress in Mechanism and Machine Science, 2004, Tianjin, 2004, pp.939-943, 2004.
231. Ceccarelli M., "Evolution of TMM (Theory of Machines and Mechanisms) to MMS (Machine and Mechanism Science): An Illustration Survey", Keynote Lecture, 11th IFToMM World Congress in Mechanism and Machine Science, 2004, Tianjin, 2004, Vol.1, pp.13-24.
232. Ceccarelli M., Koetsier T., "On the IFToMM Permanent Commission for History of MMS", *Proceedings of International Symposium on History of Machines and Mechanisms HMM2004*, Kluwer, Dordrecht, 2004, pp.10-25.
233. Ceccarelli M., "Classifications of mechanisms over time", *Proceedings of International Symposium on History of Machines and Mechanisms HMM2004*, Kluwer, Dordrecht, 2004, pp.285-302.
234. Ceccarelli M., Carbone G., Ottaviano E., 'Multi Criteria Optimum Design of Manipulators' 8-th Polish National Conference on Robotics, Polonica, 2004, Keynote Lecture, pp.3-20.
235. Ottaviano E., Ceccarelli M., Ursu A., "Teaching for programming Assembling Operations", *Proceedings of RAAD'04*, 13th International Workshop on Robotics in Alpe-Adria-Danube Region, Brno, pp. 299-304, 2004.
236. Nava Rodríguez N.E., Carbone G., Ottaviano E., Ceccarelli M., "An Experimental Validation of a Three - Fingered Hand With 1 Dof Anthropomorphic Fingers", *Int. Conf. on Intelligent Manipulation and Grasping 2004*, Genova, 2004, pp. 285-290.
237. Ottaviano E., Husty M., Ceccarelli M., "A Cartesian Representation for the Boundary Workspace of 3R Manipulators", *Advances in Robot Kinematics ARK2004*, Ed. Kluwer Academic Publishers, Genova, pp. 247-254, 2004.
238. Carbone G., Ceccarelli M., "A Procedure for Experimental Evaluation of Cartesian Stiffness Matrix", 15th CISM-IFTToMM Symposium on Robot Design, Dynamics and Control ROMANSY 2004, Montreal, 2004, CD Proceedings, paper Rom04-24.
239. Ceccarelli M., Lanni C., Carbone G., 'Numerical and Experimental Analysis of Cam profiles with Circular-Arcs', 11-th IFToMM Int. Conf. on the Theory of Machines and Mechanisms, Liberec, 2004, pp.189-208.
240. Ceccarelli M., Nava N. E., Jauregui J. M., Parada J. E., Carbone G., "Diseño y Experimentación de un Dedo Articulado Antropomorfo con un Grado de Libertad para una Mano Robótica", VI Congreso Iberoamericano de Ingeniería Mecánica CIBEM 6, Coimbra, 2003; Special issue CIBEM 2003 in *Journal Metal Univers*, Barcelona, Vol. 24, pp. 224-229, 2004; *Revista Iberoamericana de Ingeniería Mecánica*, Vol. 8, No 2, pp. 15-24, 2004
241. Ceccarelli M., Nava Rodríguez N.E., Carbone G., Lopez-Cajún C., 'Optimal Design of driving mechanism in a 1 D.O.F. anthropomorphic finger', *International Symposium on Robotics and Automation ISRA2004*, Querétaro, 2004, paper K1; *Applied Bionics and Biomechanics Journal*, June 2006, pp.
242. Ottaviano E., Ceccarelli M., Tavolieri C., 'Kinematic and Dynamic Analyses of a Pantograph-Leg for a Biped Walking Machine', 6-th International Conference on Climbing and Walking Robots CLAWAR2004, Madrid, 2004, paper A019.
243. Ceccarelli M., Carbone G., Lanni C., Ottaviano E., "A Fairly Simple Method to Identify the Curvature of a Cam Profile", *ASME International Design Engineering Technical Conferences IDETC'04*, Salt Lake City, paper DETC2004-57387, 2004.
244. Ottaviano E., Ceccarelli M., Castelli G., 'Experimental results of a 3-dof parallel manipulator as an earthquake motion simulator', *ASME IDETC'04 Mechanisms and Robotics Conference*, Salt Lake City, paper DETC2004-57075, 2004.
245. Figliolini G., Ceccarelli M., 'EP-WAR3 biped robot for climbing and descending stairs', *Robotica Internationala. Journal*,

246. Carbone G., Lanni C., Ceccarelli M., Incerti G., Righettini P., Requirements for a Mechatronic Design of Test-Beds for Cams, Mechatronics and Robotics Conference MECHROB04, Aachen, paper AF-001056, 2004, pp.326-331
247. Ceccarelli M., Carbone G., Ottaviano E., Jatsun S., Ponomarev D., "Research of Inertial Properties of System of Robots Puma-CaPaMan", Proceedings of Technical State University of Kursk, Kursk, pp.81-89, 2003 (in Russian).
248. Carbone G., Takano H., Ceccarelli M., Takanishi A., Ohtsuki K., Ohnishi M., Okino A., "Hyper-performances of WY-5 (Waseda Yamanashi 5) Parallel Manipulator", 4th International Conference on Advanced Mechatronics ICAM'04, Asahikawa Hokkaido, pp.389-394, 2004.
249. Niola V., Quaremba G., Ceccarelli M., On the effect of dynamical behaviour of cam-follower system damaged on contact surface, WSEAS Trans. On Circuits and Systems, Issue 3, Vol.3, May 2004, pagg.599 - 602.
250. Nava N.E., Carbone G., Ceccarelli M., "Validación experimental de manos robóticas", V Congreso Nacional de Ingeniería Mecánica, Mérida, 2004, pp. 189-194.
251. Ceccarelli M., Thomas F., Ottaviano E., CATRASYS (Cassino Tracking System): Un Sistema de Medida de la Posición y Orientación de Objetos Móviles Mediante Hilos Extensibles, Anales de Ingeniería Mecánica, Año 15, León, 2004, paper ID 10.
252. Ceccarelli M., Early TMM in Le Mecaniche by Galileo Galilei in 1593, Anales de Ingeniería Mecánica, Año 15, León, 2004, paper ID66, pp.1607-615.
253. Cigola M., Ceccarelli M., Carbone G., Pelliccio A., "Un progetto per l'impiego di robot per il restauro e la conservazione di beni architettonici", XV Congreso de Conservación y Restauración de Bienes Culturales, Murcia, 2004.
254. Carbone G., Ceccarelli M., "A Mechanical Design of a Low-Cost Easy-Operation Anthropomorphic Wheeled Leg for Walking Machines", CLAWAR/EURON Workshop on Robots in Entertainment, Leisure and Hobby, December 2 - 4, 2004, Vienna, Austria; The International Journal Robotica & Management, vol.9, n.2, pp.3-8, 2004
255. Lanni C., Carbone G., Ottaviano E., Ceccarelli M., "Modelling of cam transmissions", Proceedings of First International Congress Design and Modelling of Mechanical Systems, CMSM'2005, Paper n.CMSM05-LANNI, 2005.
256. Ceccarelli M., Ottaviano E., "Numerical and Experimental Analysis of Manipulator Workspace", Keynote Lecture, Proceedings of First International Congress Design and Modelling of Mechanical Systems, CMSM'2005, Paper n.CMSM05-CECCARELLI, 2005.
257. Lanni C., Carbone G., Ceccarelli M., Ottaviano E., "Numerical And Experimental Analysis of Radial Cams With Circular-Arc Profiles", Proceedings of MUSME 2005, the International Symposium on Multibody Systems and Mechatronics, Uberlandia, Brazil, Paper n. 34-MUSME05, 2005, pp.391-405.
258. Ceccarelli M., Carbone G., Ottaviano E., "An Optimization Problem Approach for Designing Both Serial and Parallel Manipulators", International Symposium on Multibody Systems and Mechatronics MUSME2005, Uberlandia, paper 03-MUSME05, 2005, pp.18-32.
259. Carbone G., Ceccarelli M., Oliveira P.J., Saramago S.F.P., Carvalho J.C.M., "Optimum Path Planning of CaPaMan (Cassino Parallel Manipulator) by Using Inverse Dynamics", International Symposium on Multibody Systems and Mechatronics MUSME2005, Uberlandia, paper 28-MUSME05, pp.332-343, 2005.
260. Ottaviano E., Ceccarelli M., Danieli G., Mundo D., "Analysis of Non-Circular Gears and Cam-Follower Systems as Function Generators", Proceedings of MUSME 2005 International Symposium on Multibody Systems and Mechatronics, Uberlandia, Paper n. 29-MUSME05, 2005.
261. Ottaviano E., Ceccarelli M., Paone A., Carbone G., "A Low-Cost Easy-Operation 4-Cable Driven Parallel Manipulator", IEEE International Conference on Robotics and Automation ICRA'05, Barcellona, pp.4019-4024, 2005.
262. Ceccarelli M., Nava Rodriguez N.E., Carbone G., "Optimal Design of Driving Mechanism in a 1-d.o.f. Anthropomorphic Finger", International Workshop on Computational Kinematics, paper 03-CK05, Cassino, 2005; Mechanism and Machine Theory, 2006, Vol.41, pp.897-911.
263. Ottaviano E., Di Giorgio J., Varone M., Ceccarelli M., "Analysis, Design and Construction of a Discretely-Actuated Multi-Module Parallel Manipulator", International Workshop on Computational Kinematics, Cassino, CD Proceedings, paper 12-CK2005, 2005.
264. Ceccarelli M., Carbone G., "Numerical and experimental analysis of the stiffness performance of parallel manipulators", 2nd International Colloquium Collaborative Research Centre 562, Braunschweig, pp.21-35, 2005.
265. Carbone G., Ceccarelli M., Cimpoeru I., "Experimental Tests with a Macro-Milli Robotic System", 14th International Workshop on Robotics in Alpe-Andria-Danube Region RAAD 2005, Bucharest, pp.64-69, 2005.
266. Jatsun S.F., Ponomarev D., Carbone G., Ceccarelli M., "Inertial Performance Estimation for a Macro-Milli Robotic System for Surgery Tasks", 14th International Workshop on Robotics in Alpe-Andria-Danube Region RAAD 2005, Bucharest, pp.326-331, 2005.
267. Ceccarelli M., "Kinematic Design of Manipulators: A Survey and Future Challenges", Keynote Lecture, 14th International Workshop on Robotics in Alpe-Andria-Danube Region RAAD 2005, Bucharest, pp.11-26, 2005.
268. **Ceccarelli M., Ottaviano E., Figliolini G., Simon A., Herrera D., Cabrera J., "A Grasp Force Control for a Moving Two-Finger Gripper", International Journal of Mechanics and Control, Vol. 5, No. 2, pp. 47-53, 2005.**
269. Ceccarelli M., Carbone G., Ottaviano E., "Multi Criteria Optimum Design of Manipulators", VIII Polish National Conference on Robotics, Polanica Zdrój, Plenary Speech, pp.3-20, 2004; Bulletin of the Polish Academy of Sciences, Technical Sciences, Vol. 53, n.1, pp.9-18, 2005.
270. **Carbone G., Ceccarelli M., "A Serial-Parallel Robotic Architecture for Surgical Tasks", Robotica: An International Journal, vol.23, pp.345-354, 2005.**
271. Ceccarelli M., "IFTToMM activity and its visibility", Bulletin IFTToMM Newsletter, 2004, Vol.13. Nr.1. (<http://www.iftomm.org>).
272. **Thomas F., Ottaviano E., Ros L., Ceccarelli M., "Performance Analysis of a 3-2-1 Pose Estimation Device", IEEE Transactions on Robotics, Vol. 21, No. 3, pp.288-297, 2005.**
273. Ceccarelli M., 'Work and influence of Francesco Masi in Italy at the end of 19-th century' Proc. of 3rd Int. Workshop on History of Machines and Mechanisms, Moscow, pp.34-47, 2005.
274. Carbone G., Ceccarelli M., "Legged Robotic Systems", Cutting Edge Robotics ARS Scientific Book, Wien, pp. 553-576, 2005.

275. Carbone G., Lanni C., López-Cajún C.S., Ceccarelli M., "Numerical and Experimental Simulation of Dynamic Operations of Cams", ECCOMAS Thematic Conference Multibody Dynamics 2005, Madrid, CD Proceedings, paper MB023, 2005.
276. Jeckel M., Havlik S., Carbone G., Ceccarelli M., "Analysis of Compliant Mechanisms. A Modular Concept", 8th International Symposium MECHATRONIKA 2005, Trencianske Teplice, pp.10-16, 2005.
277. Popescu I., Ceccarelli M., "The Machines, Structures, and Mechanisms on the Traian's Columns", The 9th IFToMM International Symposium on Theory of Machines and Mechanisms, Bucharest, 2005, pp. 283-288.
278. Ceccarelli M., Ottaviano E., Castelli L., "An Application of a 3-DOF Parallel Manipulator for Earthquake Simulations", 22nd International Symposium on Automation and Robotics in Construction, Ferrara, 2005, paper n.07.
279. Cigola M., Pelliccio A., Salotto O., Carbone G., Ottaviano E., Ceccarelli M., "Application of Robots for Inspection and Restoration of Historical Sites", 22nd International Symposium on Automation and Robotics in Construction, Ferrara, 2005, paper n.37.
280. Aiman Musa M.O., Ogura Y., Kondo H., Morishima A., Carbone G., Ceccarelli M., Lim H.O., Takanishi A., "Development of A Humanoid Robot Having 2-DOF Waist and 2-DOF Trunk", IEEE-RAS International Conference on Humanoid Robots Humanoids2005, Tsukuba, pp.333, 338, 2005.
281. Tavolieri C., Ceccarelli M., Lanni C., "An Experimental Analysis for Four Circular-Arc Cams", 12th National Conference on Machine and Mechanism, NaCoMM-2005, IIT Guwahati, 2005, pp.1-18.
282. Ceccarelli M. "A Brief Account on the Evolution of TMM (Theory of Machines and Mechanisms) to MMS (Machine and Mechanism Science), Keynote Lecture, 12th National Conference on Machine and Mechanism, NaCoMM-2005, IIT Guwahati, 2005, pp.53-59.
283. Lanni C., Ottaviano E., Ceccarelli M., López Cajún C., "Análisis y Validación Experimental de Levas Policéntricas con Seguidores Radiales y Excéntricos", 7^o Congreso Iberoamericano de Ingeniería Mecánica, México D.F., 12 al 14 de Octubre de 2005, paper n. 50 Analysis and Experimental.
284. Ceccarelli M., Carbone G., Ottaviano E. Lanni C., "An Optimum Design of Cam Profiles with Circular Arcs", Edited CT 2005 CD-Volume on Cam Transmission: Functional and Dynamical Aspects, Napoli and Cassino: November 2005, paper 02-CT05.
285. Carbone G., Lanni C., Ceccarelli M., Incerti G., Tiboni M., "On The Identification Of Lumped Parameters For Cam Transmissions", Edited CT 2005 CD-Volume on Cam Transmission: Functional and Dynamical Aspects, Napoli and Cassino: November 2005, paper 03-CT05.
286. Ceccarelli M., Lanni C., Carbone G., "A Fairly Simple Method to Identify the Curvature of a Cam Profile", Edited CT 2005 CD-Volume on Cam Transmission: Functional and Dynamical Aspects, Napoli and Cassino: November 2005, paper 04-CT05.
287. Ceccarelli M., "Problems and Procedures for Kinematic Design of Manipulators", Keynote Lecture, Proceedings of Eight National Conference on the Design of Mechanisms and Machines, Taiwan, 2005, pp.c-n.
288. Incerti G., Tiboni M., Ceccarelli M., Carbone G., "Dinamica di meccanismi a camma veloci azionati da motori in corrente continua", XVII Congresso di Meccanica Teorica e Applicata AIMETA 2005, Firenze, CD Proceedings, paper n.29, 2005.
289. Carbone G., Ceccarelli M., Kerle H., "Ein Optimierungsverfahren für den Entwurf von Kurvenprofilen", 6. IGM-Kolloquium Getriebetechnik, Aachen, pp.67-82, 2005.
290. Carbone G., Ceccarelli M., Molinaro F., Ottaviano E., "A Modular Design of an Easy-Operation Robotic Leg", 2nd European Conference on Mobile Robots ECMR'05, Ancona, pp.230-235, 2005.
291. Nava Rodriguez N.E., Ceccarelli M., Carbone G., "Proyecto y Animación de un Nuevo Robot Humanoide de Bajo Costo", 7^o Congreso Iberoamericano de Ingeniería Mecánica CIBIM7, Mexico City, paper 318, 2005.
292. Cuadrado Iglesias J.I., Ceccarelli M., "El nacimiento de la Teoría de Máquinas y Betancourt", Capítulo 3 in Técnica e Ingeniería en España: Vol.III – El siglo de las luces: De la industria al ámbito agroforestal, Real Academia de Ingeniería, Zaragoza 2005, pp.131-181
293. **Lanni C., Carbone G., Ceccarelli M., Ottaviano E., "Numerical and Experimental Analyses of Radial Cams with Circular-Arc Profiles", Proc. IMechE Part C: Journal of Mechanical Engineering Science, 2006, Vol. 220, No.C1, pp.111-126.**
294. Ceccarelli M., "Greek Mechanics of Machinery in the Early Works on Modern TMM", Proceedings of 2-nd Int. Conference on Ancient Greek Technology, Technical Chamber of Greece, Athens, ISBN 960-8369-16-9, 2006, pp.361-368.
295. Cigola M., Ceccarelli M., "Documentation and Conservation of Built Heritage by using Robots", XI Int.Seminar Forum UNESCO University and Heritage, Firenze, 2006, paper TA2-64.
296. Ceccarelli M., Hajrizi, E., Kopacek, P., Stapleton, L., "Mechatronics Education and International Stability", IFAC conference on Supplemental Ways for Improving International Stability through Automation, Pristina, June 2006, Preprints.
297. **Ottaviano E., Husty M., Ceccarelli M., "Identification of the Workspace Boundary of a General 3-R Manipulator", ASME Journal of Mechanical Design, 2006, Vol.128, No.1, pp.236-242.**
298. Tavolieri C., Ottaviano E., Ceccarelli M., "Pose Determination for a Rigid Body by Means of CaTraSys II (Cassino Tracking System)", Proceedings of EuCoMeS, the First European Conference on Mechanism Science, Obergurgl, CD Proceedings, 2006, paper n. 028.
299. Nava N. E., Ottaviano E., Ceccarelli M., "Workspace Analysis of RRP Manipulators", Proceedings of EuCoMeS, the First European Conference on Mechanism Science, Obergurgl, CD Proceedings, 2006 paper n.035.
300. Ottaviano E., Husty M., Ceccarelli M., "A Study on Workspace Topologies of 3R Industrial-Type Manipulators", 2006 IEEE-TTC International Conference on Automation, Quality and Testing, Robotics, AQTR 2006, Cluj-Napoca, 2006, pp.237-242; CEAI Journal - Control Engineering and Applied Informatics, Vol.8.no.1, 2006, pp.33-41.(Best paper Award)
301. Tavolieri C., Ottaviano E., Ceccarelli M., Di Rienzo A., "Analysis and Design of a 1-DOF Leg for Walking Machines", Proceedings of RAAD'06, 15th International Workshop on Robotics in Alpe-Adria-Danube Region, Balatonfured, CD Proceedings, 2006, paper n.27.
302. Ottaviano E., Ceccarelli M., Pelagalli P., "A Performance Analysis of a 4 Cable-Driven Parallel Manipulator", 006 IEEE International Conferences on Cybernetics and Intelligent Systems, CIS and Robotics, Automation and Mechatronics, RAM, Bangkok, 2006, pp.341-346.
303. **Carbone G., Lim H.O., Takanishi A., Ceccarelli M., "Stiffness Analysis of the Humanoid Robot WABIAN-RIV", Mechanism and Machine Theory, 2006, Vol.41, No.1, pp.17-40.**

304. Nava Rodriguez N.E., Carbone G., Ceccarelli M., "A Design and Simulation of a New Low-Cost Humanoid Robot", 1st IEEE/RAS-EMBS International Conference on Biomedical Robotics and Biomechatronics BioRob2006, Pisa, 2006, paper F327.
305. **Ceccarelli M., Nava Rodriguez N.E., Carbone G., "Design and Tests of a Three-Finger Hand with 1-dof Articulated Fingers", *Robotica: An International Journal*, 2006, Vol.24, No.2, pp.183-196.**
306. Sugahara Y., Carbone G., Ceccarelli M., Hashimoto K., Lim H.O., Takanishi A., "Stiffness Experimental Evaluation of WL-16RII Biped Walking Vehicle During Walking Operation", Robotics and Mechatronics Conference ROBOMECH'06, Tokyo, 2006, paper 2P1-B11; *Journal of Robotics and Mechatronics* Vol.19 No.3, 2007 pp.272-280
307. Nava Rodriguez N.E., Carbone G., Ceccarelli M., "CaPaMan2bis as Trunk Module in CALUMA (CASSINO Low-Cost hUMANoid Robot)", 2nd IEEE International Conference on Robotics, Automation and Mechatronics RAM 2006, Bangkok, 2006, pp.347-352.
308. Carbone G., Ceccarelli M., Sugahara Y., Lim H.O., Takanishi A., "Stiffness Experimental Monitoring for WL-16RII Biped Locomotor During Walking", 16th CISM-IFTOMM Symposium on Robot Design, Dynamics, and Control ROMANSY06, Warsaw, 2006, pp.105-112.
309. Ceccarelli M., Ottaviano E., Carbone G., "A Role of Mechanical Engineering in Mechatronics", IFAC conference on Supplemental Ways for Improving International Stability through Automation, Pristina, June 2006, pp.31-36. [doi:10.1016/B978-008045406-1/50003-3](https://doi.org/10.1016/B978-008045406-1/50003-3)
310. Stancescu C., Lanni C. and Ceccarelli M., "Using Low-Cost Sensors in a Grasping Process", Buletinul Institutului Politehnic DIN IAȘI, Tomul LII (liv), fasc. 7b, 2006 secția, construcții de mașini, pp.193-198.
311. **Lanni C., Ceccarelli M., Lopez-Cajun C., "An Experimental Validation of Three Circular-Arc Cams with Offset Followers", *Journal Mechanics Based Design of Structures and Machines*, 2006, Vol. 34, No. 3, pp.261-276.**
312. Ceccarelli M., "El Renacimiento de las maquinas: primer desarrollo de la ingenieria mecanica moderna", invited lecture, Congreso de Historia del Patrimonio e de la Ingenieria, Las Palmas, 2006, pp.3-26.
313. Ceccarelli M., Koetsier T., "Lorenzo Allievi e la cinematica dei meccanismi in Italia nel secolo 19", Primo Congresso Italiano di Storia dell'Ingegneria, Napoli, 2006, pp. 1131-1142.
314. Ceccarelli M., Cigola M., "Rappresentazione ed analisi di macchine e meccanismi nella trattatistica tecnica dal XV al XVII secolo", Primo Congresso Italiano di Storia dell'Ingegneria, Napoli, 2006, pp.395-402.
315. Nava N., Carbone G., Ceccarelli M., "A design and simulation of CALUMA (Cassino Low-Cost Humanoid Robot)", Proceedings Proceedings of ESDA 2006: 8th Biennial ASME Conference on Engineering Systems Design and Analysis July 4-7, 2006, paper n. ESDA2006-95196.
316. Nava N., Ceccarelli M., "Tip-Grasp Experiences with Three-Finger Anthropomorphic LARM Hand", Proceedings of RAAD'06, 15th International Workshop on Robotics in Alpe-Adria-Danube Region, Balatonfured, CD Proceedings, 2006, paper n.41.
317. **Lanni C., Ceccarelli M., Greco G., "An experimental characterization of cam profiles with three circular-arcs", *International Journal Gearing and Transmissions*, n.2, 2004, pp. 49-60.**
318. Lanni C., Ceccarelli M., Greco G., " Numerical and Experimental Analysis of Three Circular-Arc Radial Cams", *Revista Mecanisme si Manipuletoare, ARTOMM-IFTOMM*, Vol.3, n.1, 2004, pp.43-48.
319. Oliveira P.J., Saramago S., Ceccarelli M., "Trajectory Modeling of CaPaMan (Cassino Parallel Manipulator) by using 4th order B-splines", Proceedings of COBEM2005, 2005.
320. Ceccarelli M., Tavolieri C., Lu Z., "Design Considerations for Underactuated Grasp with a one D.O.F. Anthropomorphic Finger Mechanism", International Conference on Intelligent Robots and Systems IROS 2006, Beijing, 2006, paper n.714.
321. Ceccarelli M., "Mechanism Design: what is new in what is old and what is old in what is new", Proceedings of CCMMS 2006 The Fifth Chinese Conference on Mechanisms and Machine Science, Keynote paper, 2006, pp.19-26.
322. Ceccarelli M., "Kinematic Design and Experimental Validation of Manipulators", Proceedings of XX-th Polish Congress on TMM, Plenary Lecture, Zielona Gora, 2006, Vo.II, pp.81-99.
323. Ottaviano E., Husty M., Ceccarelli M., "Level-set method for workspace analysis of serial manipulators", *Advances in Robot Kinematics* ARK2006, Springer, Lubljana, pp. 307-314, 2006.
324. **Ceccarelli M., "Early TMM in Le Mecaniche by Galileo Galilei in 1593", *Mechanisms and Machine Theory*, 2006, Vol.41 No.12, pp 1401-1406.**
325. Carbone G., Lanni C., Ceccarelli M., Incerti G., Tiboni M., "A Characterization of Cam Transmissions Through an Identification of Lumped", Proceedings of ASME IDETC/CIE 2006 Mechanisms & Robotics Conference, Philadelphia, 2006, paper n. DETC2006-99218.
326. Ottaviano E., Lanni C., Tavolieri C., Mundo D., Fanghella P., Danieli G., Ceccarelli M., "An Experimental Comparative Study on Non-Circular Gears and Cam Transmissions for A Blood Pumping System", Proceedings of ASME IDETC/CIE 2006 Mechanisms & Robotics Conference, Philadelphia, 2006, paper n. DETC2006-99166.
327. Koetsier T., Ceccarelli M., "Burmester and Allievi: A theory and its Application for Mechanism Design at the End of 19-th Century", Proceedings of ASME IDETC/CIE 2006 Mechanisms & Robotics Conference, Philadelphia, 2006, paper n. DETC2006-99165.
328. Erogova O., Ceccarelli M., Cuadrado Iglesias J.I., Lopez-Cajun C.S., Pavlov, V.E., "Agustin Betancourt: an Early Modern Scientist and Engineer in TMM", Proceedings of ASME IDETC/CIE 2006 Mechanisms & Robotics Conference, Philadelphia, 2006, paper n. DETC2006-99198.
329. **E Ottaviano, M Ceccarelli, J Di Giorgio, and M Varone, Design and evaluation of a discretely actuated multi-module parallel manipulator. Proc. IMechE Vol. 220 Part C: J. Mechanical Engineering Science, 2006, 220(C4), 513-526.**
330. Ottaviano E., Ceccarelli M., "An Application of a 3-DOF Parallel Manipulator for Earthquake Simulations", *IEEE Transactions on Mechatronics*, Vol. 11, No. 2, pp. 140-146, 2006.
331. **Ceccarelli M., Nava Rodriguez N.E., Carbone G., "Optimal Design of Driving Mechanism in a 1-d.o.f. Anthropomorphic Finger", *Mechanism and Machine Theory*, vol.41, n.8, pp 897-911, 2006.**
332. Oliveira P.J., Saramago S.F.P., Carvalho J.C.M., Carbone G., Ceccarelli M. "Considerations on Dynamic Model of a Parallel Architecture and its influence in Optimum Path Planning", XII International Symposium on Dynamic Problems of Mechanics DINAME 2007, Varoto, P. S. and Trindade, M. A. (Editors), ABCM, vol.1, pp.1-11, Ilhabela, 2007.
333. **Nava N., Lanni C., Ceccarelli M., "Design and simulation of a New Two-Fingered Gripper with Pneumatic Actuation",**

334. Lanni C., Ceccarelli M., Tavolieri C., "Design and Characterization of a Four Circular-Arc Cam Profile", **International Journal of Mechanics and Control**, 2006, Vol.07, n.02, pp.29-39.
335. Ottaviano E., Ceccarelli M., Numerical and experimental characterization of singularities of a six-wire parallel architecture, **International Journal ROBOTICA**, 2007, Vol.25, pp.315-324
336. Ceccarelli M., Cigola M., Gaspard Monge e la sua influenza in Italia tra Geometria Descrittiva e Teoria dei Meccanismi, L'Ingegneria e la sua storia, Di Leo (Editor), Marlin, Salerno, 2007, pp.108-117.
337. Ceccarelli M., "Una visión crítica de la aplicación del proceso de europeización de la enseñanza académica en ingeniería mecánica (industrial), XI ENCUENTRO DE PROFESORES DE INGENIERÍA DE MÁQUINAS E INGENIERÍA DE VEHÍCULOS, Cd Proceedings, Madrid, 2007.
338. Lanni C., Carbone G., Havlík Š. and Ceccarelli M., "Experimental Validation of a Milli-Gripper Based on Chebyshev Mechanism", Proceedings of the 16th Int. Workshop on Robotics in Alpe-Adria-Danube Region, Ljubljana, CD Proceedings, 2007, paper n. FP_GG2, pp. 42- 51.
339. Lanni C., Ceccarelli M., "A characterization of the impact of gripper finger onto an object in a grasp", Proceedings of the 16th Int. Workshop on Robotics in Alpe-Adria-Danube Region, Ljubljana, CD Proceedings, 2007, paper n. FP_GG3, pp. 52- 61.
340. Lahouar S., Ottaviano E., Zeghoul S., Romdhane L., Ceccarelli M., "Collision Free Path Planning for Cable Driven Parallel Robots", 2nd International Congress Design and Modelling of Mechanical Systems, Monastir, CD Proceedings, 2007, Paper n.ID-42.
341. Ottaviano E., Ceccarelli M., Palmucci F., "Experimental Identification of Kinematic Parameters and Joint Mobility of Human Limbs", 2nd International Congress Design and Modelling of Mechanical Systems, Monastir, CD Proceedings, 2007, Paper n.ID-103.
342. Ceccarelli M., Ottaviano E., Tavolieri C., "Experimental Activity on Cable-Based Parallel Manipulators: Issues and Results at LARM in Cassino", 2nd International Congress Design and Modelling of Mechanical Systems, Monastir, CD Proceedings, 2007, Paper n.ID-27.
343. Castejón C., Carbone G., García-Prada J.C., Ceccarelli M., "A Multi-Objective Optimization for Designing Service Robots", 12th World Congress in Mechanism and Machine Science IFToMM'07, Besançon, 2007, paper n.A496.
344. Ceccarelli M., "Renaissance of machines: from Brunelleschi to Galilei through Francesco di Giorgio and Leonardo", 12th World Congress in Mechanism and Machine Science IFToMM'07, Besançon, 2007, paper n.A236.
345. Carbone G., Ceccarelli M., "A Comparison of Indices for Stiffness Performance Evaluation", 12th World Congress in Mechanism and Machine Science IFToMM'07, Besançon, 2007, paper n.A831.
346. Nava Rodriguez N.E., Carbone G., Ceccarelli M., "Design Evolution of Low-Cost Humanoid Robot CALUMA", 12th World Congress in Mechanism and Machine Science IFToMM'07, Besançon, 2007, paper n.A181.
347. Grandon C., Daney D., Papegay Y., Tavolieri C., Ottaviano E., Ceccarelli M., "Certified Pose Determination Under Uncertainties", 12th World Congress in Mechanism and Machine Science IFToMM'07, Besançon, 2007, paper n.A702.
348. Sugahara Y., Carbone G., Hashimoto K., Ceccarelli M., Lim H.O., Takanishi A., "Experimental Stiffness Measurement for WL-16RII Biped Walking Vehicle during Walking Operation", **Fuji International Journal of Robotics and Mechatronics**, 2007, vol.19, n.3, pp.272-280.
349. Echávarri J., Carbone G., Muñoz J.L., Ceccarelli M., "Safety Issues for Service Robots", Service and Humanoid Robotics 2007, Kosice, 2007, pp.57-64.
350. Castejón C., Carbone G., García-Prada J.C., Ceccarelli M., "A Multi-Objective Optimization Design for a 4R Service Robot", **Service and Humanoid Robotics 2007, Kosice, 2007, pp.49-56; International Journal of Mechanics and Control**, 2008, Vol.09, n.01, pp.3-8. ISSN 1590-8844
351. Carbone G., Iannone S., Gonzáles A., Ceccarelli M., "A Dynamic Simulation and Experimental Validation of a Three Finger Robotic Hand", ECCOMAS Thematic Conference Multibody Dynamics, CD Proceedings, Milan, 2007.
352. Ceccarelli M., What is old in what is new in MMS research, Special Lecture, Proc. of 13-th Symposium on MMS, Japan Council of IFToMM, Tokyo, 2007, pp.1-11.
353. Ceccarelli M., 'Giulio Mozzi (1730-1813)', Distinguished Figures in Mechanism and Machine Science: Their Contributions and Legacies – Part 1, Book series on History of Machines and Machine Science, Vol.1, Springer, Dordrecht, 2007, pp.279-293.
354. Lanni C., Stancescu C., Ceccarelli M., "Grasping Control in a Low-Cost Easy-Operation Two-Finger Gripper", Proceedings of 2nd International Conference Optimization of the Robots and Manipulators, OPTIROB 2007, Predeal, 2007, pp. 127-133.
355. Carbone G., Ottaviano E., Ceccarelli M., "An Optimum Design Procedure for Both Serial and Parallel Manipulators", **Proceedings of the Institution of Mechanical Engineers IMechE Part C: Journal of Mechanical Engineering Science**, 2007, Vol. 221, No.7, pp.829-843.
356. Ceccarelli M., Keynote lecture: MECANISMOS Y MAQUINAS DEL PASADO PARA UNA INGENIERÍA MECÁNICA MODERNA, 8 congreso FelbIM Iberoamericano de Ingeniería Mecánica CIDIM8, Cuzco, 2007.
357. Ceccarelli M., A Note on Roman Engineers and their Machines, CD Proc. of 2007 Bangalore IFToMM Workshop on History of MMS, Bangalore, 2007.
358. Ceccarelli M., Enescu M.L, Simulations for a Robotized Spray Deposition, Proc. of Int. Conference on Computational Mechanics and Virtual Engineering COMEC 2007, Brasov, 2007, pp.447-451
359. Nava Rodriguez N.E., Carbone G., Ceccarelli M., "Simulating CALUMA (Cassino Low-cost hUMANoid Robot) Carrying a Load", **International Journal Applied Bionics and Biomechanics**, vol.4, n.1, pp.1-8, 2007. (DOI: 10.1080/11762320701403880)issn: 1176-2322
360. Ottaviano E., Ceccarelli M., Husty M., "Workspace Topologies of Industrial 3R Manipulators", **International Journal of Advanced Robotic Systems**, Vol. 4, No. 3, ISSN 1729-8806, pp. 355-364, 2007.
361. Incerti G., Tiboni M., Ceccarelli M., Carbone G., "Analisi teorico-sperimentale del comportamento dinamico di meccanismi a camma a piana azionati da servomotori con controllo di velocità", XVII Congresso di Meccanica Teorica e Applicata AIMETA, Brescia, CD Proceedings, paper MA01-3, 2007.
362. Echávarri J., Carbone G., Ceccarelli M., Muñoz J.L., "Criterios para la seguridad en el uso de robots", 8º Congreso Iberoamericano de Ingeniería Mecánica CIBIM8, Cuzco, paper 05-12, 2007.

363. González A., Carbone G., Ceccarelli M., "Simulación dinámica del agarre con la mano LARM", 8° Congreso Iberoamericano de Ingeniería Mecánica CIBIM8, Cuzco, paper 45, 2007.
364. Ottaviano E., González A., Ceccarelli M., "Un Sistema de Locomoción Híbrida con Capacidad de Giro Para un Robot Móvil", 8° Congreso Iberoamericano de Ingeniería Mecánica CIBIM8, Cuzco, paper 185, 2007.
365. Tavolieri C., Ottaviano E., Ceccarelli M., Nardelli A., "A Design of a New Leg-Wheel Walking Robot", 15th Mediterranean Conference on Control and Automation – MED07, Paper T30-011, Athens, 2007.
366. Ottaviano E., Ceccarelli M., De Ciantis M., "A 4-4 Cable-Based Parallel Manipulator for an Application in Hospital Environment", 15th Mediterranean Conference on Control and Automation – MED07, Paper T30-011, Athens, 2007.
367. Tavolieri C., Ottaviano E., Ceccarelli M., "Design and Problems of a New Leg-Wheel Walking Robot", 10th International Conference on Climbing and Walking Robots CLAWAR 2007, Singapore, 2007, pp. 319-328.
368. Gonzales A., Ottaviano E., Ceccarelli M., "On the Design of a Four-Bar Mechanism for Obstacles Climbing Wheels", 10th International Conference on Climbing and Walking Robots CLAWAR 2007, Singapore, 2007, pp. 185-192.
369. Shrot A., Carbone G., Ceccarelli M., "Operation Strategy for a Low-Cost Easy-Operation Cassino Hexapod", Indian National Conference on Machines and Mechanisms NaCoMM'07, Bangalore, pp.187-193, 2007.
370. Wu L., Carbone G., Ceccarelli M., "Problems and a Design Solution for an Underactuated Finger Mechanism", International Conference on Information Computing and Automation ICICA'07, Chengdu, CD Proceedings, 2007, Vol. 1, 373-376 (paper IP-214).
371. Carbone G., Gherman B.G., Ceccarelli M., Pisla D., Itul T.P., "A Robotization for Packaging of Horticulture Products", *The International Journal Robotica & Management*, Vol.12, N.2, pp.13-20, 2007.
372. Carbone G., Shrot A., Ceccarelli M., "Operation Strategy for a Low-Cost Easy-Operation Cassino Hexapod", *Applied Bionics and Biomechanics*, 2007, Vol.4, N.4, pp.149– 156. (DOI: 10.1080/11762320802002573)
373. Castejón C., Carbone G., García-Prada J.C., Ceccarelli M., "A Multi-Objective Optimization Design for a 4R Service Robot", *International Journal of Mechanics and Control*, 2008, Vol.09, n.01, pp.3-8. ISSN 1590-8844
374. Carbone G., Lanni C., López-Cajún C., Ceccarelli M., "Numerical and Experimental Simulation of Dynamic Operations of Cams", *Problems of Mechanics International Scientific Journal*, Tbilisi, 2007, Vol.3, N.28, pp. 7-20. (ISSN: 1512-0740).
375. Castejón C., Carbone G., García-Prada J.C., Ceccarelli M., "A multi-objective optimization design for a 4R service robot", *International Journal of Mechanics and Control*, 2007, Vol.08, N.02, pp.3-8.
376. Carbone G., Ceccarelli M., Oliveira P.J., Saramago S.F.P., Carvalho J.C.M., "An Optimum Path Planning of CaPaMan (Cassino Parallel Manipulator) by Using Inverse Dynamics", *Robotica: An International Journal*, Vol.26, N.2, pp.229-239, 2008. (DOI: 10.1017/S0263574707003839.)
377. Carbone G., Ceccarelli M., "Experimental Tests on Feasible Operation of a Finger Mechanism in the LARM Hand", *International Journal Mechanics Based Design of Structures and Machines*, Vol.36, pp.1-13, 2008.
378. Carbone G., Lanni C., Incerti G., Ceccarelli M., "A Characterization of Cam Transmissions through Identification of Lumped Parameters", *International Journal of Mechanics and Control*, 2007, Vol.08, N.02, pp.33-42.
379. Rossi C., Cigola M., Ceccarelli M., "Alcune Tappe verso l'Automazione" *Atti II Convegno Naz. Storia dell'Ingegneria*, Napoli, 2008, pp. 461-470. (ISBN978-88-87998-86-3).
380. Ceccarelli M., Cigola M., Rossi C., "Sviluppo di Automi in Italia" *Atti II Convegno Naz. Storia dell'Ingegneria*, Napoli, 2008, pp. 257-266. (ISBN978-88-87998-86-3).
381. Ceccarelli M., De Paolis P., "A Survey on Roman Engineers and Their Machines", *III Congreso Internacional de Patrimonio e Historia de la Ingeniería*, Las Palmas, 2008, pp.29-48. ISBN978-84-612-3459Z.
382. Cigola M., Ceccarelli M., "Maquinas Y Papeleras En La Historia Del Bajo Lazio En El Siglo 19", *III Congreso Internacional de Patrimonio e Historia de la Ingeniería*, Las Palmas, 2008, pp.109-127. ISBN978-84-612-3459Z.
383. Ceccarelli M., "Hain K.: An Actor of the Second Golden Age for Mechanism Science", *Ehrenkolloquium Kurt Hain*, Dresden, 2008, pp.1-4.
384. Cannella G., Ottaviano E., Castelli G., "A Cable-Based System for Aiding Elderly People in Sit to Stand Transfer", *CD Proceedings of IFToMM-FelbIM Int. Symposium on Mechatronics and Multibody Systems MUSME08*, San Juan, 2008, paper n.19.
385. Palmucci F., Ottaviano E., Ceccarelli M., "An Application of Catrasy, A Cable-Based Parallel Measuring System For A Kinetostatic Analysis Of Human Walking", *CD Proceedings of IFToMM-FelbIM Int. Symposium on Mechatronics and Multibody Systems MUSME08*, San Juan, 2008, paper n.22.
386. Iannone S., Carbone G., Ceccarelli M., "Regulation And Control Of LARM Hand III", *CD Proceedings of IFToMM-FelbIM Int. Symposium on Mechatronics and Multibody Systems MUSME08*, San Juan, 2008, paper n.25.
387. Castelli G., Ceccarelli M., Ottaviano E., "An Analytical Design of Telescopic Manipulator For Prescribed Workspace", *CD Proceedings of IFToMM-FelbIM Int. Symposium on Mechatronics and Multibody Systems MUSME08*, San Juan, 2008, paper n.30.
388. Tavolieri C., Ceccarelli M., Merlet J.-P., "A Workspace Analysis of A Fully Constrained Cable-Based Parallel Manipulator By Using Interval Analysis", *CD Proceedings of IFToMM-FelbIM Int. Symposium on Mechatronics and Multibody Systems MUSME08*, San Juan, 2008, paper n.35.
389. Di Rienzo A., Ceccarelli M., Carbone G., Torassa P., "A Study On Balance Errors In Pneumatic Tyres", *CD Proceedings of IFToMM-FelbIM Int. Symposium on Mechatronics and Multibody Systems MUSME08*, San Juan, 2008, paper n.36.
390. Lanni C., Ceccarelli M., "Modelling And Evaluation of Grasp Impact In Two-Finger Grippers With Pneumatic Actuation", *CD Proceedings of IFToMM-FelbIM Int. Symposium on Mechatronics and Multibody Systems MUSME08*, San Juan, 2008, paper 37.
391. Echávarri J., Carbone G., Muñoz J.L., Ceccarelli M., "Aspectos de seguridad para robots industriales y de servicio", *XVII Congreso Nacional de Ingeniería Mecánica*, Gijón, pp.1025-1032, 2008.
392. Castejón C., Carbone G., García-Prada J.C., Ceccarelli M., "Optimización Multi-Objetivo De Mecanismos. Aplicación A La Robótica De Servicio", *XVII Congreso Nacional de Ingeniería Mecánica*, Gijón, pp.1053-1058, 2008.
393. Castelli G., Ottaviano E., Ceccarelli M., "A Parametric Study on Workspace Capability of CaPaMan (Cassino Parallel Manipulator)", *XVII Congreso Nacional de Ingeniería Mecánica*, Gijón, pp.77-84, 2008.

394. González Rodríguez A., Ottaviano E., Ceccarelli M., Pintado Sanjuán P., "Diseño y Validación Experimental De Un Nuevo Mecanismo Para Ruedas Con Capacidad De Superar Obstáculos", XVII Congreso Nacional de Ingeniería Mecánica, Gijón, pp. 1033-1040, 2008.
395. Borrás J., Ottaviano E., Ceccarelli M., Thomas F., "Optimal Design of a 6-DOF 4-4 Parallel Manipulator with Uncoupled Singularities", XVII Congreso Nacional de Ingeniería Mecánica, Gijón, pp.1047-1052, 2008.
396. Shuangji Y., Ceccarelli M., Carbone G., Lu Z., "Optimal Design of New Underactuated Finger Mechanism for LARM Hand", Proceedings of 3rd International Conference Optimization of the Robots and Manipulators, OPTIROB 2008, Bucharest, 2008, pp. 29-36.
397. Castelli G., Ottaviano E., Ceccarelli M., "Modeling And Simulation of A Cable-Based Manipulator For Rehabilitation Therapies", Proceedings of 3rd International Conference Optimization of the Robots and Manipulators, OPTIROB 2008, Bucharest, 2008, pp. 277-282.
398. Ceccarelli M., Ottaviano E., "Cable-Based Parallel Manipulators of Rehabilitation Purposes of Human Limbs", 2nd International Colloquium Collaborative Research Centre 52, Braunschweig, pp.53-67, 2008.
399. **Castelli G., Ottaviano E., Ceccarelli M., "A Fairly General Algorithm to Evaluate Workspace Characteristics of Serial and Parallel Manipulators", International Journal Mechanics Based Design of Structures and Machines", Vol.36, pp.14-33, 2008.**
400. **Wu L., Carbone G., Ceccarelli M., "Designing An Underactuated Mechanism For A 1 Active Dof Finger Operation", Mechanism and Machine Theory, Vol. 44, pp. 336-348, 2008. (Available online DOI information: 10.1016/j.mechmachtheory.2008.03.011)**
401. Wu L., Ceccarelli M., A Numerical Characterization for the Operation of an Underactuated Finger Mechanism, International Mechanisms And Machine Science Conference (CCMMS 2008), Dalian, P.R. China, 2008, pp.273-276. (best paper award)
402. Ceccarelli M., "Kinematic Design of Manipulators", Keynote Lecture, International Mechanisms And Machine Science Conference (CCMMS 2008), Dalian, P.R. China, 2008, pp.1-6.
403. **Carbone G., Ceccarelli M., "Design of LARM Hand: Problems and Solutions", 2008 IEEE-TTTC International Conference on Automation, Quality and Testing, Robotics, AQTR 2008, Cluj-Napoca, 2008, pp. 298-303; (best paper award): in Journal of Control Engineering and Applied Informatics, 2008, Vol.10, n.2, pp. 39-46.**
404. Ceccarelli M., Ottaviano E., Florea C., Itul T.P., Pisla A., "An Experimental Characterization of Earthquake Effects on Mechanism Operation", 2008 IEEE-TTTC International Conference on Automation, Quality and Testing, Robotics, AQTR 2008, Cluj-Napoca, 2008, pp. 293-297.
405. Luo M., Carbone G., Ceccarelli M., Li T., "A Mechanism for Moving and Rotating Fingers in Robotic Hand", IEEE-TTTC International Conference on Automation, Quality & Testing, Robotics AQTR 2008, Student forum, Cluj-Napoca, 2008, pp.66-71.
406. Carbone G., Shuangji Y., Wu L., Ceccarelli M., Zhen L., "Design and Simulation of a New Underactuated Mechanism for LARM Hand", 17th CISM-IFTOMM Symposium on Robot Design, Dynamics, and Control ROMANSY08, Tokyo, 2008, pp. 253-260
407. Hernández-Martínez E. E., Ceccarelli M., Carbone G., López-Cajún C., "Simulación de un manipulador paralelo espacial, de 3 grados de libertad", V Congreso Bolivariano De Ingeniería Mecánica, Junio de 2008, Cúcuta (Colombia).
408. Husty M., Ottaviano E., Ceccarelli M., "A Geometrical Characterization of Workspace Singularities in 3R Manipulators", Advances in Robot Kinematics ARK2008, Springer, Wien, 2008, pp. 411-418.
409. **Ceccarelli M., Koetsier T., "Burmeister and Allievi: A Theory and Its Application for Mechanism Design at the End of 19th Century," Journal of Mechanical Design (Vol.130, July 2008, pp. 072301-1:16), <http://link.aip.org/link/?JMD/130/072301> (DOI: 10.1115/1.2918911).**
410. Chiara Lanni, and Marco Ceccarelli, , Regulation of Grasp Impact in Two-Finger Grippers, Proceedings of the 17th Int. Workshop on Robotics in Alpe-Adria-Danube Region RAAD08, Ancona, CD Proceedings, 2008, paper n .32
411. Conghui Liang, Marco Ceccarelli, and Yukio Takeda, Operation Analysis of a One-DOF Pantograph Leg Mechanism, Proceedings of the 17th Int. Workshop on Robotics in Alpe-Adria-Danube Region RAAD08, Ancona, CD Proceedings, 2008, paper n.50
412. Hao Gu, Marco Ceccarelli and Giuseppe Carbone, Design and Operation of 1-DOF Anthropomorphic Arm for Humanoid Robots, Proceedings of the 17th Int. Workshop on Robotics in Alpe-Adria-Danube Region RAAD08, Ancona, CD Proceedings, 2008, paper n.68.
413. Carbone G., Ottaviano E., Ceccarelli M., Optimality Criteria for the Design of Manipulators, 2008 IEEE International Conferences on Cybernetics & Intelligent Systems (CIS) and Robotics, Automation & Mechatronics (RAM) (CIS-RAM 2008), Chengdu, 2008, paper P1227.
414. Marco Ceccarelli and Erika Ottaviano, Chapter: Kinematic design of manipulators, in I-Tech Book: Robot Manipulators, I-Tech Education and Publishing KG, Wien, 2008, pp. 49- 72. ISBN 978-953-7619-06-0.
415. Cigola M. and Ceccarelli M., Chapter: A Robot Application for Analysis, Survey and Conservation of Historical Architectures, in "Robotics and Automation in Construction, I-Tech Education and Publishing KG, Wien, 2008, pp. 328-354. ISBN 978-953-7619-13-8
416. **Ottaviano E., Ceccarelli M., Danieli G., Mundo D., "Analysis of Non-Circular Gears and Cam-Follower Systems as Function Generators", Mechanism and Machine Theory, Vol. 43, pp. 996-1008, 2008. (DOI 2007:10.1016/j.mechmachtheory.2007.07.004).**
417. **Carbone G., Ceccarelli M., "A Low-Cost Easy-Operation Hexapod Walking Machine", International Journal of Advanced Robotic Systems, Vol.5, n.2, pp.161-166, 2008.**
418. Castejon C., Carbone G. , Garcia Prada J.C., Ceccarelli M., Computational Multi-Objective Optimization to Design Service Robots, Proceedings of EuCoMeS08, the Second European Conference on Mechanism Science, Springer, Dordrecht, 2008, pp.139-148.
419. Yao S., Ceccarelli M., Carbone G., Lu Z., An Optimal Design for a New Underactuated Finger Mechanism, Proceedings of EuCoMeS08, the Second European Conference on Mechanism Science, Springer, Dordrecht, 2008, pp.149-158. ISBN 978-1-4020-8914-5

420. Brix T., Ceccarelli M., Döring U., Kurt Hain – An Outstanding Personality in the Field of Applied Kinematics and the Accessibility to his Scientific Work, Proceedings of HMM2008- the Third IFToMM International Symposium on History of Machines and Mechanisms, Springer, Dordrecht, 2008, pp. 45-58.
421. Muñoz Sanz J.L., Bautista Paz E. , Ceccarelli M., Echávarri Otero J., et al., The Evolution and Development of Mechanical Engineering Through Large Cultural Areas, Proceedings of HMM2008- the Third IFToMM International Symposium on History of Machines and Mechanisms, Springer, Dordrecht, 2008, pp. 69-82.
422. Ceccarelli M., De Paolis., A Brief Account on Roman Machines and Cultural Frames, Proceedings of HMM2008- the Third IFToMM International Symposium on History of Machines and Mechanisms, Springer, Dordrecht, 2008, pp. 83-100. ISBN 978-1-4020-9484-2
423. Russo F., Rossi C., Ceccarelli M., Russo F., Devices for Distance and Time Measurement at the Time of Roman Empire, Proceedings of HMM2008- the Third IFToMM International Symposium on History of Machines and Mechanisms, Springer, Dordrecht, 2008, pp. 101-114.
424. Echávarri Otero J., Díaz Lantada A., Muñoz Sanz J.L., Ceccarelli M., Bautista Paz E., et al., The Twenty-One Books of Devices and Machines: An Encyclopaedia of Machines and Mechanisms of the 16th Century, Proceedings of HMM2008- the Third IFToMM International Symposium on History of Machines and Mechanisms, Springer, Dordrecht, 2008, pp. 115-132.
425. **Ceccarelli M., Renaissance of Machines in Italy: from Brunelleschi to Galilei through Francesco di Giorgio and Leonardo, Mechanism and Machine Theory, Vol.43, pp. 1530- 1542, 2008. (Available online DOI information: 10.1016/j.mechmachtheory.2008.01.001)**
426. **Nava Rodriguez N.E., Carbone G., Ceccarelli M., Simulation results for design and operation of CALUMA, a new low-cost humanoid robot, Robotica (2008) volume 26, pp. 601–618. CambridgeUniversity Press. doi:10.1017/S0263574708004189.**
427. **Parada Puig J.E.; Nava Rodriguez N.E., and Ceccarelli M., A Methodology for the Design of Robotic Hands with Multiple Fingers, International Journal of Advanced Robotic Systems, Vol. 5, No. 2 (2008), pp. 177-184 (ISSN 1729-8806)**
428. Liang C., Ceccarelli M., “A Parametric Study of Feasible Workspace Regions for General Two-Revolute Manipulators”, CD Proceedings of Third International Congress Machine Design and Modelling CMSM’2009, Hammamet, Paper n. 26, 2009.
429. Ottaviano E., Ceccarelli M., Grande S., “An Experimental Evaluation of Human Walking”, CD Proceedings of Third International Congress Machine Design and Modelling CMSM’2009, Hammamet, Paper n. 43, 2009.
430. Carbone G., Nakadate R., Solis J., Ceccarelli M.,TakanishiA., MinagawaE., SugawaraM., Niki K., ”Design Improvements on a Carotid Blood Flow Measurement System”, Computational Kinematics CK2009, Duisburg, pp.283-290, 2009.
431. Ceccarelli M., History and Challenges of Mechanism and Machine Science within IFToMM Community, in: Towards Intelligent Enineering & Information Technology, Springer, Berlin, 2009, pp. 469-488.
432. Ceccarelli M., Cigola M., “Influencia de la Obra De Gaspard Monge en el Desarrollo de la Ingenieria Mecanica Italiana en el Siglo 19”, Actas del IV Congreso Internacional de Patrimonio e Historia de la Ingenieria, Las Palmas, 2009, pp.143-156. ISBN 976-84-612-3459-Z.
433. E. Ottaviano, A. Zotov, M. Ceccarelli, A. Golovin, A Teaching Plan on Parallel Robots, Proceedings of the RAAD 2009 18th International Workshop on Robotics in Alpe-Adria-Danube Region, May 25-27, 2009, Brasov, paper n.72.
434. Ceccarelli M., Carbone G., “A Study of Feasibility for a Leg Design with Parallel Mechanism Architecture”, IEEE/ASME Conference on Advanced Intelligent Mechatronics AIM’09, Singapore, 2009, 1447 - 1452, DOI: 10.1109/AIM.2009.5229859
435. Ceccarelli M., “A SIGNIFICANT ROLE OF MECHANISM DESIGN IN MECHATRONICS”, IEEE/ASME Conference on Advanced Intelligent Mechatronics AIM’09, Singapore, 2009, Plenary Lecture.
436. Lanni C., Ceccarelli M., “An Optimum Design Algorithm for Mechanisms in Two-Finger Grippers”, 13th WSEAS International Conference on Systems, Rhodos, 2009, paper no. 620-133, pp. 63-70.
437. Gu H., Ceccarelli M., Carbone G., “An Experimental Characterization of a 1-DOFAnthropomorphic Arm for Humanoid Robots”, 13th WSEAS International Conference on Computers, Rhodos, 2009, paper no. 620-142, pp. 92-99.
438. Liang C., Ceccarelli M., Carbone G., “Novel Biologically Inspired Tripod Walking Robot”, 13th WSEAS International Conference on Computers, Rhodos, 2009, paper no. 620-141, pp. 83-91.
439. Carbone G., Jatsun A., Ceccarelli M., Jatsun S., “Design and Simulation of Cassino Hexapod Robot”, 13th WSEAS International Conference on Computers, Rhodos, 2009, paper no. 620-314, pp. 301-314.
440. Ceccarelli M., “Workspace evaluation for Analysis and Synthesis of Manipulator”, Keynote lecture, 13th WSEAS International Conference on Computers, Rhodos, 2009, pp. 10-12. ISBN: 978-960-474-097-0
441. Briones-León J.A., Carbone G., Castillo-Castañeda E., Ceccarelli M., “Position and Force Control of the CAPAMAN 2 bis Parallel Robot for Drilling Tasks”, IEEE Electronics, Robotics and Automotive Mechanics Conference, Cuernavaca, pp. 181-186, 2009.
442. G. Carbone, A. Malchikov , M. Ceccarelli , S. Jatsun: Design and Simulation of Kursk Robot for in-Pipe Inspection, The 10th IFToMM International Symposium on Science of Mechanisms and Machines SYROM’09, Brasov, 12-15-Oct 2009, Springer, Dordrecht, pp.103-114, ISBN 978-90-481-3521-9.
443. HAO GU and MARCO CECCARELLI, ON LINK EFFECTS OF RING WORKSPACE OF THREE-REVOLUTE MANIPULATORS, The 10th IFToMM International Symposium on Science of Mechanisms and Machines SYROM’09, Brasov, 12-15-Oct 2009, Springer, Dordrecht, pp.285-298, ISBN 978-90-481-3521-9.
444. Ceccarelli M., CHALLENGES FOR MECHANISM DESIGN, The 10th IFToMM International Symposium on Science of Mechanisms and Machines SYROM’09, Brasov, 12-15-Oct 2009, Keynote paper, Springer, Dordrecht, pp.1-13, ISBN 978-90-481-3521-9. DOI 10.1007/978-90-481-3522-6
445. Gonçalves R.S., Carvalho J.C.M., Carbone G., Ceccarelli M., “A General Approach for Accuracy Analysis of Parallel Manipulator with Joint Clearance”, 20th Brazilian Congress of Mechanical Engineering COBEM2009, Gramado, paper COB09-0409, 2009.
446. Yao S., Zhan Q., Ceccarelli M., Carbone G., Lu Z., “Analysis and Grasp Strategy Modeling for Underactuated Multi-Fingered Robot Hand”, IEEE International Conference on Mechatronics and Automation ICMA 2009, Changchun, paper no.512, 2009.

447. Liang C., Hernández-Martínez E.E., Carbone G., Ceccarelli M., "A Comparison of Simulations and Experimental Tests on Operation Performance of CapaMan2 bis", IEEE International Conference on Mechatronics and Automation ICMA 2009, Changchun, paper no.640, 2009.
448. Carbone G., Hashimoto K., Sugahara Y., Ceccarelli M., Takanishi A., "Stiffness Analysis and Experimental Validation for WL-16RV Biped Walking Vehicle", IFToMM International Symposium on Robotics and Mechatronics ISRM'09, Hanoi, CD Proceedings, paper n.008, pp. 57-66, 2009.
449. Carbone G., Takeda Y., Ceccarelli M., Huda S., "Error and Stiffness Analysis of 3-URU Pure Rotational Parallel Mechanism", IFToMM International Symposium on Robotics and Mechatronics ISRM'09, Hanoi, CD Proceedings, paper n.009, pp. 77-72, 2009.
450. Ceccarelli M., Carbone G., Chang S.H., "A Study of Feasibility of a Nanosolenoid Actuator Made of Carbon Nanotubes", IFToMM International Symposium on Robotics and Mechatronics ISRM'09, Hanoi, CD Proceedings, paper n.010, pp. 73-78, 2009.
451. Ceccarelli M., Carbone G., Ottaviano, E. Lanni., Leg Designs for Walking Machines at LARM in Cassino, Workshop Robotica per esplorazione lunare unmanned, Roma July 2009.
452. Ceccarelli M., LA MECANICA DE ARQUIMEDES EN EL DESARROLLO DE LA MAQUINAS, Congreso Iberoamericano de Ingenieria Mecanica CIBIM09, Las Palmas, 2009, paper no.331.
453. C. Castejón, G. Carbone, J.C. García-Prada, M. Cecarelli, DISEÑO ÓPTIMO DE MECANISMOS: APLICACIÓN A UN BRAZO ROBÓTICO, Congreso Iberoamericano de Ingenieria Mecanica CIBIM09, Las Palmas, 2009, paper no. 213
454. J. Meneses, H. Rubio, C. Castejón, E. Ottaviano, M. Ceccarelli, J.C. García-Prada, MODELO CINEMÁTICO DEL ROBOT BÍPEDO "PASIBOT", Congreso Iberoamericano de Ingenieria Mecanica CIBIM09, Las Palmas, 2009, paper no.555.
455. Osvaldo Penisi, Marco Ceccarelli, Aplicación de manipulador paralelo 3RPS en rehabilitación de miembros inferiores, Congreso Iberoamericano de Ingenieria Mecanica CIBIM09, Las Palmas, 2009, paper no.777.
456. Giuseppe Carbon, Javier Echávarr, Marco Ceccarelli, J.L. Muñoz Sanz, UN NUEVO CRITERIO PARA CUANTIFICAR LA SEGURIDAD DE ROBOTS INDUSTRIALES Y DE SERVICIO, Congreso Iberoamericano de Ingenieria Mecanica CIBIM09, Las Palmas, 2009, paper no.702.
457. Ceccarelli M., New challenging applications for service robots: problems and experiences, Proceedings of IARP Workshop on Service Robotics and NanoRobotics, Beijing, 2009, invited paper No.2.
458. Giuseppe Carbone, Conghui Liang, Marco Ceccarelli, Using parallel architectures for humanoid robots, 8. Kolloquium Getriebetechnik – Aachen 2009, Invited paper, pp.177-188.
459. Nava Rodriguez N.E., Ceccarelli M., Region posible para el espacio de trabajo de un manipulador generico de tres pares de revolucion, Revista iberoamericana de ingenieria mecanica, 2007, vol.11, n.2, pp.67-80
460. Wu L., Ceccarelli M., "A Numerical Simulation for Design and Operation of an Underactuated Finger Mechanism for LARM Hand", International Journal Mechanics Based Design of Structures and Machines, 2009, Vol. 37, No. 1, pp.86-112 (DOI:10.1080/15397730802713397).
461. Wu L., Carbone G., Ceccarelli M., "Designing An Underactuated Mechanism for a 1 Active Dof Finger Operation", Mechanism and Machine Theory, Vol.44, pp.336-348, 2009. (Available online DOI information:10.1016/j.mechmachtheory.2008.03.011).
462. Gonzalez, E. Ottaviano, M. Ceccarelli, "On the Kinematic Functionality of a Four-Bar based Mechanism for Guiding Wheels in Climbing Steps and Obstacles", Mechanism and Machine Theory, Vol. 44, pp 1507-1523, 2009, doi:10.1016/j.mechmachtheory.2008.12.004.
463. Ottaviano E., Ceccarelli M., Palmucci F., "An application of CaTraSys, a cable-based parallel measuring system for an experimental characterization of human walking", Journal of Robotica, 2009, 28, pp 119-133, doi:10.1017/S0263574709005645.
464. Lanni C., Ceccarelli M., "An Optimzation Problem Algorithm for Kinematic Design of Mechanisms for Two-Finger Grippers", An Optimzation – Problem Algorithm for Kinematic Design of Mechanisms for Two-Finger Grippers, TOMEJ, Vol. 3, (14), pp.49-62, 2009, (Available online DOI information: 10.2174/1874155X00903010049), (ISSN: 1874-155X).
465. Lanni C., Carbone G., Ceccarelli M., Ottaviano E., "An Optimal Synthesis Procedure for Polynomial Cam Profiles", ARoTMM – IFToMM Journal Mechanisms and Manipulators, Vol. 8, No. 1, 2009, p. 17 – 26.
466. Lahouar S., Ottaviano E., Zeghoul S., Romdhane L., Ceccarelli M., "Collision free path-planning for cable-driven parallel robots", Journal Robotics and Autonomous Systems, [Volume 57, Issue 11, November 2009, Pages 1083-1093](#), doi:10.1016/j.robot.2009.07.006
467. Minzhou Luo, Giuseppe Carbone, Marco Ceccarelli, Design Considerations for Moving and Rotating Fingers in Robotic Hand, Proceedings of the IEEE International Conference on Automation and Logistics, Qingdao, China September 2008.
468. YAO Shuangji, CECCARELLI Marco, ZHAN Qiang, CARBONE Giuseppe, and LU Zhen, Design Considerations foran UnderactuatedRobotic Finger Mechanism, CHINESE JOURNAL OF MECHANICAL ENGINEERING, Vol. 22, No. 4, pp. 475-488, 2009. ISSN 1000-9354; DOI: 10.3901/CJME.2009.04.475
469. Ceccarelli M., L. Romdhane., "Design considerations for human-machine interfaces in cable-based parallel manipulators for physiotherapy applications", IFToMM International Symposium on Robotics and Mechatronics ISRM'09, Hanoi, CD Proceedings, paper n.011, pp. 79-86, 2009, ISBN.
470. Hao Gu and Marco Ceccarelli., "Simulation of Combined Motions for a 1-DOF Clutched Robotic Arm", IEEE International Conference on Mechatronics and Automation ICMA 2009, Changchun, paper no.672, 2009.
471. Borrás J., Thomas F., Ottaviano E., Ceccarelli M., "Reconfigurable 5-DOF 5-SPU Parallel Platform," ASME/IFToMM International Conference on Reconfigurable Mechanisms and Robots (ReMAR), King's College of London, London, 2009.
472. Marco Ceccarelli, Doina Pislăb, Florin Graur, Erika Ottaviano, Călin Vaidab, Rodica Ungur, Salvatore Grandea, Monica Popc, Design and Operation Issues for Parallel Robotic Devices in the Rehabilitation of Stroke Patients, Proceedings of the RAAD 2009 18th International Workshop on Robotics in Alpe-Adria-Danube Region, May 25-27, 2009, Brasov, paper n.82.
473. Cai Yao, Zhan Qiang, Marco Ceccarelli, Giuseppe Carbone, Yao Shuangji, Lu Zhen Design and Simulation of a DSP Controller for a LARM Hand, Beihang University, Beijing, 2009.

474. Victor D. Kumazawa, Tarcísio A. Hess-Coelho, Décio Rinaudi, Carbone G., Ceccarelli M., KINEMATIC ANALYSIS AND OPERATION FEASIBILITY OF A 3-DOFASYMMETRIC PARALLEL MECHANISM”, 20th Brazilian Congress of Mechanical Engineering COBEM2009, Gramado, paper COB09-0744, 2009.
475. Ceccarelli M., Role of IFToMM in MMS Developments, The 23 Conference on Heavy Duty Machines, Zakopane, 25-28 Jan 2010, Keynote paper.
476. G. Carbone, M. Suciu, M. Ceccarelli and D. Pisla , Design and Simulation of Cassino Hexapode Walking Machine, *International Journal of Mechanics and Control*, Vol. 10, n. 2, pp. 27-34, December 2009.
477. Ceccarelli M., Considerazioni sulla storia e prospettive della robotica per lo sviluppo della società, *Revista internacional de los estudios vascos*, Vol.54, 2, pp.335-349, 2009, ISSN0212-7016.
478. Castelli G., Ottaviano E. Ceccarelli M., A parametric study of postion workspace capability of CAPAMAN, the Annals of Dunarea De Jos University of Galati – Mechanical Engineering, Fascile XIV, pp.5-19, ISSN 1224-5615.
479. Hernández-Martínez, Eusebio E., Ceccarelli, Marco, Carbone, Giuseppe, López-Cajún, Carlos S. and Jáuregui-Correa, Juan C. (2010), Characterization of a Cable-Based Parallel Mechanism for Measurement Purposes, *Mechanics Based Design of Structures and Machines*, 38: 1, 25 — 49 DOI: 10.1080/15397730903386101
480. Ceccarelli M. Romdhane L., Design issues for human-machine platform interface in cable-based parallel manipulators for physiotherapy applications, *Journal of Zhejiang University SCIENCE A (ISSN 1673-565X)*, 2010 Vol.11 No.4 p.231-239. DOI 10.1631/jzus.A1000027
481. Erika Ottaviano, Salvatore Grande, and Marco Ceccarelli, A BIPED WALKING MECHANISM FOR A RICKSHAW ROBOT, *Mechanics Based Design of Structures and Machines*, 38: 1–16, 2010 ISSN: 1539-7734 DOI: 10.1080/15397731003645008.
482. HAO GU, MARCO CECCARELLI and GIUSEPPE CARBONE, DESIGN AND SIMULATION OF A 1-DOFANTHROPOMORPHIC CLUTCHED ARM FOR ROBOTS, *International Journal of Humanoid Robotics*, Vol. 7, No. 1 (2010) 157–182, DOI: 10.1142/S0219843610002027
483. Ceccarelli M., ‘Francesco Masi (1852-1944)’, Distinguished Figures in Mechanism and Machine Science: Their Contributions and Legacies – Part 2, Book series on History of Machines and Machine Science, Vol.7, Springer, Dordrecht, 2010, pp.141-162. DOI 10.1007/978-90-481-2346-9_8. ISBN: 978-90-481-2345-2
484. Giuseppe Carbone, Stefano Iannone, Marco Ceccarelli, Regulation and control of LARM Hand III, *Robotics and Computer-Integrated Manufacturing*, 26 (2010) 202–211 (doi:10.1016/j.rcim.2009.05.002).
485. Ceccarelli M., IFToMM celebration for 40-th year celebration, *Mechanism and Machine Theory* 45 (2010) 119–127.
486. Marco Ceccarelli, Michela Cigola, Descriptive Geometry and the Theory of Mechanisms in nineteenth century Italian engineering: similarities and interrelationship, *Disegnare: Biannual Magazine of the Survey, Analysis and Drawing Department of the Environment and Architecture*, Vol. XX, n. 39, 2009, pp.12-25.
487. Minzhou Luo, Giuseppe Carbone, Marco Ceccarelli, Xianxiang Zhao, Analysis and design for changing finger posture in a robotic hand, *Mechanism and Machine Theory* 45 (2010) 828–843, doi:10.1016/j.mechmachtheory.2009.10.014
488. Marco Ceccarelli, A perspective of Mechanism and Machine Science: from the past to the future (keynote lecture), Int. Conference of Mechanical Engineering, Craiova, Apr 2010, Vol.I, pp.7-24, ISBN 978-606-510-878-3.
489. E. E. Hernandez-Martinez, L. Conghui, G. Carbone, M. Ceccarelli, C. S. Lopez-Cajun, Experimental and Numerical Characterization of CaPaMan 2bis Operation, *Journal of Applied Research and Technology*, Vol.8 No.1 April 2010, pp-101-119. ISSN 1665-6423
490. Yao S., Carbone G. , Ceccarelli M., Wu L., Lu Z. “Grasping Simulation of an Underactuated Finger Mechanism for LARM Hand”, *International Journal of Modelling and Simulation*, Vol.30, No.1, 2010, pp.87- 97, paper 205-5134, Acta Press, ISSN: 0228-6203 DOI: 10.2316/Journal.205.2010.1.205-5134.
491. A. Stoica, G. Carbone, M. Ceccarelli, D. Pisla, Cassino Hexapod : Experiences and New Leg Design, 2010 IEEE-TTTC International Conference on Automation, Quality and Testing, Robotics, AQTR 2010, Cluj-Napoca, 2010, pp.338-343.
492. Ceccarelli M., The mechanics of Archimedes towards modern mechanism design, The Genius of Archimedes – 23 centuries of influence on Mathematics, Science and Engineering, Book series on History of Machines and Machine Science, Vol.11, Springer, Dordrecht, 2010, pp. 177-187, . ISBN: 978-90-481-9090-4 DOI: 10.1007/978-90-481-9091-1_12
493. Marco Ceccarelli, Doina Pislă, Florin Graur, Erika Ottaviano, Călin Vaida, Rodica Ungur, Salvatore Grande, Monica Pop, DESIGN AND OPERATION ISSUES FOR PARALLEL ROBOTIC DEVICES IN THE REHABILITATION OF STROKE PATIENTS, *International Journal of Mechanics and Control*, JoMaC Special issue for RAAD09, pp.51-58, Vol.11, no.1, 2010
494. Giuseppe CARBONE, Marco CECCARELLI, Comparison of indices for stiffness performance evaluation, *Front. Mech. Eng. China* 2010, 5(3): 270–278, DOI 10.1007/s11465-010-0023-z
495. Liang, C., Ceccarelli, M., 2009, Design and Simulation a Waist-Trunk System for a Humanoid Robot, In proceedings of the 18th CISM-IFTToMM Symposium on Robot Design, Dynamics, and Control, Springer, Wien, pp. 217-225.
496. Marco Ceccarelli, Experimental Mechanics for Mechanism Design: An Illustrated Summary, EUROMECH Colloquium 515 Advanced Applications and Perspectives of Multibody System Dynamics, Blagoevgrad, July 13 – 16, 2010 , - paper EUM515-L1
497. Giuseppe Carbone, Jorge Angeles, Giuseppe Cannella, Marco Ceccarelli, Derivation of the Mass Matrix for the McGill Schönflies Motion Generator, EUROMECH Colloquium 515 Advanced Applications and Perspectives of Multibody System Dynamics, Blagoevgrad, July 13 – 16, 2010 , - paper EUM515-01.
498. Ceccarelli Marco, Parallel Manipulator Architectures from CAPAMAN Design, Proceedings of the RAAD 2010, 19th International Workshop on Robotics in Alpe-Adria-Danube Region RAAD 2010, June 22-25, 2010, Budapest, paper 55. DOI 10.1109/RAAD.2010.5524588
499. Hao Gu and Marco Ceccarelli, AN OPTIMUM PATH planning for larm clutched arm, *Advances in Robot Kinematics ARK2010*, Springer, Wien, 2010, pp.393-400
500. Nestor Eduardo Nava Rodríguez, Luis Moreno Lorente, Giuseppe Carbone, Marco Ceccarelli, A NEW DESIGN FOR CASSINO HEXAPOD ROBOT, Proceedings of the 10th Biennial ASME Conference on Engineering System Design and Analysis ESDA 2010, July 12-14, 2010, Istanbul, paper ESDA2010-24020.

501. Cigola M., Russo F., Rossi C., Ceccarelli M., STRUMENTI GRECO-ROMANI PER LA MISURA DELLE DISTANZE, Atti II Convegno Naz. Storia dell'Ingegneria, Napoli, 2010, pp. 219-228.
502. Castejón C., Carbone G., García-Prada J.C., Ceccarelli M., "A Multi-Objective Optimization of a Robotic Arm for Service Tasks", *Strojniški vestnik - Journal of Mechanical Engineering*, Vol.56, No.5, pp.316-329, 2010. ISSN 0039-2480
503. Marco Ceccarelli and Giuseppe Carbone, DESIGN AND OPERATION OF FINGERED HANDS AND TWO-FINGER GRIPPERS FOR SPACE APPLICATIONS AS FROM EXPERIENCES AT LARM, IX International scientific-technical Conference "VIBRATION – 2010. Control vibration technologies and machines", Kursk 2010, P 208-216, ISBN 978-5-7681-0561
504. Marco Ceccarelli, Problems and experiences in using parallel manipulators for medical applications, an International Workshop ROBOMED 2010: New trends in the development of parallel robots for medical applications, Cluj-Napoca, 2010, paper no.5.
505. Marco Ceccarelli, Giuseppe Carbone, Erika Ottaviano, Mechanism Solutions for Legged Robots Overcoming Obstacles, New Trends in Mechanism Science, Analysis and Design Series: Mechanisms and Machine Science, Vol. 5, 1st Edition., 2010, pp. 545-553, ISBN: 978-90-481-9688-3, DOI: 10.10007/978-90-481-9689-0_63.
506. Marco Ceccarelli, A role of MMS and IFToMM in Technology developments, MEMORIAS DEL XVI CONGRESO INTERNACIONAL ANUAL DE LA SOMIM Sociedad Mexicana de Ingenieria Mecanica, 22 al 24 DE SEPTIEMBRE, 2010 MONTERREY, NUEVO LEÓN, MÉXICO, keynote lecture.
507. Conghui Liang, Marco Ceccarelli, Giuseppe Carbone, An Experimental Characterization of Operation of a Waist-Trunk System with Parallel Manipulator, The First IFToMM Asian Conference on Mechanism and Machine Science, October 21 - 25, 2010, Taipei, Taiwan, 2010, Paper ID: 250042. (Best paper Award)
508. Hao, Gu, Marco Ceccarelli, An Experimental Validation of LARM Clutched Arm, The First IFToMM Asian Conference on Mechanism and Machine Science, October 21 - 25, 2010, Taipei, Taiwan, 2010, Paper ID: 250043.
509. Marco Ceccarelli and Federico Thomas, A HISTORICAL SURVEY ON THE NUREMBER SCISSORS, THE PRECURSOR OF MODERN DEPLOYABLE MECHANISMS: AN ILLUSTRATED SUMMARY, 2010 IFToMM Workshop on History of Mechanisms and Machines, Beijing, China, October 8-10, 2010
510. Marco Ceccarelli and I-Ming Chen, Puppet Cable Mechanisms and Their Functionality: An Illustrated Survey, 2010 IFToMM Workshop on History of Mechanisms and Machines, Beijing, China, October 8-10, 2010
511. KENJI HASHIMOTO, GIUSEPPE CARBONE, YUSUKE SUGAHARA, MARCO CECCARELLI, ATSUO TAKANISHI, EXPERIMENTAL EVALUATION OF STIFFNESS PERFORMANCE FOR A BIPED WALKING VEHICLE WITH PARALLEL ARCHITECTURE, Proceedings of CLAWAR'2010: 13th International Conference on Climbing and Walking Robots and the Support Technologies for Mobile Machines, Nagoya, Japan, 31 August - 03 September 2010, pp.928-935.
512. Özgün Selvi, Marco Ceccarelli, An experimental evaluation of earthquake effects on mechanism operation, Proceedings of the int'l symposium of mechanism and machine science AzCIFTToMM, 2010, 5-8 October, Izmir, Turkey, pp 408-416.
513. G Carbone, R Nakadate, J Solis, M Ceccarelli, A Takanishi, E Minagawa, M Sugawara, and K Niki., **Workspace analysis and design improvement of a carotid flow measurement system**, Proc. IMechE Vol. 224 Part H: J. Engineering in Medicine, pp.1311-1323. DOI 10.1243/09544119JEIM667
514. Hao Gu and Marco Ceccarelli, Experimental Validation of a Test-bed for LARM Clutched Arm, ARoTMM – IFToMM Journal Mechanisms and Manipulators, Vol. 9, Nr. 1, 2010, p.13-28, ISSN 1583-4743.
515. Marco Ceccarelli, Alessandro Di Rienzo, Giuseppe Carbone, Piero Torassa, **A STUDY ON BALANCE ERRORS IN PNEUMATIC TYRES**, International Journal of Mechanics and Control, Vol. 11, No. 02, pp.15-26, 2010, ISSN 1590-8844.
516. Erika Ottaviano, Sergey Vorotnikov, Marco Ceccarelli, Pavel Kurenev, Design improvements and control of a hybrid walking robot Robotics and Autonomous Systems 59 (2011) 128–141. doi:10.1016/j.robot.2010.10.002.
517. Rogério Sales Gonçalves, João Carlos Mendes Carvalho, Giuseppe Carbone, and Marco Ceccarelli, **Indices for Stiffness and Singularity Evaluation for Designing 5R Parallel Manipulators**, The Open Mechanical Engineering Journal, 2010, 4, 61-68. [DOI: 10.2174/1874155X01004010061] <http://www.bentham.org/open/tomej/openaccess2.htm>
518. Ceccarelli M., A role of MMS and IFToMM in Technology developments, Keynote paper, 2010 International Conference on Mechatronics and Digital Manufacturing Technology (ICDMA 2010), CentralSouthUniversity, Changsha (China), Dec 2010.
519. Ceccarelli M., Clasificación de manipuladores 3R en función del espacio de Trabajo, XVIII Congreso Nacional de Ingeniería Mecánica, Ciudad Real, 2010, paper no. 191.
520. H. Gu, N. E. Nava Rodriguez, M. Ceccarelli, Dynamics simulation of operation for a clutched arm, XVIII Congreso Nacional de Ingeniería Mecánica, Ciudad Real, 2010, paper no. 250.
521. C. Liang, N.E.Nava Rodriguez, M. Ceccarelli, Modeling and Simulation of a Waist-Trunk System with Mass Payloads, XVIII Congreso Nacional de Ingeniería Mecánica, Ciudad Real, 2010, paper no. 249.
522. Ch. Pinto, J. Corral, A. Hernández, M. Ceccarelli, Un procedimiento para la obtención de espacios de trabajo basado en criterios estructurales, XVIII Congreso Nacional de Ingeniería Mecánica, Ciudad Real, 2010, paper no. 184.
523. Ceccarelli M., Design and experimental validation of mechanisms for novel applications, International Conference On Multi Body Dynamics (ICMBD – 2011), February 24th -26th, 2011 at K L University, Vijayawada, A.P, India, Keynote paper, pp.233-249.
524. Hao Gu and Marco Ceccarelli, **Trajectory Planning for a 1-DOF Clutched Robotic Arm**, *Robotica*: page 1 of 12. © Cambridge University Press 2010, doi:10.1017/S0263574710000603, Vol.29, n.4, pp.745-756.
525. Liang C., Gu H., Ceccarelli M., Carbone G., "Design and Operation of a Tripod Walking Robot Via Dynamics Simulation", *International Journal Robotica*, vol. 29 : pp 733-743, 2011. doi:10.1017/S0263574710000615
526. Hui Li, Marco Ceccarelli, Qiang Huang and Giuseppe Carbone, A Chameleon-Like Service Robot for Space Station, International Workshop on Bio-Inspired Robots. April 6-8, 2011 ; IRCCyN Ecole des Mines de Nantes, Nantes, France, poster paper no.46. www.emn.fr/z-dre/bionic-robots-workshop/
527. Hao Gu and Marco Ceccarelli, **RING WORKSPACE TOPOLOGY OF THREE-REVOLUTE MANIPULATORS**, International Journal of Modelling and Simulation, Vol. 31, No. 2, 143-153, 2011. DOI: 10.2316/Journal.205.2011.2.205-5407

528. T. Li, M. Ceccarelli, "A Geometric Approach for Workspace Determination of Planar n-DOF Parallel Manipulators", 4th International Congress Design and Modeling of Mechanical Systems, Tunisia, May 30–June 1, 2011, paper ID. 60
529. M. Ceccarelli, Mechanism Designs of Cultural Heritage, 13th World Congress in Mechanism and Machine Science IFToMM 2011, Guanajuato, 2011, paper n. A21-393.
530. Carbone, C. Liang, H. Gu, M. Ceccarelli, A. Burisch and A. Raatz, Design and Simulation of a Binary Actuated Parallel Micro-Manipulator, 13th World Congress in Mechanism and Machine Science IFToMM 2011, Guanajuato, 2011, paper n. A12-332.
531. H. Kerle, K. Mauersberger, and M. Ceccarelli, Historical Remarks on Past Model Collections of Machines and Mechanisms in Europe, 13th World Congress in Mechanism and Machine Science IFToMM 2011, Guanajuato, 2011, paper n. A21-279.
532. O. Erogoval and M. Ceccarelli, Ivan Ivanovich Artobolevski as one of the Founders of IFToMM, 13th World Congress in Mechanism and Machine Science IFToMM 2011, Guanajuato, 2011, paper n. A21-397.
533. Ceccarelli M., Activity and Trends in MMS from IFToMM community, in: Role of MMS and IFToMM in Technology Development, Book series on Machines and Machine Science, pp.3-24, Vol.1, Springer, Dordrecht, 2011. ISBN 978-94-007-1299-7, DOI: http://dx.doi.org/10.1007/978-94-007-1300-0_1
534. Cigola Michela; Ceccarelli Marco, Historical Development of Paper Mills and Their Machines in South Latium During the Nineteenth Century, in: History of Machines for Heritage and Engineering Development, Book series on History of Machines and Machine Science, pp 85-117, Vol.14, Springer, Dordrecht, 2011. ISBN 978-94-007-1250-8; DOI: 10.10007/978-94-007-1251-5_4
535. Li T., Carbone G., Ceccarelli M., "An Experimental Characterization of PD Control for LARM Hand III", ECCOMAS Thematic Conference Multibody Dynamics 2011., J.C. Samin, P. Fisette (eds.), CD proceedings, Brussels, 2011. ISBN 978-2-8052-0116-5
536. **Ceccarelli M., Problems and issues for service robots in new applications, International Journal of Social Robotics: Volume 3, Issue 3 (2011), Page 299-312, DOI: 10.1007/s12369-011-0097-8.**
537. Tao Li, Marco Ceccarelli, Additional Actuators for Obstacle Overcoming by a Leg Mechanism, Preprints of the 18th IFAC World Congress, Milano (Italy) August 28 - September 2, 2011, paper 351, pp. 6899- 6903.
538. Licheng Wu, Zhipeng Lian, Guosheng Yang, and Marco Ceccarelli, Water Dancer II-a: a Non-tethered Telecontrollable Water Strider Robot, International Journal of Advanced Robotic Systems, Volume 8, Number 4, September 2011, pp. 10-17, <http://www.intechopen.com/journals/volume/issn/1729-8806/volume/8/number/4>; International Journal of Advanced Robotic Systems; 2012, printed volume for Selected Papers, pp.21-28
539. Hui Li, Marco Ceccarelli, Qiang Huang and Giuseppe Carbone, Problems and Requirements for a Chameleon-Like Service Robot in Space Station, 2011 IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM2011), Budapest, Hungary, July 3-7, 2011, paper no.37, pp. 463-468.
540. Tao Li, Marco Ceccarelli, A LEG DESIGN FOR A BIPEED HUMANOID SERVICE ROBOT, Proceedings of CLAWAR 2011: the 14th International Conference on Climbing and Walking Robots and the Support Technologies for Mobile Machines, Paris, 6 – 8 september 2011, pp. 893-900.
541. J. Corral Ch. Pinto, S. Herrero, O. Altuzarra, M. Ceccarelli, A CHARACTERIZATION OF WORKSPACE OF PARALLEL MANIPULATORS WITH DYNAMIC AND OPERATION FEATURES, 10^o Congreso Iberoamericano de Ingeniería Mecánica CIBIM10, Oporto, 2011, pp.501-509 .
542. **M. Ceccarelli, R.C. Saltarello, G. Carbone and J.C.M. Carvalho, Simulation of the lumbar spine as a multi-module parallel manipulator, Applied Bionics and Biomechanics 8 (2011) 363–374, DOI 10.3233/ABB-2011-0046**
543. Marco Ceccarelli and Michela Cigola, On the evolution of graphical representation of gears, Proceeding of MeTrApp 2011 Mechanisms, Transmissions, Applications Workshop, Book series on Machines and Machine Science, Vol.1, Springer, Dordrecht, 2011. pp. 3-14.
544. Li T., Ceccarelli M., An Experimental Characterization of a Rickshaw Prototype, Proceedings of MeTrApp 2011 Mechanism, Transmissions, Applications Workshop, Book series on Machines and Machine Science, Vol.1, Springer, Dordrecht, 2011. pp. 205-216.
545. Conghui Liang, Marco Ceccarelli and Giuseppe Carbone, Design and Simulation of Legged Walking Robots in MATLAB® Environment, in: [MATLAB for Engineers - Applications in Control, Electrical Engineering, IT and Robotics](#), Edited by: Karel Perutka, Publisher: [InTech](#), Chapter 20, pp. 459-492, ISBN 978-953-307-914-1
546. Stanislav Sula, Marco Ceccarelli, Doina Pislă, An Experimental Evaluation of Earthquake Effects on Mechanism Operation, International Journal of Mechanics and Control, JoMaC Special issue for RAAD10, pp.91-98, Vol.12, no.2, 2011, ISSN 1590-8844.
547. **LIANG Conghui, CECCARELLI Marco, and CARBONE Giuseppe, Experimental Characterization of Operation of a Waist-Trunk System with Parallel Manipulators, CHINESE JOURNAL OF MECHANICAL ENGINEERING, Vol. 24, No. 5, 2011, pp.713-722, DOI: 10.3901/CJME.2011.05.713.**
548. **Carbone G., Villegas E., Ceccarelli M., Design and validation of force control loops for a parallel manipulator, Intern. Journal of Intelligent Mechatronics and Robotics, Vol.1 no. 4, 1-18, Oct-dec 2011. DOI: 10.4018/IJIMR.201100101**
549. **Nestor Eduardo Nava Rodríguez, Luis Moreno Lorente, Giuseppe Carbone, Marco Ceccarelli, A Control Design with Differential Evolution Algorithm for a Screw-actuated Robotic Leg, Journal of Control Engineering and Technology (JCET), Vol.1 No.2 October 2011 PP.65-75.**
550. Conghui LIANG, Marco CECCARELLI, Feasible workspace regions for general two-revolute manipulator, Frontiers of Mechanical Engineering Vol.4, 2011, DOI 10.1007/s11465-011-0228-9.
551. Licheng Wu, Shuhui Wang, Marco Ceccarelli, Haiwen Yuan, Guosheng Yang, Shape and Location Design of Supporting Legs for a New Water Strider Robot, 2011 IEEE/RSJ International Conference on Intelligent Robots and Systems, San Francisco, Sept 2011, paper no.206, pp.5061-5066 (978-1-61284-455-8).
552. D'Aliesio E., Ceccarelli M., A history of artificial hands, Proceedings of IFToMM-FelbIM Int. Symposium on Mechatronics and Multibody Systems MUSME 2011, Editorial Polytechnic University of Valencia, Valencia, 2011, pp.555-578.
553. Jiménez E., Ceccarelli M., Carbone G., A DYNAMIC ANALYSIS OF THE ROBOT CAPAMAN (CASSINO PARALLEL MANIPULATOR) AS SOLAR TRACKER, Proceedings of IFToMM-FelbIM Int. Symposium on Mechatronics and Multibody Systems MUSME 2011, Editorial Polytechnic University of Valencia, Valencia, 2011, pp.579-594
554. Li T., Ceccarelli M., A Topology search for a new larm leg mechanism, Proceedings of IFToMM-FelbIM Int. Symposium on

- Mechatronics and Multibody Systems MUSME 2011, Editorial Polytechnic University of Valencia, Valencia, 2011, pp. 77-94.
555. Ceccarelli M., A history of TMM-MMS in Italy, 15th National Conference on Machines and Mechanisms, 2011, Chennai, paper NaCoMM2011-59, Edited Book: Machines and Mechanisms, Narosa Publ. House, Delhi, 2012, pp.67-74. ISBN 978-81-8487-192-0.
 556. Tao Li, Hao Gu, Conghui Liang, Giuseppe Carbone, Marco Ceccarelli, Christian Löchte, Annika Raat, Test Results with a Binary Actuated Parallel Manipulator, 15th National Conference on Machines and Mechanisms, 2011, Chennai, paper NaCoMM2011-104, Edited Book: Machines and Mechanisms, Narosa Publ. House, Delhi, 2012, pp.401-409. ISBN 978-81-8487-192-0.
 557. Ceccarelli M., Workspace Evaluation for Analysis and Synthesis of Manipulators, 15th National Conference on Machines and Mechanisms, 2011, Chennai, paper keynote lecture 3. Edited Book: Machines and Mechanisms, Narosa Publ. House, Delhi, 2012, pp.1. ISBN 978-81-8487-192-0.
 558. Cesare Rossi, Marco Ceccarelli, Michela Cigola, La groma, lo squadro agrimensorio e il corobate: note di approfondimento su progettazione e funzionalità di antiche strumentazioni, , Disegnare - idee immagini, Biannual Magazine of the Survey, Analysis and Drawing Department of the Environment and Architecture, Vol. XXII, n.42, 2011, pp.22-33. ISBN 978-88-492-2248-7
 559. Tao Li, Hui Li, Marco Ceccarelli, Qiang Huang and Que Dong, Workspace Determination of a Chameleon-like Space Service Robot with Planar Configurations, CIS-RAM 2011, Qindao, Sptember 2011, paper no.26, pp.190-195.
 560. Li H., Carbone G., Ceccarelli M., Huang Q., "Operation Simulation of a Robot for SpaceApplications", 4th International Conference on Intelligent Robotics and Applications ICIRA 2011, Aachen, S. Jeschke, H. Liu, and D. Schilberg (Eds.), Lecture notes in Computer Science Springer book series, vol.7101, part I, pp. 122-131, 2011. DOI: 10.1007/978-3-642-25486-4
 561. Yao S., Ceccarelli M. , Carbone G., Zhan Q., Lu Z., "Analysis and Optimal Design of an Underactuated Finger Mechanism for LARM Hand", Frontiers of Mechanical Engineering, vol.6, n.3, pp.332-343, 2011. DOI: 10.1007/s11465-011-0229-8
 562. Li T. , Ceccarelli M., AN EXPERIMENTAL CHARACTERIZATION OF A RICKSHAW PROTOTYPE, International Journal of Mechanics and Control, Vol.12, no.2, 2011, ISSN 1590-8844.Pag.29-48.
 563. Ceccarelli M., Yao S., Carbone G., Zhan Q., Lu Z., "Analysis and optimal design of an underactuated finger mechanism for robotic fingers", Proceedings of the Institution of Mechanical Engineers, Part C, Journal of Mechanical Engineering Science, Volume 226 Issue 1, January 2012, pp. 242-256. DOI: 10.1177/0954406211412457.
 564. Hao Gu & Marco Ceccarelli (2012): A Multiobjective Optimal Path Planning for a 1-DOF Clutched ARM, Mechanics Based Design of Structures and Machines, 40:1, 109-121.<http://dx.doi.org/10.1080/15397734.2011.609090>
 565. Li Kejia, Ding Xilun, Marco Ceccarelli, Dynamic modeling and performance analysis of a six-legged robot considering the posture of supporting legs, IFToMM International Symposium on Robotics and Mechatronics ISRM 2012, Shanghai, CD Proceedings, paper no.16.
 566. Ceccarelli M. and Cigola M., Service Robots for Restoration of Goods of Cultural Heritage , Chapter 12 in Service Robots and Robotics: Design and Application, Engineering Science Reference (IGI Global), Hershey, 2012, pp.213-228, ISBN 978-1-4666-0293-9; DOI: 10.4018/978-1-4666-0291-5.ch012
 567. Acevedo M, Ceccarelli M., Carbone G., Cafolla D., Complete dynamic balancing of a 3-DOF spatial parallel mechanisms by the application of counter-rotary counterweights, EUROMECH Colloquium 524 on Multibody system modelling, control and simulation for engineering design, University of Twente , February 27–29, 2012.
 568. C. Liang, M. Ceccarelli, Design and simulation of a waist–trunk system for a humanoid robot, Mech. Mach. Theory (2012), Vol. 53, pp.50-65 . doi:[10.1016/j.mechmachtheory.2012.02.009](https://doi.org/10.1016/j.mechmachtheory.2012.02.009)
 569. Ceccarelli M., The Historical Development of Catrasys- a Cable System; In: Explorations in the History of Machines and Mechanisms, Book series on History of Machines and Machine Science, Vol.15, Springer, Dordrecht, 2012. pp.365-379. <http://dx.doi.org/10.1007/978-94-007-4132-4>. ISBN: 978-94-007-4131-7
 570. Zakiuddin K.S., Sondawale H.V, Modak J.P., Ceccarelli M., History of Human Powered Threshing Machines: a Literature Review; In: Explorations in the History of Machines and Mechanisms,, Book series on History of Machines and Machine Science, Vol.15, Springer, Dordrecht, 2012. pp.431-445. <http://dx.doi.org/10.1007/978-94-007-4132-4>. ISBN: 978-94-007-4131-7
 571. G. Carbone, M. Ceccarelli, T. Borangiu, A low-cost control architecture for user-oriented service applications of Cassino parallel manipulator, 14th IFAC Symposium on Information Control Problems in Manufacturing (INCOM 2012), Bucharest, May 23-25, 2012, paper no.337.
 572. Theodor Borangiu, Marco Ceccarelli, Florin Anton, Silvia Anton, Giuseppe Carbone, Octavian Stocklosa, Open Robot Control for Services in Construction, 14th IFAC Symposium on Information Control Problems in Manufacturing (INCOM 2012), Bucharest, May 23-25, 2012, paper no.341.
 573. Ceccarelli M.; Keynote Presentation 2 – IICS'12: Trends and challenges in research for service robots, 14th IFAC Symposium on Information Control Problems in Manufacturing (INCOM 2012), Bucharest, May 23-25, 2012.
 574. Kejia Li, Xilun Ding and Marco Ceccarelli, A total torque index for dynamic performance evaluation of a radial symmetric six-legged robot, Frontiers of Mechanical Engineering, Volume 7, Number 2 (2012), 219-230, DOI:10.1007/s11465-012-0320-9
 575. Mario Acevedo, Marco Ceccarelli and Giuseppe Carbone, Application of Counter-Rotary Counterweights to the Dynamic Balancing of a Spatial Parallel Manipulator, Applied Mechanics and Materials Vol. 162 (2012) pp 224-233, doi:10.4028/www.scientific.net/AMM.162.224
 576. Marco Ceccarelli, A Formulation for Analytical Design of Telescopic Manipulators with Prescribed Workspace, Applied Mechanics and Materials Vol. 162 (2012) pp 113-120, doi:10.4028/www.scientific.net/AMM.162.113
 577. Ceccarelli M., Workspace Evaluation for Analysis and Synthesis of Manipulators, in:Advances in Mechanisms Design, J. Berna et als (eds), Springer, Dordrecht, 2012, pp.289-301. DOI: 10.1007/978-94-007-5125-5_38
 578. Marco Ceccarelli, An Illustrated History of LARM in Cassino, Proceedings of RAAD 2012 international Workshop on Robotics in Ale-Adria-Danube Region, Napoli, Edizioni Scientifiche e Artistiche, ISBN 978-88-95430-45-4,pp. 35-42.
 579. Tao Li, Marco Ceccarelli, Terence Essomba, Med Amine Laribi, Said Zegloul, Analysis of Human Biped Obstacle

- Overcoming by Motion Capture System, Proceedings of RAAD 2012 international Workshop on Robotics in Alpe-Adria-Danube Region, Napoli, Edizioni Scientifiche e Artistiche, ISBN 978-88-95430-45-4, pp. 85-92
580. Giuseppe Carbone, Costantino Falchi, Andrea Manuello Bertetto and Marco Ceccarelli, Simulation of a Gripping Device for Obstacle Removing on Lunar Soil, Proceedings of RAAD 2012 international Workshop on Robotics in Ale-Adria-Danube Region, Napoli, Edizioni Scientifiche e Artistiche, ISBN 978-88-95430-45-4, pp. 150-155
 581. Silvia Anton, Irina Mocanu, Florin Daniel Anton, Theodor Borangiu and Marco Ceccarelli, Gesture Recognition for Robot Assistance in Ambient Assisted Living Environments, Proceedings of RAAD 2012 international Workshop on Robotics in Ale-Adria-Danube Region, Napoli, Edizioni Scientifiche e Artistiche, ISBN 978-88-95430-45-4, pp.223-228. (Best paper research award)
 582. Theodor Borangiu, Marco Ceccarelli, Florin Daniel Anton, Silvia Anton, and Silviu Raileanu, Visual Guidance based on Robot-Object Models, Proceedings of RAAD 2012 international Workshop on Robotics in Ale-Adria-Danube Region, Napoli, Edizioni Scientifiche e Artistiche, ISBN 978-88-95430-45-4, pp. 250-257.
 583. Marco Ceccarelli, Hui Li, Giuseppe Carbone and Qiang Huang, Conceptual Design and Characterization by Simulation of a Chameleon-like Robot for Outdoor Space Service, Proceedings of RAAD 2012 international Workshop on Robotics in Ale-Adria-Danube Region, Napoli, Edizioni Scientifiche e Artistiche, ISBN 978-88-95430-45-4, pp. 334-341
 584. T. Li and M. Ceccarelli, Characterization of Human Locomotion by CATRASYS (Cassino Tracking System), New Trends in Mechanisms and Machine Science, Springer Dordrecht, 2012, pp. 469-472, ISBN 978-94-007-4001-6; DOI 10.1007/978-94-007-4002-3_50
 585. G. Borchert, C. Löchte, S. Brumme, G. Carbone, M. Ceccarelli and A. Raatz, Design Methodology for a Compliant Binary Actuated Parallel Mechanism with Flexure Hinges, New Trends in Mechanisms and Machine Science, Springer Dordrecht, 2012, pp. 171-179, ISBN 978-94-007-4001-6; DOI 10.1007/978-94-007-4002-3_18
 586. J. L. Torres, A. Gimenez, J. Lopez-Martinez, G. Carbone and M. Ceccarelli, Analysis of the dynamic behavior of an electric vehicle using an equivalent roll stiffness model, New Trends in Mechanisms and Machine Science, Springer Dordrecht, 2012, pp.599-607, ISBN 978-94-007-4001-6; DOI 10.1007/978-94-007-4002-3_63. (best paper award)
 587. M. Ceccarelli, Historical Development of CaPaMan, Cassino Parallel Manipulator, New Trends in Mechanisms and Machine Science, Springer Dordrecht, 2012, pp.749-747, ISBN 978-94-007-4001-6; DOI 10.1007/978-94-007-4002-3_78
 588. Tao Li and Marco Ceccarelli, A Method for Topological Design of Mechanism, CD Proceedings of MEDER2012, the IFToMM Symposium on Mechanism Design for Robotics, Beijing, 12-14 October 2012, paper n. 1.
 589. Hui Li, Marco Ceccarelli, Qiang Huang, Giuseppe Cabonec and Zhihong Jiang A Chameleon-like Service Robot for Space Stations, CD Proceedings of MEDER2012, the IFToMM Symposium on Mechanism Design for Robotics, Beijing, 12-14 October 2012, paper n. 5.
 590. **Castejón, C., Carbone, G., García-Prada, J.C., Cecarelli, M, A methodology to design robotic arms for service tasks since early design stage, International Journal of Mechanics and Control, Vol. 13, No. 02, pp. .73-83. 20XX, ISSN 1590-8844**
 591. M. Ceccarelli, Notes for a History of Grasping Devices, in Grasping in Robotics, Carbone, Giuseppe (Ed.); Series: Mechanisms and Machine Science, Vol. 10, Springer Dordrecht, 2013, pp.3-17. http://link.springer.com/chapter/10.1007%2F978-1-4471-4664-3_1
 592. Conghui LIANG, Marco CECCARELLI, Yukio TAKEDA, Operation analysis of a Chebyshev-Pantograph leg mechanism for a single DOF biped robot, Frontiers of Mechanical Engineering 2012, 7(4): 357–370, DOI 10.1007/s11465-012-0340
 593. Marco Ceccarelli and Conghui Liang, , A formulation for automatic generation of workspaceboundary of N-R manipulators, Int. J. Mechanisms and Robotic Systems, Vol. 1, No. 1, 2013, pp.2-13.
 594. Ceccarelli M., Activity and influence of Francesco Masi in Italy at the end of XIX century, in Science and Technics in XVIII and XIX century, Mesini E. and Mirri D. (eds), CLUEB, Bologna , pp. 467- 492. ISBN 978-88-491-3697-5. (in Italian)
 595. Tao Li and Marco Ceccarelli, An Experimental Analysis of Human Straight Walking, Frontiers of Mechanical Engineering, Vol.8, no.1, March 2013, pp.95-103, DOI 10.1007/s11465-012-0357-9.
 596. **Javier Echávarri, Marco Ceccarelli, Giuseppe Carbone, Cristina Alén, José Luis Muñoz, Andrés Díaz & Juan Manuel Munoz-Guijosa (2013): Towards a safety index for assessing head injury potential in service robotics, Advanced Robotics, DOI:10.1080/01691864.2013.791655.**
 597. COPILUSI Cristian, CECCARELLI Marco, CARBONE Giuseppe, HUMAN GAIT PHASES STUDY AND THEIR INFLUENCE ON A LOW-COST EXOSKELETON DESIGN, INTERNATIONAL CONFERENCE OF MECHANICAL ENGINEERING ICOME 2013 : 16th – 17th of May 2013, Craiova – Romania, pp. 41-48.
 598. Ionut Geonea, Marco Ceccarelli, Nicolae Dumitru, Cristian Copilusi, KINEMATICS SIMULATION OF A MECHANISM FOR HUMAN LEG MOTION ASSISTANCE, INTERNATIONAL CONFERENCE OF MECHANICAL ENGINEERING ICOME 2013 : 16th – 17th of May 2013, Craiova – Romania, pp. 49-60.
 599. Giuseppe Carbone, Costantino Falchi, Andrea Manuello Bertetto and Marco Ceccarelli, Simulation of a Gripping Device for Obstacle Removing on Lunar Soil, RAAD 2012 Jnl special Issue, Int. Journal of Mechnics and Control, 2013, Vol.14, no.1 pp.25-31.
 600. Ceccarelli M., Role and Trends of Mechanism Science in Technological Developments, 2013 CCAMMS 10-th International Chinese Conference on Applied Mechanism and Machine Science, Journal Machine Design & Research, Vol. 29, pp. 33-39 (keynote lecture), ISSN 1006-2343.
 601. Li T., Ceccarelli M., Design and Simulation of a New Biped Mechanism, 2013 CCAMMS 10-th International Chinese Conference on Applied Mechanism and Machine Science, Journal Machine Design & Research, Vol. 29, pp. 165-167, ISSN 1006-2343.
 602. Juan Carlos JÁUREGUI, Eusebio E. HERNÁNDEZ, Marco CECCARELLI, Carlos LÓPEZ-CAJÚN, Alejandro GARCÍA, Kinematic calibration of precise 6-DOF Stewart platform-type positioning systems for radio telescope applications, [Frontiers of Mechanical Engineering](#), September 2013, Volume 8, [Issue 3](#), pp 252-260. DOI10.1007/s11465-013-0249-7.
 603. Ceccarelli M., Historia IFTOMM de Teoría de Máquinas y Mecanismos y Retos para su Educación, Jornada Técnica Divulgativa - HISTORIA DE LA INGENIERÍA MECÁNICA, **UNIVERSIDAD DE JAÉN, Jaén, 11 de Septiembre de 2013**

604. Ceccarelli M., Introducción a Mesa Redonda 2 : “EEES. Los grados y master en Europa”, *XIV Reunión Nacional de Profesores de Ingeniería Mecánica y Vehículo, UNIVERSIDAD DE JAÉN, Jaén, 12-13 de Septiembre de 2013*.
605. Gani Balbayev and Marco Ceccarelli, Design and Characterization of a New Planetary Gear Box, In: *New Advances in Mechanisms, Transmissions, and Applications - Proceeding of MeTrApp 2013, MMS Vol.17, Springer, Dordrecht, 2013*. pp. 91-98. DOI: 10.1007/978-94-007-7485-8_12
606. C. Copilusi, M. Ceccarelli, G. Carbone and A. Margine, Mechanism of a Leg Exoskeleton for Walking Rehabilitation Purposes, In: *New Advances in Mechanisms, Transmissions, and Applications - Proceeding of MeTrApp 2013, MMS Vol.17, Springer, Dordrecht, 2013*. pp. 107-114. DOI: 10.1007/978-94-007-7485-8_14
607. Marco Ceccarelli and Jorge Alencastre Miranda, A Fairly Simple Mechanism Design for a Rural Water Pump, In: *New Advances in Mechanisms, Transmissions, and Applications - Proceeding of MeTrApp 2013, MMS Vol.17, Springer, Dordrecht, 2013*. pp. 261-268. DOI: 10.1007/978-94-007-7485-8_32
608. Michela Cigola and Marco Ceccarelli, Giuseppe Antonio Borgnis and significance of his handbooks on representation and terminology of machines, In: *New Advances in Mechanisms, Transmissions, and Applications - Proceeding of MeTrApp 2013, MMS Vol.17, Springer, Dordrecht, 2013*. pp. 301-308. DOI: 10.1007/978-94-007-7485-8_37
609. Ceccarelli M., Mechanism design for robots, The 11th IFToMM International Symposium on Science of Mechanisms and Machines (SYROM'13 Brasov), Springer, Dordrecht, 2013, pp.1-8, ISBN 978-978-3-319-018447. DOI: 10.1007/978-3-319-01845-4_1.
610. C. Copilusi, M. Ceccarelli, N. Dumitru, G. Carbone, Design and Simulation of a Leg Exoskeleton Linkage for a Human Rehabilitation System, The 11th IFToMM International Symposium on Science of Mechanisms and Machines (SYROM'13 Brasov), Springer, Dordrecht, 2013, pp.117-125, ISBN 978-3-319-018447. DOI: 10.1007/978-3-319-01845-4_12.
611. Dugaescu I., Ceccarelli M., Comanescu A., A structural synthesis of a new leg mechanism, The 11th IFToMM International Symposium on Science of Mechanisms and Machines (SYROM'13 Brasov), Springer, Dordrecht, 2013 pp.263-275, ISBN 978-3-319-018447. DOI: 10.1007/978-3-319-01845-4_27.
612. Yibing Fang, Marco Ceccarelli, Findings on Italian Historical developments of Machine Technology in 19th Century towards industrial revolution, The 11th IFToMM International Symposium on Science of Mechanisms and Machines (SYROM'13 Brasov), Springer, Dordrecht, 2013 pp.493-501, ISBN 978-3-319-018447. DOI: 10.1007/978-3-319-01845-4_49.
613. Ceccarelli M., Problems and Experiences on Cable-Based Service Robots for Physiotherapy Applications, in: *New Trends in Medical and Service Robots*, Springer, Dordrecht, 2013, pp.27-42, ISBN 978-3-319-01591-0. DOI: 10.1007/978-3-319-01592-7_3.
614. Marco Ceccarelli, Contributions of Archimedes on mechanics and design of mechanisms, *Mechanism and Machine Theory*, 72 (2014) 86–93, <http://dx.doi.org/10.1016/j.mechmachtheory.2013.10.005>.
615. Marco Ceccarelli and Roberto Bragastini, Historical accounts on the figure of engineers and academic mission for their formation, *New Trends in Educational Activity in the Field of Mechanism and Machine Science*, Springer, Dordrecht, pp.3-10, ISBN 978-3-319-01835-5. DOI: 10.1007/978-3-319-01836-2_1.
616. O.V. Erogoval, M. Ceccarelli, IFToMM First President Ivan Ivanovich Artobolevski, *Proceedings of higher educational institutions- Machine Building, Bauman State Technical University, Moscow*, n.8, 2013, pp 72-78. ISSN 0536-1044.
617. Ceccarelli M., Twenty-five year of activity in IFToMM, *Journal Theory of Mechanism and Machine* (<http://tmm.spbstu.ru>), St Petersburg State University, 2013, Vol.11.No.2, pp.3-14.
618. Copilusi C., Ceccarelli M., Margine A., Rusu P., A COMPARATIVE STUDY FOR HUMAN WALKING WITH A NEW LOW-COST EXOSKELETON PROTOTYPE, *Robotica & Management*, 18-1 / 2013, pp.19-24
619. J. M. T. Pêgo, R. S. Gonçalves, J. C. M. Carvalho, Giuseppe Carbone, Marco Ceccarelli, Stiffness Analysis of CaPaMan-2bis Using Finite Element Analysis, 22nd International Congress of Mechanical Engineering (COBEM 2013) November 3-7, 2013, Ribeirão Preto, SP, Brazil, pp.4560-4568. ISSN 2176-5480
620. Giuseppe Carbone, Costantino Falchi, Andrea Manuello Bertetto and Marco Ceccarelli, Simulation of a Gripping Device for Obstacle Removing on Lunar Soil, *International Journal of Mechanics and Control, JoMaC Special issue for RAAD12*, pp.25-31, Vol.14, no.1, 2013. ISSN 1590-8844.
621. T. Li and M. Ceccarelli, A design procedure for conceptual design of mechanisms, *Int. J. Mechanisms and Robotic Systems*, 2013, Vol. 1, Nos. 2/3, pp.136-150, 2013. ISSN 2047-7244.
622. Ericka Madrid, Marco Ceccarelli, SOLUCION NUMERICA PARA EL DISEÑO DE UN MANIPULADOR TELESCOPICO EMPLEANDO PUNTOS DEL ESPACIO DE TRABAJO, 11 Congreso Iberoamericano de Ingeniería Mecánica, La Plata, Argentina, 11-14 de noviembre de 2013.
623. Yibing Fang, Marco Ceccarelli, Medium Size Companies of Mechanical Industry in North Italy During mid 19th Century, *CD Proceedings on IFToMM Workshop on History of Machine and Mechanism Science, Palermo 21-22- November 2012*, paper no.6. ISBN 978-889-5430-84-3
624. Marco Ceccarelli, Francesco Sorge, Giuseppe Genchi, Notes on Elia Ovazza, professor of TMM in Palermo since the end of 19th century, *CD Proceedings on IFToMM Workshop on History of Machine and Mechanism Science, Palermo 21-22- November 2012*, paper no.3. ISBN 978-889-5430-84-3
625. Ileana Dugaescu, Marco Ceccarelli, Adriana Comanescu, Christian Pelecudi: Researcher and Professor, *CD Proceedings on IFToMM Workshop on History of Machine and Mechanism Science, Palermo 21-22- November 2012*, paper no.19. ISBN 978-889-5430-84-3
626. Ceccarelli Marco, Giuseppe Antonio Borgnis and his handbook collection on machine designs, *CD Proceedings on IFToMM Workshop on History of Machine and Mechanism Science, Palermo 21-22- November 2012*, paper no.14. ISBN 978-889-5430-84-3
627. Cigola Michela, Ceccarelli Marco, Machine designs by Vitruvius in reproductions of *De Architectura* over the time, *CD Proceedings on IFToMM Workshop on History of Machine and Mechanism Science, Palermo 21-22- November 2012*, paper no.15. ISBN 978-889-5430-84-3
628. Rossi C., Ceccarelli M., Heavy Industries in Southern Italy Before the Unification, *CD Proceedings on IFToMM Workshop on History of Machine and Mechanism Science, Palermo 21-22- November 2012*, paper no.12. ISBN 978-889-5430-84-3

629. Ming Li, Huapeng Wu, Heikki Handroos, Marco Ceccarelli, and Giuseppe Carbone, Vibration Control for Parallel Manipulator Based on the Feed Forward Control Strategy, Proceedings of the 2013 International Mechanical Engineering Congress & Exposition IMECE2013, November 15-21, 2013, San Diego, California, USA, paper IMECE2013-64496
630. Ceccarelli M., Considerations on Mechanism Designs as Suitable for Cultural Heritage Evaluation, Advances in Historical Studies 2013. Vol.2, No.4, 175-184, <http://dx.doi.org/10.4236/ahs.2013.24022>.
631. Ceccarelli M., An Outline of History of Mechanism Design in servicing Science, In Physics, Astronomy and Engineering: critical problems in the History of Science and Society – Proc. of SISFA 2012, The Scientia Socialis Press Siauliai, (Invited lecture) pp.1-10. ISBN 978-609-95513-0-2
632. Ericka Madrid, Marco Ceccarelli Numerical solution for designing telescopic manipulators with prescribed workspace points, Robotics and Computer-Integrated Manufacturing, Volume 30, Issue 2, April 2014, Pages 201-205 <http://dx.doi.org/10.1016/j.rcim.2013.09.013>
633. Ceccarelli M., History and Trends of Mechanism Science with an IFToMM role, keynote lecture, International Symposium of Theory and practice of gearing – 2014, January 21-23, 2014, Izhevsk, Russia, pp.31- 49, ISBN 978-5-7526-0629-8.
634. Balbayev G., Ceccarelli M., AN EXPERIMENTAL TEST VALIDATION OF A NON-CIRCULAR GEAR TRAIN, International Symposium of Theory and practice of gearing – 2014, January 21-23, 2014, Izhevsk, Russia, pp.96-102, ISBN 978-5-7526-0629-8.
635. Carbone G., Tedeschi F., Ceccarelli M., DESIGN OF A SENSING AND TESTING SYSTEM FOR MAGNETIC TRANSMISSIONS, International Symposium of Theory and practice of gearing – 2014, January 21-23, 2014, Izhevsk, Russia, pp. 345-351, ISBN 978-5-7526-0629-8.
636. Gani Balbayev, Marco Ceccarelli and Giuseppe Carbone, Design and Numerical Characterization of a New Planetary Transmission, (IJTR) INTERNATIONAL JOURNAL OF INNOVATIVE TECHNOLOGY AND RESEARCH, Volume No.2, Issue No. 1, December – January 2014, 735 - 739. ISSN 2320 –5547
637. Ceccarelli M. and Carbone G., Experiences on Service Robots at LARM in Cassino, in: New Trends in Medical and Service Robots, A. Rodic' et al. (eds.), Mechanisms and Machine Science Vol. 20, Springer, Dordrecht, 2014, pp.331-343, DOI: 10.1007/978-3-319-05431-5_22.
638. Tao Li and Marco Ceccarelli Design and simulated characteristics of a new biped mechanism. Robotica, Available on CJO 2014 doi:10.1017/S0263574714000897
639. M. Wang, M. Ceccarelli, "Design and simulation for kinematic characteristics of a tripod mechanism for biped robots", International Journal of Mechanics and Control, ISSN: 1590-8844, Vol. 15, No. 01, 2014, pp. 11-18.
640. Ceccarelli Marco, Cigola Michela, Carbone Giuseppe, SURVEY, RESTORATION AND CONSERVATION OF HISTORICAL BUILDINGS AND MONUMENTS BY USING ROBOTIC SYSTEMS, Proceedings of 6th International Congress "Science and Technology for the Safeguard of Cultural Heritage in the Mediterranean Basin", Athens, Ed VALMAR, Roma, 2014, Vol. II, pp.42-51. ISBN 978-88-97987-04-8.
641. Ceccarelli Marco, Breve storia della Meccanica Applicata alle macchine in Italia, Atti del Quinto Congresso Italiano di Storia dell'Ingegneria, Ed Cuzzolin, Napoli, 2014, pp. 87-102. ISBN 978-88-87479-80-5
642. Tao Li, Marco Ceccarelli, and Min-Zhou Luo, Design and Operation Analysis of a New Biped Mechanism, International Journal of Humanoid Robotics, Vol. 11, No. 2 (2014) 1450017 (15 pages), DOI: 10.1142/S0219843614500170
643. M. Zottola and M. Ceccarelli, Underactuated Finger Mechanism for LARM Hand, Advances on Theory and Practice of Robots and Manipulators - Proceedings of Romansy 2014 XX CISM-IFTToMM Symposium on Theory and Practice of Robots and Manipulators, Mechanisms and Machine Science Volume 22, Springer, Dordrecht, 2014, pp 283-291, ISBN: 978-3-319-07057-5, DOI: 10.1007/978-3-319-07058-2_32.
644. Mehmet İsmet Can Dede, Barış Taner, Tunç Bilginçan, Marco Ceccarelli, Kinematic Analysis Validation and Calibration of a Haptic Interface, Advances on Theory and Practice of Robots and Manipulators - Proceedings of Romansy 2014 XX CISM-IFTToMM Symposium on Theory and Practice of Robots and Manipulators, Mechanisms and Machine Science Volume 22, Springer, Dordrecht, 2014, pp 375-381, ISBN: 978-3-319-07057-5, DOI: 10.1007/978-3-319-07058-2_42.
645. Cesare Rossi and Marco Ceccarelli, From Legends to Early Designs of Flying machines: From Ancient Egypt to Renaissance, IFTToMM Workshop on History of MMS, CD Proceedings, Tianjin 2014, paper WHMMS-1.
646. Marco Ceccarelli, Pietrarsa Workshops: an Italian Landmark in machine developments at the beginning of Industrial Revolution, IFTToMM Workshop on History of MMS, CD Proceedings, Tianjin 2014, paper WHMMS-3.
647. Conghui Liang, Yuming Li, Ming Hu, Jiawei Tu, Zengkun Pu, I-Ming Che, Marco Ceccarelli Resolved Motion Control of a Large-scale Redundant Manipulator for Concrete Spraying, Proceedings of 2014 IFTToMM Asian Conference on Mechanism and Machine Science, July 9–10, 2014, Tianjin, paper RM3-2.
648. Daniele Cafolla, Ceccarelli Marco, I-Ming Chen, Characterization of human Torso behaviour, Proceedings of 2014 IFTToMM Asian Conference on Mechanism and Machine Science, July 9–10, 2014, Tianjin, paper BM& MWD-4.
649. Mingfeng Wang and Marco Ceccarelli, A Topology Search of 3-DOF Translational Parallel Manipulators for Leg Mechanisms, Proceedings of 2014 IFTToMM Asian Conference on Mechanism and Machine Science, July 9–10, 2014, Tianjin, paper DM-3. (Best Paper Award)
650. Ceccarelli Marco, IFTToMM Italia: storia e prospettive, Atti del 3° CONGRESSO NAZIONALE DEL COORDINAMENTO DELLA MECCANICA ITALIANA, Napoli, 30 Giugno – 1 Luglio 2014, paper ID C08.
651. Ceccarelli M., Giuseppe Antonio Borgnis (1781–1863), in: Distinguished Figures in Mechanism and Machine Science – Part 3, History of Mechanism and Machine Science Volume 26, 2014, pp 41-56. http://dx.doi.org/10.1007/978-94-017-8947-9_3
652. Ceccarelli M., Allievi Lorenzo (1856–1941), in: Distinguished Figures in Mechanism and Machine Science – Part 3, History of Mechanism and Machine Science Volume 26, 2014, pp 1-17. http://dx.doi.org/10.1007/978-94-017-8947-9_1
653. Cigola M., Ceccarelli M., Marcus Vitruvius Pollio (Second Half of the 1st Century B.C.), in: Distinguished Figures in Mechanism and Machine Science – Part 3, History of Mechanism and Machine Science Volume 26, 2014, pp 307-344. http://dx.doi.org/10.1007/978-94-017-8947-9_15
654. Cristina Alén Cordero, Giuseppe Carbone, Marco Ceccarelli, Javier Echávarri, Jose Luis Muñoz, Experimental tests in human-robot collision evaluation and characterization of a new safety index for robot operation, MMT Mechanism and Machine Theory, pp. 184–199, Vol.80., 2014. <http://dx.doi.org/10.1016/j.mechmachtheory.2014.06.004>

- 655 Cristian Copilusi, Marco Ceccarelli and Giuseppe Carbone, Design and numerical characterization of a new leg exoskeleton for motion assistance. *Robotica*, 2015, 33, pp 1147-1162 doi:10.1017/S0263574714002069.
- 656 Ceccarelli M., Li T., Simulation results of operation of a new biped Mechanism, *Int. J. Mechanisms and Robotic Systems*, Vol. 2, No. 1, 2014, pp. 51-66. ISSN 2047-7244
- 657 Marco Ceccarelli, Are Theory and Procedures for Mechanism Designs Suitable as Goods of Cultural Heritage?, *Revista internacional de los estudios vascos*, Vol.59, 1, pp.36-50, 2014, ISSN0212-7016.
- 658 Ceccarelli M., Carbone G., Bastianini E., Riviaccio A., Alfieri S., Design constraints and features for a robotic system cutting pipelines in nuclear vessels, *Proceedings of the RAAD 2014 23rd International Conference on Robotics in Alpe-Adria-Danube Region*, 2014, Smolenice IEEE publ., pp121-126. ISBN 978-80-227-4219-1.
- 659 Ceccarelli M., What can be innovation in MMS:achievements and community developments, keynote paper, *Modern Trends in Theory of machines and mechatronic system- 24th int. Conference*, Wroclaw, September 2014, Technical Wroclaw University Publ., Wroclaw, pp.XV-XXI. ISBN 9788374938501.
- 660 Ceccarelli M.. A study of feasibility for an on-field system for harvesting and packaging horticulture products in green houses, *XX CONGRESO NACIONAL DE INGENIERÍA MECÁNICA AEIM*, Malaga, 2014, CD Proceedigns, paper 14 -01.
- 661 Ceccarelli M.. Early Machine Industry in the Kingdom of Two Sicilies in 19-th century, *XX CONGRESO NACIONAL DE INGENIERÍA MECÁNICA AEIM*, Malaga, 2014, CD Proceedigns, paper 06 -02.
- 662 Mingfeng Wang and Marco Ceccarelli, Experimental Experiences with a LARMTripod Leg Mechanism, *10th IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications*, Senigallia September 10-12, 2014, paper no.39.DOI: 10.1109/MESA.2014.6935547
- 663 Ceccarelli M., Teoli G., Corradino D'Ascanio and His Design of Vespa Scooter, *Multibody Mechatronic Systems, Mechanisms and Machine Science 25*, Springer, Dordrecht, 2014, pp. 399- 410. DOI 10.1007/978-3-319-09858-6_38
- 664 Cafolla D. , Ceccarelli M. , Design and FEM Analysis of a Novel Humanoid Torso , *Multibody Mechatronic Systems, Mechanisms and Machine Science 25*, Springer, Dordrecht, pp. 477- 488. DOI 10.1007/978-3-319-09858-6_45.
- 665 Cafolla D. , Ceccarelli M. , Design and simulation of Humanoid Spine, *New Trends in Mechanisms and Machine Science*, Springer Dordrecht, 2014, pp.585-593. DOI 10.1007/978-3-319-09411-3_62.
- 666 I. Silva, M. Ceccarelli, C. Copilusi and P. Flores,Lab experiences with a linkage exoskeleton for walking assistance, *New Trends in Mechanisms and Machine Science, Mechanisms and Machine Science*, Vol. 24, Springer Dordrecht, 2014, pp.643-650. DOI 10.1007/978-3-319-09411-3_68.
- 667 C. Copilusi, M. Kaur and M. Ceccarelli, Lab Experiences with LARM Clutched Arm for Disabled People, *New Trends in Mechanisms and Machine Science, Mechanisms and Machine Science*, Vol. 24, Springer Dordrecht, 2014, pp. 603-611. DOI 10.1007/978-3-319-09411-3_64
- 668 Wang M., Ceccarelli M., Design and Simulation of Walking Operation of a Cassino Biped Locomotor, *New Trends in Mechanisms and Machine Science, Mechanisms and Machine Science*, Vol. 24, Springer Dordrecht, 2014, pp. 613-621. DOI 10.1007/978-3-319-09411-3_65
- 669 Cigola M., Gallozzi A., Ceccarelli M., Carbone G., De Stefano S., Scotto di Freca A., *STRATEGIE ROBOTICHE ED INFORMATICHE PER LA FRUIZIONE MUSEALE*, in *SCIRES-IT. SCientific REsearch and Information Technology*, Vol. 4 Issue 1, © CASPUR-CIBER Publishing; pp.59-68. e-ISSN 2239-4303, DOI: 10.2423/i22394303v4n1p59
- 670 Ceccarelli M. Kinematic design problems for low-cost easy-operation humanoid robots, *InterdisciplinaryApplications of Kinematics, Mechanisms and Machine Science*, Vol. 26, Springer, Dordrecht, 2015, pp 91-99. DOI: 10.1007/978-3-319-10723-3_10
- 671 Ericka Madrid and Marco Ceccarelli, Numerical design solutions for telescopic manipulators, *InterdisciplinaryApplications of Kinematics, Mechanisms and Machine Science*, Vol. 26, Springer, Dordrecht, 2015, pp 101-108. DOI: 10.1007/978-3-319-10723-3_11
- 672 Dante Elias and Marco Ceccarelli, Characteristics of a walking simulator with parallel manipulators, *InterdisciplinaryApplications ofKinematics, Mechanisms and Machine Science*, Vol. 26, Springer, Dordrecht, 2015, pp 137-145. DOI: 10.1007/978-3-319-10723-3_15
- 673 Maria João Varela, Marco Ceccarelli, Paulo Flores, A kinematic characterization of human walking by using CaTraSys, *Mechanism and Machine Theory* 86 (2015) 125–139. <http://dx.doi.org/10.1016/j.mechmachtheory.2014.12.006>.
- 674 Ceccarelli M., LARM PKM solutions for torso design in humanoid robots, *Front. Mech. Eng.* 2014, 9(4): 308–316. DOI 10.1007/s11465-014-0318-6
- 675 G. Balbayev, M. Ceccarelli, K. Ivanov, "An experimental test validation of a new planetary transmission", *International Journal of Mechanics and Control*, ISSN: 1590-8844, Vol. 15, No. 02, 2014, pp. 3-7.
- 676 N.E. Nava Rodríguez, G. Carbone, M. Ceccarelli, "A design and simulation of an articulated leg for hexapod robots", *International Journal of Mechanics and Control*, ISSN: 1590-8844, Vol. 15, No. 02, 2014, pp. 9-22.
- 677 Eusebio E. Hernandez, S.-I. Valdez, M. Ceccarelli, A. Hernandez and S. Botello (2015). Design optimization of a cable-based parallel tracking system by using evolutionary algorithms. *Robotica*, 33, pp 599-610 doi:10.1017/S0263574714000484
- 678 J. C. Jauregui-Correa, C. S. Lopez-Cajun, A. Garcia-Arredondo, . E. Hernandez-Martinez, M. Ceccarelli, Validation Process of Pose Accuracy Estimation in Parallel Robot, *Journal of Dynamic Systems, Measurement, and Control*, Transactions of the ASME, JUNE 2015, Vol. 137 / 064503-1-4
- 679 M. F. Wang, M. Ceccarelli, and G. Carbone, Experimental tests on operation performance of a LARM leg mechanism with 3-DOF parallel architecture, *Mechanical Science Open Access*, 6, 1–8, 2015; doi:10.5194/ms-6-1-2015
- 680 Tao Li, Marco Ceccarelli, Minzhou Luo, Med Amine Laribi, Said Zegloul, An Experimental Analysis of Overcoming Obstacle in Human Walking, *Journal of Bionic Engineering*, 11 (2014) 497-505. doi: 10.1016/S1672-6529(14)60062-7
- 681 Ivo Miguel Silva, Marco Ceccarelli, Cristian Copilusi e Paulo Flores, *ANÁLISE EXPERIMENTAL DE UM EXOSQUELETO ARTICULAR PARAASSISTÊNCIA NA REABILITAÇÃO DA MARCHA*, 6º CONGRESSO NACIONAL DE BIOMECÂNICA, Rui B. Ruben et al. (Eds), Monte Real, Leiria, Portugal, 6-7 de fevereiro, 2015

- 682 Ceccarelli M., IFToMM and MMS: History, Structure, Trends and Challenges, Proc. Of 25th Working meeting of IFToMMpermanet Commssion for Standardization and Termonilogy on MMS, Saint Petersburg, june 23-29, 2014, Shalobaev E. and Starzhinskyy. (Eds), Saint Petersburg, Gomel, pp. 9-19.
- 683 **Marco Ceccarelli, Hui Li, Giuseppe Carbone and Qiang Huang, Conceptual Kinematic Design and Performance Evaluation of a Chameleon-like Service Robot for Space Stations, Int J Adv Robot Syst, 2015, Volume 12, paper17 (pp1-10). doi: 10.5772/60203**
- 684 **Ceccarelli M., A short account of History of IFToMM and its role in MMS, Mechanism and Machine Theory, Vol. 89, 2015, pp.75-91,10.1016/j.mechmachtheory.2014.09.007**
- 685 Wang M., Ceccarelli M., Step Design of a Cassino Tripod Leg Mechanism, Mechanisms, Transmissions and Applications Mechanisms and Machine Science Volume 31, 2015, pp 211-219. DOI: [10.1007/978-3-319-17067-1_22](https://doi.org/10.1007/978-3-319-17067-1_22)
- 686 Ionut Geonea, Marco Ceccarelli, Cristian Copilusi, New Assistive Device for People with Motor Disabilities, Applied Mechanics and Materials Vol 772 (2015), pp. 574-579, © (2015) Trans Tech Publications, Switzerland, doi:10.4028/www.scientific.net/AMM.772.574.
- 687 S.A. Vorotnikov, N.I. Nikitin, M. Ceccarelli, A Robotic System for Inspection and Repair of Small Diameter Pipelines, Science and Education of the Bauman MSTU, 2015, no. 02, pp. 180–196. DOI: 10.7463/0215.0757676
- 688 Marco Ceccarelli, Italian Landmarks in the History of MMS, eProceedings of 2015 IFToMM Workshop on History of Mechanism and Machine Science, May 26-28, 2015, St-Petersburg, paper no. 20-03.
- 689 Ceccarelli M., Mechanisms for robot fingers, Recent Advances in Mechanism Design for Robotics, Springer, Dordrecht, 2015, pp.3-13. DOI 10.1007/978-3-319-18126-4_1
- 690 T. Li, F.Y. Guo, M.Z. Luo, M. Ceccarelli, X. Liu, S.X. Chen and L. Fu, Design and Characterization of a New 5-DOF Arc Welding Robot, Recent Advances in Mechanism Design for Robotics, Springer, Dordrecht, 2015, pp.65-75. DOI 10.1007/978-3-319-18126-4_7
- 691 C. Liang, Y. Zou, I.-M. Chen and M. Ceccarelli, Development and Simulation of an Automated Twistlock Handling Robot System, Recent Advances in Mechanism Design for Robotics, Springer, Dordrecht, 2015, pp.145-155. DOI 10.1007/978-3-319-18126-4_14
- 692 V. Glazunov, N. Nosova and M. Ceccarelli, Kinematics of a 6 DOFs Manipulator with Interchangeable Translation and Rotation Motions Recent Advances in Mechanism Design for Robotics, Springer, Dordrecht, 2015, pp.407-416. DOI 10.1007/978-3-319-18126-4_39
- 693 Ceccarelli M., Innovating MMS with IFToMM, TrC IFToMM Symposium on Theory of Machines and Mechanisms, İzmir, Turkey, 14-17 June, 2015, Keynote no.3.
- 694 Ö.Selvi, K. Yılmaz, M. Ceccarelli, Motion Generation Synthesis of HPPH Linkage, TrC IFToMM Symposium on Theory of Machines and Mechanisms, İzmir, Turkey, 14-17 June, 2015, paper no.44
- 695 Cristian Copilusi, Marco Ceccarelli, An Application of LARM Clutched Arm for Assisting Disabled People, International Journal of Mechanics and Control, pp.57-66, Vol.16, no.1, 2015. ISSN 1590-8844.
- 696 WANG Mingfeng and CECCARELLI Marco, Topology Search of 3-DOF Translational Parallel Manipulators with Three Identical Limbs for Leg Mechanisms, Chinese Journal of Mechanical Engineering, July 2015, Volume 28, Issue 4, pp 666-675. DOI: 10.3901/CJME.2015.0408.060.
- 697 Ceccarelli M., Leg Mechanisms, Chapter 1 in: Marco Ceccarelli and Emin Faruk Kececi (Editors), Designs and Prototypes of Mobile Robots, ASME Press Robotics Engineering Book Series, ASME, 2015, pp. 1-21. ISBN: 9780791860472
- 698 Ceccarelli M., Carbone G., New Challenges in Service Robotics, Keynote paper, 2nd International Conference on Electrical, Electronic and Computing Engineering, IcETRAN 2015, CD Proceedings, Silver Lake, Serbia, June 8-11, 2015
- 699 Meiling Wang, Minzhou Luo, Tao Li, Marco Ceccarelli, A Unified Dynamic Control Method for a Redundant Dual Arm Robot, Journal of Bionic Engineering 12 (2015) 361–371. doi: 10.1016/S1672-6529(14)60128-1.
- 700 M. Ceccarelli and M. Zottola, Design and simulation of an underactuated finger mechanism for LARM Hand. Robotica, July 2015. Available on CJO 2015 doi:10.1017/S0263574715000648
- 701 Wuxiang Zhang, Shaodan Zhang, Marco Ceccarelli, and Di Shi, Design and Kinematic Analysis of a Novel Metamorphic Mechanism for Lower-Limb Rehabilitation, Third ASME/IFToMM International Conference on Reconfigurable Mechanisms and Robots (ReMAR 2015), Beijing, 2015, CD Preprint Proceedigns, paper 108.
- 702 Huaxin Liu, Marco Ceccarelli, Qiang Huang, Xinran Guo and Haotian She, A Cable-Pulley Transmission for Ankle Joint Actuation in Artificial Leg, Third ASME/IFToMM International Conference on Reconfigurable Mechanisms and Robots (ReMAR 2015), Beijing, 2015, CD Preprint Proceedigns, paper 114.
- 703 Hulin Huang, Ceccarelli Marco, Weimin Zhang, Qiang Huang, Zhangguo Yu, Xuechao Chen, Biomimetic inspiration for PKM torso design in humanoid robots, The 2015 IEEE International Conference on Mechatronics and Automation (ICMA 2015), August 2- August 5, 2015 Beijing, China, eProceedings, paper no.201
- 704 Ceccarelli M., Carbone G., Cafolla D., Wang M. F., How to use 3D printing for feasibility check of mechanism design, In: T. Borangiu (ed.), Advances in Robot Design and Intelligent Control, Advances in Intelligent Systems and Computing 371, Springer, Dorderecht, pp.305-313. DOI 10.1007/978-3-319-21290-6_31.
- 705 Yibing Fang, Marco Ceccarelli, Peculiarities of Evolution of Machine Technology and Its Industrialization in Italy during 19th Century, Advances in Historical Studies, Vol.4 No.4, September 23, 2015 PP. 338-355. DOI: 10.4236/ahs.2015.44024
- 706 Ceccarelli M., Considerations on History of Mechanism and Machine Science with an IFToMM Role for Future Developments, In: V. Goldfarb and N. Barmina (eds.), Theory and Practice of Gearing and Transmissions, Mechanisms and Machine Science 34, Springer International Publishing, Dorderecht, 2015, pp.37-54, DOI 10.1007/978-3-319-19740-1_3
- 707 G. Huang, M. Ceccarelli, W. M. Zhang, H. X. Liu, Y. Tian, and H.T. She, A Pedal-actuated Wheelchair with a Leg Exoskeleton, 14th World Congress in Mechanism and Machine Science, Taipei, Taiwan, 25-30 October, 2015, paper OS13-127. DOI Number: 10.6567/IFToMM.14TH.WC.OS13.127
- 708 S. Peng, X. Ding, M. Ceccarelli and F. Yang, Force Distribution Based on Loading Capacity of a Hexapod Robot with Insect-Mammal Mixed Tripod Gait, 14th World Congress in Mechanism and Machine Science, Taipei, Taiwan, 25-30 October, 2015, paper OS13-044. DOI Number: 10.6567/IFToMM.14TH.WC.OS13.044

- 709 Geonea, M. Ceccarelli and G. Carbone, Design and Analysis of an Exoskeleton for People with Motor Disabilities, 14th WorldCongress in Mechanism and Machine Science, Taipei, Taiwan, 25-30 October, 2015, paper OS1-006. DOI Number: 10.6567/IFTToMM.14TH.WC.OS1.006
- 710 Daniele Cafolla and Marco Ceccarelli, Design and Validation of a PKM Structure for a Humanoid Torso, 14th World Congress in Mechanism and Machine Science, Taipei, Taiwan, 25-30 October, 2015, paper OS13-122. DOI Number: 10.6567/IFTToMM.14TH.WC.OS13.122
- 711 Mingfeng Wang, Giuseppe Carbone and Marco Ceccarelli, Stiffness Analysis for a Tripod Leg Mechanism, 14th World Congress in Mechanism and Machine Science, Taipei, Taiwan, 25-30 October, 2015, paper OS13-078. DOI Number: 10.6567/IFTToMM.14TH.WC.OS13.078
- 712 Marco Ceccarelli, Figures and Achievements in MMS as Landmarks in History of MMS for Inspiration of IFTToMM Activity, 14th World Congress in Mechanism and Machine Science, Taipei, Taiwan, 25-30 October, 2015, paper OS7-003. DOI Number: 10.6567/IFTToMM.14TH.WC.OS7.003
- 713 Jun Zhang, Shiyuan Bian, Xian-Zeng Liu and Marco Ceccarelli, Effects of Boundary Conditions on Vibration Characteristics of Planetary Ring Gear, 14th World Congress in Mechanism and Machine Science, Taipei, Taiwan, 25-30 October, 2015, paper OS6-031. DOI Number: 10.6567/IFTToMM.14TH.WC.OS6.031
- 714 Duanling Li, Zhongbao Wang and M. Ceccarelli, Configuration Change Analysis and Design of Metamorphic Mechanisms with Isomeric Structure, 14th World Congress in Mechanism and Machine Science, Taipei, Taiwan, 25-30 October, 2015, paper PS3-013. DOI Number: 10.6567/IFTToMM.14TH.WC.PS3.013
- 715 Torres-Moreno, A. Giménez-Fernández, G. Carbone and M. Ceccarelli, Kinematic and Dynamic Analysis of Old Mechanism by Modern Means, 14th World Congress in Mechanism and Machine Science, Taipei, Taiwan, 25-30 October, 2015, paper PS7-DOI Number: 10.6567/IFTToMM.14TH.WC.PS7.001
- 716 D. Cafolla, G. Carbone, and M. Ceccarelli, Chapter 8: Balancing of a 3-DOFs Parallel Manipulator, in: Dynamic Balancing of Mechanisms and Synthesizing of Parallel Robots, Springer, Dordrecht, 2016. pp 173-191. DOI 10.1007/978-3-319-17683-3_8.
- 717 D. Cafolla and M. Ceccarelli, Experimental Inspiration and Rapid Prototyping of a Novel Humanoid Torso, in: Robotics and Mechatronics, Mechanisms and Machine Science Vol. 37, Springer Dordrecht, 2016, pp.65-74. DOI 10.1007/978-3-319-22368-1_7.
- 718 Gómez, C. Castejón, J.C. García-Prada, G. Carbone and M. Ceccarelli, Analysis and Comparison of Motion Capture Systems for Human Walking, Experimental Techniques Wiley, on line : 26 feb 2015. DOI: 10.1111/ext.12135
- 719 Marco Ceccarelli, Francisco Blanco-Moreno, Pilar Roig, Giuseppe Carbone, Jose Luis Regidor, Michela Cigola, A robotic solution for restoration of fresco paintings, Int. Journal of Advanced Robotic Systems, Special Issue, 2015, 12:160. DOI: 10.5772/61757.
- 720 Meiling Wang, Minzhou Luo, Tao Li, Marco Ceccarelli, A Unified Dynamic Control Method for a Redundant Dual Arm Robot, Journal of Bionic Engineering 12 (2015) 361–371, doi: 10.1016/S1672-6529(14)60128-1
- 721 Libo Meng, Zhangguo Yu, Xuechao Chen, Weimin Zhang, Marco Ceccarelli, Kenji Hashimoto, Atsuo Takanishi, Qiang Huang, Wenjuan Guo, Lin Xie, and Huaxin Liu, A Falling Motion Control of Humanoid Robots Based on Biomechanical Evaluation of Falling Down of Humans, 2015 IEEE-RAS 15th International Conference on Humanoid Robots (Humanoids), November 3 - 5, 2015, Seoul, Korea, pp.441-446. 978-1-4799-6885-5/15
- 722 Özgün SELVİ, Marco CECCARELLI, Erman B. AYTAZ, EFFECTS OF EARTHQUAKE MOTION ON MECHANISM OPERATION: AN EXPERIMENTAL APPROACH, International Journal of Mechanics and Control, Vol. 12, No. 02, 2011, pp. 25-37 . SSN 1590-8844
- 723 Daniele CAFOLLA, I-Ming CHEN, Marco CECCARELLI, An experimental characterization of human torso motion, Front. Mech. Eng.. 2015, 10 (4): 311-325. DOI: 10.1007/s11465
- 724 Ceccarelli M., Giuseppe Antonio Borgnis and His Handbook of Machine Designs, in: Essays on the History of Mechanical Engineering, History of Mechanism and Machine Science 31, Springer, Dordrecht, 2016. pp.15-34. DOI 10.1007/978-3-319-22680-4_2
- 725 Marco Ceccarelli, Francesco Sorge and Giuseppe Genchi, Elia Ovazza, Professor of TMM in Palermo Around the End of the 19th Century, in: Essays on the History of Mechanical Engineering, History of Mechanism and Machine Science 31, Springer, Dordrecht, 2016. pp.47-64. DOI 10.1007/978-3-319-22680-4_4
- 726 Cesare Rossi and Marco Ceccarelli, Science, Technology and Industry in Southern Italy Before the Unification, in: Essays on the History of Mechanical Engineering, History of Mechanism and Machine Science 31, Springer, Dordrecht, 2016. pp.159-180. DOI 10.1007/978-3-319-22680-4_10
- 727 Yibing Fang and Marco Ceccarelli, Medium Size Companies of Mechanical Industry in Northern Italy During the Second Half of the 19th Century, in: Essays on the History of Mechanical Engineering, History of Mechanism and Machine Science 31, Springer, Dordrecht, 2016. pp.181- 200. DOI 10.1007/978-3-319-22680-4_11
- 728 Michela Cigola and Marco Ceccarelli, Machine Designs and Drawings in Renaissance Editions of de Architectura by Marcus Vitruvius Pollio, in: Essays on the History of Mechanical Engineering, History of Mechanism and Machine Science 31, Springer, Dordrecht, 2016. pp.291- 309. DOI 10.1007/978-3-319-22680-4_17
- 729 Jun Zhang, Yan Q. Zhao, Marco Ceccarelli, Elastodynamic Model-Based Vibration Characteristics Prediction of a Three Prismatic–Revolute–Spherical Parallel Kinematic Machine, Journal of Dynamic Systems, Measurement, and Control, APRIL 2016, Vol. 138 / 041009-1. DOI: 10.1115/1.4032657
- 730 S. Ivvan Valdez, E. Chávez-Conde, Eusebio E. Hernandez & M. Ceccarelli, Structure-control design of a mechatronic system with parallelogram mechanism using an estimation of distribution algorithm, Mechanics Based Design of Structures and Machines, 2016, VOL. 44, NOS. 1–2, 58–71. <http://dx.doi.org/10.1080/15397734.2015.1035785>.
- 731 Fayong Guo Tao Mei, Minzhou Luo, Marco Ceccarelli, Ziyi Zhao, Tao Li, Jianghai Zhao, (2016), Motion planning for humanoid robot dynamically stepping over consecutive large obstacles, Industrial Robot: An International Journal, 2016, Vol. 43 Iss 2, pp. 204– 220. <http://dx.doi.org/10.1108/IR-08-2015-0157>
- 732 Marco Ceccarelli and Giuseppe Carbone, A cable parallel mechanism for exercising elderly people, The Israeli Conference on Robotics (ICR 2016), Herzelya, 2016, p.53.

- 733 Luigi Traetta e Marco Ceccarelli, Ricostruire, classificare e divulgare: Bernard Forest de Bélidor e Giuseppe Antonio Bagnis manualisti della meccanica, VI Convegno di Storia dell'Ingegneria - 2nd International Conference on History of Engineering, Naples - Italy – 2016, pp 193-202.
- 734 Jun He, Minzhou Luo, Xinglong Zhang, Marco Ceccarelli, Jianfang, Jianghai Zhao, Adaptive Fuzzy Sliding Mode Control for Redundant Manipulators with Varying Payload, *Industrial Robot: An International Journal* 2016 43:6 , 665-676
- 735 Cafolla D., Acevedo M., Ceccarelli M, Static and Dynamic Balancing of a Parallel Manipulator, Edizioni Accademiche Italiane, ISBN: 978-3-639-65873-6, 2014.
- 736 D. Cafolla, M. Ceccarelli, M. F. Wang, G. Carbone, 3D printing for feasibility check of mechanism design, *International Journal of Mechanics and Control*, ISSN: 1590-8844, Vol. 17, No. 01, 2016, pp. 3-12. , ISSN: 1590-8844.
- 737 Marco Ceccarelli, Role of IFToMM in MMS developments, *Proceedings of IFToMM International Conference 'Mechanics 2016'*, Tblisi, June 2016, pp.11-21 ISBN 978-9941-9420-4-4.
- 738 Daniele Cafolla, Mingfeng Wang, Giuseppe Carbone and Marco Ceccarelli, LARMbot: A New Humanoid Robot with Parallel Mechanisms, V. Parenti-Castelli and W. Schiehlen (eds.), ROMANSY 21 - Robot Design, Dynamics and Control, CISM International Centre for Mechanical Sciences 569, 2016, pp.275-283. DOI 10.1007/978-3-319-33714-2_31
- 739 Fayong Guo, Tao Mei, Marco Ceccarelli, Ziyi Zhao, Tao Li and Jianghai Zhao, A generic walking pattern generation method for humanoid robot walking on the slope, *Industrial Robot: An International Journal*, 43/3 (2016) 317–327. [DOI 10.1108/IR-09-2015-0170]
- 740 Mingfeng WANG, Marco CECCARELLI, Giuseppe CARBONE, A feasibility study on the design and walking operation of a biped locomotor via dynamic simulation, *Front. Mech. Eng.* 2016, 11(2): 144–158. DOI 10.1007/s11465-016-0391-0
- 741 **Huaxin LIU, Marco CECCARELLI, Qiang HUANG, Design and simulation of a cable-pulley-based transmission for artificial ankle joints, *Front. Mech. Eng.* 2016, 11(2): 170–183. DOI 10.1007/s11465-016-0383-0**
- 742 Olinski M., Ceccarelli M., Cafolla, D. and Gronowicz A., “An experimental characterization of human knee joint motion capabilities”, *New Trends in Mechanism and Machine Science*, Mechanisms and Machine Science 43, Springer, Dordrecht, 2016, pp. 411-419. DOI 10.1007/978-3-319-44156-6_42.
- 743 Chaparro-Rico B.D.M, Castillo-Castañeda E., Ceccarelli M., Cafolla D., Design and Test of Therapy Exercise for Human Arms, MESROB2016: Medical and Service Robotics, Gratz, 2016, paper no.3
- 744 Leal-Naranjo J.A., Ceccarelli M., Torres-San Miguel C.R., Cafolla D., An experimental characterization of human arm motion, MESROB2016, Medical and Service Robotics, Gratz, 2016. paper no.8
- 745 **Daniele Cafolla and Marco Ceccarelli, Design and Simulation of a Cable-Driven Vertebra-Based Humanoid Torso, *International Journal of Humanoid Robotics*, Vol. 13, No. 4 (2016), 1650015 (27 pages). DOI: 10.1142/S0219843616500158**
- 746 Marco Ceccarelli, Figures and achievements in MMS as landmarks in history of MMS for inspiration of IFToMM activity, *Mechanism and Machine Theory*, Volume 105, 2016, Pages 529–539. doi: 10.1016/j.mechmachtheory.2016.07.012
- 747 Marco Ceccarelli, Daniele Cafolla, Mingfeng Wang, and Giuseppe Carbone, An Overview of the Ongoing Humanoid Robot Project LARMbot, IN: L. Alboul et al. (Eds.): TAROS 2016, LNAI 9716, Springer International Publishing Switzerland 2016. pp. 53–64, 2016. DOI: 10.1007/978-3-319-40379-3_6
- 748 M. Ceccarelli, IFToMM in MMS Developements, in: *Advances in Mechanism Design II*, MMS bookseries Vol. 44, Springer, Dordrecht, 2016, pp.3-13, DOI: 10.1007/978-3-319-44087-3_1
- 749 E.-C. Lovasz , V. Mesaroş-Anghel , C. M. Gruescu , C. E. Moldovan , M. Ceccarelli, General Algorithm for Computing the Theoretical Centering Precision of the Gripping Devices, in: *Advances in Mechanism Design II*, MMS bookseries Vol. 44, Springer, Dordrecht, 2016, pp.15-21, DOI: 10.1007/978-3-319-44087-3_2
- 750 Russo M., Ceccarelli M., Corves B., Lorenz M., Hüsing M., Carbone G., “Design, Construction and Testing of a Gripper for Horticulture Products”, 25th International Workshop on Robotics In Alpe-Adria-Danube Region RAAD 2016, Belgrade, paper RAAD n.01, 2016.
- 751 José Eduardo Esquivel González, Giuseppe Carbone, Marco Ceccarelli and Juan Carlos Jáuregui Correa, Requirements and constraints for a robotized roll hemming solution, 25th International Workshop on Robotics In Alpe-Adria-Danube Region RAAD 2016, Belgrade, paper RAAD n.36, 2016.
- 752 Bianchi A., Ceccarelli M., Toward an active protection for robot arms, 25th International Workshop on Robotics In Alpe-Adria-Danube Region RAAD 2016, Belgrade, paper RAAD n.30, 2016.
- 753 Oscar Altuzarra, Mikel Diez, Javier Corral, Gennaro Teoli and Marco Ceccarelli, Kinematic Analysis of a Continuum Parallel Robot, *New Trends in Mechanism and Machine Science*, Mechanisms and Machine Science 43, Springer, Dordrecht, 2016, pp. 173-189. DOI 10.1007/978-3-319-44156-6_18.
- 754 M. CECCARELLI, INNOVATION OF MMS WITH INSPIRATION FROM THE PAST, *Int. J. of Applied Mechanics and Engineering*, 2016, vol.21, No.3, pp.IX-XXII, DOI: 10.1515/ijame-2016-0032.
- 755 M. OLINSKI, A. GRONOWICZ, A. HANDKE, M. CECCARELLI, DESIGN AND CHARACTERIZATION OF A NOVEL KNEE ARTICULATION MECHANISM, *Int. J. of Applied Mechanics and Engineering*, 2016, vol.21, No.3, pp.611-622, DOI: 10.1515/ijame-2016-0037
- 756 Matteo Russo and Marco Ceccarelli, A Workspace Analysis of 4R Manipulators via Level-Set Formulation, *New Trends in Mechanism and Machine Science*, Mechanisms and Machine Science 43, Springer, Dordrecht, 2016, pp. 483-491. DOI 10.1007/978-3-319-44156-6_49.
- 757 Arturo Gallozzi, Giuseppe Carbone, Marco Ceccarelli, Claudio De Stefano, Alessandra Scotto di Freca, Marina Bianchi, and Michela Cigola, The MuseBot Project: Robotics, Informatic, and Economics Strategies for Museums –Chapter 3. In: *Handbook of Research on Emerging Technologies for Digital Preservation and Information Modeling*, IGI Global, Hershe. 2016, pp. 45-66. DOI: 10.4018/978-1-5225-0680-5.ch003
- 758 Sholanov K.S. Abzhaparov K.A., Zh.T. Zhumasheva, M. Ceccarelli, A New parallel manipulator hydraulically actuated, *JoMaC: International Journal of Mechanics and Control*, 2016, Vol.17, no.1, pp.49-58, 2016. ISSN 1590-8844.
- 759 Matteo Russo, Marco Ceccarelli, Burkhard Corves, Mathias Hüsing, Michael Lorenz, Daniele Cafolla, Giuseppe Carbone, Design and gripper prototype for horticulture products, *Robotics and Computer-Integrated Manufacturing*, 44(2017)266–275. <http://dx.doi.org/10.1016/j.rcim.2016.09.005>

- 760 J. I. Cuadrado Iglesias, M. Ceccarelli, La síntesis de generación de trayectorias en Betancourt, Proceedings of XXI Spanish National Congress of Mechanical Engineering, Universidad de Elche, November 2016, pp. 420-427. ISBN 978-84-16024-37-7.
- 761 M. Ceccarelli, Contributions of Leonardo da Vinci in Mechanisms Design, Proceedings of XXI Spanish National Congress of Mechanical Engineering, Universidad de Elche, November 2016, pp. 459-466. ISBN 978-84-16024-37-7
- 762 Daniele Cafolla, Marco Ceccarelli, Torso umanoide con struttura ispirada en la anatomía humana usando manipuladores paralelos, Proceedings of XXI Spanish National Congress of Mechanical Engineering, Universidad de Elche, November 2016, pp. 1409-1416. ISBN 978-84-16024-37-7
- 763 Molari P.G. Ceccarelli M., Come insegnare la Meccanica: il metodo di Francesco Masi all'Università di Bologna e all'Istituto Aldini Valeriani, Scuola Officina – Museo del patrimonio industriale di Bologna, n.2, 2016, pp. 4-11. ISSN 1723-168X.
- 764 Tao Li, Fayong Guo, Minzhou Luo, Marco Ceccarelli, Saixuan Chen, Long Fu, Xiao Liu and Meiling Wang, Development of a 5-DOF arc welding robot, Int. J. Mechanisms and Robotic Systems, Vol. 3 Nos. 2/3, 2016, pp.129-144
- 765 Michał Olinski, Antoni Gronowicz, Marco Ceccarelli, Daniele Cafolla, Human motion characterization using wireless inertial sensors, in: B. Corves et al. (eds.), New Advances in Mechanisms, Mechanical Transmissions and Robotics, Mechanisms and Machine Science 46, Springer International Publishing AG 2017, pp.401-408. DOI 10.1007/978-3-319-45450-4_40
- 766 G. Carbone, C. Aróstegui Caverio, M. Ceccarelli and O. Altuzarra, A Study of Feasibility for a Limb Exercising Device, in: G. Boschetti and A. Gasparetto (eds.), Advances in Italian Mechanism Science, Springer International Publishing AG 2017, pp. 11- 21. DOI 10.1007/978-3-319-48375-7_2
- 767 M. Russo, M. Ceccarelli, A Kinematic Solution of a Novel Leg Mechanism with Parallel Architecture, in: G. Boschetti and A. Gasparetto (eds.), Advances in Italian Mechanism Science, Springer International Publishing AG 2017, pp.41- 49. DOI 10.1007/978-3-319-48375-7_5
- 768 B. Chaparro-Rico, D. Cafolla, M. Ceccarelli and E. Castillo-Castaneda, Design and Simulation of an Assisting Mechanism for Arm Exercises, in: G. Boschetti and A. Gasparetto (eds.), Advances in Italian Mechanism Science, Springer International Publishing AG 2017, pp. 115-123. DOI 10.1007/978-3-319-48375-7_13
- 769 Yibing Fang and Marco Ceccarelli, On the Warship by Ansaldo for Chinese Imperial Navy, C. López-Cajún and M. Ceccarelli (eds.), Explorations in the History of Machines and Mechanisms, History of Mechanism and Machine Science 32, Springer International Publishing Switzerland, 2016, pp.223-232 .DOI 10.1007/978-3-319-31184-5_20
- 770 R. Sales Gonçalves, G. Carbone, J.C. Mendes Carvalho, M. Ceccarelli, “A comparison of stiffness analysis methods for robotic systems”, International Journal of Mechanics and Control, ISSN: 1590-8844, Vol. 17, No. 02, 2016, pp. 35-50.
- 771 Gao Huang, Jiameng Fan, Weimin Zhang, Tony Xiao, Fei Meng, Marco Ceccarelli and Qiang Huang, A Master-slave Control System for Lower Limb Rehabilitation Robot with Pedal-actuated Exoskeleton, 2016 IEEE International Conference on Real-time Computing and Robotics (IEEE RCAR 2016).
- 772 Libo Meng, Marco Ceccarelli, Zhangguo Yu, Xuechao Chen, and Qiang Huang, An experimental characterization of human falling down, Mechanical Sciences, 8, 79-89, doi:10.5194/ms-8-79-2017, 2017
- 773 Gao Huang, Weimin Zhang, Marco Ceccarelli, Zhangguo Yu, Xuechao Chen, Fei Meng, Qiang Huang. The research of a new rehabilitation and assisting robot. Acta Automatica Sinica, 016, 42(12): 1933-1942
- 774 Ceccarelli M. et al., HeritageBot Service Robot assisting in Cultural Heritage, 2017 First IEEE International Conference on Robotic Computing, Taichung, Taiwan, 2017. pp.440-445. 978-1-5090-6724-4/17. DOI 10.1109/IRC.2017.84
- 775 Russo M., Takeda Y., Ceccarelli M., Jacobian analysis of a 3-UPR parallel manipulator for a robotic leg application. In Proceedings of the 23rd Jc-IFTToMM Symposium (2017), Tokyo, 9th June 2017, pp.104-111.
- 776 Libo Meng, Zhangguo Yu, Weimin Zhang, Xuechao Chen, Marco Ceccarelli, Qiang Huang, A Falling Motion Strategy for Humanoids Based on Motion Primitives of Human Falling, Advances in Service and Industrial Robotics - Proceedings of the 26th International Conference on Robotics in Alpe-Adria-Danube Region RAAD 2017, Dordrecht, Springer, 2017, pp.264-272. DOI 10.1007/978-3-319-61276-8_29
- 777 Marco Ceccarelli, Daniele Cafolla, Matteo Russo, Giuseppe Carbone, Design and construction of a demonstrative Heritagebot Platform, Advances in Service and Industrial Robotics - Proceedings of the 26th International Conference on Robotics in Alpe-Adria-Danube Region RAAD 2017, Springer, 2017, pp.355-363 DOI 10.1007/978-3-319-61276-8_39
- 778 Cristian Iancu, Marco Ceccarelli, Erwin-Christian Lovasz, Design and Lab Tests of a Scaled Leg Exoskeleton with Electric Actuators, Advances in Service and Industrial Robotics - Proceedings of the 26th International Conference on Robotics in Alpe-Adria-Danube Region RAAD 2017, Springer, 2017, pp.719-726. DOI 10.1007/978-3-319-61276-8_76
- 779 Gao Huang, Marco Ceccarelli, Weimin Zhang, Fei Meng, Tao Sun, Qiang Huang, Design and Control of Linkage Exoskeletons in Wheelchair, Advances in Service and Industrial Robotics - Proceedings of the 26th International Conference on Robotics in Alpe-Adria-Danube Region RAAD 2017, Dordrecht, Springer, 2017, pp.862-869. DOI 10.1007/978-3-319-61276-8_91
- 780 Yu-Hsun Chen, Marco Ceccarelli, Hong-Sen Yan, Performance Analysis of the Automata in a Blossoming Flower Clock in the 18th Century, Advances in Service and Industrial Robotics - Proceedings of the 26th International Conference on Robotics in Alpe-Adria-Danube Region RAAD 2017, Dordrecht, Springer, 2017, pp.1017-1024. DOI 10.1007/978-3-319-61276-8_109
- 781 Russo M., Ceccarelli M. (2018) Kinematic Design of a Tripod Parallel Mechanism for Robotic Legs. In: Dede M., Itik M., Lovasz EC., Kiper G. (eds) Mechanisms, Transmissions and Applications. IFTToMM 2017. Mechanisms and Machine Science, vol 52. Springer International Publishing AG 2018, pp 121-130. 10.1007/978-3-319-60702-3_13
- 782 Matteo Russo, Saioa Herrero, Oscar Altuzarra, and Marco Ceccarelli, Multi-objective Optimization of a Tripod Parallel Mechanism for a Robotic Leg, Springer International Publishing AG 2018, S. Zeghloul et al. (eds.), Computational Kinematics 2017, Mechanisms and Machine Science 50, pp.374-382. DOI 10.1007/978-3-319-60867-9_43
- 783 **Daniele Cafolla and Marco Ceccarelli, An experimental validation of a novel humanoid torso, Journal Robotics and Autonomous Systems, Volume 91, May 2017, Pages 299-313. Doi: 10.1016/j.robot.2017.02.005**
- 784 Tengfei Tang, Jun Zhang and Marco Ceccarelli, Static Performance Analysis of an Exechon-like Parallel Kinematic Machine, in: X. Zhang et al. (eds.), Mechanism and Machine Science, Springer Nature Singapore Pte Ltd. 2017, pp.831-843. DOI 10.1007/978-981-10-2875-5_68

- 785 **Cafolla D. and Ceccarelli M., Characteristics and Performance of CAUTO (Cassino hUmanoid TOrso) Prototype, Inventions 2017, 2(3), 17, Special Issue Advances in Mechanism Design for Robots), (DOI) 10.3390/inventions2030017, 2017**
- 786 **Ceccarelli M, Cafolla D, Russo M, Carbone G (2017) LARMBot Humanoid Design Towards a Prototype. MOJ int. Jnl Applied Bionics and Biomechanics 1(2): 00008. DOI: 10.15406/mojabb.2017.01.00008**
- 787 Ibrahimcan GÖRGÜLÜ, Omar W. MAAROOF, Barış Taner, Mehmet İsmet Can DEDE, Marco CECCARELLI, Experimental Verification of Quasi-Static Equilibrium Analysis of a Haptic Device, Proceedings of the International Symposium of Mechanism and Machine Science, 2017 AzCIFTtoMM – Azerbaijan Technical University 11-14 September 2017, Baku, Azerbaijan, pp. 57-65.
- 788 Yu-Hsun Chen, Marco Ceccarelli, and Hong-Sen Yan, Designing and Prototyping Reconstruction of Musician Automata, in M. Ceccarelli et al. (eds.), New Activities for Cultural Heritage, Springer International Publishing AG 2017, pp. 22-32, DOI 10.1007/978-3-319-67026-3_3
- 789 Marco Ceccarelli, Daniele Cafolla, Matteo Russo, and Giuseppe Carbone, Prototype and Testing of HeritageBot Platform for Service in Cultural Heritage, in M. Ceccarelli et al. (eds.), New Activities for Cultural Heritage, Springer International Publishing AG 2017, pp. 104-112, DOI 10.1007/978-3-319-67026-3_11.
- 790 Konstantin Ivanov, Marco Ceccarelli and Baurjan Tultaev, Force Adaptation in Robot Transmissions, Open Access International Journal of Advanced Robotics and Automation, 2017, 2(2):1-8.
- 791 Marco Ceccarelli, The Greek Legacy in Mechanical Engineering for its Development and Promotion, in: The Influence of Greek Thought on Philosophy, Science and Technology (S. Paipetis, Editor), Avatr publ. Athens , 2017 pp. 430-436.
- 792 Marco CECCARELLI, INNOVATING MMS AND IFTOMM IN INNOVATION CHALLENGE, IRMES 2017: 8th International Scientific Conference – Research and Development of Mechanical Elements and Systems, Trebinje, 7-9 Spet 2017, pp 3-8
- 793 Pablo Rodriguez, Eduardo Esquivel, Carlos Jáuregui, Giuseppe Carbone, Marco Ceccarelli, A multibody dynamic model for roll hemming applications, MEMORIAS DEL XXIII CONGRESO INTERNACIONAL ANUAL DE LA SOMIM 20 al 22 DE SEPTIEMBRE, 2017 CUERNAVACA, MORELOS, MÉXICO, paper no.06
- 794 Matteo Russo, Saioa Herrero, Oscar Altuzarra, Marco Ceccarelli, Kinematic analysis and multi-objective optimization of a 3-UPR parallel mechanism for a robotic leg, Mechanism and Machine Theory, Volume 120, 2018, Pages 192-202. <https://doi.org/10.1016/j.mechmachtheory.2017.10.004>.
- 795 Eduardo Esquivel, Giuseppe Carbone, Marco Ceccarelli, and Carlos Jáuregui, An Experimental Characterization of Roll Hemming Process, In: J.C.M. Carvalho et al. (eds.), Multibody Mechatronic Systems, Springer International Publishing AG 2018, pp.367-378. , DOI 10.1007/978-3-319-67567-1_35
- 796 Eusebio Hernandez, S. Ivvan Valdez, Giuseppe Carbone, and Marco Ceccarelli, Design Optimization of a Cable-Driven Parallel Robot in Upper, Arm Training-Rehabilitation Processes , In: J.C.M. Carvalho et al. (eds.), Multibody Mechatronic Systems, Springer International Publishing AG 2018, pp.413-423. DOI 10.1007/978-3-319-67567-1_39
- 797 N. Plitea, B. Gherman, G. Carbone, M. Ceccarelli, C. Vaida, A. Banica, D. Pisla, and A. Pisla, , Kinematic Analysis of an Exoskeleton-Based Robot for Elbow, and Wrist Rehabilitation, In: J.C.M. Carvalho et al. (eds.), Multibody Mechatronic Systems, Springer International Publishing AG 2018, pp. 424- . DOI 10.1007/978-3-319-67567-1_40
- 798 L.A. Aguilar, M. Ceccarelli, Ch.R. Torres-San-Miguel, G. Urriolagoitia-Sosa, and G. Urriolagoitia-Calderón, Experimental Evaluation of Artificial Human Ribs, In: J.C.M. Carvalho et al. (eds.), Multibody Mechatronic Systems, Springer International Publishing AG 2018, pp. 434 – 433. DOI 10.1007/978-3-319-67567-1_41
- 799 Gao Huang, Marco Ceccarelli, Weimin Zhang, Zhipeng Chi, Erbo Zhao and Qiang Huang, Design and Construction of a Cycling-based Wheelchair Prototype, 2017 IEEE International Conference on Cyborg and Bionic Systems, October 17 - 19, 2017, Beijing, China, pp.310-313. 978-1-5386-3193-5/17/\$31.00 © 2017 IEEE
- 800 Yu-Hsun Chen , Marco Ceccarelli, Hong-Sen Yan, A historical study and mechanical classification of ancient music-playing automata, Mechanism and Machine Theory 121 (2018) 273–285. <https://doi.org/10.1016/j.mechmachtheory.2017.10.015>
- 801 Gao Huang, Weimin Zhang, Zhangguo Yu, Xuechao Chen, Fei Meng, Marco Ceccarelli and Qiang Huang, Design and simulation of leg exoskeleton cycling-actuated wheelchair, International Journal of Advanced Robotic Systems, November-December 2017: 1–11. DOI: 10.1177/1729881417741739journals.sagepub.com/home/arx
- 802 Matteo Russo, Marco Ceccarelli, Kinematic design of a novel robotic leg mechanism with parallel architecture, International Journal of Mechanics and Control, Vol. 18, No. 2, 2017, pp.3-8. ISSN 1590-8844
- 803 E. Esquivel, G. Carbone, M. Ceccarelli and J. C. Jáuregui, "A Dynamic Compensation for Roll Hemming Process," in *IEEE Access*, vol. 6, pp. 18264-18275, 2018. doi: 10.1109/ACCESS.2018.2812145
- 804 Ceccarelli M., Innovation Challenges for Mechanism Design, Mechanism and Machine Theory, 125 (2018) 94–100. DOI 10.1016/j.mechmachtheory.2017.11.026
- 805 L. Traetta, M. Ceccarelli, Dall'artificiale anatomico alla robotica: storia delle tecnologie per la disabilità, in History of Engineering. Proceedings of the 3rd International Conference, vol. I, Cuzzolin, Napoli 2018, pp. 347-356.
- 806 Mehmet İsmet Can DEDE, Omar W. MAAROOF, and Marco CECCARELLI, Analytical Dynamic Analysis of a Kinesthetic Haptic Device, Dokuz Eylul University- Journal of Science and Engineering, Volume 20, Issue 59, May, 2018, pp.492-508. DOI: 10.21205/deufind.2018205939
- 807 José-Alfredo Leal-Naranjo, Marco Ceccarelli, Christopher-René Torres-San-Miguel, Luis-Antonio Aguilar-Perez, Guillermo Urriolagoitia-Sosa, Guillermo Urriolagoitia-Calderón, Multi-objective optimization of a parallel manipulator for the design of a prosthetic arm using genetic algorithms, Latin American Journal of Solids and Structures, 2018, 15(3), e26, 15 pages. <http://dx.doi.org/10.1590/1679-78254044>
- 808 Eduardo Esquivel, Pablo Rodríguez, Giuseppe Carbone, Marco Ceccarelli, Juan C. Jáuregui, A Trajectory Compensation Model for Roll Hemming Applications, Strojniški vestnik - Journal of Mechanical Engineering 63(2017)3, 1-10, 2017. DOI: 10.5545/sv-jme.2017.4027
- 809 M. Ceccarelli, Challenges for Mechanism Design in Robotics, ROMANSY 22 - Robot Design, Dynamics and Control, (V.Arakelyan and P. Wenger (Eds), pp. 1-9, Springer, Cham, 2019. http://doi.org/10.1007/978-3-319-78963-7_1.

- 810 Matteo Russo, Marco Ceccarelli, Daniele Cafolla, Daisuke Matsuura, Yukio Takeda, An Experimental Characterization of a Parallel Mechanism for Robotic Legs, ROMANSY 22 - Robot Design, Dynamics and Control, (V.Arakelyan and P. Wenger (Eds)), pp. 18-25, Springer, Cham, 2019. http://doi.org/10.1007/978-3-319-78963-7_4.
- 811 Jhon Freddy Rodríguez León, Giuseppe Carbone, Daniele Cafolla, Matteo Russo, Marco Ceccarelli, Eduardo Castillo Castañeda, Experiences and Design of a Cable-Driven Assisting Device for Arm Motion, ROMANSY 22 - Robot Design, Dynamics and Control, (V.Arakelyan and P. Wenger (Eds)), pp. 94-101, Springer, Cham, 2019. http://doi.org/10.1007/978-3-319-78963-7_13.
- 812 B. Gherman, G. Carbone, N. Plitea, M. Ceccarelli and D. Pislă, Kinematic design of a parallel robot for elbow and wrist rehabilitation, in: New advances in Mechanism and Machine Science – Proceedigns of SYROM 2017, (I. Doroftei et .a. Eds.), pp. 147-154, Springer, Cham, 2018. http://doi.org/10.1007/978-3-319-79111-1_14.
- 813 Shuangji Yao, Marco Ceccarelli, Design and Simulation of an Underactuated Mechanism for Leg Exoskeleton, in: New advances in Mechanism and Machine Science – Pproceedigns of SYROM 2017, (I. Doroftei et .a. Eds.), pp. 181-190, Springer, Cham, 2018. http://doi.org/10.1007/978-3-319-79111-1_18.
- 814 A. Mussina, G. Balbayev and M. Ceccarelli, Neurorobotic Investigation into the Control of Artificial Eye Movements, in: New advances in Mechanism and Machine Science – Proceedings of SYROM 2017, (I. Doroftei et .a. Eds.), pp. 211-221, Springer, Cham, 2018. http://doi.org/10.1007/978-3-319-79111-1_21.
- 815 M. Demirel, G. Carbone, M. Ceccarelli and G. Kiper, Design and Simulation of a Novel Hybrid Leg Mechanism for Walking Machines, in: New advances in Mechanism and Machine Science – Proceedings of SYROM 2017, (I. Doroftei et .a. Eds.), pp. 283-290, Springer, Cham, 2018. http://doi.org/10.1007/978-3-319-79111-1_28.
- 816 Matteo Russo and Marco Ceccarelli, Design and simulation of a parallel-serial LARMBot arm, in: New advances in Mechanism and Machine Science – Proceedings of SYROM 2017, (I. Doroftei et .a. Eds.), pp. 379-386, Springer, Cham, 2018. http://doi.org/10.1007/978-3-319-79111-1_38.
- 817 F. Inel, Z. Mansouri, M. Ceccarelli and G. Carbone, Dynamic Modeling and Simulation of Sliding Mode Control for a Cable Driven Parallel Robot, in: New advances in Mechanism and Machine Science – Proceedings of SYROM 2017, (I. Doroftei et .a. Eds.), pp. 413-426, Springer, Cham, 2018. http://doi.org/10.1007/978-3-319-79111-1_41.
- 818 Betsy Dayana Marcela Chaparro-Rico, Daniele Cafolla, Marco Ceccarelli, and Eduardo Castillo-Castaneda, Experimental Characterization of NURSE, a Device for Arm Motion Guidance, Hindawi Journal of Healthcare Engineering, Volume 2018, Article ID 9303282, 15 pages. <https://doi.org/10.1155/2018/9303282>
- 819 Shuangji Yao, Marco Ceccarelli b, Giuseppe Carbone , Zhikui Dong, Grasp configuration planning for a low-cost and easy-operation underactuated three-fingered robot hand, Mechanism and Machine Theory 129 (2018) 51–69. <https://doi.org/10.1016/j.mechmachtheory.2018.06.019>
- 820 Marco Ceccarelli, Daniele Cafolla, Matteo Russo, Giuseppe Carbone, HeritageBot platform for service in Cultural Heritage frames, IJARS International Journal on Advances of Robotic Systems, Volume: 15 issue: 4, July 1, 2018. <https://doi.org/10.1177/1729881418790692>
- 821 Zeyuan Sun, Hui Li, Zhihong Jiang, Zhenzi Song, Yang Mo, and Marco Ceccarelli, Prototype Design and Performance Tests of Beijing Astronaut Robot, MDPI Journal *Applied Science* 2018, 8(8), 1342. <https://doi.org/10.3390/app8081342>
- 822 Matteo Russo, Marco Ceccarelli and Yukio Takeda, Force transmission and constraint analysis of a 3-SPR parallel manipulator, Proc IMechE Part C: J Mechanical Engineering Science, 0(0) 1–11, IMechE 2017. published online: December 27, 2017. Print: 2018 Vol. 232(23) 4399–4409. DOI: 10.1177/0954406217750190
- 823 Marco Ceccarelli, Carlo Filangieri y la Real Fabrica Borbónica de Máquinas en Nápoles, in: Figuras ilustres de la Ingeniería Mecánica en España, Lopez-Garcia R. and Bautista Paz. E: (Eds), Editorial Universidad de Jaen, Jaen, pp. 120-133. ISBN 978-84-9159-105-4
- 824 Carlos Santiago López Cajún, Marco Ceccarelli, Olga Egorova, José María Lanz y Zaldivar- uno de los pioneros de la cinemática moderna, in: Figuras ilustres de la Ingeniería Mecánica en España, Lopez-Garcia R. and Bautista Paz. E: (Eds), Editorial Universidad de Jaen, Jaen, pp. 86-94. ISBN 978-84-9159-105-4
- 825 Lazăr V.A., Cafolla D., Leon Rodriguez J.F.R, Carbone G., Ceccarelli M., Pislă D., Vaida C., Experimental Characterization of Assisted Human Arm Exercises, International Conference on Automation, Quality and Testing, Robotics (AQTR 2018), Cluj Napoca, Romania, 2018. pp.1-6. 978-1-5386-2205-6/18 <http://doi.ieeecomputersociety.org/10.1109/AQTR.2018.8402757>
- 826 E.-C. Gerding, G. Carbone, D. Cafolla, M. Russo, M. Ceccarelli, S. Rink, B. Corves, Design of a Finger Exoskeleton for Motion Guidance, in: EuCoMeS 2018, B. Corves et al. (eds.), pp.11-18, Springer, Cham, 2019. http://doi.org/10.1007/978-3-319-98020-1_2.
- 827 Claudia Aide González-Cruz, Marco Ceccarelli, Juan Carlos Jauregui, Experimental analysis of the dynamic behavior of a non-stationary two stage planetary gearbox, in: EuCoMeS 2018, B. Corves et al. (eds.), pp.117-125, Springer, Cham, 2019. http://doi.org/10.1007/978-3-319-98020-1_14.
- 828 K. Ivanov, C. A. González-Cruz, M. Ceccarelli, A. Ozhiken, D. Cafolla, Design and experiences of a planetary gear box for adaptive drives, in: EuCoMeS 2018, B. Corves et al. (eds.), pp.284-291, Springer, Cham, 2019. http://doi.org/10.1007/978-3-319-98020-1_33.
- 829 José-Alfredo Leal-Naranjo, Christopher-René Torres-San Miguel, Marco Ceccarelli, and Horacio Rostro-Gonzalez, Mechanical Design and Assessment of a Low-Cost 7-DOF Prosthetic Arm for Shoulder Disarticulation, Applied Bionics and Biomechanics, Volume 2018, Article ID 4357602, 13 pages. <https://doi.org/10.1155/2018/4357602>
- 830 Eduardo Esquivel, Pablo Rodriguez, Giuseppe Carbone, Marco Ceccarelli, and Juan C. Jáuregui, Stiffness Evaluation of a Metalforming Industrial Robot, International Journal of Mechanics and Control, pp.61-78, Vol. 19 No 01, 2018. ISSN1590-8844.
- 831 Matteo Russo, Daniele Cafolla, and Marco Ceccarelli, Development of LARMBot 2, A Novel Humanoid Robot with Parallel Architectures, A. Gasparetto and M. Ceccarelli (Eds.): MEDER 2018, Springer Nature Switzerland AG 2019, pp. 17–24, 2019. https://doi.org/10.1007/978-3-030-00365-4_3
- 832 O. Arslan, S. B. Karaahmet, Ö. Selvi, D. Cafolla, and M. Ceccarelli, Redesign and Construction of a Low-Cost CaPaMan Prototype, A. Gasparetto and M. Ceccarelli (Eds.): MEDER 2018, Springer Nature Switzerland AG 2019, pp. 158–165, 2019. https://doi.org/10.1007/978-3-030-00365-4_19

- 833 S. Kaimov, Ab. T. Kaimov, A. T. Kaimov, M. Ceccarelli, T. Kaiym, G. Kaimova, A. Jomartov, and E. Temirbekov, A Gripper Mechanism to Automate Overload Process for Fuel Elements, A. Gasparetto and M. Ceccarelli (Eds.): MEDER 2018, Springer Nature Switzerland AG 2019, pp. 118–128, 2019. https://doi.org/10.1007/978-3-030-00365-4_15
- 834 Shuangji Yao, Marco Ceccarelli, and Zhen Lu, Underactuated Elements Design Criterion for Envelop Gripper Mechanism, A. Gasparetto and M. Ceccarelli (Eds.): MEDER 2018, Springer Nature Switzerland AG 2019, pp. 432–442, 2019. https://doi.org/10.1007/978-3-030-00365-4_51.
- 835 Marco Ceccarelli, CHALLENGES FOR MECHANISM DESIGN IN SERVICE SYSTEMS Proc. of XXIVth International Conference on Theory of Machines and Mechatronic Systems, Publ. Tech University of Wroclaw, Wroclaw,2018, pp.3-10. ISBN 978-83-7493-024-6.
- 836 Marco Ceccarelli, Contributions of Francesco di Giorgio in Mechanism Design, Anales de Ingeniería Mecánica, Año 21, UNED, Madrid, Septiembre 2018, pp. 352-362. SSN: 0212-5072
- 837 C. A González-Cruz, M. Ceccarelli, J. C. Jáuregui-Correa, M. Alimehmeti, Estudio de viabilidad de un sistema robótico subacuático para trabajos de inspección e intervención, Anales de Ingeniería Mecánica, Año 21, UNED, Madrid, Septiembre 2018, pp. 1175-1184. SSN: 0212-5072
- 838 Erwin-Chr. Lovasz, Marco Ceccarelli, Corina Mihaela Gruescu, Giuseppe Carbone, Iosif Cărăbaș, A Comparative Analysis of Teaching MMS at Politehnica University of Timișoara and University of Cassino and South Latium, in: New Trends in Educational Activity in the Field of Mechanism and Machine Theory (J.C. García-Prada and C. Castejón.Eds.) Springer, Cham, 2019, pp. 91 - 102. DOI 10.1007/978-3-030-00108-7_11
- 839 Carbone G., Cafolla D., Ceccarelli M., Aydinoglu O., Demirel M., “Internship Experience for Learning the Operation of a Cable-Driven Robot for Rehabilitation Tasks”, in: New Trends in Educational Activity in the Field of Mechanism and Machine Theory (J.C. García-Prada and C. Castejón.Eds.) Springer, Cham, 2019, pp. 195 – 207. DOI 10.1007/978-3-030-00108-7_22
- 840 Aguilar L.A., Torres-San-Miguel C.R., Ceccarelli M., Sánchez-Cruz I., Leal-Naranjo J.A., Urriolagoitia C.G. (2019) Design of a Methodology for the Determination of the Mechanical Rib Stiffness as Injury Index. In: Carbone G., Ceccarelli M., Pisla D. (eds) New Trends in Medical and Service Robotics. Mechanisms and Machine Science, vol 65. Springer, Cham. Pages 62-69. DOI https://doi.org/10.1007/978-3-030-00329-6_8
- 841 Geonea I., Tarnita D., Carbone G., Ceccarelli M. (2019) Design and Simulation of a Leg Exoskeleton Linkage for Human Motion Assistance. In: Carbone G., Ceccarelli M., Pisla D. (eds) New Trends in Medical and Service Robotics. Mechanisms and Machine Science, vol 65. Springer, Cham. Pages 93-100 DOI https://doi.org/10.1007/978-3-030-00329-6_11
- 842 Copilusi C., Dumitru S., Geonea I., Rosu E., Ceccarelli M. (2019) Numerical Simulation of a Leg Exoskeleton for Human Motion Assistance. In: Carbone G., Ceccarelli M., Pisla D. (eds) New Trends in Medical and Service Robotics. Mechanisms and Machine Science, vol 65. Springer, Cham. Pages 101-108 DOI https://doi.org/10.1007/978-3-030-00329-6_12
- 843 Espinosa García F.J., Ceccarelli M., Arias Montiel M., Carbone G., Lugo Gonzalez E., Russo M. (2019) A Characterization of a Robotic Hand with Movable Palm. In: Carbone G., Ceccarelli M., Pisla D. (eds) New Trends in Medical and Service Robotics. Mechanisms and Machine Science, vol 65. Springer, Cham. Pages 118-125 DOI https://doi.org/10.1007/978-3-030-00329-6_14
- 844 Rueda Arreguín J.L., Torres San Miguel C.R., Ceccarelli M., Ramírez Vela V., Urriolagoitia Calderón G.M. (2019) Design of a Test Bench to Simulate Cranial Sudden Impact. In: Carbone G., Ceccarelli M., Pisla D. (eds) New Trends in Medical and Service Robotics. Mechanisms and Machine Science, vol 65. Springer, Cham. Pages 225-234 DOI https://doi.org/10.1007/978-3-030-00329-6_26
- 845 Huang G., Ceccarelli M., Zhang W., Huang Q. (2019) Experimental Characterizations of Operation of Exoskeleton-Assisted Wheelchair. In: Carbone G., Ceccarelli M., Pisla D. (eds) New Trends in Medical and Service Robotics. Mechanisms and Machine Science, vol 65. Springer, Cham. Pages 244-252 DOI https://doi.org/10.1007/978-3-030-00329-6_28. (Best Paper Award)
- 846 Iuliu Nadas , Doina Pisla , Marco Ceccarelli , Calin Vaida , Bogdan Gherman , Paul Tucan , Giuseppe Carbone (2019) Design of Dual-Arm Exoskeleton for Mirrored Upper Limb Rehabilitation. In: Carbone G., Ceccarelli M., Pisla D. (eds) New Trends in Medical and Service Robotics. Mechanisms and Machine Science, vol 65. Springer, Cham. Pages 303-311 DOI https://doi.org/10.1007/978-3-030-00329-6_34
- 847 Marco Ceccarelli and Roberto Simoni (Guest Editors), Editorial Preface, Special Issue on: Advances on Multibody Systems and Mechatronics, Int. J. Mechanisms and Robotic Systems, Vol. 4, No. 4, 2018
- 848 Claudia Aide González-Cruz and Marco Ceccarelli, An Experimental Characterization of a Planetary Gearbox, G. Carbone and A. Gasparetto (Eds.): Advances in Italian Mechanism Science- Proceedings of the Second International Conference of IFToMM Italy, MMS Vol. 68, Springer Nature Switzerland AG 2019, pp. 61–69, 2019. https://doi.org/10.1007/978-3-030-03320-0_7
- 849 E. S. Temirbekov, T. T. Kaiym, M. Ceccarelli, B. O. Bostanov, S. T. Kaimov, and A. T. Kaimov, Grasps of Robot Manipulator When Overloading Solid High-Radioactive Elements and Their Calculation, G. Carbone and A. Gasparetto (Eds.): Advances in Italian Mechanism Science- Proceedings of the Second International Conference of IFToMM Italy, MMS Vol. 68, Springer Nature Switzerland AG 2019, pp. 316–323, 2019. https://doi.org/10.1007/978-3-030-03320-0_34
- 850 Eike-Cristian Gerding, Giuseppe Carbone, Daniele Cafolla, Matteo Russo, Marco Ceccarelli, Sven Rink, and Burkhard Corves, Design and Testing of a Finger Exoskeleton Prototype, G. Carbone and A. Gasparetto (Eds.): Advances in Italian Mechanism Science- Proceedings of the Second International Conference of IFToMM Italy, MMS Vol. 68, Springer Nature Switzerland AG 2019, pp. 342–349, 2019. https://doi.org/10.1007/978-3-030-03320-0_37
- 851 Octavio Ramirez, Marco Ceccarelli, Matteo Russo, Christopher R. Torres-San-Miguel, and Guillermo Urriolagoitia-Calderon, Experimental Dynamic Tests of Rib Implants, G. Carbone and A. Gasparetto (Eds.): Advances in Italian Mechanism Science- Proceedings of the Second International Conference of IFToMM Italy, MMS Vol. 68, Springer Nature Switzerland AG 2019, pp. 353–361, 2019. https://doi.org/10.1007/978-3-030-03320-0_38
- 852 A. Gasparetto and M. Ceccarelli, The Arsenal of Venice: The First “Industrial” Factory in History, G. Carbone and A. Gasparetto (Eds.): Advances in Italian Mechanism Science- Proceedings of the Second International Conference of IFToMM Italy, MMS Vol. 68, Springer Nature Switzerland AG 2019, pp. 3–11, 2019. https://doi.org/10.1007/978-3-030-03320-0_1
- 853 Matteo Russo, Daniele Cafolla and Marco Ceccarelli, Design and Experiments of a Novel Humanoid Robot with Parallel Architectures, Robotics 2018, 7 (4), 79; doi:10.3390/robotics7040079. (best paper Award MEDER 2018)

- 854 R. Bragastini and M. Ceccarelli, Mechanisms in Heron's Automata as Technological Transfer and Cultural Means, in: Zhang B. and Ceccarelli M. (Eds.), Explorations in the History and Heritage of Machines and Mechanisms – Proceedings of HMM2018, Springer Nature Switzerland AG 2019, HMMS 37, pp. 175–186, 2019. https://doi.org/10.1007/978-3-030-03538-9_15
- 855 Marco Ceccarelli, Piergabrilele Molari, Sofia Ceccarelli, Cinzia Conti, Giangiacomo Martines, Analysis and reconstruction of a platform with ball bearings in Roman ships of Nemi lake, in: Zhang B. and Ceccarelli M. (Eds.), Explorations in the History and Heritage of Machines and Mechanisms – Proceedings of HMM2018, Springer Nature Switzerland AG 2019, HMMS 37, pp. 187–198, 2019. https://doi.org/10.1007/978-3-030-03538-9_16 (Best Paper Award HMM2018)
- 856 Y. H. Chen, Marco Ceccarelli, and Hong-Sen Yan, Reconstruction and Analysis of Zhan's S and Clock in the 14th Century, in: Zhang B. and Ceccarelli M. (Eds.), Explorations in the History and Heritage of Machines and Mechanisms – Proceedings of HMM2018, Springer Nature Switzerland AG 2019, HMMS 37, pp. 123–133, 2019. https://doi.org/10.1007/978-3-030-03538-9_11 (Best Paper Award HMM2018)
- 857 Qiang Huang, Tianqi Yang, Wenxi Liao, Weimin Zhang, Zhangguo Yu, Xuechao Chen, and M. Ceccarelli, Historical developments of BHR humanoid robot, in: Zhang B. and Ceccarelli M. (Eds.), Explorations in the History and Heritage of Machines and Mechanisms – Proceedings of HMM2018, Springer Nature Switzerland AG 2019, HMMS 37, pp. 310–323, 2019. https://doi.org/10.1007/978-3-030-03538-9_25 (Best Paper Award HMM2018)
- 858 Gao Huang, Weimin Zhang, Fei Meng, Zhangguo Yu, Xuechao Chen, Marco Ceccarelli, and Qiang Huang, Master-Slave Control of an Intention-Actuated Exoskeletal Robot for Locomotion and Lower Extremity Rehabilitation, INTERNATIONAL JOURNAL OF PRECISION ENGINEERING AND MANUFACTURING 2018 Vol. 19, No. 7, pp. 983-991. DOI: 10.1007/s12541-018-0116-x
- 859 Ding, W., Chen, X., Yu, Z., Meng, L., Ceccarelli, M., & Huang, Q. (2018, November). Fall Protection of Humanoids Inspired by Human Fall Motion. In 2018 IEEE-RAS 18th International Conference on Humanoid Robots (Humanoids) (pp. 827-833). IEEE.
- 860 Gao Huang , Marco Ceccarelli , Qiang Huang , Weimin Zhang, Zhangguo Yu, Xuechao Chen and Jingeng Mai, Design and Feasibility Study of a Leg-exoskeleton Assistive Wheelchair Robot with Tests on Gluteus Medius Muscles, MDPI journal Sensors 2019, 19, 548; doi:10.3390/s19030548
- 861 Qiang Huang, Zhangguo Yu, Xuechao Chen, Weimin Zhang, Tianqi Yang, Wenxi Liao, Marco Ceccarelli, Historical Developments of BHR Humanoid Robots, Advances in Historical Studies, Special issue on History of Machines and Mechanisms, 2019, 8, 79-90. DOI: 10.4236/ahs.2019.81005
- 862 Marco Ceccarelli and Baichun Zhang, Preface, Special issue on History of Machines and Mechanisms, Advances in Historical Studies, 2019, 8. <https://www.scirp.org/journal/ahs/>
- 863 Marco Ceccarelli and Alessandro Gasparetto, Preface for special issue on MEDER 2018: Mechanism Design for Robotics, Robotics 2019, 8(2), 30; <https://doi.org/10.3390/robotics8020030>
- 864 Giuseppe Carbone, Marco Ceccarelli, Christopher Fabrizi, Pietro Varilone, Paola Verde, Effects of Voltage Dips on Robotic Grasping, Journal reference: Robotics 2019, 8, 28. doi: 10.20944/preprints201902.0174.v1
- 865 Marco Ceccarelli, Lucia Ferrara and Victor Petuya, Design of a cable-driven device for elbow rehabilitation and exercise, In: Interdisciplinary Applications of Kinematics, pp. 61-68, Springer Nature Switzerland AG 2019, Cham 2019, Mechanisms and Machine Science 71, https://doi.org/10.1007/978-3-030-16423-2_6
- 866 **Ceccarelli, M., Ceccarelli, S., Conti, C. E., & Martines, G., (2019). Ball Bearings from Roman Imperial Ships of Nemilake. Advances in Historical Studies, 8, 115-130. <https://doi.org/10.4236/ahs.2019.83009>**
- 867 Claudia Aide González-Cruz and Marco Ceccarelli, Experimental Characterization of the Coupling Stage of a Two-Stage Planetary Gearbox in Variable Operational Conditions Machines 2019, 7(2), 45; <https://doi.org/10.3390/machines7020045>.
- 868 Marco Ceccarelli , IFToMM: yesterday, today, and tomorrow, T. Uhl (ed.), Advances in Mechanism and Machine Science, Mechanisms and Machine Science 73, Springer Nature Switzerland AG 2019. pp. ix-xxi. https://doi.org/10.1007/978-3-030-20131-9_96.
- 869 Michał Olinski, Antoni Gronowicz and Marco Ceccarelli, Interactive device supporting ankle joint rehabilitation, T. Uhl (ed.), Advances in Mechanism and Machine Science, Mechanisms and Machine Science 73, Springer Nature Switzerland AG 2019. pp. 43-52. https://doi.org/10.1007/978-3-030-20131-9_5
- 870 O. Ramirez, Ch. R. Torres-San-Miguel, M. Ceccarelli and G. Urriolagoitia-Calderon, Experimental characterization of an osteosynthesis implant, T. Uhl (ed.), Advances in Mechanism and Machine Science, Mechanisms and Machine Science 73, Springer Nature Switzerland AG 2019. pp. 53-62. https://doi.org/10.1007/978-3-030-20131-9_6
- 871 Özgün Selvi and Marco Ceccarelli, Design and Optimization of a Walking Over-Constrained Mechanism, T. Uhl (ed.), Advances in Mechanism and Machine Science, Mechanisms and Machine Science 73, Springer Nature Switzerland AG 2019. pp. 681-687. https://doi.org/10.1007/978-3-030-20131-9_68
- 872 Claudia A González-Cruz, Marco Ceccarelli, Mario Alimehmeti and Juan Carlos Jáuregui-Correa, Design and experience of a test-bed for gearboxes, T. Uhl (ed.), Advances in Mechanism and Machine Science, Mechanisms and Machine Science 73, Springer Nature Switzerland AG 2019. pp.967-976. https://doi.org/10.1007/978-3-030-20131-9_96
- 873 Yu-Hsun Chen, Marco Ceccarelli and Hong-Sen Yan, Reconstruction of an Ancient Blossoming Flower Automaton with a Circular-arc Cam, T. Uhl (ed.), Advances in Mechanism and Machine Science, Mechanisms and Machine Science 73, Springer Nature Switzerland AG 2019. pp.1151-1160. https://doi.org/10.1007/978-3-030-20131-9_114
- 874 Gao Huang, Weimin Zhang, Fangxing Li, Zhipeng Chi, Jiahao Jin, Marco Ceccarelli and Qiang Huang, An electronic differential control of wheelchair based on PID control, T. Uhl (ed.), Advances in Mechanism and Machine Science, Mechanisms and Machine Science 73, Springer Nature Switzerland AG 2019. pp.1499-1506. https://doi.org/10.1007/978-3-030-20131-9_148
- 875 E.-C Lovasz, C. Sticlaru, C. Suci, C. M. Gruescu, M. Ceccarelli, I. Maniu and C. E. Moldovan, Novel Actuation Design of an Active Elbow Orthosis, T. Uhl (ed.), Advances in Mechanism and Machine Science, Mechanisms and Machine Science 73, Springer Nature Switzerland AG 2019. pp.1527-1533. https://doi.org/10.1007/978-3-030-20131-9_151
- 876 Shuangji Yao, Henan Wang, Dingxuan Zhao, Tao Ni and Marco Ceccarelli, Simulation analysis of the structure of helicopter simulator steering column, T. Uhl (ed.), Advances in Mechanism and Machine Science, Mechanisms and Machine Science 73, Springer Nature Switzerland AG 2019. pp.1629-1638. https://doi.org/10.1007/978-3-030-20131-9_161

- 877 V. A. Glazunov, G. S. Filippov, A. B. Lastochkin, M. Ceccarelli, S. A. Skvortsov, G. V. Rashoyan, A. K. Aleshin and K. A. Shaluhin, 5DOF Mechanism for Vertebral Surgery Kinematic Analysis and Velocity Calculation, T. Uhl (ed.), *Advances in Mechanism and Machine Science, Mechanisms and Machine Science 73*, Springer Nature Switzerland AG 2019. pp.1741-1749. https://doi.org/10.1007/978-3-030-20131-9_172
- 878 Matteo Russo and Marco Ceccarelli, Dynamics of a Humanoid Robot with Parallel Architectures, T. Uhl (ed.), *Advances in Mechanism and Machine Science, Mechanisms and Machine Science 73*, Springer Nature Switzerland AG 2019. pp.1799-1808. https://doi.org/10.1007/978-3-030-20131-9_178
- 879 Ziyi Guo, Yiduo Zhu, Meiling Wang, Tao Li, Hanbin Zhao, Linsen Xu and Marco Ceccarelli, System Design and Experimental Analysis of an All-environment Mobile Robot, T. Uhl (ed.), *Advances in Mechanism and Machine Science, Mechanisms and Machine Science 73*, Springer Nature Switzerland AG 2019. pp.1969-1978. https://doi.org/10.1007/978-3-030-20131-9_195
- 880 Francisco J. Espinosa-García, Manuel Arias-Montiel, Marco Ceccarelli, Esther Lugo-González and Giuseppe Carbone, Advances on the development of a robotic hand with movable palm, T. Uhl (ed.), *Advances in Mechanism and Machine Science, Mechanisms and Machine Science 73*, Springer Nature Switzerland AG 2019. pp.1997-2006. https://doi.org/10.1007/978-3-030-20131-9_198
- 881 K. Ivanov, M. Ceccarelli, G. Yestemessova, Y. Nurgizat and G. Balbayev, Design and Characterization of a Gearbox Joint for Manipulators, T. Uhl (ed.), *Advances in Mechanism and Machine Science, Mechanisms and Machine Science 73*, Springer Nature Switzerland AG 2019. pp.2261-2268. https://doi.org/10.1007/978-3-030-20131-9_223
- 882 Libo Zhou, Mingfeng Wang and Marco Ceccarelli, Design and Simulation of a Biped Locomotor with Walking and Turning Operation, T. Uhl (ed.), *Advances in Mechanism and Machine Science, Mechanisms and Machine Science 73*, Springer Nature Switzerland AG 2019. pp.2329-2338. https://doi.org/10.1007/978-3-030-20131-9_230
- 883 Libo Meng, Marco Ceccarelli, Zhangguo Yu, Xuechao Chen and Qiang Huang, Gait Transition Between Standing and Falling Down for a Humanoid Robot, T. Uhl (ed.), *Advances in Mechanism and Machine Science, Mechanisms and Machine Science 73*, Springer Nature Switzerland AG 2019. pp.2501-2509. https://doi.org/10.1007/978-3-030-20131-9_247
- 884 Hui Li, Bowen Qin, Zhihong Jiang and Marco Ceccarelli, Multi-arm Motion Planning of Beijing Astronaut Robot, T. Uhl (ed.), *Advances in Mechanism and Machine Science, Mechanisms and Machine Science 73*, Springer Nature Switzerland AG 2019. pp.2873-2882. https://doi.org/10.1007/978-3-030-20131-9_284
- 885 Claudia González-Cruz, Juan Jauregui. And Marco Ceccarelli, DYNAMIC CHARACTERIZATION OF A TWO DEGREE OF FREEDOM PLANETARY GEARBOX DURING VARYING LOAD CONDITIONS, *Proceedings of ASME Turbo Expo 2019: Turbomachinery and Technical Conference and Exposition GT2019*, June 17-21, 2019, Phoenix, Arizona, USA, paper GT2019-91862
- 886 M. Russo, M. Ceccarelli and Y. Takeda, Comparison of motion/force transmissibility in a 3-SPR parallel manipulator and a 6-SPS equivalent mechanism, Switzerland AG 2019., In *Robotics and Mechatronics*, R. Yang et al. (eds.), *Mechanisms and Machine Science 72*, Switzerland AG, Cham 2019, 119-129. https://doi.org/10.1007/978-3-030-17677-8_10.
- 887 Marco Ceccarelli, Keynote : Innovations in Robotics with Mechanism Design, *Book of Abstracts of IRMES 2019 9th International Scientific Conference Research and Development of Mechanical Elements and Systems*, September 2019, Kragujevac, Serbia, pp. 2-5. ISBN 978-86-6335-061-8
- 888 Francesco Samani and Marco Ceccarelli, Design and performance simulation of TORVEastro three-link astronaut robot, *Book of Abstracts of IRMES 2019 9th International Scientific Conference Research and Development of Mechanical Elements and Systems*, September 2019, Kragujevac, Serbia, pp. 105-106. ISBN 978-86-6335-061-8; IOP Conf. Series: Materials Science and Engineering 659 (2019) 012010, IOP Publishing. doi:10.1088/1757-899X/659/1/012010
- 889 Marco Ceccarelli, Tian Huang, Teresa Zielinska, Juan Antonio Carretero and Tadeusz Uhl, Celebrations for the 50-Year Anniversary of IFToMM, *Machines* 2019, 7, 53; doi:10.3390/machines7030053 www.mdpi.com/journal/machines; *Journal: Journal of Vibration Engineering & Technologies*, Online publication date: 9/9/19. <https://doi.org/10.1007/s42417-019-00171-8>; Volume 8, Number 4, *J. Vib. Eng. Technol.* (2020) 8:485-488. DOI 10.1007/s42417-019-00171-8
- 890 Marco Ceccarelli and Matteo Russo, Parallel Mechanism Designs for Humanoid Robots, C.-H. Kuo et al. (Eds.): *Robotics and Mechatronics – Proceedings of ISRM 2019*, Springer Nature Switzerland AG, Cham, 2020, MMS vol. 78. pp. 255–264, 2020. https://doi.org/10.1007/978-3-030-30036-4_23 (finalist Best Paper Award)
- 891 Zheng Tao, Ceccarelli Marco, Li Hui, and Mo Yang, An Experimental Characterization of the BIT Astronaut Robot, C.-H. Kuo et al. (Eds.): *Robotics and Mechatronics – Proceedings of ISRM 2019*, Springer Nature Switzerland AG, Cham, 2020, MMS vol. 78. pp. pp. 380–387, 2020. https://doi.org/10.1007/978-3-030-30036-4_34
- 892 Luca Di Nunzio, Giancarlo Cardarilli, Marco Ceccarelli, and Rocco Fazzolari, Design and Requirements for a Mobile Robot for Team Cooperation, C.-H. Kuo et al. (Eds.): *Robotics and Mechatronics – Proceedings of ISRM 2019*, Springer Nature Switzerland AG, Cham, 2020, MMS vol. 78. pp. pp. 277–285, 2020. https://doi.org/10.1007/978-3-030-30036-4_25
- 893 Gao Huang, Marco Ceccarelli, Weimin Zhang and Qiang Huang, Modular Design Solutions of BIT Wheelchair for Motion Assistance, 2019 IEEE International Conference on Advanced Robotics and its Social Impacts (ARSO), BIT, Beijing, China. October 31 - November 2, 2019, paper 0091, pp.90-96. 978-1-7281-3176-4/19/\$31.00 ©2019 IEEE. (finalist Best Paper Award)
- 894 Tao Zheng, Yunqi Liu, Long Li, Hui Li, Marco Ceccarelli, One-dimensional attitude control for BIT flying Robot, 2019 IEEE International Conference on Advanced Robotics and its Social Impacts (ARSO), BIT, Beijing, China. October 31 - November 2, 2019, paper 0015, pp.134-140. 978-1-7281-3176-4/19/\$31.00 ©2019 IEEE. (Student Best Paper Award)
- 895 F.J. Espinosa-García, M. Arias-Montiel, M. Ceccarelli, G. Carbone and E. Lugo-González, “Design and experimental characterization of a novel subactuated mechanism for robotic finger and movable palm”, *International Journal of Mechanics and Control*, ISSN: 1590-8844, Vol. 20, No. 02, 2019, pp. 141-146.
- 896 Xuechao Chen, Wenpeng Ding, Zhangguo Yu, Libo Meng, Marco Ceccarelli and Qiang Huang, Combination of Hardware and Control to Reduce Humanoids Fall Damage, *International Journal of Humanoid Robotics*, 2019. <https://doi.org/10.1142/S0219843620500024>
- 897 R Rogério Sales Gonçalves, Thiago Alves, Giuseppe Carbone, Marco Ceccarelli, Chapter 3 Cable-Driven Robots in Physical Rehabilitation: From Theory to Practice, in: (Habib M.K. Editor) *Advanced Robotics and Intelligent Automation in Manufacturing*, 2020, IGI Global, Hershey. Pp.52-96. DOI: 10.4018/978-1-7998-1382-8.ch003

- 898 Mingfeng Wang, Marco Ceccarelli, Giuseppe Carbone, Design and Development of the Cassino Biped Locomotor, ASME Journal of Mechanisms and Robotics, JUNE 2020, Vol. 12 / 031001-1-9. [DOI: 10.1115/1.4045181]
- 899 Shuangji Yao, Marco Ceccarelli, Giuseppe Carbone and Bin Ma, Force Analysis and Curve Design for Laying Pipe in Loop Laying Head of Wire Rod Mills, Chinese Journal Mechanical Engineering (2019) 32:32.https://doi.org/10.1186/s10033-019-0344-8
- 900 Alberto Rovetta and Marco Ceccarelli, Giovanni Bianchi (1924–2003), in: M. Ceccarelli and Y. Fang (eds.), Distinguished Figures in Mechanism and Machine Science- Part 4, History of Mechanism and Machine Science 38, Springer Nature Switzerland AG 2020, pp.1-13. https://doi.org/10.1007/978-3-030-32398-1_1
- 901 Marco Ceccarelli and Pier Gabriele Molari, Francesco di Giorgio (1439-1501), in: M. Ceccarelli and Y. Fang (eds.), Distinguished Figures in Mechanism and Machine Science- Part 4, History of Mechanism and Machine Science 38, Springer Nature Switzerland AG 2020, pp.47-66. https://doi.org/10.1007/978-3-030-32398-1_3
- 902 N. Selezneva, S. Vorotnikov, A. Vukolov, D. Saschenko and Marco Ceccarelli, Alexander Alexandrovich Golovin (1939–2013), in: M. Ceccarelli and Y. Fang (eds.), Distinguished Figures in Mechanism and Machine Science- Part 4, History of Mechanism and Machine Science 38, Springer Nature Switzerland AG 2020, pp.67-84. https://doi.org/10.1007/978-3-030-32398-1_4
- 903 Marco Ceccarelli and Alessandro Gasparetto, Cesare Rossi (1955–2017), in: M. Ceccarelli and Y. Fang (eds.), Distinguished Figures in Mechanism and Machine Science- Part 4, History of Mechanism and Machine Science 38, Springer Nature Switzerland AG 2020, pp.115-125. https://doi.org/10.1007/978-3-030-32398-1_7
- 904 Claudia Aide González-Cruz and Marco Ceccarelli, Chapter 22 - Vibration Analysis of Gearboxes, in: V. Goldfarb et al. (eds.), New Approaches to Gear Design and Production, Mechanisms and Machine Science 81, Springer Nature Switzerland AG 2020, pp.473-494. https://doi.org/10.1007/978-3-030-34945-5_22
- 905 Marco Ceccarelli, End-Term Message from the IFToMM President, Journal of Vibration Engineering & Technologies, ISSN 2523-3920. Online 5-03-2020; (2020) 8:381–389; DOI 10.1007/s42417-020-00200-x; MDPI Robotics, online 25-01-2020 https://www.mdpi.com/journal/robotics/announcements/1790
- 906 Daniele Cafolla, Matteo Russo, & Marco Ceccarelli, Experimental Validation of HeritageBot III, a Robotic Platform for Cultural Heritage, Journal of Intelligent & Robotic Systems. 10 March 2020 https://doi.org/10.1007/s10846-020-01180-6.
- 907 Betsy D. M. Chaparro-Rico; Daniele Cafolla; Marco Ceccarelli; Eduardo Castillo-Castaneda, NURSE-2 DoF Device for Arm Motion Guidance: Kinematic, Dynamic, and FEM Analysis. Appl. Sci. 2020, Volume 10, Issue 6, 2139. doi:10.3390/app10062139
- 908 Giuseppe Carbone, Eike Christian Gerding, Burkard Corves, Daniele Cafolla, Matteo Russo and Marco Ceccarelli, Design of a Two-DOFs Driving Mechanism for a Motion-Assisted Finger Exoskeleton, Appl. Sci. 2020, 10, 1-23, 2619; doi:10.3390/app10072619
- 909 Fayong Guo, Hao Cai, Marco Ceccarelli, Tao Li, Butang Yao, Enhanced D-H: an improved convention for establishing a robot link coordinate system fixed on the joint, Industrial Robot: the international journal of robotics research and application, 47/2 (2020) 197–205. [DOI 10.1108/IR-09-2019-0185]
- 910 Matteo Russo 1 and Marco Ceccarelli, A Survey on Mechanical Solutions for Hybrid Mobile Robots, Robotics 2020, 9, 32; doi:10.3390/robotics9020032
- 911 Arturo Gallozzi, Giuseppe Carbone, Marco Ceccarelli, Claudio De Stefano, Alessandra Scotto di Freca, Marina Bianchi, Michela Cigola, Chapter 82: The MuseBot Project: Robotics, Informatic, and Economics Strategies for Museums , in: Robotic Systems: Concepts, Methodologies, Tools, and Applications , IGI Global, (pages 1721-1743). DOI: 10.4018/978-1-7998-1754-3.ch082
- 912 Mario E. Herrera-Cordero, Manuel Arias-Montiel, Marco Ceccarelli, and Esther Lugo-Gonzalez, On the Dynamics and Control of a Single-Wheel Robot with Inertial Locomotion,IN: Industrial and Robotic Systems (LASIRS 2019), MMS 86, Springer, Cham pp. 249–260, 2020..https://doi.org/10.1007/978-3-030-45402-9_24
- 913 Ceccarelli M., Italian Contributions to RAAD, in: Advances in Service and Industrial Robotics - Results of RAAD 2020, Springer Nature Switzerland AG 2020, Cham, pp. 325–333, 2020. https://doi.org/10.1007/978-3-030-48989-2_35
- 914 José Luis Rueda Arreguín , Marco Ceccarelli, and Christopher René Torres San Miguel, Design and Simulation of a Parallel-Mechanism Testbed for Head Impact, in: Advances in Service and Industrial Robotics - Results of RAAD 2020, Springer Nature Switzerland AG 2020, Cham, pp. 400–407, 2020. https://doi.org/10.1007/978-3-030-48989-2_43
- 915 Samani F. , Ceccarelli M.,Prototype Design and Testing of TORVEastro, Cable-Driven Astronaut Robot, in: Advances in Service and Industrial Robotics - Results of RAAD 2020, Springer Nature Switzerland AG 2020, Cham, pp. 448–455, 2020. https://doi.org/10.1007/978-3-030-48989-2_48
- 916 Tao Zheng, Hui Li, Qiang Huang, Xiang Wang, Marco Ceccarelli, Zhihong Jiang, Pingli Wang, Sanliang Wang, Yanyan Zhao, and Xiao Liu, Design and Lab Experience for a Pipeline Service Robot in Space Orbital Stations, in: Advances in Service and Industrial Robotics - Results of RAAD 2020, Springer Nature Switzerland AG 2020, Cham, pp. 456–465, 2020. https://doi.org/10.1007/978-3-030-48989-2_49
- 917 Marco Ceccarelli, Daniele Cafolla, Matteo Russo, and Giuseppe Carbone, Design Issues for a Walking-Flying Robot, D. Sen et al. (eds.), Mechanism and Machine Science - Select Proceedings of Asian MMS 2018, Lecture Notes in Mechanical Engineering, Springer Nature Singapore Pte Ltd. 2021, pp.267-277. https://doi.org/10.1007/978-981-15-4477-4_19
- 918 Ceccarelli M., Design Experiences for Reconstruction of an Ancient Roman Crane, in: Advances Italian Mechanism Science - Proceedings of 3rd Int. Conference of IFToMM Italy (IFIT2020), Springer Nature Switzerland AG 2021, MMS 91, pp. 37–45, 2021. https://doi.org/10.1007/978-3-030-55807-9_5.
- 919 Rueda Arreguin J.L. , Ceccarelli M.,and Torres San Miguel R.C, Design of an Articulated Neck for Testbed Mannequin, in: Advances Italian Mechanism SciEnce - Proceedings of 3rd Int. Conference of IFToMM Italy (IFIT2020), Springer Nature Switzerland AG 2021, MMS 91, pp. 94–101, 2021. https://doi.org/10.1007/978-3-030-55807-9_11
- 920 Ceccarelli M., and Samani F., Design and Experimental Characterization of an Underactuated Finger Mechanism, in: Advances Italian Mechanism Science - Proceedings of 3rd Int. Conference of IFToMM Italy (IFIT2020), Springer Nature Switzerland AG 2021, MMS 91, pp. 102–110, 2021. https://doi.org/10.1007/978-3-030-55807-9_12

- 921 Russo M. and Ceccarelli M., A Wearable Device for Ankle Motion Assistance, in: *Advances Italian Mechanism Science - Proceedings of 3rd Int. Conference of IFToMM Italy (IFIT2020)*, Springer Nature Switzerland AG 2021, MMS 91, pp. 173–181, 2021. https://doi.org/10.1007/978-3-030-55807-9_20
- 922 Miguel Angel Martínez- Miranda, Christopher Rene Torres San Miguel, J. Alejandro Flores-Campos, and Marco Ceccarelli, Numerical Simulation of a 2D Harmonic Oscillator as Coupling System for Child Restraint Systems (CRS), in: *Advances Italian Mechanism Science - Proceedings of 3rd Int. Conference of IFToMM Italy (IFIT2020)*, Springer Nature Switzerland AG 2021, MMS 91, pp. 492–502, 2021. https://doi.org/10.1007/978-3-030-55807-9_56
- 923 Bottin M. , Ceccarelli M., Morales-Cruz C. , and Rosati G. Design and Operation Improvements for CADEL Cable-Driven Elbow Assisting Device), in: *Advances Italian Mechanism Science - Proceedings of 3rd Int. Conference of IFToMM Italy (IFIT2020)*, Springer Nature Switzerland AG 2021, MMS 91, pp. 503–511, 2021. https://doi.org/10.1007/978-3-030-55807-9_57
- 924 Shuken Wada, Cuauhtemoc Morales-Cruz, José Luis Rueda Arreguin, Marco Ceccarelli, and Nobuyuki Iwatsuki, An Experimental Analysis of Vibrations During Walking in Humans and Robots, in: *Advances Italian Mechanism Science - Proceedings of 3rd Int. Conference of IFToMM Italy (IFIT2020)*, Springer Nature Switzerland AG 2021, MMS 91, pp. 635–643, 2021. https://doi.org/10.1007/978-3-030-55807-9_71
- 925 Cuauhtemoc Morales-Cruz C. , Marco Ceccarelli M. , and Portilla-Flores E.A., Design Formulation for a Multi-criteria Optimization of Mechatronic Systems in: *Advances Italian Mechanism Science - Proceedings of 3rd Int. Conference of IFToMM Italy (IFIT2020)*, Springer Nature Switzerland AG 2021, MMS 91, pp. 849–860, 2021. https://doi.org/10.1007/978-3-030-55807-9_94
- 926 Cuauhtémoc Morales-Cruz, Cristian Enrico Capalbo, Giammarco Caroleo, Marco Ceccarelli, and Giuseppe Carbone Numerical and Experimental Validation of ExoFing, a Finger Exoskeleton, in *New Trends in Mechanism and Machine Science - EuCoMeS 2020*, Springer Nature Switzerland AG 2020, Cham, D. Pisla et al. (Eds.): MMS 89, pp. 115–122, 2020. https://doi.org/10.1007/978-3-030-55061-5_14
- 927 Russo M., Ceccarelli, M. Analysis of a Wearable Robotic System for Ankle Rehabilitation. *Machines* 2020, 8(3), 48; <https://doi.org/10.3390/machines8030048>.<https://www.mdpi.com/2075-1702/8/3/48>
- 928 Ceccarelli M., Models of mechanisms for teaching and experimental activity, *Atti del XXXVIII Convegno annuale Società Italiana degli Storici della Fisica e dell'Astronomia*, Pavia : Pavia University Press, 2020, pp. 255-266. ISBN: 978-88-6952-7
- 929 Marco Ceccarelli, Matteo Russo and Cuauhtemoc Morales-Cruz, Parallel Architectures for Humanoid Robots, *Robotics* 2020, 9, 75; doi:10.3390/robotics9040075
- 930 Yunqi Liu, Long L, Marco Ceccarelli, Hui L, Qiang Huang, and Xiang Wang, Design and Testing of BIT Flying Robot, in: G. Venture et al. (Eds.): *ROMANSY 2020, ROMANSY 23 – Robot Design, Dynamics and Control*, Springer, Cham, 2021, pp. 68–75, 2021. https://doi.org/10.1007/978-3-030-58380-4_9
- 931 Libo Meng, Marco Ceccarelli, Zhangguo Yu, Xuechao Chen, Gao Huang, and Qiang Huang, Continuous Jumping Control Based on Virtual Model Control for a One-Leg Robot Platform, in: G. Venture et al. (Eds.): *ROMANSY 2020, ROMANSY 23 – Robot Design, Dynamics and Control*, Springer, Cham, 2021, pp. 24–33, 2021. https://doi.org/10.1007/978-3-030-58380-4_4
- 932 Giacomo Zuccon, Matteo Bottin, Marco Ceccarelli and Giulio Rosati, Design and Performance of an Elbow Assisting Mechanism, *Machines* 2020, 8, 68; doi:10.3390/machines8040068
- 933 Michał Olinski, Antoni Gronowicz, Marco Ceccarelli, Development and characterisation of a controllable adjustable knee joint mechanism, *Mechanism and Machine Theory* 155 (2021). <https://doi.org/10.1016/j.mechmachtheory.2020.104101>
- 934 Ludovica Sommariva, Jose Luis Arreguin, Federico Tacconi, Lucrezia Puglisi, Marco Ceccarelli, Vincenzo Ambrogio, DESIGN AND MECHANICAL TESTING OF A NEW RESORBABLE OSTEOSYNTHESIS DEVICE FOR RIB FRACTURES 1st ESTS VIRTUAL CONGRESS of European Society of Thoracic Surgeons, 2-3 October 2020, Abstract #765. <https://www.ests-meeting.com/ests2020vc/>
- 935 Ludovica Sommariva, José Luis Arreguin, Cuauhtemoc Morales, Marco Ceccarelli, Vincenzo Ambrogio, and Lucrezia Puglisi, Design and Lab Experiences for a Fixator of Rib Fractures, *New Trends in Medical and Service Robotics - MESROB 2020*, Springer Nature Switzerland AG 2021, MMS 93, pp. 152–160, 2021. https://doi.org/10.1007/978-3-030-58104-6_18
- 936 José Luis Rueda Arreguin, Marco Ceccarelli, Christopher R. Torres-San-Miguel , and Cuauhtémoc Morales Cruz, Lab Experiences on Impact Biomechanics of Human Head, *New Trends in Medical and Service Robotics - MESROB 2020*, Springer Nature Switzerland AG 2021, MMS 93, pp. 229–237, 2021. https://doi.org/10.1007/978-3-030-58104-6_26
- 937 Octavio Ramirez, Christopher R. Torres-San-Miguel, Marco Ceccarelli, José Luis Rueda Arreguin, and Guillermo Urriolagoitia-Calderón, A Compliant Mechanism as a Sternum Prosthesis, *New Trends in Medical and Service Robotics - MESROB 2020*, Springer Nature Switzerland AG 2021, MMS 93, pp. 143–151, 2021. https://doi.org/10.1007/978-3-030-58104-6_17
- 938 Arnaud Kozisek, Marco Ceccarelli, Med Amine Laribi, and Lucia Ferrara, Experimental Characterization of a Cable-Driven Device for Elbow Motion Assistance, *New Trends in Medical and Service Robotics - MESROB 2020*, Springer Nature Switzerland AG 2021, MMS 93, pp. 71–78, 2021. https://doi.org/10.1007/978-3-030-58104-6_9
- 939 Jose Luis Arreguin, Roberto Montanari, Marco Ceccarelli, Vincenzo Ambrogio, Maria Richetta, Christopher R. Torres-San-Miguel, Alessandra Varone, Design Solutions from Material Selection for Rib Fixators, *Materials Science Forum*, Vol. 1016, pp 303-308, 2021 Trans Tech Publications Ltd, Switzerland. ISSN: 1662-9752.
- 940 **Rogério Sales Gonçalves, Lorena Souza Furtado Brito, Lucas Pinheiro Moraes, Giuseppe Carbone and Marco Ceccarelli, A fairly simple mechatronic device for training human wrist motion, International Journal of Advanced Robotic Systems, November-December 2020: 1–15, DOI: 10.1177/1729881420974286**
- 941 Gao Huang, Marco Ceccarelli, Weimin Zhang, Qiang Huang, Design and Performance of BIT Lexochair, a Robotic Leg-Exoskeleton Assistive Wheelchair, *International Journal of Physical Medicine and Rehabilitation*, 2020. Vol.9 Iss.01 No:1000581
- 942 **Marco Ceccarelli, Design and Reconstruction of an Ancient Roman Crane, Advances in Historical Studies, 2020, 9, 261-283. DOI: 10.4236/ahs.2020.95021**
- 943 F. Inel, G. Carbone and M. Ceccarelli, “Design and implementation of high level control modes for a 3D cable-driven-parallel robot”, *International Journal of Mechanics and Control*, ISSN: 1590-8844, Vol. 21, No. 02, 2020, pp. 87-94.

- 944 F. Samani and M.Ceccarelli, An Experimental Characterization of TORVEastro, Cable-Driven Astronaut Robot, *Robotics* 2021, 10(1), 21; <https://doi.org/10.3390/robotics10010021>
- 945 Med Amine Laribi, and Marco Ceccarelli, Design and Experimental Characterization of a Cable-Driven Elbow Assisting Device, *J. Medical Devices*. MARCH 2021, Vol. 15 / 014503, 1-8 DOI: 10.1115/1.4049529
- 946 Ceccarelli M., Design and Operation of Humanoid Robots with Incipient Fall Detection, *BMSTU JOURNAL OF MECHANICAL ENGINEERING*, 2021, 1(730), 11-15. doi: 10.18698/0536-1044-2021-1-11-15
- 947 Jinfu Liu¹, Linsen Xu¹, Jiajun Xu, Tao Li, Shouqi Chen, Hong Xu, Gaoxin Cheng, Marco Ceccarelli, Design, Modeling and Experimentation of a Biomimetic Wall-climbing Robot for Multiple Surfaces, *Journal of Bionic Engineering*, 17 (2020) 523–538. DOI: <https://doi.org/10.1007/s42235-020-0042-3>
- 948 Russo M, Ceccarelli M, Cafolla D. Kinematic Modelling and Motion Analysis of a Humanoid Torso Mechanism. *Applied Sciences*. 2021; 11(6):2607. <https://doi.org/10.3390/app11062607>
- 949 Islas-García E, Ceccarelli M, Tapia-Herrera R, Torres-SanMiguel CR. Pipeline Inspection Tests Using a Biomimetic Robot. *Biomimetics*. 2021; 6(1):17. <https://doi.org/10.3390/biomimetics6010017>
- 950 Axel Fort, Octavie Somoza Salgado, Med Amine Laribi, Juan Sandoval, and Marco Ceccarelli, Design of a Cable-Driven Robot for Elbow and Wrist Rehabilitation, *Advances in Service and Industrial Robotics - RAAD 2021*, Springer Nature Switzerland AG, Cham, 2021, pp. 167–175. https://doi.org/10.1007/978-3-030-75259-0_18
- 951 R. Hernández-Cerero, C. R. Torres San Miguel, J. A. Leal-Naranjo, and M. Ceccarelli, Design and Analysis of 2 DOF Elbow Prosthesis, *Advances in Service and Industrial Robotics - RAAD 2021*, Springer Nature Switzerland AG, Cham, 2021, pp. 3–12. https://doi.org/10.1007/978-3-030-75259-0_1
- 952 Alexey Fomin, Anton Antonov, Daniil Petelin, Victor Glazunov, Inverse Kinematics and Velocity Analysis of a 6-DOF Hexapod-Type Manipulator with a Circular Guide, *Mechanism Design for Robotics: MEDER 2021*, Springer Nature Switzerland AG, Cham, pp. 12–19, 2021. https://doi.org/10.1007/978-3-030-75271-2_2
- 953 Matteo Russo and Marco Ceccarelli, A Comparison of Algebraic and Iterative Procedures for the Generation of the Workspace of Parallel Robots, *Mechanism Design for Robotics: MEDER 2021*, Springer Nature Switzerland AG, Cham, pp. 53–61, 2021. https://doi.org/10.1007/978-3-030-75271-2_6
- 954 Antonio-Marius-Flavius Luputi, Erwin-Christian Lovasz, Marco Ceccarelli, Sticlaru Carmen, and Ana-Maria Stoian, Kinematic Simulation of a Geared Planar Parallel Manipulator, *Mechanism Design for Robotics: MEDER 2021*, Springer Nature Switzerland AG, Cham, pp. 102–110, 2021. https://doi.org/10.1007/978-3-030-75271-2_11
- 955 Wang Renquan, Yao Shuangji, Marco Ceccarelli, and Yang Xiaohan, Design Criteria Study for Underactuated Symmetric Pinching Mechanism of Pinch Roll Machine in High-Speed Wire Rod Product Line, *Mechanism Design for Robotics: MEDER 2021*, Springer Nature Switzerland AG, Cham, pp. 113–121, 2021. https://doi.org/10.1007/978-3-030-75271-2_12
- 956 Yury Selyutskiy, Marat Dosaev, Andrei Holub, and Marco Ceccarelli, Aerodynamic Double Pendulum with Nonlinear Elastic Spring, *Mechanism Design for Robotics: MEDER 2021*, Springer Nature Switzerland AG, Cham, pp. 132–140, 2021. https://doi.org/10.1007/978-3-030-75271-2_14
- 957 Job Eli Escobar-Flores, Christopher R. Torres-San Miguel, Luis Antonio Aguilar-Pérez, and Marco Ceccarelli, Design of a Flexible Interphalangeal Joint, *Mechanism Design for Robotics: MEDER 2021*, Springer Nature Switzerland AG, Cham, pp. 141–148, 2021. https://doi.org/10.1007/978-3-030-75271-2_15
- 958 Konstantin S. Ivanov, Dana T. Tulekenova, and Marco Ceccarelli, An Adaptive Drive of Spacecraft Docking Mechanism, *Mechanism Design for Robotics: MEDER 2021*, Springer Nature Switzerland AG, Cham, pp. 168–178, 2021. https://doi.org/10.1007/978-3-030-75271-2_18
- 959 Jorge Enrique Araque Isidro and Marco Ceccarelli, Driving Mechanism in Robotized Hospital Bed for Patients with COVID 19, *Mechanism Design for Robotics: MEDER 2021*, Springer Nature Switzerland AG, Cham, pp. 179–186, 2021. https://doi.org/10.1007/978-3-030-75271-2_19
- 960 Marco Ceccarelli, Challenges of Mechanical Engineering and in IFToMM: Yesterday and Tomorrow, in: N. Barmina and E. Trubachev (eds.), *Gears in Design, Production and Education*, Springer Nature Switzerland AG, 2021, Cham, pp. 69-83. https://doi.org/10.1007/978-3-030-73022-2_3
- 961 Marco Ceccarelli and Fernando Viadero Rueda, Geared Designs from the Past for Today Inspiration, in: N. Barmina and E. Trubachev (eds.), *Gears in Design, Production and Education*, Springer Nature Switzerland AG, 2021, Cham, pp. 6243-254. https://doi.org/10.1007/978-3-030-73022-2_11
- 962 Marco Ceccarelli and Cuauhtemoc Morales-Cruz, A prototype characterization of ExoFinger, a finger exoskeleton, *International Journal of Advanced Robotic Systems*, May-June 2021: 1–8. DOI: 10.1177/17298814211024880
- 963 C.A. González-Cruz, M. Ceccarelli, J.C. Jáuregui-Correa and M. Alimehmeti, “An experimental characterization of a two-stage planetary gear transmission under non-stationary operation”, *International Journal of Mechanics and Control*, ISSN: 1590-8844, Vol. 22, No. 01, 2021, pp. 115-124.
- 964 M. Ceccarelli, L. Sarmati and V. Ambrogio, "A robotized hospital bed for COVID-19 patients in intensive care treatments," *2021 IEEE International Conference on Automation/XXIV Congress of the Chilean Association of Automatic Control (ICA-ACCA)*, 2021, pp. 1-6, doi: 10.1109/ICAACCA51523.2021.9465310.
- 965 Mario E. Herrera-Cordero, Manuel Arias-Montiel, Marco Ceccarelli, Esther Lugo-Gonzalez, Cosimulation and Control of a Single-Wheel Pendulum Mobile Robot, *J. Mechanisms Robotics*. Oct 2021, 13(5): 050909 (9 pages), Paper No: JMR-21-1128. <https://doi.org/10.1115/1.4051359>
- 966 José Luis Rueda-Arreguin, Marco Ceccarelli, and Christopher Rene Torres-SanMiguel, Impact Device for Biomechanics of Human Head-Neck Injuries, *Hindawi Mathematical Problems in Engineering*, Volume 2021, Article ID 5592673, 8 pages. <https://doi.org/10.1155/2021/5592673>
- 967 Ceccarelli, M.; Riabtsev, M.; Fort, A.; Russo, M.; Laribi, M.A.; Urizar, M. Design and Experimental Characterization of L-CADEL v2, an Assistive Device for Elbow Motion. *Sensors* 2021, 21, 5149. <https://doi.org/10.3390/s21155149>
- 968 Alexey Fomin, Daniil Petelin, Anton Antonov, Victor Glazunov and Marco Ceccarelli, Virtual and Physical Prototyping of Reconfigurable Parallel Mechanisms with Single Actuation, *Appl. Sci.* 2021, 11(15), 7158; <https://doi.org/10.3390/app11157158>
- 969 Ceccarelli, M., challenges in Leadership IFToMM: Achievements and Challenges, *Advances in Mechanism Design III – Proceedings of TMM 2020*, Springer Nature Switzerland AG, 2022, pp. 3–16. https://doi.org/10.1007/978-3-030-83594-1_1

- 970 Titov A. and Ceccarelli, M., Prototype and Testing of L-CaPaMan, Advances in Mechanism Design III – Proceedings of TMM 2020, Springer Nature Switzerland AG, 2022, 249–258. https://doi.org/10.1007/978-3-030-83594-1_26
- 971 Fort A., Ceccarelli, M., and Laribi M-A., Prototype and Testing of LARMbot PK Arm ,Advances in Mechanism Design III – Proceedings of TMM 2020, Springer Nature Switzerland AG, 2022, pp. 210–219. https://doi.org/10.1007/978-3-030-83594-1_22
- 972 Rueda Arreguín, J., Ceccarelli, M., & Torres-SanMiguel, C. (2021). Design and simulation of a PK testbed for head impact evaluation. *Robotica*, 2021, pp. 1-16. doi:10.1017/S0263574721001089
- 973 **Morales-Cruz, C.; Ceccarelli, M.; Portilla-Flores, E. An Innovative Optimization Design Procedure for Mechatronic Systems with a Multi-Criteria Formulation. Appl. Sci. 2021, 11(19), 8900; <https://doi.org/10.3390/app11198900>.**
- 974 Irakoze V., Marco Ceccarelli M., and Russo M., Historical and Technical Analysis of Harmonic Drive Gear Design, in: *Multibody Mechatronic Systems - MuSMe 2021*, MMS 110, Springer Nature Switzerland AG 2022, Cham, pp. 46–55, 2022. https://doi.org/10.1007/978-3-030-88751-3_5
- 975 Ceccarelli M., Contributions of Mariano di Jacopo (il Taccola) in Mechanism Design, *Anales de Ingeniería Mecánica*, Año 22, Jaén, , Octubre 2021, 06_008. SSN: 0212-5072
- 976 Ceccarelli M., Conferencia plenaria: Logros pasados y desafíos futuros del diseño de mecanismos para robótica, *Anales de Ingeniería Mecánica*, Año 22, Jaén, , Octubre 2021, pp.27-36 (libro de resúmenes). SSN: 0212-5072
- 977 **Marco Ceccarelli, Matteo Russo, Daniele Cafolla and Betsy D. M. Chaparro-Rico, Operation Safety of a 2-DoF Planar Mechanism for Arm Rehabilitation, *Inventions* 2021, 6, 85. <https://doi.org/10.3390/inventions6040085>**
- 978 G Carbone, M Ceccarelli , C. E. Capalbo, G Caroleo and C Morales-Cruz, Numerical and experimental performance estimation for a ExoFing - 2 DOFs finger exoskeleton, *Robotica* (2021), 1–13 doi:10.1017/S0263574721001375
- 979 Marco Ceccarelli and Luigi Traetta, From the “pedagogy of innovation” to 3D technologies: Mechanical models for technical-scientific training, *Proceedings of the Second Workshop on Technology Enhanced Learning Environments for Blended Education*, paper 06, October 5–6, 2021, Foggia, Italy. ISSN 1613-0073
- 980 **Ceccarelli M. , Papuc P.E., Taje R. , Aquilini M., and Ambrogi V., A Biomechanics Analysis of Ventilation in Thorax Operated Patients, *International Journal of Clinical Studies & Medical Case Reports*, Volume 15- Issue 1, pp.1-3, November 2021. DOI: 10.46998/IJCMCR.2021.15.00051**
- 981 Matteo Russo and Marco Ceccarelli, A geometrical formulation for the workspace of parallel manipulators, *Robotica* (2021), 1–11 (online). doi:10.1017/S026357472100180
- 982 K. Sholanov, B. Mirzabayev and M. Ceccarelli, Expansibility of electric power production by sail wind power stations *International Journal of Mechanics and Control*, Vol. 22, No. 02, 2021, pp. 117-126 . ISSN 1590-8844
- 983 Ceccarelli M., Past Achievements and Future Challenges of Mechanism Design for Robotics, *Advances in Asian Mechanism and Machine Science – Proceedings of ASIAN MMS 2021*, Springer Nature Switzerland AG 2022 , Cham, pp. 3–9, 2022. https://doi.org/10.1007/978-3-030-91892-7_1
- 984 Wenshuo Gao and Marco Ceccarelli, Requirements and Design of a Hand for LARMbot Humanoid, *Advances in Asian Mechanism and Machine Science – Proceedings of ASIAN MMS 2021*, Springer Nature Switzerland AG 2022 , Cham, pp. 238–246, 2022. https://doi.org/10.1007/978-3-030-91892-7_22
- 985 Marco Ceccarelli, Matteo Russo, and Margarita Lapteva, Performance Analysis of a Cable-Driven Ankle Assisting Device, *Advances in Asian Mechanism and Machine Science – Proceedings of ASIAN MMS 2021*, Springer Nature Switzerland AG 2022 , Cham, pp. 619-627–9, 2022. https://doi.org/10.1007/978-3-030-91892-7_59
- 986 Zhetenbayev Nursultan, Alexander Titov, Marco Ceccarelli, and Gani Balbayev, Design and Performance of a Motion-Assisting Device for Ankle, *Advances in Asian Mechanism and Machine Science – Proceedings of ASIAN MMS 2021*, Springer Nature Switzerland AG 2022 , Cham, pp. 659-668, 2022. https://doi.org/10.1007/978-3-030-91892-7_63
- 987 Ceccarelli M., SENSIRIB: A device monitoring the breathing characteristics, *International Society of Bionic Engineering: ISBE 2021 Newsletter*, Volume 10, Issue 4, 2021, pp-15-16.
- 988 Med Amine Laribi, Marco Ceccarelli, Juan Sandoval, Matteo Bottin, Giulio Rosati, Experimental Validation of Light Cable-Driven Elbow-Assisting Device L-CADEL Design, *Journal of Bionic Engineering*, published online, 4 Jan 2020, pp.1-13. <https://doi.org/10.1007/s42235-021-00133-5>
- 989 A. Tota, E. Galvagno, M. Velardocchia and M. Ceccarelli, Articulated steering control design for autonomous tracked vehicles, *International Journal of Mechanics and Control*, Vol. 22, No. 02, pp. 161-180, 2021
- 990 Marco Ceccarelli, Lucrezia Puglisi, Francesco Mesiti, Vincenzo Ambrogi, A DEVICE FOR EXPERIMENTAL CHARACTERIZATION OF BIOMECHANICS OF BREATHING AND COUGHING, 26th ABCM International Congress of Mechanical Engineering November 22-26, 2021. Florianópolis, SC, Brazil, paper COB-2021-0273. doi://10.26678/ABCM.COBEM2021.COB2021-0273
- 991 Rogério Sales Gonçalves, Glênio Ramalho, Fabian Andres Lara-Molina, Marco Ceccarelli, ACCURACY ANALYSIS OF MULTIBODY SYSTEMS WITH JOINT CLEARANCE IN FOUR-BAR MECHANISMS, 26th ABCM International Congress of Mechanical Engineering November 22-26, 2021. Florianópolis, SC, Brazil, paper COB-2021-0273. doi://10.26678/ABCM.COBEM2021.COB2021-0978.
- 992 Titov A, Russo M, Ceccarelli M. Design and Performance of L-CaPaMan2. *Applied Sciences*. 2022; 12(3):1380. <https://doi.org/10.3390/app12031380>
- 993 Titov A. and Ceccarelli M., L-CaPaMan Design and Performance Analysis, in M. Rackov et al. (eds.), *Machine and Industrial Design in Mechanical Engineering*, , Springer Nature Switzerland AG 2022, Cham, p. 569 – 576. https://doi.org/10.1007/978-3-030-88465-9_5

- 994 **Ceccarelli M., Taje R., Papuc P.E., Ambrogio V., An Analysis of Respiration with the Smart Sensor SENSIRIB in Patients Undergoing Thoracic Surgery. *Sensors*. 2022; 22(4):1561. <https://doi.org/10.3390/s22041561>**
- 995 Rueda-Arreguín, J.L.; Ceccarelli, M.; Torres-SanMiguel, C.R. Design of an Articulated Neck to Assess Impact Head-Neck Injuries. *Life* 2022, 12, 313. <https://doi.org/10.3390/life12020313>
- 996 Venkata Sai Prathyush, I.; Ceccarelli, M.; Russo, M. Control Design for CABLEankle, a Cable Driven Manipulator for Ankle Motion Assistance. *Actuators* 2022, 11, 63. <https://doi.org/10.3390/act11020063>
- 997 Matteo Russo and Marco Ceccarelli, Mechanism Designs for Solar Tracking, Proceedings of I4SDG Workshop 2021- IFToMM for Sustainable Development Goals, Springer Nature Switzerland AG 2022, G. Quaglia et al. (Eds.): I4SDG 2021, MMS 108, pp. 241–249, 2022. https://doi.org/10.1007/978-3-030-87383-7_26
- 998 Aguilar-Pérez, Luis A., Christopher R. Torres-SanMiguel, Marco Ceccarelli, and Guillermo M. Urriolagoitia-Calderón, Traumatic Impact Assessment of CPR Load on a Human Ribcage, International Journal of Environmental Research and Public Health, 2022, 19, no. 6: 3414. <https://doi.org/10.3390/ijerph19063414>
- 999 Ceccarelli, M. (2021). A historical account on Italian mechanism model. *Elementa. Intersections between Philosophy, Epistemology and Empirical Perspectives*, 1(1-2), 115-134. doi: <https://dx.doi.org/10.7358/elem-2021-0102-cecc>
- 1000 Ceccarelli M, Bottin M, Russo M, Rosati G, Laribi MA, Petuya V. Requirements and Solutions for Motion Limb Assistance of COVID-19 Patients. *Robotics*. 2022; 11(2):45. <https://doi.org/10.3390/robotics11020045>
- 1001 Magdaleno, E.C.O., Cafolla, D., Ceccarelli, M., Castañeda, E.C., Carbone, G. (2019). Experiences for a User-Friendly Operation of Cassino Hexapod III. In: *Advances in Service and Industrial Robotics*. RAAD 2018. Mechanisms and Machine Science, vol 67. Springer, Cham, pp. 205–213. https://doi.org/10.1007/978-3-030-00232-9_21
- 1002 Espinosa-Garcia, F.J., Carbone, G., Ceccarelli, M., Cafolla, D., Arias-Montiel, M., Lugo-Gonzalez, E. (2019). A Study of Feasibility for a Design of a Metamorphic Artificial Hand. In: *Advances in Service and Industrial Robotics*. RAAD 2018. Mechanisms and Machine Science, vol 67. Springer, Cham, pp. 283–290. https://doi.org/10.1007/978-3-030-00232-9_29
- 1003 Ceccarelli, M. (2022). In Memory of Past PC Members. In: Ceccarelli, M., López-García, R. (eds) *Explorations in the History and Heritage of Machines and Mechanisms*. HMM 2022. History of Mechanism and Machine Science, vol 40. Springer, Cham. https://doi.org/10.1007/978-3-030-98499-1_1.
- 1004 Gasparetto, A., Ceccarelli, M. (2022). Recent Advances and Challenges in the IFToMM PC for History of MMS. In: Ceccarelli, M., López-García, R. (eds) *Explorations in the History and Heritage of Machines and Mechanisms*. HMM 2022. History of Mechanism and Machine Science, vol 40. Springer, Cham. https://doi.org/10.1007/978-3-030-98499-1_2.
- 1005 Trubachev, E.S., Barmina, N.A., Ceccarelli, M. (2022). Contribution of Professor Veniamin Goldfarb to Promotion of Gearing Science and International Cooperation. In: Ceccarelli, M., López-García, R. (eds) *Explorations in the History and Heritage of Machines and Mechanisms*. HMM 2022. History of Mechanism and Machine Science, vol 40. Springer, Cham. https://doi.org/10.1007/978-3-030-98499-1_3.
- 1006 Chiavoni, E., Cigola, M., Diacodimitri, A., Ceccarelli, M. (2022). A Historical Development of LARM Finger Design Shape. In: Ceccarelli, M., López-García, R. (eds) *Explorations in the History and Heritage of Machines and Mechanisms*. HMM 2022. History of Mechanism and Machine Science, vol 40. Springer, Cham. https://doi.org/10.1007/978-3-030-98499-1_29.
- 1007 Traetta L. e Ceccarelli M., Meccanismi e modelli meccanici per la formazione tecnico-scientifica, 5th International Conference on History of Engineering Ed Cuzzolin, Napoli, 2022, pp. 427-438.
- 1008 Ceccarelli M., Paolo Frisi ed i suoi contributi per la moderna Meccanica, 5th International Conference on History of Engineering Ed Cuzzolin, Napoli, 2022, pp. 979-992.
- 1009 M. Wang, J. -A. Leal-Naranjo, M. Ceccarelli and S. Blackmore, "A Novel Two-Degree-of-Freedom Gimbal for Dynamic Laser Weeding: Design, Analysis, and Experimentation," in *IEEE/ASME Transactions on Mechatronics*, vol. 27, no. 6, pp. 5016-5026, Dec. 2022, doi: 10.1109/TMECH.2022.3169593
- 1010 Zhihong Jiang, Xiaolei Cao, Xiao Huang, Hui Li, Marco Ceccarelli, Progress and Development Trend of Space Intelligent Robot Technology, Space: Science & Technology, January 2022, Volume 2022, Article ID 9832053, 11 pages <https://doi.org/10.34133/2022/9832053>,
- 1011 Ceccarelli M., Ambrogio V., RIBOLUTION, a minimally invasive rib fixator, International Society of Bionic Engineering: ISBE 2022 Newsletter, Volume 11, Issue 2, 2022, pp.18-19.
- 1012 F. J. Espinosa-Garcia, M. Arias-Montiel, E. Lugo-, R. Tapia-Herrera, and M. Ceccarelli, A review and classification of robotic hands focused on palm structure, International Journal of Mechanics and Control, Vol.23, No.1, 2022, pp.45 - 59
- 1013 Matteo Aquilini and Marco Ceccarelli, Manuel D'onofrio and Vincenzo Ambrogio, An experimental characterization of respiration biomechanics by a Holter device, Proceedings of Jc-IFTToMM International Symposium, 2022, Volume 5, Pages 80-87. ISSN 2436-9330. https://doi.org/10.57272/jciftomm.5.0_80
- 1014 Francisco J. Espinosa Garcia, Esther Lugo-González, Arturo Telléz-Velázquez, Manuel Arias-Montiel, Marco Ceccarelli, "Optimal Position Fuzzy Control of an Underactuated Robotic Finger", Mathematical Problems in Engineering, vol. 2022, Article ID 2091337, 12 pages, 2022. <https://doi.org/10.1155/2022/2091337>

- 1015 Ceccarelli, M.; Cocconcelli, M. Italian Historical Developments of Teaching and Museum Valorization of Mechanism Models. *Machines* 2022, 10(8), 628; <https://doi.org/10.3390/machines10080628>.
- 1016 Ceccarelli, M. (2022). A Note on 50-Year Anniversary of IFToMM Italy. In: Niola, V., Gasparetto, A., Quaglia, G., Carbone, G. (eds) *Advances in Italian Mechanism Science. IFToMM Italy 2022* pages 3-6. *Mechanisms and Machine Science*, vol 122. Springer, Cham. https://doi.org/10.1007/978-3-031-10776-4_1
- 1017 Ceccarelli, M., Zhang, B. (2022). Contributions of Italian Jesuits in Machinery Technology Transfer to China in the 16–18 th Centuries. In: Niola, V., Gasparetto, A., Quaglia, G., Carbone, G. (eds) *Advances in Italian Mechanism Science. IFToMM Italy 2022* pages 7-15. *Mechanisms and Machine Science*, vol 122. Springer, Cham. https://doi.org/10.1007/978-3-031-10776-4_2
- 1018 Fang, Y., Ceccarelli, M., Chu, Y. (2022). Earliest Locomotives in Italy and China from the Perspective of Technology Transfer. In: Niola, V., Gasparetto, A., Quaglia, G., Carbone, G. (eds) *Advances in Italian Mechanism Science. IFToMM Italy 2022* pages 25-33. *Mechanisms and Machine Science*, vol 122. Springer, Cham. https://doi.org/10.1007/978-3-031-10776-4_4
- 1019 Demjen, T., Lovasz, EC., Ceccarelli, M., Sticlaru, C., Lupuți, AMF. (2022). Analytical Synthesis of Five-Bar Linkage used for 3D Printer Structure. In: Niola, V., Gasparetto, A., Quaglia, G., Carbone, G. (eds) *Advances in Italian Mechanism Science. IFToMM Italy 2022* pages 105-113. *Mechanisms and Machine Science*, vol 122. Springer, Cham. https://doi.org/10.1007/978-3-031-10776-4_13
- 1020 Titov, A., Ceccarelli, M. (2022). Problems and Requirements for Docking Operation in Orbital Stations. In: Niola, V., Gasparetto, A., Quaglia, G., Carbone, G. (eds) *Advances in Italian Mechanism Science. IFToMM Italy 2022* pages 159-167. *Mechanisms and Machine Science*, vol 122. Springer, Cham. https://doi.org/10.1007/978-3-031-10776-4_19
- 1021 Küçükoglu, S.F., Dede, M.İ.C., Ceccarelli, M. (2022). Modeling a Magneto-Rheological Fluid-Based Brake via a Neural Network Method. In: Niola, V., Gasparetto, A., Quaglia, G., Carbone, G. (eds) *Advances in Italian Mechanism Science. IFToMM Italy 2022* pages 211-218. *Mechanisms and Machine Science*, vol 122. Springer, Cham. https://doi.org/10.1007/978-3-031-10776-4_25
- 1022 Garrosa, M., Ceccarelli, M., Díaz, V. (2022). Problems and Requirements in Impact Analysis from Vehicle Accidents. In: Niola, V., Gasparetto, A., Quaglia, G., Carbone, G. (eds) *Advances in Italian Mechanism Science. IFToMM Italy 2022* pages 346-354. *Mechanisms and Machine Science*, vol 122. Springer, Cham. https://doi.org/10.1007/978-3-031-10776-4_40
- 1023 Damarla, A.P., Ceccarelli, M., Gao, W. (2022). Prototype and Testing of a Finger Linkage Exoskeleton. In: Niola, V., Gasparetto, A., Quaglia, G., Carbone, G. (eds) *Advances in Italian Mechanism Science. IFToMM Italy 2022* pages 471-479. *Mechanisms and Machine Science*, vol 122. Springer, Cham. https://doi.org/10.1007/978-3-031-10776-4_54
- 1024 Aquilini, M., Ceccarelli, M. (2022). Design and Testing of RESPIRholter Device for Respiratory Monitoring. In: Niola, V., Gasparetto, A., Quaglia, G., Carbone, G. (eds) *Advances in Italian Mechanism Science. IFToMM Italy 2022* pages 480-488. *Mechanisms and Machine Science*, vol 122. Springer, Cham. https://doi.org/10.1007/978-3-031-10776-4_55
- 1025 Gao, W., Ceccarelli, M. (2022). Design and Testing of a Lab Prototype LARMbot Hand. In: Niola, V., Gasparetto, A., Quaglia, G., Carbone, G. (eds) *Advances in Italian Mechanism Science. IFToMM Italy 2022* pages 489-496. *Mechanisms and Machine Science*, vol 122. Springer, Cham. https://doi.org/10.1007/978-3-031-10776-4_56
- 1026 Sales Gonçalves, R., de Souza, M.R.S.B., Carbone, G., Ceccarelli, M. (2022). Development of a Serious Game Using the Leap Motion Controller for Virtual Rehabilitation of a Human Upper Limbs. In: Niola, V., Gasparetto, A., Quaglia, G., Carbone, G. (eds) *Advances in Italian Mechanism Science. IFToMM Italy 2022* pages 497-504. *Mechanisms and Machine Science*, vol 122. Springer, Cham. https://doi.org/10.1007/978-3-031-10776-4_57
- 1027 Méndez-García, S.R., Torres-SanMiguel, C.R., Flores-Campos, J.A., Ramirez, O., Ceccarelli, M. (2022). Conceptual Design of a Stewart Platform in a Testbed for the Peritoneal Movements. In: Niola, V., Gasparetto, A., Quaglia, G., Carbone, G. (eds) *Advances in Italian Mechanism Science. IFToMM Italy 2022* pages 549-559. *Mechanisms and Machine Science*, vol 122. Springer, Cham. https://doi.org/10.1007/978-3-031-10776-4_63
- 1028 Araque-Isidro, J.E., Cafolla, D., Ceccarelli, M. (2022). Problems and Requirements for Outer Space Astronaut Service Robot. In: Niola, V., Gasparetto, A., Quaglia, G., Carbone, G. (eds) *Advances in Italian Mechanism Science. IFToMM Italy 2022* pages 603-611. *Mechanisms and Machine Science*, vol 122. Springer, Cham. https://doi.org/10.1007/978-3-031-10776-4_69
- 1029 Axel Fort; Med Amine Laribi; Marco Ceccarelli. Design and performance of a LARMbot PK arm prototype. *International Journal of Humanoid Robotics*, Vol. 19, No. 2 (2022) 2250009 (16 pages). <https://doi.org/10.1142/s0219843622500098>
- 1030 T. Zheng *et al.* and Marco Ceccarelli, "Design of a Robot for Inspecting the Multishape Pipeline Systems," in *IEEE/ASME Transactions on Mechatronics*, vol. 27, no. 6, pp. 4608-4618, Dec. 2022, doi: 10.1109/TMECH.2022.3160728.
- 1031 Gao, W.; Ceccarelli, M. Design and Performance Analysis of LARMbot Torso V1. *Micromachines* 2022, 13, 1548. <https://doi.org/10.3390/mi13091548>
- 1032 Damarla, A.P.; Russo, M.; Ceccarelli, M. Control Design and Testing for a Finger Exoskeleton Mechanism. *Actuators* 2022, 11, 230. <https://doi.org/10.3390/act11080230>

- 1033 **Luputi A-M-F, Lovasz E-C, Ceccarelli M, Sticlaru C, Scurt (Stoian) A-M. Kinematic study of feasibility of geared planar parallel manipulator. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science. 2022;236(18):10001-10016. doi:10.1177/09544062221105988**
- 1034 Antonov A, Fomin A, Glazunov V, Ceccarelli M. Workspace and performance analysis of a 6-DOF hexapod-type manipulator with a circular guide. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science. 2022;236(18):9951-9965. doi:10.1177/09544062221095953
- 1035 L. Puglisi, M. Ceccarelli, R. Taje, et al., An experimental characterization of ventilation motions in healthy subjects, *Clinical Biomechanics* (2022), Volume 100, 105769. <https://doi.org/10.1016/j.clinbiomech.2022.105769>. Published online: September 28, 2022
- 1036 O. RAMIREZ, C. R. TORRES-SANMIGUEL, M. CECCARELLI and G. M. URRIOLAGOITIA-CALDERÓN, NUMERICAL AND EXPERIMENTAL VALIDATION OF A RIB IMPLANT USING AN ARTIFICIAL RIB, *Journal of Mechanics in Medicine and Biology* Vol. 22, No. 05, 2250036 (2022). <https://doi.org/10.1142/S0219519422500361>
- 1037 Ceccarelli, M. (2023). Historical Backgrounds on Robot Mechanism Design. In: Carbone, G., Laribi, M.A. (eds) *Robot Design. Mechanisms and Machine Science*, vol 123. Springer, Cham. https://doi.org/10.1007/978-3-031-11128-0_1
- 1038 **Puglisi, L., Ceccarelli, M., and Ambrogio, V., An Experimental Study of Feasibility of a Mini-Invasive Fixator for Rib Osteosynthesis. ASME. J. Med. Devices. Mar 2023, 17(1): 011001 (5 pages. Paper No: MED-22-1042. . (online October 5, 2022). doi: <https://doi.org/10.1115/1.4055861>**
- 1039 Ceccarelli M. and Jauregui Correa J.C., Carlos López-Cajún (1948–2020), In Ceccarelli M. and Gasparetto A. (Editors), *Distinguished Figures in Mechanism and Machine Science - Part 5: Legacy and Contribution of the IFToMM Community*, Springer, Cham, 2023, pp. 111-135. https://doi.org/10.1007/978-3-031-18288-4_4
- 1040 Ceccarelli M. and Rovetta C., Alberto Rovetta (1940–2020), In Ceccarelli M. and Gasparetto A. (Editors), *Distinguished Figures in Mechanism and Machine Science - Part 5: Legacy and Contribution of the IFToMM Community*, Springer, Cham, 2023, pp. 163-182. https://doi.org/10.1007/978-3-031-18288-4_6
- 1041 Ceccarelli M., The Founding Fathers of IFToMM, In Ceccarelli M. and Gasparetto A. (Editors), *Distinguished Figures in Mechanism and Machine Science - Part 5: Legacy and Contribution of the IFToMM Community*, Springer, Cham, 2023, pp. 183-216. https://doi.org/10.1007/978-3-031-18288-4_7
- 1042 **M. Wang, J. -A. Leal-Naranjo, M. Ceccarelli and S. Blackmore, "A Novel Two-Degree-of-Freedom Gimbal for Dynamic Laser Weeding: Design, Analysis, and Experimentation," in IEEE/ASME Transactions on Mechatronics, vol. 27, no. 6, pp. 5016-5026, Dec. 2022, doi: 10.1109/TMECH.2022.3169593**
- 1043 **K. Sholanov, A. Omarov and M Ceccarelli, IMPROVING EFFICIENCY OF CONVERTING WIND ENERGY IN MODIFIED SAIL WIND POWER STATION , International Journal of Mechanics and Control, Vol. 23 No. 02 2022, pp. 101-110**
- 1044 **Cafolla D, Araque-Isidro JE, Ceccarelli M. Design and Testing of Torvestro: An Outer Space Service Robot. Applied Sciences. 2023; 13(2):1187. <https://doi.org/10.3390/app13021187>**
- 1045 Ambrogio, V, Bolli, E, Ceccarelli, M, et al. Surface modifications of biodegradable AZ31 alloy after immersion in physiological solution. *Surf Interface Anal.* 2023; 1- 6. doi:10.1002/sia.7195
- 1046 Jorge E. Araque Isidro, Daniele Cafolla, Marco Ceccarelli, EVALUACIÓN EXPERIMENTAL DEL FUNCIONAMIENTO DE UN PROTOTIPO DEL ROBOT ASTRONAUTA TORVEASTRO V2, Libro de Actas del XV Congreso Iberoamericano de Ingeniería Mecánica, Madrid, 22-24 Nov. 2022, Vol. 1, pp. 212 – 224. (in Spanish) <https://doi.org/10.5944/bicim2022.035>
- 1047 M. Belen Estebanez-Campos, Salvador Moreno-Vegas, Francisco M. Garcia-Vacas, Juan M. Velasco Garcia, Fernando Nadal-Martinez, Alejandro Peña-Trabalon, Rita Pilar Romero-Calisteo , Maria Prado Novoa, Marco Ceccarelli, SISTEMA DE ADQUISICIÓN DE DATOS EN PROTOTIPO DE ANDADOR INFANTIL PARA PERSONAS CON PROBLEMAS DE MOVILIDAD, Libro de Actas del XV Congreso Iberoamericano de Ingeniería Mecánica, Madrid, 22-24 Nov. 2022, Vol. 3, pp. 139 – 148. (in Spanish) <https://doi.org/10.5944/bicim2022.103>
- 1048 María Garrosa, Marco Ceccarelli, Vicente Díaz, PROPUESTA DE UN NUEVO CRITERIO PARA CUANTIFICAR LAS LESIONES EN IMPACTOS DE VEHÍCULOS, Libro de Actas del XV Congreso Iberoamericano de Ingeniería Mecánica, Madrid, 22-24 Nov. 2022, Vol. 3, pp. 291 – 300. (in Spanish) <https://doi.org/10.5944/bicim2022.248>
- 1049 **Petelin D, Fomin A, Laryushkin P, Fomina O, Carbone G, Ceccarelli M. Design, Kinematics and Workspace Analysis of a Novel 4-DOF Kinematically Redundant Planar Parallel Grasping Manipulator. Machines. 2023; 11(3):319. <https://doi.org/10.3390/machines11030319>**
- 1050 **Demirel, M., Kiper, G., Carbone, G., & Ceccarelli, M. (2023). Design of a novel hybrid cable-constrained parallel leg mechanism for biped walking machines. Robotica, 1-16. doi:10.1017/S0263574723000140**
- 1051 **Yao S, Luan Y, Ceccarelli M, Wang R, Zhao D. Design criteria study and simulation for underactuated symmetric pinching mechanism of pinch roll machine in high-speed wire rod product line. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science. 2022;236(18):9978-9990. doi:10.1177/09544062221095362**
- 1052 Araque-Isidro, J.E., Ceccarelli, M., Cafolla, D. (2023). Performance Analysis of a Mechanism-Driven Joint. In: Laribi, M.A., Nelson, C.A., Ceccarelli, M., Zeghloul, S. (eds) *New Advances in Mechanisms, Transmissions and*

- Applications. MeTrApp 2023. Mechanisms and Machine Science, vol 124. Springer, Cham. pp. 404–411. https://doi.org/10.1007/978-3-031-29815-8_39
- 1053 Gao, W., Russo, M., Ceccarelli, M. (2023). A Kinematic Analysis of a New LARMbot Torso Design. In: Laribi, M.A., Nelson, C.A., Ceccarelli, M., Zeghloul, S. (eds) New Advances in Mechanisms, Transmissions and Applications. MeTrApp 2023. Mechanisms and Machine Science, vol 124. Springer, Cham. pp. 74–81, . https://doi.org/10.1007/978-3-031-29815-8_8
- 1054 Titov, A., Ceccarelli, M. (2023). Design and Performance Characterization of a Gripper End-Effector for a Space Berthing Manipulator. In: Laribi, M.A., Nelson, C.A., Ceccarelli, M., Zeghloul, S. (eds) New Advances in Mechanisms, Transmissions and Applications. MeTrApp 2023. Mechanisms and Machine Science, vol 124. Springer, Cham. pp. 15–22. https://doi.org/10.1007/978-3-031-29815-8_2
- 1055 Sgroso, M., Ceccarelli, M., Russo, M., Solana, M.G., Cafolla, D. (2023). Torso Motion Monitoring with an IMU Set-Up. In: Laribi, M.A., Nelson, C.A., Ceccarelli, M., Zeghloul, S. (eds) New Advances in Mechanisms, Transmissions and Applications. MeTrApp 2023. Mechanisms and Machine Science, vol 124. Springer, Cham. pp 65–73. https://doi.org/10.1007/978-3-031-29815-8_7
- 1056 Ceccarelli, M. (2023). Mechanism Design for Robot in Italy: Historical Backgrounds, Achievements, and Challenges (keynote). In: Laribi, M.A., Nelson, C.A., Ceccarelli, M., Zeghloul, S. (eds) New Advances in Mechanisms, Transmissions and Applications. MeTrApp 2023. Mechanisms and Machine Science, vol 124. Springer, Cham. pp.7-11. https://doi.org/10.1007/978-3-031-29815-8_1
- 1057 Ramirez, O., Ceccarelli, M., Torres-San-Miguel, C.R. (2023). A Study of Feasibility of a Mechanism for Rib-Vertebra-Sternum Prosthesis. In: Doroftei, I., Nitulescu, M., Pisla, D., Lovasz, EC. (eds) Proceedings of SYROM 2022 & ROBOTICS 2022. IISSMM 2022. Mechanisms and Machine Science, vol 127. Springer, Cham. pp.11-18. https://doi.org/10.1007/978-3-031-25655-4_2
- 1058 Espinosa-Garcia, F.J., Ceccarelli, M., Arias-Montiel, M. (2023). Design and Performance Analysis of a Compliant Finger Mechanism. In: Doroftei, I., Nitulescu, M., Pisla, D., Lovasz, EC. (eds) Proceedings of SYROM 2022 & ROBOTICS 2022. IISSMM 2022. Mechanisms and Machine Science, vol 127. Springer, Cham. Pp.59-67. https://doi.org/10.1007/978-3-031-25655-4_6
- 1059 Pulloquina, J.L., Ceccarelli, M., Mata, V., Valera, A. (2023). Experimental Identification of Singularities in Parallel Manipulators. In: Doroftei, I., Nitulescu, M., Pisla, D., Lovasz, EC. (eds) Proceedings of SYROM 2022 & ROBOTICS 2022. IISSMM 2022. Mechanisms and Machine Science, vol 127. Springer, Cham. https://doi.org/10.1007/978-3-031-25655-4_13
- 1060 Titov, A., Ceccarelli, M. (2023). Requirements and Problems for Space Berthing System. In: Doroftei, I., Nitulescu, M., Pisla, D., Lovasz, EC. (eds) Proceedings of SYROM 2022 & ROBOTICS 2022. IISSMM 2022. Mechanisms and Machine Science, vol 127. Springer, Cham. https://doi.org/10.1007/978-3-031-25655-4_14
- 1061 Paoloni, M., Cupertino, G., Ceccarelli, M. (2023). A Kinematic Analysis of the TORVEastro Astronaut Robot Arm. In: Doroftei, I., Nitulescu, M., Pisla, D., Lovasz, EC. (eds) Proceedings of SYROM 2022 & ROBOTICS 2022. IISSMM 2022. Mechanisms and Machine Science, vol 127. Springer, Cham. https://doi.org/10.1007/978-3-031-25655-4_15
- 1062 Nursultan, Z., Ceccarelli, M., Balbayev, G. (2023). Design of an Exoskeleton for Rehabilitation Ankle Joint. In: Doroftei, I., Nitulescu, M., Pisla, D., Lovasz, EC. (eds) Proceedings of SYROM 2022 & ROBOTICS 2022. IISSMM 2022. Mechanisms and Machine Science, vol 127. Springer, Cham. https://doi.org/10.1007/978-3-031-25655-4_23
- 1063 Lovasz, KE., Olah, A., Ceccarelli, M. (2023). Requirements and Characteristics of Finger Motion Assistance. In: Doroftei, I., Nitulescu, M., Pisla, D., Lovasz, EC. (eds) Proceedings of SYROM 2022 & ROBOTICS 2022. IISSMM 2022. Mechanisms and Machine Science, vol 127. Springer, Cham. https://doi.org/10.1007/978-3-031-25655-4_24
- 1064 Gao, W., Ceccarelli, M. (2023). An Experimental Characterization of LARMbot Torso V1. In: Doroftei, I., Nitulescu, M., Pisla, D., Lovasz, EC. (eds) Proceedings of SYROM 2022 & ROBOTICS 2022. IISSMM 2022. Mechanisms and Machine Science, vol 127. Springer, Cham. https://doi.org/10.1007/978-3-031-25655-4_30
- 1065 Couprie, R., Ceccarelli, M., Laribi, M.A. (2023). Design and Performance of LARMbot Arm V3. In: Doroftei, I., Nitulescu, M., Pisla, D., Lovasz, EC. (eds) Proceedings of SYROM 2022 & ROBOTICS 2022. IISSMM 2022. Mechanisms and Machine Science, vol 127. Springer, Cham. https://doi.org/10.1007/978-3-031-25655-4_31
- 1066 Ceccarelli, M. (2023). TORVEASTRO Project: Plans and Achievements. In: Ceccarelli, M., Santo, L., Paoloni, M., Cupertino, G. (eds) Design Advances in Aerospace Robotics. TORVEASTRO 2023. Mechanisms and Machine Science, vol 130. Springer, Cham. pp.1-26. https://doi.org/10.1007/978-3-031-28447-2_1
- 1067 Cafolla, D., Ceccarelli, M. (2023). Dimensional Design of Torveastro, a Space Orbital Station Service Robot. In: Ceccarelli, M., Santo, L., Paoloni, M., Cupertino, G. (eds) Design Advances in Aerospace Robotics. TORVEASTRO 2023. Mechanisms and Machine Science, vol 130. Springer, Cham. pp. 35-44. https://doi.org/10.1007/978-3-031-28447-2_3
- 1068 Araque-Isidro, J.E., Ceccarelli, M. (2023). Assembly and Testing of a New Joint Mechanism for TORVEASTRO. In: Ceccarelli, M., Santo, L., Paoloni, M., Cupertino, G. (eds) Design Advances in Aerospace Robotics. TORVEASTRO 2023. Mechanisms and Machine Science, vol 130. Springer, Cham. pp. 45-59. https://doi.org/10.1007/978-3-031-28447-2_4

- 1069 Titov, A., Russo, M., Ceccarelli, M. (2023). Design and Performance of a Berthing Space Manipulator. In: Ceccarelli, M., Santo, L., Paoloni, M., Cupertino, G. (eds) Design Advances in Aerospace Robotics. TORVEASTRO 2023. Mechanisms and Machine Science, vol 130. Springer, Cham. pp. 140-147 https://doi.org/10.1007/978-3-031-28447-2_11
- 1070 Ceccarelli, M., Consalvo, E., Russo, M., Ambrogio, V. (2023). An Experimental Characterization of RIBOLUTION Rib Fracture Fixator. In: Tarnita, D., Dumitru, N., Pisla, D., Carbone, G., Geonea, I. (eds) New Trends in Medical and Service Robotics. MESROB 2023. Mechanisms and Machine Science, vol 133. Springer, Cham. https://doi.org/10.1007/978-3-031-32446-8_9
- 1071 Garrosa, M., Ceccarelli, M., Russo, M., Cafolla, D. (2023). Lab Experiences for a Driver Monitoring System. In: Tarnita, D., Dumitru, N., Pisla, D., Carbone, G., Geonea, I. (eds) New Trends in Medical and Service Robotics. MESROB 2023. Mechanisms and Machine Science, vol 133. Springer, Cham. https://doi.org/10.1007/978-3-031-32446-8_12
- 1072 Nursultan, Z., Ceccarelli, M., Balbayev, G. (2023). Design and Performance Analysis of Ankle Joint Exoskeleton. In: Tarnita, D., Dumitru, N., Pisla, D., Carbone, G., Geonea, I. (eds) New Trends in Medical and Service Robotics. MESROB 2023. Mechanisms and Machine Science, vol 133. Springer, Cham. https://doi.org/10.1007/978-3-031-32446-8_17
- 1073 Copilusi, C., Ceccarelli, M., Dumitru, S., Margine, A., Geonea, I. (2023). A Leg Exoskeleton Mechanism for Human Walking Assistance. In: Tarnita, D., Dumitru, N., Pisla, D., Carbone, G., Geonea, I. (eds) New Trends in Medical and Service Robotics. MESROB 2023. Mechanisms and Machine Science, vol 133. Springer, Cham. https://doi.org/10.1007/978-3-031-32446-8_18
- 1074 Ceccarelli, M., D'Onofrio, M., Casciani, C., Russo, M., Ambrogio, V. (2023). Experimental Evaluation of Respiration in Patients Undergoing Thoracic Surgery. In: Tarnita, D., Dumitru, N., Pisla, D., Carbone, G., Geonea, I. (eds) New Trends in Medical and Service Robotics. MESROB 2023. Mechanisms and Machine Science, vol 133. Springer, Cham. https://doi.org/10.1007/978-3-031-32446-8_28
- 1075 Geonea, I., Dumitru, N., Ceccarelli, M., Tarnita, D. (2023). Kinematic and Dynamic Analysis of a New Mechanism for Assisting Human Locomotion. In: Tarnita, D., Dumitru, N., Pisla, D., Carbone, G., Geonea, I. (eds) New Trends in Medical and Service Robotics. MESROB 2023. Mechanisms and Machine Science, vol 133. Springer, Cham. https://doi.org/10.1007/978-3-031-32446-8_33
- 1076 Ceccarelli, M., Russo, M., Isidro, J.A., Chaparro-Rico, B.D.M., Cafolla, D. (2023). Design and Operation of a Robotized Bed for Bedridden COVID Patients. In: Tarnita, D., Dumitru, N., Pisla, D., Carbone, G., Geonea, I. (eds) New Trends in Medical and Service Robotics. MESROB 2023. Mechanisms and Machine Science, vol 133. Springer, Cham. https://doi.org/10.1007/978-3-031-32446-8_37
- 1077 Ceccarelli, M., Cocconcelli, M. (2023). Plans for a Course on the History of Mechanisms and Machine Science. In: García Prada, J.C., Castejon, C., Pedrero Moya, J.I. (eds) Trends in Educational Activity in the Field of Mechanism and Machine Theory (2018–2022). ISEMMS 2022. Mechanisms and Machine Science, vol 128. Springer, Cham. https://doi.org/10.1007/978-3-031-25730-8_13
- 1078 **María Garrosa, Marco Ceccarelli, Vicente Díaz, BIOMECHANICS IN VEHICLE ACCIDENTS FOR RISK ANALYSIS, International Journal of Mechanics and Control, Vol. 24, No. 01, 2023, pp.43-52**
- 1079 **Mario Mauro Salvatore, Marco Ceccarelli, Doina Pisla, Marius Sofan, Giuseppe Carbone, DESIGN AND VALIDATION OF A HYBRID UPPER-LIMB ASSISTIVE EXOSKELETON FOR REPETITIVE LIFTING TASKS, International Journal of Mechanics and Control, Vol. 24, No. 01, 2023, pp.215-225**
- 1080 **Titov, A.; Russo, M.; Ceccarelli, M. Design and Operation of a Gripper for a Berthing Task. *Inventions* 2023, 8, 82. <https://doi.org/10.3390/inventions8040082>**
- 1081 Ceccarelli, M. (2023). Carlo Filangieri (1784–1867). In: López-García, R., Ceccarelli, M. (eds) Distinguished Figures in Mechanical Engineering in Spain and Ibero-America. History of Mechanism and Machine Science, vol 43. Springer, Cham. https://doi.org/10.1007/978-3-031-31075-1_4

Patents

1. Ceccarelli M., Carbone G., Dispositivo robotizzato (Robotic device), 102013902153862 (RM2013A000273), 8 May 2013, Roma, Italy. Concesso/Released no. 102013902153862 October 2015. Brevetto n. /patent no. 0001417882 - 04/09/2015
2. Cafolla D., Carbone G., Ceccarelli M., Meccanismo per assistenza motoria di dita (Mechanism for motion assistance of fingers), 102013902188492 (FR2013A000007) 9 September 2013, Frosinone, Italy
3. Ceccarelli M., Li T., Meccanismo per gamba robotica (Mechanism for robotic leg), 102013902194318 (FR2013A000010), 30 September 2013, Frosinone, Italy - Brevetto n. /patent no. 0001424039- 30 August 2016; A walking mechanism for biped, 201410446333.7, September 4th 2014, Hefei, China- Brevetto n. /patent no. 201410446333 november 2016 一种双足机器人行走机构
4. Marco Ceccarelli, Giuseppe Carbone, Michela Cigola, Pilar Roig Picazo, Francisco José Blanco-Moreno Pérez, Dispositivo robotico per rilievo e restauro di elementi decorativi dell'architettura (Robotic device for survey and restoration of decorative elements of architecture), 102013902197863 (FR2013A000011), 11 October 2013, Frosinone, Italy.
5. Marco Ceccarelli, Carbone Giuseppe, Mano artificiale a tre dita a meccanismi articolati sottoattuati (Artificial Hand in the configuration with three fingers) , 102013902210960 (FR2013A000012), 25 November 2013, Frosinone, Italy. Brevetto n. /patent no. 0001422986 - 28 June 2016
6. Marco Ceccarelli, Copilusi Petre Cristian, Dispositivo ad esoscheletro per assistenza alla locomozione umana (Exoskeleton device

- for assisting human locomotion), 102013902210961 (FR2013A000013), 25 November 2013, Frosinone, Italy. Brevetto n. /patent no. IT0001422987- 28 June 2016
7. Marco Ceccarelli, Daniele Cafolla, Torso artificiale per robot umanoid (Artificial torso for humanoid robot), no.102015000032902 (UB2015A002049), 10 July 2015, Italy. Brevetto n. /patent no. IT102015000032902- 2 febbraio 2018.
8. Marco Ceccarelli, Qiang Huang, Gao Huang, Sedia a rotelle con esoscheletro per assistenza del moto delle gambe (Wheelchair with exoskeleton for assistance of leg motion), no. 102015000032950 (UB2015A002080), 10 July 2015, Italy; patent no. IT 102015000032950 – 21 December 2017.
9. Qiang Huang, Gao Huang, Marco Ceccarelli, Ye Tian, Weimin Zhang, Zhangguo Yu, Xuechao Chen, 一种脚踏式下肢外骨骼运动康复轮椅 (A pedal-actuated rehabilitation wheelchair with lower extremity exoskeleton) . Brevetto n. /patent no. ZL201510239279.3, 12 May 2015, China. (in Chinese)
10. Marco Ceccarelli, Protezione attiva per robot (Active protection for robots), no. 102015000046004 (UB2015A003207), 24 August 2015, Italy. patent no. IT102015000046004 – 06/07/2018
11. Marco Ceccarelli, Huang Qiang, Huaxin Liu, Meccanismo per caviglia artificiale (Artificial ankle joint), no.102015000046014 (UB2015A003212), 24 August 2015, Italy. Patent no. IT102015000046014 – 26/01/2018
12. Marco Ceccarelli, Mingfeng Wang, Meccanismo bipede a manipolatori paralleli (Biped locomotor with parallel leg mechanisms), no. 102015000056450 (UB2015A004008), 29 September 2015, Italy. Patent no. IT102015000056450 – 29/05/2019
13. Marco Ceccarelli, Daniele Cafolla, Giuseppe Carbone, Mingfeng Wang, Robot umanoide a meccanismi paralleli (humanoid robot with parallel mechanisms), no.102015000062714 (UB2015A005201), 16/10/2015, Italy. Patent no. IT. 102015000062714 – 27/02/2018
14. Giuseppe Carbone, Marco Ceccarelli, Sistema a cavi per assistenza motoria (Cable-based system for motion assistance), no. 102016000038975 (UA2016A002627), 15/04/2016, Italy. Patent no. IT. 102016000038975 - 06/11/2018
15. Marco Ceccarelli, Russo Matteo, Dispositivo di collegamento sferico tra tre corpi (Device for the spherical connection of three bodies), no. 102016000093695, 19/09/2016, Italy. Patent no. IT. 102016000093695 – 06/05/2019
16. Marco Ceccarelli, Russo Matteo, Cafolla Daniele, Dispositivo per gamba tripode (Device for tripod leg), n. 102016000097258, 28/09/2016, Italy. Patent no. IT. 102016000097258– 04/03/2019
17. Marco Ceccarelli, Daniele Cafolla, Matteo Russo, Giuseppe Carbone, Dispositivo di piattaforma a gambe ed eliche (Device with legs and helices), n.102016000103321, 14/10/2016, Italy. Patent no. IT. 102016000103321– 06/03/2019
18. Betsy Dayana Marcela Chaparro Rico, Daniele Cafolla, Marco Ceccarelli, Eduardo Castillo Castañeda, Dispositivo per assistenza motoria del braccio (Device for arm motion assistance), n. 102016000107499, 25/10/2016, Italy. Patent no. IT. 102016000107499– 12/03/2019
19. Marco Ceccarelli, Matteo Russo, Meccanismo di braccio per robot umanoide (Arm mechanism for humanoid robot), n.102017000021920, 27/2/2017, Italy. Patent no. IT. 102017000021920 – 18/06/2019
20. Marco Ceccarelli, Michela Cigola, Arturo Gallozzi, Giuseppe Carbone, Luca James Senatore, Daniele Cafolla, Roberto Di Maccio, Modello di scocca a volume cavo per piattaforma a gambe ed elica, Modello n. 402017000025062 del 7/3/2017. Registrato MISE AOO.PIT no. 0429848 del 3.10.2017
21. Marco Ceccarelli, Luis Antonio Aguilar Perez, Christopher René Torres San-Miguel, Banco di prova per costole artificiali, (Testing machine for artificial ribs), n. 102017000036498, 3/4/2017, Italy. Patent no. IT. 102017000036498 – 23/07/2019
22. Marco Ceccarelli, Michela Cigola, Arturo Gallozzi, Giuseppe Carbone, Luca James Senatore, Daniele Cafolla, Roberto Di Maccio, Totem per procedure di rilievo archeologico/architettonico, Disegno e Modello n. 402017000050981 del 28/5/2019.
23. Marco Ceccarelli, Ferarra Lucia, Victor Petuya, Dispositivo per assistenza motoria del gomito (Device for elbow rehabilitation), n.102017000083887, 24/7/2017, Italy. Patent no. IT. 102017000083887 – 29/10/2019
24. Marco Ceccarelli, Huang Qiang e Meng Libo, Dispositivo di protezione per robot umanoidi (Protection device for humanoid robots), n. 102017000093435, 11/8/2017, Italy. Chinese submsion: CN 201710821797.5, 13/9/2017, China. Patent no. CN102017000093435– 19/11/2019.
25. Marco Ceccarelli, Hong-Sen Yan e Yu-Shen Chen, Dispositivo di fiore meccanico (Device of mechanical flower), n. 102017000095272, 22/8/2017, Italy. Patent no. IT. 102017000095272 – 4/11/2019
26. Carbone Giuseppe, Demirel Murat, Kiper Gökhan, Marco Ceccarelli, Gamba robotica a struttura ibrida (Robotic leg with hybrid structure), n. 102017000124364, 31/10/2017, Italy
27. Espinosa García Francisco Javier, Ceccarelli Marco, Arias Montiel Manuel, Giuseppe Carbone, Lugo González Esther, Cafolla Daniele, Russo Matteo, Meccanismo per mano robotica (Mechanism for robotic hand), n. 102018000002785, 19/02/2018, Italy. Patent no. IT. 102018000002785 – 29/05/2020
28. Eike Gerding, Ceccarelli Marco, Giuseppe Carbone, Cafolla Daniele, Russo Matteo, Meccanismo per esoscheletro di dito (Mechanism for finger exoskeleton), n. 102018000003847, 21/03/2018, Italy. Patent no. IT. 102018000003847 – 6/4/2020
29. Marco Ceccarelli, Qiang Huang, Hui Li, Robot astronauta con tre arti (Three-limb astronaut robot), n. 102018000007507, 27/7/2018, Italy. Patent no. IT. 102018000007507 – 31/7/2020
30. Christopher René Torres San Miguel and Marco Ceccarelli, Placca di fissaggio per osteosintesi di costole (Fixation plate for osteosynthesis of ribs), n. 102018000007860, Italy, 3-8-2018. Patent no. IT 102018000007860 - 04/8/2020
31. Marco Ceccarelli, Michał Olinski, Antoni Gronowicz, Sławomir Kiwała, Dispositivo di protesi di ginocchio (Device of knee prosthesis), n. 102018000008443, 19/9/2018, Italy. Polish submsion: Warsaw on 4.09.2018 No. P. 426870; SŁAWOMIR KIWAŁA, ANTONI GRONOWICZ, MARCO CECCARELLI, MICHAŁ OLINSKI, Mechanism for knee prosthesis, patent no. PL238438B1, Poland, 23-08-2021. (in Polish)
32. Vincenzo Ambrogio and Marco Ceccarelli, Placca di fissaggio per osteosintesi di coste fratturate (Fixing plate for osteosynthesis of fractured ribs), n. 102019000005638, Italy, 12/4/2019 Patent no. IT. n. 102019000005638 – 03/03/2021
33. Shuangji Yao and Marco Ceccarelli, Closed Linkage Underactuated Leg Exoskeleton Mechanism, Chinese Patent no. CN ZL-102017-1-0013990.6– 09/01/2017.

34. Marco Ceccarelli, Russo Matteo, Dispositivo per assistenza motoria della caviglia (Device for motion assistance of ankle), Patent n. IT 10202000002863, 14/02/2022, Italy.
35. Marco Ceccarelli, Christopher Renè Torres San Miguel, José Luis Rueda Arreguín, Banco di prova per manichini di testa umana in prove d'urto (Testbed for human head mannequins in impact tests), n. 102020000005152, 11/3/2020, Italy. Patent no. IT. . 102020000005152 del 11/3/2022.
36. Marco Ceccarelli, Bottin Matteo, Giulio Rosati, Esoscheletro portatile a cavi per assistenza motoria del gomito (Portable cable-driven exoskeleton for elbow motion assistance), n. 102020000004885, 9/3/2020, Italy. Patent no. IT. 102020000004885, 30/3/2022.
37. Marco Ceccarelli, Christopher Renè Torres San Miguel, José Luis Rueda Arreguín, Collo artificiale articolato per testa di manichino (Artificial articulated neck for mannequin head), n. 102020000005596 del 16/3/2020, Italy.
38. Marco Ceccarelli, Lorena Souza Furtado Brito, Rogério Sales Gonçalves, Dispositivo per l'esercizio di riabilitazione del polso (Device for wrist rehabilitation exercise), n. 102020000012682, 28-5-2020, Italy. Patent no. IT. 102020000012682, 13/7/2022.
39. Marco Ceccarelli, Emanuela Chiavoni, Alekos Diacodimitri, Modello di scocca per dita artificiali, Modello e Disegno n. 402020000001738, 02-04-2021, Italy
40. Marco Ceccarelli, Christopher Renè Torres San Miguel, Octavio Ramírez Juárez, Dispositivo di protesi di sterno (Sternum prosthesis device), n. 102020000013486, 08-06-2020, Italy. Patent no. IT102020000013486, 26/7/2022; MX_W_2023:019469, 24-2-2023
41. Marco Ceccarelli, Letto a parti mobili (Bed with moving parts), n.102020000014263, 16-06-2020, Italy. Patent no. IT102020000014263, 09/08/2022
42. Marco Ceccarelli, Huang Qiang, Li Hui, Zheng Tao, Li Long, Sistema per ispezione tubi a sezione variabile (Inspection system for pipes with variable section), n. 102020000015586, 29-6-2020, Italy. Patent no. IT. 102020000015586, 02/08/2022.
43. Marco Ceccarelli, Vincenzo Ambrogio and Roberto Montanari, Placca di fissaggio per osteosintesi di coste con fratture multiple (Fixation plate for osteosynthesis of ribs with multiple fractures) n. 102020000020299, 20-8-2020, Italy
44. Marco Ceccarelli, Dispositivo portatile per misurazione del movimento di costole umane (Portable device for measuring the movement of human ribs), n. 102021000005726, 13-3-2021, Italy. Patent no. IT. 102021000005726, 21-3-2023.
45. Marco Ceccarelli, Vincenzo Ambrogio, Lucrezia Puglisi, Matteo Aquilini, Dispositivo di holter ventilatorio (Ventilatory holter device), n. 102021000008585, Italy, 7/4/2021. Patent no. IT. 102021000008585, 18-4-2023.
46. Marco Ceccarelli, Marco Ceccarelli, Matteo Russo, Monica Urizar Arana, Mykhailo Riabtsev, Axel Fort, Mohamed Amine Laribi, Dispositivo portatile per assistenza motoria del gomito (Portable device for motion assistance of the elbow), no. 102021000013229, Italy, 20/5/2021. Patent no. IT. 102021000013229, 20/05/2021
47. Ceccarelli Marco, Cafolla Daniele, Araque Isidro Jorge Enrique, Giunto azionato da meccanismi (Mechanism-driven joint), no. 102022000007889, Italy, 21/04/2022.
48. Ceccarelli Marco, Cafolla Daniele, Russo Matteo, Sticlaru Carmen, Lovasz Erwin-Christian, Lovasz Karla-Elisabeth, Olah Andrada, Guanto sensorizzato (Sensored glove), no. 102022000020460, Italy, 05/10/2022.
49. Ceccarelli Marco, Cafolla Daniele, Russo Matteo, Maria Garrosa Solana, Vicente Diaz Lopez, Dispositivo di monitoraggio per conducente di veicoli (Vehicle driver monitoring device), no. 102022000022092, Italy, 26/10/2022; Spain Patent request No. 202231105, 23/12/2022.
50. Marco Ceccarelli, Erwin-Christian Lovasz, Carmen Sticlaru, Elida-Gabriela, Robot mobile di disinfezione (Mobile disinfection robot), no. 102023000008523 Italy, 2/05/2023
51. Ceccarelli Marco, Maria Garrosa Solana, Vicente Diaz, Corpetto di monitoraggio per conducente di veicoli (monitoring jacket for vehicle drivers), no. 102023000010938 Italy, 30/05/2023
52. Marco Ceccarelli, Russo Matteo, Erwin-Christian Lovasz, Tivadar Demjen, Alexandru Oarcea, Dispositivo di assistenza con meccanismo pentalatero per assistenza motoria del braccio (Pentalateral Mechanism Assistant Device for arm motion assistance), no. 102023000011325 Italy, 5/06/2023
53. Marco Ceccarelli, Russo Matteo, Ambrogio Vincenzo, Banco di prova per biomeccanica delle costole (Testbed for biomechanical experimentation on rib specimens), no. 102023000014079 Italy, 06/07/2023

Journal Special Issues

- Ceccarelli M. (Editor), Special issue on Computational Kinematics, Mechanism and Machine Theory, Vol.41, n.8, 2006.
- Ceccarelli M. (Editor), Special issue on MUSME 2008 International Symposium on Multibody Systems and Mechatronics, Journal Mechanics Based Design of Structures and Machines, Vol. 36, No. 4, 2008.
- Ceccarelli M. (Editor), Special Part-issue of the International Symposium on Robotics and Mechatronics (ISRM 2009), Journal of Zhejiang University-SCIENCE A (Applied Physics & Engineering), ISSN 1673-565X (Print); ISSN 1862-1775 (Online) doi:10.1631/jzus.A10ISRM09, 2010 Vol.11 No.4.
- Ceccarelli M. and E. Zaharev(Editors), Special issue on EUROMECH515 Colloquium on Advances and Perspectives of Multibody System Dynamics, Journal Mechanics Based Design of Structures and Machines, Vol. 39, No. 2, 2011.
- Ceccarelli M. (Editor), Special Issues Kinematic Design of Manipulators, The Open Mechanical Engineering Journal, ISSN: 1874-155X, 2010, 4, 36-92.[DOI: 10.2174/1874155X01004010036]<http://www.bentham.org/open/tomej/V004-SI0036TOMEJ.htm>
- Marco Ceccarelli and Fernando Viadero (Editors), Special issue on EUCOMES 2012 European Conference on Mechanism Science, Frontiers of Mechanical Engineering, Vol.8, no.1, March 2013, pp.95-103, DOI 10.1007/s11465-012-0357-9
- Marco Ceccarelli and Cesare Rossi (Editors), Special issue on RAAD2012 Workshop, in: Advanced Robotics, Vol.27, No. 13, 2013, pp. 979-1043. DOI 10.1080/01691864.2013.804147.
- Marco Ceccarelli and Cesare Rossi (Editors), Special issue on RAAD2012 Workshop, in: JoMaC International Journal of Mechanics and Control, Vol.14, no.1, 2013. ISSN 1590-8844.
- Ceccarelli M., Wu L. (Eds), Special issue on MEDER 2012 the IFToMM Symposium on Mechanism Design for Robotics, in: Int.

- Journal Mechanisms and Robotic Systems, 2013, Vol. 1, Nos. 2/3, ISSN2047-7244
- Ceccarelli M., Sanchez R.V. (Eds), Special issue on CIBIM 2014: the VIII LatinAmerican Conference on Mechanical Engineering, in: Int. Journal Frontiers of Mechanical Engineering Mechanisms and Robotic Systems, Sept. 2015, Volume 10 Issue 3. DOI: 10.1007/s11465-015-0356-8
- Claudio Moriconi and Marco Ceccarelli. Designing Bioinspired Robots Editorial. Special Issue, Int J Adv Robot Syst, 2015, 12:151. doi: 10.5772/61857
- Marco Ceccarelli. Service Robotics Editorial. Special Issue, Int J Adv Robot Syst, 2015, 12:161. DOI: 10.5772/61987
- Ceccarelli M. (Ed.), Special issue on the 2015 Workshop on History of Mechanism and Machine Science, in: Int. Journal Frontiers of Mechanical Engineering Mechanisms and Robotic Systems, march 2016, Volume 11, n.1. <http://dx.doi.org/10.1016/j.robot.2016.03.001>
- M. Ceccarelli (Ed.) Special Issue "Advances in Mechanism Design for Robots", Inventions MPDI open access Journal, 2017, 2 (3). Preface in: Inventions 2018, 3, 10; doi:10.3390/inventions3010010
- Francisco Valero, Marco Ceccarelli, and Ashitava K. Ghosal (Eds), Special Issue: Applied Mathematics to Mobile Robotics and Their Applications, Mathematical Problems in Engineering, Volume 2017 (2017), Article ID 8706164, 2 pages <https://doi.org/10.1155/2017/8706164>
- Marco Ceccarelli and Roberto Simoni (Guest Editors), Special Issue on: Advances on Multibody Systems and Mechatronics, Int. J. Mechanisms and Robotic Systems, Vol. 4, No. 4, 2018
- Marco Ceccarelli and Alessandro Gasparetto (Guest Editors), Special Issue on MEDER 2018: Mechanism design for Robotics, MDPI Robotics, 2019, 8, 30; doi:10.3390/robotics8020030 1 www.mdpi.com/journal/robotics
- Marco Ceccarelli, and Giuseppe Carbone (Guest Editors), Special Issue on Advances of Italian Machine Design, Machines 2019, 7, 61; doi:10.3390/machines7030061. www.mdpi.com/journal/machines
- Marco Ceccarelli, and Vincenzo Niola (Guest Editors), Special Issue on 'Findings on history of Italian mechanical Engineering', Journal Advances in Historical Studies (<https://www.scirp.org/journal/ahs/>), Vol. 9, 5, December 2020
- Laribi MA, Ceccarelli M. Preface for the special issue on MEDER 2021. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science. 2022;236(18):9917-9918. doi:10.1177/09544062221116438
- Ceccarelli M, Carbone G, Gasparetto A. Advances of Machine Design in Italy 2022. *Machines*. 2023; 11(1):64. <https://doi.org/10.3390/machines11010064>

Edited CD Proceedings

- Ceccarelli M., CD Volume for 'A Tutorial on History of Mechanism Design', ASME DETC 2002, Montreal, 2002.
- Ceccarelli M. and Acevedo M. (Editors), CD Proceedings of MUSME 2002 International Symposium on Multibody Systems and Mechatronics, Mexico City, 2002.
- Ceccarelli M. (Editor), Proceedings of 12th International Workshop on Robotics in Alpe-Adria-Danube Region RAAD'03, Cassino, 2003.
- Ceccarelli M. (Editor), CD Volume for 'A Tutorial on History of Mechanism and Machine Science' by B. Ravani, H.S. Yan and M. Ceccarelli, ASME DETC 2004, SaltLakeCity, 2004
- Ceccarelli M. (Editor), CD Volume for '2004 Workshop of project PRIN2003: Design and Validation of cam mechanical transmissions', Cassino, 2004.
- Ceccarelli M. and Carvallho J.C. M. (Editors), CD Proceedings of MUSME 2005 International Symposium on Multibody Systems and Mechatronics, Uberlandia, 2005.
- Ceccarelli M. (Editor), CD Proceedings of IFToMM International Workshop on Computational Kinematics CK2005, Cassino, 2005.
- Ceccarelli M. and Niola V (Editors), Edited CT 2005 CD-Volume on Cam Transmissions: Functional and Dynamical Aspects, Cassino and Napoli, 25 November 2005.
- Ceccarelli M. and Penisi O. (Editors), CD Proceedings of MUSME 2008 International Symposium on Multibody Systems and Mechatronics, San Juan, 2008.
- Ceccarelli M. (Editor), CD Proceedings of 40th year celebration of IFToMM during 2006 IFToMM Executive Council meeting in Guanajuato, IFToMM Archives, Udine.
- Ding X. Ceccarelli M. (Eds), CD Proceedings of MEDER2012, the IFToMM Symposium on Mechanism Design for Robotics, Beijing, 12-14 October 2012
- Sorge F. Genchi G. Ceccarelli M. (Eds), CD Proceedings on IFToMM Workshop on History of Machine and Mechanism Science, Palermo 21-22- November 2012. ISBN 978-889-5430-84-3

Edited Books

- Ceccarelli M. (Editor), Proceedings of 6th International Workshop on Robotics in Alpe-Adria-Danube Region RAAD'97, Cassino, 1997.
- Ceccarelli M. (Editor), Proceedings of International Symposium on History of Machines and Mechanisms HMM2000, Kluwer, Dordrecht, 2000.
- Ceccarelli M. (Editor), Proceedings of International Symposium on History of Machines and Mechanisms HMM2004, Kluwer, Dordrecht, 2004.
- Golovin A. and Ceccarelli M. (Editors), Proceedings of the Third IFToMM International Workshop on History of Machines and Mechanisms, Bauman Technical University, Moscow, May 2005.
- Ceccarelli M. (Editor), Distinguished Figures in Mechanism and Machine Science: Their Contributions and Legacies – Part 1, Book series on History of Machines and Machine Science, Vol.1, Springer, Dordrecht, 2007.
- Ceccarelli M. (Editor), Robot Manipulators, I-Tech Education and Publishing KG, Wien, 2008, ISBN 978-953-7619-06-0.
- Ceccarelli M. (Editor), Proceedings of Second European Conference on Mechanism Science EUCOMES 2008, Springer, Dordrecht, 2008. DOI:10.1007/978-1 420-8915-2 ISBN: /978-1 420-8914-5
- Ceccarelli M. and Yan H.S. (Editors), Proceedings of IFToMM International Symposium on History of Machines and Mechanisms HMM2008, Springer, Dordrecht, 2009.
- Ceccarelli M. (Editor), Distinguished Figures in Mechanism and Machine Science: Their Contributions and Legacies – Part 2, Book series on History of Machines and Machine Science, Vol.7, Springer, Dordrecht, 2010,. DOI 10.1007/978-90-481-2346-9_8.

ISBN: 978-90-481-2345-2

- Paipetis S.A., Ceccarelli M.(Editors),The Genius of Archimedes – 23 centuries of influence on Mathematics, Science and Engineering, Book series on History of Machines and Machine Science, Vol.11, Springer, Dordrecht, 2010. ISBN: 978-90-481-9090-4 <http://dx.doi.org/10.1007/978-90-481-9091-1>
- Pisla, D.; Ceccarelli, M.; Husty, M.; Corves, B. (Eds.), New Trends in Mechanism Science, Analysis and Design Series: Mechanisms and Machine Science, Vol. 5 , 1st Edition., 2010, XIV, 708 p., ISBN: 978-90-481-9688-3, DOI: <http://dx.doi.org/10.1007/978-90-481-9689-0>
- Ceccarelli M. (Ed.), Role of MMS and IFToMM in Technology Development, Book series on Machines and Machine Science, Vol.1, Springer, Dordrecht, 2011. ISBN 978-94-007-1299-7, DOI: <http://dx.doi.org/10.1007/978-94-007-1300-0>
- Portilla, J. M. de la; Ceccarelli, Marco (Eds.), History of Machines for Heritage and Engineering Development, Book series on History of Machines and Machine Science, Vol.14, Springer, Dordrecht, 2011. SBN 978-94-007-1250-8.
- Ceccarelli M. (Ed.), Service Robots and Robotics: Design and Application, Engineering Science Reference (IGI Global), Hershey, 2012, ISBN 978-1-4666-0293-9.
- Koetsier T. and Ceccarelli M. (Eds.),Explorations in the History of Machines and Mechanisms, Book series on History of Machines and Machine Science, Vol.15, Springer, Dordrecht, 2012. <http://dx.doi.org/10.1007/978-94-007-4132-4>. ISBN: 978-94-007-4131-7
- F. Viadero and M. Ceccarelli(Editors) New Trends in Mechanisms and Machine Science, Springer Dordrecht, 2012, ISBN 978-94-007-4001-6; DOI 10.1007/978-94-007-4002-3.
- Rossi C. and Ceccarelli M. (Eds), Proceedings of RAAD 2012 international Workshop on Robotics in Ale-Adria-Danube Region, Napoli, Edizioni Scientifiche e Artistiche, ISBN 978-88-95430-45-4.
- Ceccarelli M. (Editor),Distinguished Figures in Mechanism and Machine Science: Their Contributions and Legacies – Part 3, Book series on History of Machines and Machine Science, Volume 26, 2014. <http://dx.doi.org/10.1007/978-94-017-8947-9>
- Marco Ceccarelli and Victor A. Glazunov (Eds.), Advances on Theory and Practice of Robots and Manipulators - Proceedings of Romansy 2014 XX CISM-IFTToMM Symposium on Theory and Practice of Robots and Manipulators, Mechanisms and Machine Science Volume 22, Springer, Dordrecht, 2014, ISBN: 978-3-319-07057-5; DOI: 10.1007/978-3-319-07058-2.
- M. Ceccarelli and E.E. Hernández Martínez (eds.), Multibody Mechatronic Systems,Mechanisms and Machine Science 25, Springer, Dordrecht, 2015 . DOI 10.1007/978-3-319-09858-6
- Marco Ceccarelli and Emin Faruk Kececi (Editors), Designs and Prototypes of Mobile Robots, ASME Press Robotics Engineering Book Series, ASME, 2015. ISBN: 9780791860472
- Emin Faruk Kececi and Marco Ceccarelli (Editors), Mobile Robots for Dynamic Environments,ASME Press Robotics Engineering Book Series, ASME, 2015. ISBN: 9780791860526
- S. Bai and M. Ceccarelli (eds.), Recent Advances in Mechanism Design for Robotics, Mechanisms and Machine Science 33, Springer, Dordrecht, 2015 DOI 10.1007/978-3-319-18126-4_0
- C. López-Cajún and M. Ceccarelli (eds.), Explorations in the History of Machines and Mechanisms, History of Mechanism and Machine Science 32, Springer International Publishing Switzerland, 2016, pp.223-232 .DOI 10.1007/978-3-319-31184-5_0
- M. Ceccarelli et al. (eds.), New Activities for Cultural Heritage, Springer International Publishing Switzerland, 2017, DOI 10.1007/978-3-319-67026-3
- Zhang B. and Ceccarelli M. (Eds.), Explorations in the History and Heritage of Machines and Mechanisms – Proceedigns of HMM2018, Springer Nature Switzerland AG 2019, HMMS 37, 2019. https://doi.org/10.1007/978-3-030-03538-9_1
- Marco Cecarelli and Giuseppe Carbone (eds); Design and Operation of Human Locomotion Systems, Academic Press, 2019. ISBN 9780128156599,<https://doi.org/10.1016/B978-0-12-815659-9.09991-1>.
- Khang N.V. Hoang N.Q., and Ceccarelli M. (Eds.), Advances in Asian Mechanism and Machine Science – Proceedigns of ASIAN MMS 2021, Springer Nature Switzerland AG 2022 , Cham, 2022. <https://doi.org/10.1007/978-3-030-91892-7>
- Ceccarelli, M., López-García, R. (eds) Explorations in the History and Heritage of Machines and Mechanisms. HMM 2022. History of Mechanism and Machine Science, vol 40. Springer, Cham. <https://doi.org/10.1007/978-3-030-98499-1>
- Ceccarelli M. and Gasparetto A. (Editors), Distinguished Figures in Mechanism and Machine Science - Part 5: Legacy and Contribution of the IFToMM Community, Springer, Cham, 2023. <https://doi.org/10.1007/978-3-031-18288-4>
- Ceccarelli M, Carbone G, Gasparetto A. Advances of Machine Design in Italy 2022. *Machines*. 2023; 11(1):64. <https://doi.org/10.3390/machines11010064>
- Med Amine Laribi · Carl A. Nelson · Marco Ceccarelli · Saïd Zeghloul Editors New Advances in Mechanisms, Transmissions and Applications Proceedings of the Sixth MeTrApp Conference 2023. Mechanisms and Machine Science, vol 124. Springer, Cham. <https://doi.org/10.1007/978-3-031-29815-8>
- Ceccarelli M., Santo L., Paoloni M., and Cupertino G: (editors), Design Advances in Aerospace Robotics – TORVEASTRO 2023, Springer Cham, 2023. <https://doi.org/10.1007/978-3-031-28447-2>
- López-García, R., Ceccarelli, M. (eds) Distinguished Figures in Mechanical Engineering in Spain and Ibero-America. History of Mechanism and Machine Science, vol 43. Springer, Cham. <https://doi.org/10.1007/978-3-031-31075-1>

Books

- Ceccarelli M., Fundamentals of Mechanics of Robotic Manipulation, Kluwer,Dordrecht, 2004.(ISBN 1-4020-1810-X)
- Bautista Paz E., Bernardos Rodriguez R., Ceccarelli M., et al., Breve historia ilustrada de las maquinas, ETSII, Madrid, 2007. (ISBN 978-84-7484-200-5)
- Lopez-Cajún C.S., Ceccarelli M., Mecanismos: Fundamentos cinematicos para el diseno y la optimizacion de la maquinaria, Trillas, Ciudad de Mexico, 2008 (ISBN 978-968-24-8181-9); 2nd Edition 2013.
- Bautista Paz E., Ceccarelli M.,Echavarri Otero J., Munoz Sanz, J.J., A brief illustrated history of machines and mechanisms, Science and Engineering, Book series on History of Machines and Machine Science, Vol.10, Springer, Dordrecht, 2010. DOI 10.1007/978-90-481-2512-8. ISBN: 978-90-481-2511-1
- Zhang B., Fang Y., Ceccarelli M., Scientific/technological Revolutions and the Modernization of Italy, Shandong Education Press, Beijing, 2020. (in Chinese)
- Ceccarelli M., Fundamentals of Mechanics of Robotic Manipulation, Springer, Cham, 2022 (second Edition). ISBN 978-3-030-90846-1. <https://link.springer.com/book/10.1007/978-3-030-90848-5>