

Giancarlo Genta.

Curriculum vitae

Giancarlo Genta got a degree in Aeronautical Engineering in 1971 and one in Aerospace Engineering in 1972 at the Politecnico di Torino, both '*cum laude*'. Then he became assistant professor of Machine Design at the same University. He taught a course in Astronautical Propulsion and then he lectured in Motor Vehicle Mechanics. In 1983 he became Associate Professor of Design of Aircraft Engines at the School of Aerospace Engineering of Politecnico di Torino and then he became full Professor in Machine Design. From 1989 to 1995 he was head of the Department of Mechanics at Politecnico di Torino.

From 1998 to 2015 he coordinated the PhD course in Mechatronics at the PhD School of Politecnico di Torino.

He gave courses in Italy and abroad in the context of different programs for Developing Countries in Kenya, Somalia, India and at the International Labour Office.

From 2003 to 2018 was responsible for the courses in Automotive Engineering of Politecnico di Torino.

Since 2018 he is Professor Emeritus at the Politecnico di Torino.

Since 1999 he is a member of the Academy of Sciences of Torino and since 2006 he is a member (corresponding member since 2001) of the International Academy of Astronautics.

In 2013 he received the International Yangel Medal for Outstanding Contributions to the development of space sciences and technologies and, in the same year, received the Engineering Science Award for outstanding achievement in engineering science of the International Academy of Astronautics.

In 2013 received the Engineering Book Award of the International Academy of Astronautics for the book *Introduction to the Mechanics of Space Robots*, Springer, New York, 2011 and in 2022 for the book *Technology and the Growth of Civilization*, Springer-Praxis, New York, 2019.

He performed research, mainly in the field of machine design, in particular dealing with static and dynamic structural analysis. He worked in the field of magnetic suspension systems and in general of the dynamics of controlled systems. He was one of the promoters of the Interdepartmental Laboratory of Mechatronics which works in the areas of magnetic bearings (active, passive, and superconducting) and mobile robots. Since 1996 he deals with space systems and space robotics.

Since 2012 he heads the IAA Study Group on Human Mars Exploration (SG 3.16, and then SG 3.27).

He is a member of the Advisory Board of the Starshot Project.

He participated to the design and construction of experimental equipment that are currently part of the Laboratory of the Mechanical and Aerospace Engineering Department of the Politecnico di Torino.

He is the author of 101 scientific papers covering various sectors of mechanical design published in scientific journals, 288 presented at conferences, and of 5 patents. He is the author of 40 books, including textbooks, research monographies and popular science books.

He is also the author of 6 science fiction novels, published in Italian and English.

Books

- 1 Genta G., *Lezioni di Meccanica dell'autoveicolo*, Levrotto e Bella, Torino, 1979.
- 2 Genta G., *Meccanica dell'autoveicolo*, II ed., Levrotto e Bella, Torino, 1982.
- 3 Genta G., *Progettazione e calcolo strutturale con i materiali compositi*, Tecniche Nuove, Milano, 1982.
- 4 Genta G., *Kinetic Energy Storage*, Butterworths, Londra, 1985, ISBN 0 408 01396 6.
- 5 Genta G., *Calcolo e Progetto di Macchine, Vol.2*, Levrotto & Bella, Torino, 1987.
- 6 Genta G., *Mechanics of Vibration - A Short Course*, Levrotto e Bella, Torino, 1988.
- 7 Genta G., *Nakoplenie kineticheskoi energii*, Mir, Moscow, 1988, ISBN 5 03 000148 4.
- 8 Genta G., *Principi e metodologie della progettazione meccanica, Vol.2*, Levrotto & Bella, Torino, 1989.
- 9 Genta G., *Meccanica dell'autoveicolo*, III ed., Levrotto e Bella, Torino, 1989
- 10 Genta G., *Principi e metodologie della progettazione meccanica, Vol.2*, II ed., Levrotto & Bella, Torino,
- 11 1992.
- 12 Genta G., *Vibration of structures and machines*, Springer, New York, 1993, ISBN 0 387 97919 0.
- 13 Genta G., *Meccanica dell'autoveicolo*, IV ed., Levrotto e Bella, Torino, 1993
- 14 Genta G., *Vibration of structures and machines*, II ed., Springer, New York, 1994, ISBN 0 387 94403 6..
- 15 Genta G., *Calcolo di resistenza degli organi rotanti e dei recipienti cilindrici*, Levrotto e Bella, Torino, 1996
- 16 Genta G., *Vibrazioni delle strutture e delle macchine*, Levrotto e Bella, Torino, 1996
- 17 Genta G., *Motor Vehicle Dynamics*, World Scientific, Singapore, 1997, ISBN 98 102 2911 9.
- 18 Genta G., *Vibration of structures and machines*, III ed., Springer, New York, 1998, ISBN: 0 387 98506 9.
- 19 Genta G., *La culla troppo stretta – Le frontiere naturali dello spazio*, Paravia, Torino, 2000, ISBN: 88 395 6205 2.
- 20 Genta G., *Meccanica dell'autoveicolo*, V ed., Levrotto e Bella, Torino, 2000
- 21 Genta G., Rycroft M., *Space, The Final Frontier?*, Cambridge University Press, Cambridge, 2003, ISBN: 0 521 81403 0.
- 22 Genta G., *Motor Vehicle Dynamics*, II ed., World Scientific, Singapore, 2003, ISBN: 9810229119.
- 23 Genta G., Brusa E., Amati N., *Rotordynamics for Electrical Machines*, Otamedia Oy, Espoo, Finland, 2003, ISBN: 951-22-6696-2.
- 24 Genta G., *Dynamics of Rotating Systems*, Springer, New York, 2005 ISBN: 0-387-20936-0.
- 25 Genta G., Morello L., *L'autotelaio*, ATA, Torino, 2007, ISBN: 978 88 8218 129 1.
- 26 Genta G., *Lonely Minds in the Universe: The search for Extraterrestrial Intelligence*, Springer-Praxis, New York, 2007, ISBN: 978 0 387 33925 2.
- 27 Genta G., Morello L., *The automotive chassis*, Springer, New York, 2008, ISBN 978-1402086731.
- 28 Genta G., *Vibration Dynamics and Control*, Springer, New York, 2009, ISBN 978 0 387 79579 9.
- 29 Genta G., *Incontri Lontani, alla ricerca delle intelligenze extraterrestri*, Lindau, Torino, 2009, ISBN: 978 88 7180 834 5.
- 30 Genta G., Morello L., *L'automobile, Evoluzione di una tecnologia*, Edizioni ASI Service, Torino, 2013. ISBN 978 88 983 4413 0
- 31 Genta G., Morello L., Cavallino F., Filtri L., *The Motor Car, Past, Present and Future*, Springer, New York, 2014, ISBN 978 94 007 8552 6
- 32 Genta G., Bonelli Genta F., *Il silenzio dell'Universo*, Lindau, Torino, 2016, ISBN 978 88 6708 496 8
- 33 Genta G., Salotti J.M. (Editors), *Global Human Mars System Missions Exploration Goals, Requirements and Technologies*, International Academy of Astronautics, Paris, 2016, ISBN 978 29 177 6143 4
- 34 Genta G., *Next stop Mars - The Why, How, and When of Human Missions*, Springer-Praxis, New York, 2017, ISBN: 978 3 319 44310 2.
- 35 Genta G., Genta A., *Road Vehicle Dynamics – Fundamentals of Modeling and Simulation*, World Scientific, Singapore, 2017, ISBN 978 981 4713 43 6.
- 36 Genta G., Grandi M., Morello L., *La più veloce: Breve storia dei record mondiali di velocità su strada*, Libreria Automotoclub Storico Italiano, Torino, 2017, ISBN 978 889 8344 49 9
- 37 Genta G., *Introduction to the Mechanics of Space Robots*, Beijing: National defense industry press., 2017, ISBN 9787118113938.
- 38 Genta G., Riberi P., *Oltre l'orizzonte*, Lindau, Torino, 2019, ISBN 978 88 33531 62 5.
- 39 Genta, G. Riberi P., *Technology and the Growth of Civilization*, Springer-Praxis, New York, 2019, ISBN 978-3-030-25583-1.
- 40 Genta G., Morello L., *The automotive chassis, 2nd Edition*, Springer, New York, 2020, Vol. 1, ISBN 978-3-030-35634-7, Vol. 2, ISBN 978-3-030-35708-5.

Fiction

- 1 G. Genta, *Il Cacciatore*, ISBN 978 8 867 36009 3, UteLibri, Genova, 2012; translated into Ukrainian with the title *Mislivietz*, published on the journal *Svitoglyad*, Main Astronomical Observatory of the National Academy of Sciences of Ukraine, Kiev, (ISSN 1819-7329), starting from issue 1(33) 2012.
Translated into English as G. Genta, *The Hunter: A scientific Novel*, Springer, 2014, New York, ISBN 978-3-319-02059-4.
- 2 G. Genta, *A Man from Planet Earth: A scientific Novel*, Springer, 2014, New York, ISBN 978 3 319 21114 5.
- 3 G. Genta, *Le porte dell'inferno*, Youcanprint, Tricase, 2018, ISBN 978 88 27830 16 1.
- 4 G. Genta, *Le Rosse Cupole di Acheron*, Paola Caramella Editrice, Torino, 2019, ISBN 978 8 898 54927 6
Translated into English as *The Red Domes of Acheron, book One of the Martians' Saga*, KDP, 2022, ISBN 979 8 352 12612 7 (Hard cover ISBN 979 8 352 27134 6)
- 5 G. Genta, *La frontiera*, Paola Caramella Editrice, Torino, 2021, ISBN 978 88 98549 27 6
Translated into English as *The Frontier, Book One of the Hunters' Saga*, KDP, ISBN 979 8 431 35550 9 (Hard cover ISBN 979 8 837 96948 5)
- 6 G. Genta, *Il Cacciatore, Volume Due della Saga di Cacciatori*, KDP, 2022, ISBN 979 8 840 70935 1 (Hard cover ISBN 979 8 840 80459 9)
Translated into English as *The Hunter, Book Two of the Hunters' Saga*, KDP, ISBN 979 8 836 77628 2 (Hard cover ISBN 979 8 837 86752 1)
- 7 G. Genta, *Oltre la frontiera, Volume Tre della Saga di Cacciatori*, KDP, 2022, ISBN 979 8 841 38485 4 (Hard cover ISBN 979 8 841 39453 2)
Translated into English as *Beyond the Frontier, Book Three of the Hunters' Saga*, KDP, ISBN 979 8 841 07942 2 (Hard cover ISBN 979 8 841 08613 0)
- 8 G. Genta, *Gli Alieni Perduti, Volume Quattro della Saga di Cacciatori*, KDP, 2022, ISBN 979 8 354 61857 6 (Hard cover ISBN 979 8 354 64206 9)
Translated into English as *The Lost Aliens, Book Four of the Hunters' Saga*, KDP, ISBN 979 8 354 99328 4 (Hard cover ISBN 979 8 355 09915 2)

Chapters of books

1. G. Genta, *Tires, Automobile*, in *Encyclopedia of Composites*, 2nd Edition, Luigi Nicolais Assunta Borzacchiello (eds.), publisher John Wiley & Sons, Hoboken, New Jersey, 2012, p. 3129-3136, ISBN: 978-0-470-12828-2.
2. G. Genta, P. F. Maffione, *Choice of the Optimal Launch Date for Interplanetary Missions*, in G. Fasano, J. D. Pinter (eds.), *Modeling and Optimization in Space Engineering; State of the Art and New Challenges*, Springer, New York, 2019, ISBN 978-3-030-10501-3
3. G. Genta, *Appunti sulle civiltà aliene*, in *Assalto al cielo*, M. Pecchioli, (ed.), Mimesis, Milano, 2019, ISBN: 9788857555843
4. G. Genta, *Marte: scienza, fantascienza e tecnologia*, in *Assalto al cielo*, M. Pecchioli, (ed.), Mimesis, Milano, 2019, ISBN: 9788857555843
5. G. Genta, *Terraforming and Colonizing Mars*, in *Terraforming Mars*, M. Beech, J. Seckbach, R. Gordon, (eds.), Scrivener Publishing, 2022
6. G. Genta, *Dante e la Cosmologia Medievale*, in *Dante, il tempo e lo Spazio*, I quaderni della Ricerca 64, Loescher, Milano 2022,

Papers published on journals

1. Genta G., Chirone E., *Disegno automatico mediante elaboratori elettronici da tavolo*, Ingegneria Meccanica, Febr. 1973.
2. Genta G., *Traiettorie di un veicolo a propulsione solare elettrica passante nel cono d'ombra di un corpo celeste*, L'Aerotecnica - Missili e Spazio, n.2, 1973.
3. Genta G., *Variazione del piano orbitale durante un trasferimento orbitale a propulsione elettrica*, L'Aerotecnica - Missili e Spazio, n.4, 1973.
4. Genta G., Campanaro P., *Ottimizzazione di un convertitore termoelettrico a radioisotopi (RTG) per la produzione di energia elettrica a bordo di satelliti*, Rivista di Ingegneria, n.3/4 1974.

5. Genta G., *Calcolo dell'orbita di parcheggio per un trasferimento orbitale a propulsione solare - elettrica tra orbite circolari*, L'Aerotecnica - Missili e Spazio, n.3, 1974.
6. Calderale P.M., Genta G., *Accumulatori di energia, crisi energetica e ambiente*", ATA, March 1976.
7. Genta G., *Utilizzazione degli accumulatori di energia cinetica su veicoli urbani di superficie*, ATA, April 1976.
8. Genta G., *Proposta di utilizzazione degli accumulatori di energia cinetica per l'alimentazione degli endoreattori a propellenti liquidi*, L'Aerotecnica - Missili e spazio, n.6, 1976.
9. Genta G., *Considerazioni sull'impiego dei ferrofluidi nell'ingegneria meccanica*, Quaderni di Ricerca e Progettazione, Ingegneria Meccanica, n.6, 1976.
10. Belingardi G., Genta G., *Sul comportamento di dischi di uniforme resistenza realizzati in laminato quasi isotropo*, L'Aerotecnica - Missili e spazio, n.8, 1976.
11. Belingardi G., Genta G., *Generalizzazione del metodo di Manson per il calcolo di corpi a simmetria cilindrica in parete spessa in materiale ortotropo assialsimmetrico non lineare*, La Meccanica Italiana, n.108, June 1977.
12. Belingardi G., Genta G., Gola M.M., *Optimization of Orthotropic Multilayer Cylinders and rotating disks*, L'Aerotecnica - Missili e spazio, n.4, Dec. 1977.
13. Belingardi G., Genta G., Gola M.M., *A Study of the Stress Distribution in Rotating Orthotropic Discs*, Composites, April 1979.
14. Genta G., Gola M.M., *Whirl and Critical Speeds of Flywheel - Container Systems Aboard Vehicles*, Meccanica, vol. 14, n.1, March 1979.
15. Genta G., *Progettazione e realizzazione di una attrezzatura di prova per volani ad elevata densita' di energia*, Quaderni di Ricerca e Progettazione, Ingegneria Meccanica, n. 12, 1979.
16. Belingardi G., Genta G., *Stato di tensione e stato di deformazione piano in dischi rotanti ortotropi soggetti a variazione di temperatura*, ATA, April 1980.
17. Genta G., *Design and Construction of a Spin Test Facility for High Energy Density Flywheels*, Italian Machinery and Equipment, n.57, May 1980.
18. Genta G., *The Shape Factor in Composite Material Filament - Wound Flywheels*, Composites, April 1981.
19. Genta G., Gola M.M., *The Stress Distribution in Rotating Orthotropic Discs*, Journ. of Appl. Mech., vol. 48, Sept. 1981.
20. Genta G., Gola M.M., Gugliotta A., *Axisymmetrical Computation of the Stress Distribution in Orthotropic Rotating Discs*, Int. Journ. of Mech. Science, vol.24,n.1, pp.21-26, Jan. 1982.
21. Genta G., *Spin Tests on Medium Energy Density Flywheels*, Composites, Jan. 1982.
22. Genta G., Gola M.M., Gugliotta A., *Stress Field in Orthotropic Accelerating Discs*, Journal of Applied Mechanics, Sept. 1982.
23. Genta G., *Shape of a Wire in a Centrifugal Field - Application to Quasi Circular Bare Filament Flywheels*, Journal of Vibration, Stress & Reliability in Design, April 1983.
24. Ferrero C., Genta G., Marinari C., *Experimental Strain Measurements on Bare Filament Flywheels*, Composites, vol.14, Oct. 1983.
25. Genta G., *On the design of Composite Material Thick Rim Flywheels Built by Filament Winding*, Composites, vol.15, n.1, Jan. 1984.
26. Genta G., Gugliotta A., Brussino G., *Determinazione delle velocita' critiche flessionali e tracciamento del diagramma di Campbell di rotori mediante modelli a parametri concentrati*, Il progettista industriale, April 1984.
27. Genta G., Gugliotta A., Brussino G., *Un codice di calcolo per l'analisi dinamica dei rotori*, Il progettista industriale, July-Aug. 1984.
28. Genta G., *Consistent Matrices in Rotor Dynamics*, Meccanica, vol. 20, 1985, pp. 235-248.
29. Ferrero C., Marinari C., Genta G., Ronco C., *Experimental Study of the Stress Distribution in the Spokes of Bare Filament Flywheels*, Composites, vol. 16, n. 4, Oct. 1985.
30. Genta G., Gugliotta A., *A Conical Element for Finite Element Rotor Dynamics*, Journal of Sound and Vibration, Febr. 1988, 120, pp.175-182.
31. Genta G., *Whirling of Unsymmetrical Rotors, a Finite Element Approach Based on Complex Coordinates*, Journal of Sound and Vibration, 124(1), 1988, pp. 27-53
32. Genta G., Campanile P., *An Approximated Approach to the Study of Motor Vehicle Suspensions with Nonlinear Shock Absorbers*, Meccanica, Vol. 24, 1989, pp. 47-57.
33. Genta G., *Progettazione di un accumulatore di energia a volano per autobus urbano ibrido*, ATA, n. 10, Oct. 1989.
34. Genta G., *Some Considerations on the Constant Stress Disc Profile*, Meccanica, vol. 24, 1989, pp. 235-248.
35. Genta G., De Bona F., *Unbalance Response of Rotors: a Modal Approach with some Extensions to Damped Natural Systems*, Journal of Sound and Vibration, 140,1, pp. 129-153.
36. Calderale P.M., Cornacchia G., Genta G., Pellegrino E., *Studio di una metodologia per l'Ottimizzazione della sospensione motore*, ATA, n. 4, April 1991.

37. Genta G., A Fast Modal Technique for the Computation of the Campbell Diagram of Multi-Degrees of Freedom Rotors, *Journal of Sound and Vibration*, 155(3), 1992.
38. Genta G., Delprete C., Tonoli A., Vadori R., Conditions for Noncircular Whirling of Nonlinear Isotropic Rotors, *Nonlinear Dynamics*, Vol.4, 1993, pp. 153-181.
39. Genta G., Delprete C., Some Considerations on the experimental determination of moments of inertia, *Meccanica*, Vol. 29, 1994, pp. 125-141.
40. Carabelli S., Delprete C., Genta G., Grazie alla meccatronica – Automazione più informatica più elettronica più meccanica per il progetto di un rotore a sospensione elettromagnetica a cinque assi attivi, *Progettare*, n. 169, June 1994, pp 68-75.
41. Delprete C., Genta G., Bona B., Carabelli S., Rotore a sospensione elettromagnetica a cinque assi attivi, *Automazione e strumentazione*, Oct. 1994, pp 103-109.
42. Abbattista F., Albanese R., Delprete C., Genta G., Gerbaldo R., Ghigo G., Gozzelino L., Mezzetti E., Mosolov A., Ronchetti S., Vallino M., Advances in Melt Processed HTSC Applications at Politecnico di Torino, *Il Nuovo Cimento*, Dec. 1994, pp. 2087-2093.
43. Genta G., Delprete C., Acceleration Through Critical Speeds of an Anisotropic, Nonlinear, Torsionally Stiff Rotor with Many Degrees of Freedom, *Journal of Sound and Vibration*, 180(3), 1995.
44. Nobili A.M., Bramanti D., Genta G. et al., Galileo Galilei Flight Experiment on the Equivalence Principle with Field Emission Electric Propulsion, *The Journal of Astronautical Science*, Vol. 43, n. 3.
45. Bassani D., Genta G., Use of genetic algorithms in the design of rotors, *Meccanica*, 30, 1995, pp. 707-717.
46. Genta G., Dynamic Design, *European Journal of Mechanical Engineering*, Vol. 40, n. 3, 1995, pp. 132-138.
47. Genta G., Bassani D., Delprete C., DYNROT: A finite element code for rotordynamic analysis based on complex co-ordinates, *Engineering Computations*, Vol. 13, n. 6, 1996, pp. 86-19.
48. Genta G., Tonoli A., A Harmonic Finite Element for the Analysis of Flexural, Torsional and Axial Rotordynamic Behaviour of Discs, *Journal of Sound and Vibration*, 196(1), 1996, pp. 19-43.
49. Brusa E., Del prete C., Franchin D., Genta G., Analisi dinamica torsionale dell'albero a gomiti di un motore aeronautico, *Organi di Trasmissione*, anno 28, n.4, April 1997, pp.92-96.
50. Brusa E., Delprete C., Genta G. Torsional Vibration of Crankshafts; Effects of Nonconstant Moments of Inertia, *Journal of Sound and Vibration*, 205(2), 1997, pp. 135-150.
51. Bona B., Maddaleno F., Genta G., Brusa E., Delprete C., Tonoli A., Carabelli S., Chiaberge M., The Mechatronics lab. of Politecnico di Torino, *Mechatronics*, Vol. 7, n. 5, 1997, pp. 413-427.
52. Carabelli S., Delprete C., Genta G., Orbital tubes, *Meccanica*, 32, 1997, pp. 485-492.
53. Genta G., Tonoli A., A Harmonic Finite Element for the Analysis of Flexural, Torsional and Axial Rotordynamic Behaviour of Bladed Arrays, *Journal of Sound and Vibration*, 207(5), 1997, pp. 693-720.
54. Nobili A.M., Bramanti D., Genta G. et al., Proposed noncryogenic, nondrag-free test of the equivalence principle in space, *New Astronomy*, 3, 1988, pp. 175-218.
55. Carabelli S., Delprete C., Genta G., Rotor on Active Magnetic Suspension: Part I: Theoretical Considerations, *European Journal Mech. Eng.*, Vol. 43, n. 3, p. 123-128.
56. Brusa E., Genta G., Fast-Spinning Multibody Spacecrafts Seen as Free Rotors: Stability Considerations, *Space Forum*, vol.2, pp. 319-344.
57. Amati N., Chiaberge M., Genta G., Miranda E., Reyneri L.M., *Twin Rigid-Frames Walking Microrovers: a Perspective for Miniaturization*, *Journal of the British Interplanetary Society*, Vol. 52, n. 7/8, 1999, pp. 301-304.
58. Genta G., Brusa E., *The Parachute Sail with Hydrostatic Beam: a New Concept for Solar Sailing*, *Acta Astronautica*, Vol. 44, n. 2-4, pp. 141-146, 1999
59. Genta G., Brusa E., *The Aurora Project: a New Sail Layout*, *Acta Astronautica*, Vol. 44, n. 2-4, pp. 141-146, 1999
60. Brusa E., Delprete C., Genta G., *FEM Structural Assessment of the Aurora Solar Sail Spacecraft*, *Space Forum*, Vol. 4, 1999, pp. 257,277.
61. Genta G., Delprete C., Brusa E., *Some Considerations on the basic assumptions in rotordynamics*, *Journal of Sound and Vibration*, Vol. 227, n.3, Oct. 1999, pp. 611-645.
62. Genta G., Delprete C., Rondano D., *Gyroscopic Stabilization of Passive Magnetic Levitation*, *Meccanica*, Vol. 34, n. 6, pp. 411-424, 1999.
63. Genta G., *Twin Rigid-Frames Hexapod Rovers for the Saha Radioastronomic Missions*, *Adv. Space Res.*, Vol. 26, No. 2, pp. 351-357, 2000.
64. Amati N., Chiaberge M., Genta G., Miranda E., Reyneri L.M., *WALKIE 6: A Walking Rover Demonstrator for Planetary Exploration*, *Clawar News*, n. 5, Aug. 2000.
65. Genta G., Brusa E., *On the Role of Non.synchronous Rotating Damping in Rotordynamics*, *Int. Journ. of Rotating Machinery*, Vol. 6, n. 6, pp. 467-475, 2000.
66. Amati N., Chiaberge M., Genta G., Miranda E., Reyneri L.M., *WALKIE 6 – A Walking Demonstrator for Planetary Exploration*, *Space Forum*, Vol. 5, pp. 259-277, 2000.
67. Carabelli S., Delprete C., Genta G., Muzzarelli M., Zanolli S., *Passive Repulsive MagLev: Concept and Experimental Demonstration*, *Vehicle System Dynamics*, 34, pp. 333-356, 2000.

68. Sawicki J.T., Genta G., *Modal Uncoupling of Damped Gyroscopic Systems*, Journal of Sound and Vibration, Vol. 244, n. 3, pp. 431-451, 2001.
69. G. Genta, G. Vulpetti, *Some Considerations on Sun Gravitational Lens Missions*, Journal of the British Interplanetary Society, Vol. 55, n. 3/4, 2002, pp. 131-136.
70. N. Amati, G. Genta, L.M. Reyneri, *Three Rigid Frames Walking Planetary Rovers: a New Concept*, Acta Astronautica, Vol. 50, n. 12, pp. 729-736, 2002
71. G. Genta, N. Amati, *Non-Zoomorphic versus Zoomorphic Walking Machines and Robots: a Discussion*, European Journ. Mech. & Env. Eng., Vol. 47, n. 4, 2002, pp. 223-237.
- 72.** Carabelli S., Genta G, Silvagni M., Tonoli A., *Inertia Wheel on Low-Noise Active Magnetic Suspension*, Space Technology, Vol. 23, n. 2-3, pp. 105-117, 2003
- 73.** Brusa E., Delprete C., Genta G., *Second Approximation Structural Assessment of the Aurora Solar Sail Spacecraft*, Acta Astronautica, Vol. 54, 2003, pp. 115-125.
- 74.** G. Genta, N. Amati, *Mobility on Planetary Surfaces: May Walking Machines be a Viable Alternative?*, Planetary and Space Science, 52, 2004, pp. 31-40.
75. G. Genta , *On the Stability of Rotating Blade Arrays*, Journal of Sound and Vibration, 273, 2004, pp. 805-836.
76. G. Genta , *On a Persisting Misunderstanding on the Role of Hysteretic Damping in Rotordynamics*, Journal of Vibration and Acoustics, Vol. 126, July 2004, 469-471.
77. G. Genta, *The challenge of very deep space exploration: how far will be the frontier?*, Journal of the British Interplanetary Society, Vol. 59, n. 2, 2006, pp. 43-47.
78. G. Genta, M. Rycroft, *Will space actually be the final frontier of humankind?*, Acta Astronautica, Vol. 58, 2006, pp. 287-295.
- 79.** G. Genta, *Robotic Platforms for the Exploration of Outer Solar System Bodies*, Journal of the British Interplanetary Society, Vol. 61, No. 8, p. 304 – 309, August 2008.
80. A. Della Torre, A. Ercoli Finzi, G. Genta, F. Curti, L. Schirone, G. Capuano, A. Sacchetti, I. Vukman, F. Mailland, E. Monchieri, A. Guidi, R. Trucco, I. Musso, C. Lombardi, *The Conceptual Design Of The Team Italia Amalia Mission Rover, Candidate For Google Lunar X Prize Challenge*, Acta Astronautica, 2010, [Vol. 67, n. 7-8](#), Oct.-Nov. 2010, p. 961-978
81. G. Genta, N. Amati, *Hysteretic Damping in Rotordynamics: An Equivalent Formulation*, Journal of Sound and Vibration, [Vol. 329, n. 22](#), Oct. 2010, p. 4772-4784.
82. G. Genta, C. Feng, A. Tonoli, *Dynamics behavior of rotating bladed discs: A finite element formulation for the study of second and higher order harmonics*, , Journal of Sound and Vibration, [Vol. 239, n. 25](#), Dec. 2010, p. 5289-5306
- 83.** G. Genta, A. Genta, *Preliminary Assessment of a Small Robotic Rover for Titan Exploration*, Acta Astronautica, [Vol. 68, n. 5-6](#), March-April 2011, p. 556-566.
- 84.** F. Chen, G. Genta, *Dynamic modeling of wheeled planetary rovers: A model based on the Pseudo-coordinates approach*, Acta Astronautica, [Vol. 81](#), 2012, p. 288-305.
85. G. Genta, *On the dynamics of a massless beam with end mass rotating in the 3-dimensional space*, Proceedings Of The Institution Of Mechanical Engineers. Part C, Journal Of Mechanical Engineering Science, 227(3), 2013, p. 434-448.
- 86.** M. Augelli, G.F. Bignami, G. Genta, *Fission Fragments Direct Heating for Space Propulsion – Programme Synthesis and Applications to Space Exploration*, Acta Astronautica, [Vol. 82 \(2013\)](#), p. 153-158.
- 87.** G. Genta, M. Silvagni, *On the centrifugal Softening in Finite Element Method Rotordynamics*, Journal of Applied Mechanics, Vol. 81, 2014, pp. 011001-1, 011001-10
88. G. Genta, *Private space exploration: A new way for starting a spacefaring society?*, Acta Astronautica, [Vol. 104, pp. 480-486, 2014](#).
89. G. Genta, *Are there severe limitations to the bioinspired approach in machine design?*, Proceedings Of The Institution Of Mechanical Engineers. Part C, Journal of Mechanical Engineering Science, Vol. 230(9) 1511–1520, 2016, DOI: 10.1177/0954406215576064.
90. G. Genta, P. F. Maffione, *Optimal Low-Thrust Trajectories for Nuclear and Solar Electric Propulsion*, Acta Astronautica, [Vol. 118, p. 251-261, 2016](#).
91. C. Pizzamiglio; A. Andreoli, V. Comito, D. Lippi, G. Binello, S. Leveratto, D. Catelani, G. Genta, *Simulazione dinamica multibody del rover T0-R0 per la "European Rover Challenge*, A&C. Analisi e Calcolo, vol. 76, pp. 38-45, 2016. - ISSN 1128-3874

92. G. Genta, P. F. Maffione, *Low Thrust Interplanetary Transfers: Second Approximation Computation of Planetocentric Phases*, Advances in Aerospace Science and technology, vol.1, pp 100-107, ISBN 978-7-5159-1282-0, 2017.
93. G. Genta, *The History and Future of Mars Exploration*, Popular Astronomy, June, 2017.
94. G. Genta, P. F. Maffione, *Comparison Between Different Approaches to Interplanetary Mission Design*, International Journal of Signal Processing, Vol. 2, 2017, p. 54-66.
95. G. Genta, M. Dolci, *Robotic Gripper for Payload Capture in Low Earth Orbit*, Advances in Aerospace Science and technology, vol.1, pp 100-107, ISBN 978-7-5159-1282-0, 2017, January 2, 2019
96. G. Genta, P. F. Maffione, *A Graphical Tool to Design Two-Ways Human Mars Missions*, Acta Astronautica, Vol. 154, p. 301-310, 2019.
97. M. Baratta, G. Genta, D. Laurenzano, D. Misul, *Exploring the Surface of the Moon and Mars: What Kind of Ground Vehicles Are Required?*, Acta Astronautica, Vol. 154, p. 204-213, 2019.
98. F. Chang-Diaz, J. Carr, L. Johnson, W. Johnson, G. Genta, P. F. Maffione, *Solar Electric Propulsion for Human Mars Missions*, Acta Astronautica, Vol. 160, 2019, p. 183-194, 2019.
99. G. Genta, R. Kezerashvili, *Achieving the required mobility in the solar system through Direct Fusion Drive*, arXiv:2002.12686v1 [physics.pop-ph] 28 Feb 2020
100. G. Genta, R. Kezerashvili, *Achieving the required mobility in the solar system through Direct Fusion Drive*, Acta Astronautica, Vol. 173, 303-309, 2020.
101. D. Riccobono, G. Genta, S. Moreland, P. Backes, *A multidisciplinary design tool for robotic systems involved in sampling operations on planetary bodies*, CEAS Space journal, 13, 155-174, 2021

Papers presented to conferences

1. Genta G., *Influenza sulla traiettoria di un veicolo spaziale propulsione solare elettrica della interruzione della spinta al passaggio nel cono d'ombra di un corpo celeste - calcolo di prima approssimazione*, II Conv. Sez. AIDAA, Torino, June 1972.
2. Genta G., *Proposta di utilizzazione degli accumulatori di energia cinetica per l'alimentazione degli endoreattori a propellenti liquidi*, II Congr. Naz. AIDAA, Torino, Sept. 1975.
3. Belingardi G., Genta G., *Determinazione delle caratteristiche di materiali destinati alla costruzione di volani in vetroresina*, IV Congr. Naz. AIAS, Rome, Sept. 1976.
4. Belingardi G., Genta G., *Sull'analisi delle tensioni in dischi rotanti in materiale ortotropo soggetti a variazione di temperatura*, III Congr. Naz. AIMETA, Cagliari, Oct. 1976.
5. Genta G., *Rilievo sperimentale delle caratteristiche di tenute ferrofluidi Deche su alberi rotanti*, III Congr. Naz. AIMETA, Cagliari, Oct. 1976.
6. Belingardi G., Genta G., *Generalizzazione del metodo di Manson per il calcolo di corpi a simmetria cilindrica in parete spessa in materiale ortotropo assialsimmetrico non lineare*, II Conv. sui materiali compositi, Milano, Nov. 1976.
7. Belingardi G., Genta G., *Una applicazione del principio dei lavori virtuali al calcolo di dischi rotanti in materiale anisotropo*, V Congr. Naz. AIAS, Bari, Sept. 1977.
8. Belingardi G., Genta G., *Sul calcolo di recipienti cilindrici multistrato in materiali ortotropi assialsimmetrici*, V Congr. Naz. AIAS, Sept. 1977.
9. Belingardi G., Genta G., *On the Stress State in Quasi - Circular Bare Filament Flywheels*, 1977 Flywheel Tech. Symp., San Francisco, Oct. 1977.
10. Belingardi G., Genta G., Gola M.M., *Ovalization Critical Speeds in Anisotropic Rotating Disks*, 1977 Flywheel Tech. Symp., San Francisco, Oct. 1977.
11. Genta G., Gola M.M., *Volani in legno lamellare: caratterizzazione del materiale, calcolo delle tensioni e prove di centrifugazione*, VI Conv. Naz. AIAS, Brescia, June 1978.
12. Genta G., *Progettazione, realizzazione e messa a punto di una attrezzatura di prova per volani ad elevata densità di energia*, VI Conv. Naz. AIAS, Brescia, June 1978.
13. Genta G., *Il coefficiente di forma nei volani in materiale composito realizzati per avvolgimento*, IV Conv. Naz. AIMETA, Firenze, Oct. 1978.
14. Genta G., Gola M.M., *Dynamic Behaviour of Flywheel- Heat Engine Hybrid Vehicles*, Science and Motor Vehicle, Bled, Jugoslavia, June 1979.
15. Belingardi G., Genta G., *Stato di tensione piano e stato di deformazione piano in dischi rotanti ortotropi soggetti a variazione di temperatura*, VII Conv. Naz. AIAS, Cagliari, Sept. 1979.
16. Genta G., Gola M.M., *Dimensionamento di alberi e sopporti per volani ad alta densità di energia: problemi dinamici*, VII Conv. Naz. AIAS, Cagliari, Sept. 1979.
17. Genta G., Gola M.M., *Dynamic Problems in the Mechanical Design of Flywheel - Heat Engine Hybrid Vehicles*, XVIII Int. Congr. FISITA, Amburgo, May 1980.

18. Genta G., Gola M.M., *Stato di tensione in dischi ortotropi rotanti*, VIII Conv. Naz. AIAS, Firenze, Sept. 1980.
19. Mondina A., Genta G., Sangirardi M., *Analisi delle tensioni in volani a razze a fili nudi*, VIII Conv. Naz. AIAS, Firenze, Sept. 1980.
20. Genta G., Gola M.M., Gugliotta A., *Axisymmetrical Stress States in Orthotropic Rotating Disks*, V Congr. Naz. AIMETA, Palermo, Oct. 1980.
21. Genta G., Gola M.M., Gugliotta A., *Remarks on the Stress State in Rotating Orthotropic Disks*, 1980 Flywheel Technology Symposium, ScOtsdale, Arizona, Oct. 1980.
22. Genta G., *A Systematic Approach to the Design of Advanced Flywheels*, ICED 81, Rome, March 1981.
23. Genta G., *Shape of a Wire in a Centrifugal Field - Application to Quasi Circular Bare Filament Flywheels*, Failure Prevention and Reliability 1981, Hartford, Conn., Sept. 1981.
24. Genta G., Gola M.M., Gugliotta A., *Considerazioni sullo stato di tensione in dischi ortotropi in accelerazione*, IX Conv. Naz. AIAS Grado, Sept. 1981.
25. Genta G., *Prove di centrifugazione su volani a media densità di energia*, IX Conv. Naz. AIAS, Grado, Sept. 1981.
26. Genta G., Gola M.M., Gugliotta A., *Design of Anisotropic Disc Flywheels: Interacting Role of Numerical and Analytical Methods of Solution*, Int. Conf. on Finite Element Methods, Shanghai, Aug. 1982.
27. Ferrero C., Genta G., Marinari C., *Experimental Strain Measurements on Bare Filament Flywheels*, VII Int. Conf. on Exp. Stress Analysis, Haifa, Aug. 1982.
28. Genta G., Brussino G., *Dynamic Behaviour of Multi - Disc Flywheels*, II European Symposium on Flywheel Energy Storage, Torino, May 1983.
29. Genta G., *Study of a 5 kWh Experimental Flywheel for the CNR Flywheel Energy Storage System*, II European Symposium on Flywheel Energy Storage, Torino, May 1983.
30. Genta G., Sangirardi M., *Experimental Evaluation of the Bending Stresses in the Spokes of Bare Filament Flywheels*, II European Symposium on Flywheel Energy Storage, Torino, May 1983.
31. Genta G., *On the Design of Composite Material Thick Rim Flywheels Built by Filament Winding*, XII Reinforced Plastics Conference, Karlovy Vary, May 1983.
32. Genta G., *Study of a 5 kWh Experimental Flywheel for the CNR Flywheel Energy Storage System*, I Int. Symp. on Design and Synthesis, Tokyo, July 1984.
33. 34. Belingardi G., Genta G., Regalzi G., *Una macchina di prova per molle di flessione in materiale composito*, XII Conv. Naz. AIAS, Sorrento, Sept. 1984.
34. Ferrero C., Genta G., Marinari C., Ronco C., *Rilievo dello stato di tensione nelle razze di volani ad avvolgimento subcircolare*, XII Conv. Naz. AIAS, Sorrento, Sept. 1984.
35. Genta G., Gugliotta A., Brussino G., *Un modello per lo studio dinamico di rotori*, VII Conv. Naz. AIMETA, Trieste, Oct. 1984.
36. Genta G., *Whirl Stability of Multi-Disc Flywheels*, 1984 ASME Winter Annual Meeting, New Orleans, Dec. 1984.
37. Belingardi G., Genta G., Campagna P., *Composite Material Drive Shafts For Vehicular Applications*, XIV Reinforced Plastics Conference, Karlovy Vary, May 1985.
38. Genta G., *On the Optimum Design of a Steel Flywheel for a Hybrid City Bus*, XX I.E.C.E.C., Miami Beach, Aug. 1985.
39. Belingardi G., Genta G., Campagna P., *Hybrid Composite Technology for Automotive Drive Shaft: a Computer Aided Optimization*, ISATA 85, Graz, Sept. 1985.
40. Genta G., *A Consistent Matrix Approach for F.E.M. Dynamic Modeling of Rotors*, 3rd Conf. on Mechanical Design and Production, Il Cairo, Dec. 1985.
41. Genta G., Schips C., *Studio statico e dinamico di rotori su cuscinetti a caratteristica nonlineare*, VIII Conv. Naz. AIMETA, Torino, Oct. 1986.
42. Genta G., Gugliotta A., *Un elemento tronco-conico per lo studio dinamico dei rotori*, VIII Conv. Naz. AIMETA, Torino, Oct. 1986.
43. Genta G., Repaci A., *Unbalance Response and Circular Whirling of Nonlinear Rotors*, XI ICNO, Budapest, Aug. 1987.
44. Genta G., Miller P.A., *Un codice di calcolo per lo studio dinamico di rotori non assialsimmetrici*, XV Conv. Naz. AIAS, Pisa, Sept. 1987.
45. Genta G., Rossetto M., Damilano M., *Modifiche ed aggiornamenti di una attrezzatura per prove di centrifugazione*, XV Conv. Naz. AIAS, Pisa, Sept. 1987.
46. Genta G., Repaci A., *Circular Whirling and Unbalance Response of Non-linear Rotors*, XI Biennial Conf. on Mechanical Vibration and Noise, Boston, Sept. 1987.
47. Genta G., *Dynamic Study of a Kinetic Energy Storage System for a Hybrid bus*, XXIII I.E.C.E.C., Denver, 31 July-3 Aug. 1988.
48. Widmer J., Genta G., Von Burgh P., Asper A., *PreDedction of the Dynamic Behaviour of a Flywheel Rotor System by FE Method*, XXIII I.E.C.E.C., Denver, 31 July-3 Aug. 1988.

49. Genta G., De Bona F., Tonoli A., *Calcolo della risposta allo squilibrio di rotori nonlineari. Un approccio modale*, XVI Conv. Naz. AIAS, L'Aquila, 20-24 Sept. 1988.
50. Genta G., Pasquero G., *Prove preliminari su anelli di contenimento sollecitati dall'esplosione di rotori metallici*, XVI Conv. Naz. AIAS, L'Aquila, 20-24 Sept. 1988.
51. Genta G., *Progettazione di un accumulatore di energia a volano per autobus urbano ibrido*, Convegno del progetto finalizzato trasporti, Napoli, 21-23 Sept. 1988.
52. Genta G., De Bona F., *Calcolo della risposta allo squilibrio di rotori a molti gradi di libertà mediante analisi modale*, IX Conv. Naz. AIMETA, Bari, 4-7 Oct. 1988.
53. Genta G., De Bona F., *A Modal Approach to the Dynamic Study of Rotors*, ICAM 89, Aug. 1989, Pechino.
54. Genta G., Mijno M., Ferrero C., Marinari C., *Residual stresses in Rotating Discs Stressed Beyond the Limit of Elasticity: an Experimental Study*, ICAM 89, Aug. 1989, Pechino.
55. Genta G., Ferrero C., Marinari C., Martino E., Turone G., *Rilievo delle tensioni residue in rotori in materiale composito*, XVII Conv. Naz. AIAS, Ancona, Sept. 1989.
56. Genta G., Albesiano R., *A Mathematical Model for Assessing the Driveability of Motorcycles*, XXIII FISITA Congress, Torino, May 1990.
57. Genta G., Mazzocchetti L., Rava E., *Magnetic Suspension for a Turbomolecular Pump*, II Int. Symp. on Magnetic Bearings, Tokyo, July 1990.
58. Genta G., Mijno M., Ferrero C., Marinari C., *An Experimental Study on Residual Stresses in Rotating Discs Plasticized by Overspeeding*, IX Int. Conf. on Experimental Mechanics, Copenhagen, Aug. 1990.
59. Genta G., Repaci A., Briacca I., *Iterative Techniques for Computation of the Unbalance Response of Multi-degrees of Freedom Nonlinear Rotors*, III International Conf. Rotordynamics, Lione, Sept. 1990.
60. Genta G., *Tracciamento del diagramma di Campbell di rotori con molti gradi di libertà*, X Congr. Naz. AIMETA, Pisa, Oct. 1990.
61. Genta G., Delprete C., *Accelerazione attraverso le velocità critiche di un rotore torsionalmente rigido a molti gradi di libertà*, X Congr. Naz. AIMETA, Pisa, Oct. 1990.
62. Genta G., *Inertial Accumulators in Machine Drive Systems*, Polish-Italian Seminar, Varsavia, Oct. 1990.
63. Genta G., *Recent Advances in FEM Rotor Dynamics at the Department of Mechanics of Politecnico di Torino*, Polish-Italian Seminar, Warsaw, Oct. 1990.
64. Genta G., Vatta F., *A Lubricated Bearing Element for FEM Rotor Dynamics*, IX IMAC, Firenze, April 1991.
65. Genta G., Delprete C., Tonoli A., Vadori R., *Introduction to Nonlinear Rotordynamics*, Nonlinear Problems in Engineering, Rome, May, 1991.
66. Genta G., Delprete C., Rava E., Mazzocchetti L., *Dynamic Analysis and Testing of a High Speed Unsymmetrical Rotor*, VIII World Congress IFTOMM, Prague, Aug. 1991.
67. Genta G., Vatta F., *A Lubricated Bearing Element for FEM Rotor Dynamics*, Florence Modal Analysis Conference, Firenze, Sept. 1991.
68. Genta G., Delprete C., *Alcune considerazioni sulla determinazione sperimentale dei momenti d'inerzia*, XX Conv. Naz. AIAS, Palermo, Sept. 1991.
69. Genta G., Delprete C., Tonoli A., Rava E., Mazzocchetti L., *Analytical and Experimental Investigation of a Magnetic Radial Passive Damper*, III Int. Symposium on Magnetic Bearings, Alexandria VA, July 1992.
70. Delprete C., Genta G., Mazzocchetti L., Rava E., Ricca A., Ripamonti G., Santini L., Tonoli A., Varesi E., Zannella S., *High Speed Asynchronous Motor with High Tc Superconducting Bearings*, III Int. Symposium on Magnetic Bearings, Alexandria VA, July 1992.
71. Genta G., Delprete C., Tonoli A., Rava E., Mazzocchetti L., *Study of the Geometry of a Radial Passive Magnetic Bearing for Application to a Turbomolecular Pump*, MAG 92, Alexandria VA, July 1992.
72. Genta G., Delprete C., Tonoli A., Vadori R., *Unbalance Response of Nonlinear Unsymmetric Rotating Systems*, Conference on Vibration in Rotating Machinery, Bath, Sept. 1992.
73. Genta G., Delprete C., Tonoli A., *Studio teorico-sperimentale di uno smorzatore magnetico passivo*, XXI Conv. Naz. AIAS, Genova, 23-26 Sept. 1992.
74. Genta G., Delprete C., Santini L., Tonoli A., *Studio teorico-sperimentale di una sospensione magnetica a superconduttori ad alta temperatura*, XI Congr. Naz. AIMETA, Trento, 28 Sept.- 2 Oct. 1992.
75. Genta G., Delprete C., Tonoli A., Vadori R., *Precessione noncircolare di rotori isotropi assialsimmetrici nonlineari*, XI Congr. Naz. AIMETA, Trento, 28 Sept.- 2 Oct. 1992.
76. Bertolino G., Genta G., Gugliotta A., *IRIS Spin Table Static and Dynamic Analysis and Experimental Tests of Selected Structural Components*, II Polish Italian Seminar, Torino, April 1993, pp. 189-196.
77. Genta G., Delprete C., Tonoli A., *Development of Magnetic Bearings at the Department of Mechanics of Politecnico di Torino*, II Polish Italian Seminar, Torino, April 1993, pp. 9-16.
78. Genta G., Delprete C., Tonoli A., Vadori R., *Unbalance Response of Nonlinear Rotating Systems*, II Polish Italian Seminar, Torino, April 1993, pp. 197-204.
79. Genta G., Bassani D., *A One Active-Axis Magnetic Suspension Controlled by a Neural Net*, II Polish Italian Seminar, Torino, April 1993, pp. 17-24.
80. Genta G., *Disaccoppiamento tra comportamento direzionale e comfort di marcia nei veicoli*, Scritti e testimonianze in ricordo A. Lausetti, DIASP, Politecnico di Torino, May 1993, pp. 69-84.

81. Carabelli S., Delprete C., Genta G., *Design, Construction and Testing of a Five Active-Axis Magnetic Bearing System*, II Int. Symp. on Magnetic Suspension Technology, Seattle, Aug. 1993.
82. Genta G., Carabelli S., Delprete C., *Active Magnetic Bearing Control Loop Modelling for a Finite Element Rotordynamics Code*, II Int. Symp. on Magnetic Suspension Technology, Seattle, Aug. 1993.
83. Bona B., Brusa E., Canestrelli P., Genta G., Tonoli A., *A Controlled Beam Element for FEM Simulation of Beams with Piezoelectric Devices*, III Int. Symp. on Measurement and Control in Robotics, Torino, Sept. 1993.
84. Bassani D., Chiaberge M., Del Corso D., Genta G., Zanetti F., *Simulation of a Hexapod Walking Machine Controlled by Neural Networks*, III Int. Symp. on Measurement and Control in Robotics, Torino, Sept. 1993.
85. Delprete C., Genta G., *Attuatore radiale per sospensione magnetica attiva: progetto e caratterizzazione sperimentale*, XXII Conv. Naz. AIAS, Forli, Oct. 1993.
86. Bassani D., Delprete C., Genta G., Tonoli A., *Progettazione, realizzazione e prove di un quadrupolo gravitazionale rotante*, XXII Conv. Naz. AIAS, Forli, Oct. 1993.
87. Mosolov A., Genta G., Albanese R., *Experimental and Theoretical Investigations of Levitation Force and Magnetic Stiffness in High-Tc Superconductors for Magnetic Bearing Application*, 6th Int. Symp. on Superconductivity, Hiroshima, Oct. 1993.
88. Bona B., Carabelli S., Delprete C., Genta G., *Progetto e realizzazione di un rotore a sospensione elettromagnetica a 5 assi attivi*, Automazione 1993, Milano, Nov. 1993.
89. Mosolov A., Genta G., Albanese R., *High-Tc Superconductors and the Perspectives of the Construction of Levitation Devices*, ICMAS 93, Parigi, Dec. 1993.
90. Bona B., Brusa E., Canestrelli P., Genta G., Tonoli A., *Finite Element Modelling and Experimental Validation of an Elastic Beam with Surface Bonded Piezoelectric Devices*, 1994 IEEE Int. Conf. on Robotic and Automation, San Diego, May 1994.
91. Mosolov A., Genta G., Albanese R., *Melt textured high-Tc superconductors, flux pinning and levitation force: theory and applications*, Eighth Cimtec, Firenze, June-July 1994.
92. Bassani D., Genta G., *Use of genetic algorithms in the design of rotors*, WCCM3, Chiba, Japan, Aug. 1994.
93. Genta G., Tonoli A., *A disc finite element for the study of the flexural behaviour of rotors*, WCCM3, Chiba, Japan, Aug. 1994.
94. Bassani D., Genta G., *A FEM code for rotordynamics based on complex coordinates*, WCCM3, Chiba, Japan, Aug. 1994.
95. Albanese R., Delprete C., Frangi F., Genta G., Mazzocchetti L., Rava E., Tonoli A., Zannella S., *Design, Construction and Testing of a Kinetic Energy Storage Device with High-Tc Superconductive Suspension*, 4-th Int. Symp. on Magnetic Bearings, Zurich, Aug. 1994.
96. Albanese R., Delprete C., Genta G., Mosolov A., *Experimental Characterization and Mathematical Modelling of High-Tc Superconductors for Magnetic Bearings*, 4-th Int. Symp. on Magnetic Bearings, Zurich, Aug. 1994.
97. Carabelli S., Delprete C., Genta G., *Control Strategies for Decentralized Control of Active Magnetic Bearings*, 4-th Int. Symp. on Magnetic Bearings, Zurich, Aug. 1994.
98. Carabelli S., Cerruti F., Delprete C., Genta G., *High Efficiency and Low Cost Power Amplifiers and Transducers for Active Magnetic Bearings*, 4-th Int. Symp. on Magnetic Bearings, Zurich, Aug. 1994.
99. Carabelli S., Delprete C., Genta G., Mazzocchetti L., Rava E., *Design, Construction and Testing of a Turbomolecular Pump with Five Axes Magnetic Suspension*, 4-th Int. Symp. on Magnetic Bearings, Zurich, Aug. 1994.
100. Delprete C., Genta G., Tonoli A., Carabelli S., *Effetto del carico radiale sul comportamento dinamico dei cuscinetti magnetici attivi*, XXIII Conv. Naz. AIAS, Rende, Sept. 1994.
101. Bassani D., Delprete C., Genta G., *Ottimizzazione del profilo di dischi rotanti mediante algoritmi genetici*, XXIII Conv. Naz. AIAS, Rende, Sept. 1994.
102. Bassani D., Brusa E., Delprete C., Genta G., Tonoli A., *Calcolo delle sollecitazioni dinamiche negli alberi a gomiti: influenza delle ipotesi semplificative sui risultati*, XXIII Conv. Naz. AIAS, Rende, Sept. 1994.
103. Albanese R., Delprete C., Genta G., Mosolov A., *Modellizzazione matematica e caratterizzazione sperimentale di un cuscinetto magnetico a superconduttori ad alta temperatura*, XXIII Conv. Naz. AIAS, Rende, Sept. 1994.
104. Genta G., Bassani D., Delprete C., *DYNROT: A Matlab toolbox for rotordynamics analysis*, Workshop Matlab, Bologna, 14 Oct. 1994.
105. Abbattista F., Albanese R., Delprete C., Genta G., Gerbaldo R., Ghigo G., Gozzelino L., Mezzetti E., Mosolov A., Ronchetti S., Vallino M., *Advances in Melt Processed HTSC Applications at Politecnico di Torino*, SATT7, Torino, Oct. 1994.
106. Genta G., Brusa E., *Selfcentring of Supercritical Rotors in Space*, Galileo Galilei GG-FEEP2 Second International Meeting, Pisa, May 1995.
107. Genta G., Brusa E., *Numerical Stability Analysis of the GG and GG-FEEP2 Rotating Systems*, Galileo Galilei GG-FEEP2 Second International Meeting, Pisa, May 1995.

108. Carabelli S., Delprete C., Genta G., Moretto I., *A spindle running on a five axes magnetic suspension based on conical bearings*, MAG 95, Alexandria, USA, Aug. 1995.
109. Carabelli S., Delprete C., Genta G., Maddaleno F., Mittino M., Ugazio M., *High efficiency linear power amplifier for active magnetic bearings*, MAG 95, Alexandria, USA, Aug. 1995.
110. Albanese R., Delprete C., Genta G., Mosolov A., Negro R., *Progettazione e realizzazione di una piattaforma per l'isolamento dalle vibrazioni su cuscinetti magnetici a superconduttori ad alta Tc*, XXIV Conv. Naz. AIAS, Parma, Italy, Sept. 1995.
111. Brusa E., Delprete C., Franchin D., Genta G., *Analisi dinamica torsionale dell'albero a gomiti di un motore aeronautico*, XXIV Conv. Naz. AIAS, Parma, Italy, Sept. 1995.
112. Bassani D., Genta G., Malucchi G., *Progettazione meccanica di un veicolo elettrico esapode*, XXIV Conv. Naz. AIAS, Parma, Italy, Sept. 1995.
113. Delprete C., Genta G., Moretto I., Carabelli S., *Progettazione e realizzazione di un rotore su cuscinetti magnetici attivi a geometria conica*, XXIV Conv. Naz. AIAS, Parma, Italy, Sept. 1995.
114. Albanese R., Delprete C., Genta G., Mosolov A., *Passive vibration insulation for microgravity environment using high Tc superconductors*, 46th International Astronautical Congress, Oslo, Oct. 1995.
115. Carabelli S., Bona B., Delprete C., Genta G., Tonoli A., *Il Laboratorio Interdipartimentale di Meccatronica del Politecnico di Torino*, Automazione 95, Bari, Nov. 1995.
116. Genta G., Brusa E., *Project Aurora: Preliminary Structural Definition of the Spacecraft*, I IAA Symposium on Realistic Near Term Advanced Scientific Space Missions, Torino, June 1996.
117. Belbruno E., Genta G., *Low Energy Comet Rendezvous Using Resonance Transitions*, I IAA Symposium on Realistic Near Term Advanced Scientific Space Missions, Torino, June 1996.
118. Carabelli S., Cerruti F., Delprete C., Di Maio F., Genta G., Zanolli S., *A two Active-axes Suspension for Maglev Vehicles*, Fifth Int. Symp. on Magnetic Bearings, Kanazawa, Aug. 1996.
119. Genta G., Brusa E., *Structural Design and Static Stress Analysis of a Fast Solar Sail Spacecraft*, Int. Conf. on Material Engineering - XXV Conv. Naz. AIAS, Gallipoli, Sept. 1996.
120. Genta G., Brusa E., Molina E., *A Simple Demonstrator for Rotordynamics*, Int. Conf. on Material Engineering - XXV Conv. Naz. AIAS, Gallipoli, Sept. 1996.
121. Carabelli S., Cerruti F., Delprete C., Di Maio F., Genta G., Zanolli S., *A two Active-axes Suspension for Maglev Vehicles*, Int. Conf. on Material Engineering - XXV Conv. Naz. AIAS, Gallipoli, Sept. 1996.
122. Bussolino L., Del Corso D., Genta G., Somma R., Perino M.A., *ALGEN - A Walking Robotic Rover for Planetary Exploration*, 1977 Int. Conf. on Mobile Planetary Robots & Rover Roundup, Santa Monica, Jan. 1997.
123. Carabelli S., Delprete C., Genta G., Zanolli S., *Control of a Two Active Axes Suspension for Maglev Vehicles*, American Control Conference 97, Albuquerque, June 1997.
124. Genta G., Zanolli S., *Sollecitazioni dinamiche negli alberi a gomiti: integrazione numerica delle equazioni del moto nel dominio del tempo*, XXVI Conv. Naz. AIAS, Catania, Sept. 1997.
125. Brusa E., Delprete C., Genta G., *Analisi strutturale di seconda approssimazione della vela solare AURORA*, XXVI Conv. Naz. AIAS, Catania, Sept. 1997.
126. Genta G., Tonoli A., *Studio del comportamento dinamico di dischi palettati mediante il metodo degli elementi finiti*, XIII Congr. Naz. AIMETA, Siena, Sept.-Oct. 1997.
127. Brusa E., Genta G., *Active Stabilization of a Fast Spinning Multibody Spacecraft*, 48th Int. Astronautical Congress, Torino, Oct. 1997.
128. Brusa E., Delprete C., Genta G., *Second approximation Structural Assessment of the AURORA Solar Sail Spacecraft*, 48th Int. Astronautical Congress, Torino, Oct. 1997.
129. Carabelli S., Delprete C., Genta G., Zanolli S., *Realizzazione di un dimostratore per un sistema di trasporto a levitazione magnetica*, III Conv. Naz. PFT-2, Taormina, Oct. 1997.
130. Carabelli S., Delprete C., F. Di Majo, Genta G., Zanolli S., *Passive repulsive maglev concept and experimental demonstration*, WCRR, Firenze, Oct. 1997.
131. Blauler H., Carabelli S., Genta G., Mueller R., Tonoli A., *FEM based controller design for active magnetic bearings in hard disc drives*, ISROME7, Honolulu, Febr. 1998.
132. Genta G., Zanolli S., *Time domain study of the dynamic stressing of crankshafts*, ISROME7, Honolulu, Febr. 1998.
133. Genta G., Delprete C., Repaci A., *Numerical simulation of the dynamic behaviour of rotors on class-B active magnetic bearings*, ISROME7, Honolulu, Febr. 1998.
134. Chiaberge M., Genta G., Miranda E., Reyneri L.M., *Twin Rigid-Frames Walking Rovers: a Perspective for Miniaturization*, From Microsystems to Nanotechnology for Space Missions, Londra, March 1998.
135. Genta G., Brusa E., *The Parachute Sail with Hydrostatic Beam: a New Concept for Solar Sailing*, II IAA Symposium on Near Term Advanced Space Missions, Aosta, June-July 1998.
136. Genta G., Brusa E., *The Aurora Project: a New Sail Layout*, II IAA Symposium on Near Term Advanced Space Missions, Aosta, June-July 1998.
137. Vuillemin R., Aescliman B., Kummerle M., Zoethout J., Belfroid T., Blauler H., Cassat A., Passeraub P., Hediger S., Besse P.A., Argondizza A., Tonoli A., Carabelli S., Genta G., Heine G., *Low Cost Active*

- Magnetic Bearings for Hard Disc Drive Spindle Motors*, Sixth Int. Symp. on Magnetic Bearings, Cambridge, USA, Aug. 1998.
138. Carabelli S., Genta G., *Nonlinear Rotordynamic Behavior of Rotors on Active Magnetic Bearings*, Sixth Int. Symp. on Magnetic Bearings, Cambridge, USA, Aug. 1998.
 139. Genta G., Delprete C., Zanolli S., Burzio M., *Control of the Suspension Motions of a Maglev Vehicle*, Fourth Int. Conf. on Motion and Vibration Control (MoViC), Zurigo, Aug. 1998.
 140. Genta G., Amati N., *Performance Evaluation of Twin Rigid-Frames Hexapod Planetary Rovers*, Fourth Int. Conf. on Motion and Vibration Control (MoViC), Zurigo, Aug. 1998
 141. Genta G., Delprete C., Zanolli S., Burzio M., *Studio dei moti di sospensione di un veicolo a levitazione magnetica*, XXVII Conv. Naz. AIAS, Perugia, Sept. 1998.
 142. Genta G., Amati N., *Prestazioni su terreno accidentato di veicoli esapodi a telai rigidi*, XXVII Conv. Naz. AIAS, Perugia, Sept. 1998.
 143. Perino M.A., Bussolino L., Somma R., Genta G., Amati N., Chiaberge M., Miranda E., Reyneri L.M., *WALKIE 6: An Autonomous Micro-Hexapod Walking Machine for Planetary Exploration*, 49th Int. Astronautical Congress, Melbourne, Oct. 1998.
 144. Perino M.A., Bussolino L., Somma R., Genta G., Amati N., Chiaberge M., Miranda E., Reyneri L.M., *WALKIE 6: An Autonomous Micro-Hexapod Walking Machine for Planetary Exploration*, Workshop on Space Exploration and Resources exploitation, Cagliari, Oct. 1998.
 145. Genta G., Amati N., Chiaberge M., Miranda E., Reyneri L.M., Somma R., Perino M.A., *An Autonomous Micro-Hexapod Walking Machine for Planetary Exploration*, Clawar '98, Brussels, Nov. 1998.
 146. Genta G., Delprete C., Brusa E., *Dynamic Behaviour of Free Rotors: a Rotordynamic Approach*, EPMESC VII, Macao, Aug. 1999.
 147. Brusa E., Delprete C., Genta G., *Analisi dello squilibrio e procedure di equilibratura in rotori a sospensione magnetica*, XXVIII Conv. Naz. AIAS, Vicenza, Sept. 1999.
 148. Genta G., Amati N., Delprete C., *Effetto della geometria degli attuatori elettromagnetici sul comportamento dinamico dei rotori*, XXVIII Conv. Naz. AIAS, Vicenza, Sept. 1999
 149. Amati N, Genta G., Reyneri L.M., *Three Rigid Frames Walking Planetary Rovers: a New Concept*, 50th Int. Astronautical Congress, Amsterdam, Oct. 1999.
 150. Genta G., Delprete C., Zanolli S., Fusta D., Carabelli S., Profumo F., Tenconi A., Gianolio G., Muzzarelli M., Argondizza A., Delmastro A., *Dimostratore di un veicolo Maglev automotore a due carrelli*, IV Conv. Naz. PFT-2, Rome, Nov. 1999.
 151. Genta G., Delprete C., Brusa E., *Dynamic behaviour of rotors: a nonlinear model for large displacements and rotations*, Atti dell' Accademia delle Scienze di Torino, 1999.
 152. Argondizza A., Carabelli S., Genta G., Tonoli A., *Magnetically-Levitated Reaction Wheel for Space Application*, 5th Int. Symp. On Magnetic Suspension Technology, Santa Barbara, Dec. 1999.
 153. Brusa E., Delprete C., Genta G., *On-line Unbalance Analysis for Monitoring and Active Balancing of Rotors*, Int. Conf. On App. of Modal Analysis, Gold Coast, Australia, Dec. 1999.
 154. Genta G., Carabelli S., *Noncolocation Effects on Rigid-Body Rotordynamics of Rotors on Active Magnetic Bearings*, Int. Conf. On App. of Modal Analysis, Gold Coast, Australia, Dec. 1999.
 155. Genta G., *Interstellar Space Exploration: What is Going on?*, III IAA Symposium on Near Term Advanced Space Missions, Aosta, July 2000.
 156. Genta G., Vulpetti G., *Some Considerations on Missions to the Solar Gravitational Lens*, III IAA Symposium on Near Term Advanced Space Missions, Aosta, July 2000.
 157. Genta G., Brusa E., *Basic Considerations on the Free Vibrational Dynamics of Circular Solar Sails*, III IAA Symposium on Near Term Advanced Space Missions, Aosta, July 2000.
 158. Genta G., *Propulsion for Interstellar Space Exploration*, COSPAR Colloquium on the Outer Heliosphere: The Next Frontiers, Potsdam, Germany, July 2000.
 159. Genta G., Brusa E., *Rotordynamic Analysis in the Design of Rotating Machinery*, Int. Workshop on multidisciplinary design optimization, Pretoria, August 2000.
 160. Genta G, Carabelli S., *Noncolocation Effects on the Rigid Body Rotordynamics of Rotors on Active Magnetic Bearings*, Seventh Int. Symp. on Magnetic Bearings, Zurich, Aug. 2000.
 161. Genta G, *The Saha Crater Radioastronomic And Seti Observatory*, 6th Trieste Conference on Chemical Evolution, Trieste, Sept. 2000.
 162. Carabelli S., Genta G, Silvagni M., Tonoli A., *Active Magnetic Suspension for Satellite Inertia Wheels*, 2nd EUSPEN, Torino, May 2001. 162
 163. Brusa E., Carabelli S., Genta G, Maddaleno F., Silvagni M., Tonoli A., *Voice Coil Actuator for Active Vibration Insulation in Microgravity*, 2nd EUSPEN, Torino, May 2001.
 164. Brusa E., Carabelli S., Genta G, Maddaleno F., Silvagni M., Tonoli A., *Voice Coil Actuator for Active Vibration Isolation in Microgravity*, 6th ISMST, Torino, October 2001.
 165. Genta G., Amati N, *Planar Motion Hexapod Walking Machines: a New Configuration*, CLAWAR 2001, Professional Engineering Publishing, London, October 2001.

166. Genta G., Chiaberge M., Amati N, *Non Zoomorphic Rigid Frame Walking Micro-Rover for Uneven Ground: from a Demonstrator to an Engineering Prototype*, International Conference on Smart Technology Demonstrators & Devices, Edimburgh, Dec. 2001.
167. Genta G., Somma R., *Non-Zoomorphic Walking Machines for Planetary Exploration and Exploitation*, International Workshop [Futuristic Space Technologies](#) , May 2002, Padriciano, Trieste
168. Genta G., Amati N, *Walking Machines and Robots: is Present Technology Able to Imitate Nature?*, Atti dell' Accademia delle Scienze di Torino, 2002.
169. Genta G., Amati N, *Mobility on Planetary Surfaces: May Walking Machines be a Viable Alternative?*, Exploring Mars and its Earth Analogues, Catania, September 2002.
170. Genta G., Amati N, *Performance of twin rigid frames walking rover on uneven ground: simulation and experimental tests*, CLAWAR 2002, Paris.
171. Carabelli S., Genta G, Silvagni M., Tonoli A., *Inertia Wheel on Low-Noise Active Magnetic Suspension*, 53th Int. Astronautical Congress, Houston, Oct. 2002
172. Brusa E., Carabelli S., Genta G, Maddaleno F., Silvagni M., Tonoli A., *Voice Coil Actuator for Active Vibration Isolation in Microgravity*, 53th Int. Astronautical Congress, Houston, Oct. 2002.
173. Genta G., *On the Controversial Issue of Humanoids: a Mechanical Engineer's Viewpoint*, Atti dell' Accademia delle Scienze di Torino, 2003.
174. Genta G., *Dynamic Behaviour of an Array of Rotating Pendulums*, Atti dell' Accademia delle Scienze di Torino, 2003.
175. Genta G., Chiaberge M., Amati N, *An Autonomous Walking Robot for Operation on Irregular Surfaces*, Robotics and Mems for Vehicle systems, Rome, June 2003,
176. Genta G., *Numerical Modelling and Simulation in Rotordynamics*, ISCORMA-2, Gdańsk, Poland, 4-8 August 2003.
177. Genta G., *On the Role of Damping on the Dynamics of Rotating Blades*, ISCORMA-2, Gdańsk, Poland, 4-8 August 2003
178. Silvagni M., Genta G., Tonoli A., Genta G., *Non-Axisymmetrical 3D Element for FEM Rotordynamics*, ISCORMA-2, Gdańsk, Poland, 4-8 August 2003.
179. Maddaleno F., Chiaberge M., Damilano C., Genta G., *A FPGA Based High Efficiency Transconductance Amplifier for AMB*, ISCORMA-2, Gdańsk, Poland, 4-8 August 2003.
180. Genta G., *Some Engineering Considerations on the Controversial Issue of Humanoids*, 7th Trieste Conference on Chemical Evolution and the Origin of Life: Life in the Universe, Trieste, Sept. 2003.
181. Picco G., Genta G., Galeotti P., Noventa D., *Proposing a United Nations Secretary General SETI International Advisory Board*, 7th Trieste Conference on Chemical Evolution and the Origin of Life: Life in the Universe, Trieste, Sept. 2003.
182. Genta G., Chiaberge M., Amati N., Sansoè C., Rolando P., Padovani M., *Navigation Tools for Autonomous Walking Rovers Operating in Hazardous Environments*, CLAWAR 2003, Catania, Sept. 2003.
183. G. Genta, M. Rycroft, *Will Space Actually Be the Final Frontier of Humankind?*, 54th Int. Astronautical Congress, Bremen, Oct. 2003.
184. Amati N., Bona B, Canova A., Carabelli S., Chiaberge M., Genta G., *Light Hybrid Robotic Platform for Humanitarian Demining*, HUDEM 04, Bruxelles, June, 2004
185. Genta G., Amati N, *Geometrical Coupling Between Axial and Radial Dynamics of AMB*, 9th Int. Symp. On Magnetic Bearings, Lexington, Aug. 2004,
186. Bona B, Carabelli S., Chiaberge M., Wolley O., Genta G., Amati N., Canova A., *Hybrid wheel-legs locomotion: simplified mechanical and control architectures for realistic, near term, moving robots*, MECHROB 04, Aachen, Sept. 2004.
187. Bona B, Carabelli S., Chiaberge M., Wolley O., Genta G., Amati N., Canova A., *Hybrid wheel-legs moving robot: proposal of a new configuration*, MECHROB 04, Aachen, Sept. 2004.
188. Amati N., Bona B., Carabelli S., Chiaberge M., Genta G., Padovani M., Volpe R., *WALKIE 6.4: A New Improved Version Of A Rigid Frames Hexapod Rover*, CLAWAR 04, Madrid, Sept. 2004.
189. Genta G., Perino M.A., *Teleoperation Support for Early Human Planetary Missions*, accepted at New Trends in Astrodynamics and Applications II, Princeton, June 2005
190. Genta G., *The challenge of very deep space exploration: how far will be the frontier?*, IV IAA Symposium on Near Term Advanced Space Missions, Aosta, July 2005.
191. Genta G., Amati N., Repaci A., *Chaotic Behavior of Rotors on Lubricated Bearings*, ISCORMA-3, Cleveland, September 2005.
192. Genta G., *The Beauty of Rotordynamics*, ISCORMA-3, Cleveland, September 2005.
193. Genta G., Silvagni M., *Some Considerations on Cyclic Symmetry in Rotordynamics*, ISCORMA-3, Cleveland, September 2005.
194. G. Genta, A. Tonoli, N. Amati, M. Silvagni, *Vibration Control of Rotors; Tradeoff between Active, Semiactive and Passive Solutions*, FMD 2006, Lappeenranta, June 2006.

195. G. Genta, *Design of Planetary Exploration Vehicles*, ESDA2006, 8th Biennial ASME Conference on Engineering Systems Design and Analysis, July, 2006, Torino.
196. G. Genta, N. Amati, *Oil Whip and Unstable Whirling in Anisotropic Rotors on Lubricated Bearings*, ESDA2006, 8th Biennial ASME Conference on Engineering Systems Design and Analysis, July, 2006, Torino.
197. Amati N.; Carabelli S; Genta G; Macchi P; Silvagni M; Tonoli A., *More electric aero engines: trade-off between different electromagnetic dampers and supports*. ISMB 9, Martigny, Switzerland. August 18-20, 2006. pp. 1-10.
198. S. Carabelli, A. Tonoli, M. Silvagni, P. Macchi, M. Visconti, G. Genta, N. Amati, *Active Magnetic Dampers (AMD) for the Dynamic Control of Rotors*, 7th IFToMM Conference on Rotor Dynamics, Wien, September 2006.
199. Amati N.; Carabelli S; Genta G; Macchi P; Silvagni M; Tonoli A; M. Visconti, *Semi-active electromagnetic dampers for the dynamic control of rotors*. 7th IFToMM Conference on Rotor Dynamics, Wien, September 2006, pp. 1-10. ISBN: 3-200-00689-7.
200. G. Genta, *Vehicles for Robotic and Manned Planetary Exploration*, 57th International Astronautical Congress, Valencia, September 2006.
201. Amati N, Genta G; *Wheeled Rovers: Basic Mobility Considerations*, 2nd International Workshop on Exploring Mars and its Earth Analogues, Trento, June 2007.
202. G. Genta, *Robotic rovers for long range exploration*, V IAA Symposium on Near Term Advanced Space Missions, Aosta, July 2007.
203. Genta G., Amati N., Bonfitto A., Carabelli S., Impinna F., *A Wheeled Robot for Lunar Environment: Design, Modelling and Construction*, 57th International Astronautical Congress, Hyderabad, September 2007.
204. Venditti F., Vallerani E., Genta G., *Innovative Surface Elements for Space Exploration: a Lunar Tractor and its Family of Trailers*, 57th International Astronautical Congress, Hyderabad, September 2007.
205. G. Genta, N. Amati, *On the equivalent viscous damping for systems with hysteresis*, Atti dell' Accademia delle Scienze di Torino, 2008, Serie V, Vol. 32, p. 22 - 45.
206. G. Genta, N. Amati, B. Bona, F. Impinna, M. Kaouk, C. Pristerà, G. Romeo, *Mobile teleoperated manipulator for difficult and hazardous environments*, Atti dell' Accademia delle Scienze di Torino, Serie V, Vol. 32, p. 117 – 160, 2008.
207. G. Genta, A. Festini, X. Delepine, *From Oil to Magnetic Fields: Active and Passive Vibration Control*, 4th Conference Mechatronic Systems and Materials 2008, Bialystok, July 2008.
208. G. Genta, *Time-Domain Simulation of Rotors with Hysteretic Damping*, 9th International Conference On Vibrations In Rotating Machinery, Exeter, September 2008.
209. G. Genta, *Present and Future Trends in Rotordynamic Analysis*, 9th International Conference On Vibrations In Rotating Machinery, Exeter, September 2008.
210. I. Vukman, E. Vallerani, G. Genta, A. Della Torre, E. Monchieri, F. Mailland, *Lunar Surface Mobility System Resulting From the ESA Study on Surface Architectures for European Space Exploration*, 58th International Astronautical Congress, Glasgow, September 2008.
211. G. Genta, A. Genta, *An elastic wheel for low-gravity applications*, Atti dell' Accademia delle Scienze di Torino, Serie V, Vol. 33, p. 27-69, 2008.
212. G. Genta, *Dynamic modelling of rotors: a modal approach*, IUTAM Symposium on emerging trends in rotordynamics, New Delhi, March 2009, Springer, ISSN 1875-3507, ISBN 978 94 007 0019 2.
213. G. Genta, X. De Lépine, F. Impinna, J. Girardello, N. Amati, A. Tonoli, *Sensitivity analysis of the design parameters of electrodynamic bearings*, IUTAM Symposium on emerging trends in rotordynamics, New Delhi, March 2009, Springer, ISSN 1875-3507, ISBN 978 94 007 0019 2.
214. G. Genta, B. Bona, N. Amati, F. Impinna *A Demonstrator of a Wheeled Rover for Lunar Exploration and Exploitation*, Workshop Robotica per esplorazione lunare unmanned, Luglio 2009, Roma.
215. G. Genta, *The nuclear renaissance: from the power industry to space exploration?*, VI IAA Symposium on Near Term Advanced Space Missions, Aosta, July 2009.
216. G. Genta, A. Genta, *A small robotic rover for titan exploration: part 1: general layout*, VI IAA Symposium on Near Term Advanced Space Missions, Aosta, July 2009.
217. G. Genta, *A small robotic rover for titan exploration: part 2: Strategies for trajectory control*, VI IAA Symposium on Near Term Advanced Space Missions, Aosta, July 2009.
218. A. Della Torre, A. Ercoli Finzi, G. Genta, F. Curti, L. Schirone, G. Capuano, A. Sacchetti, I. Vukman, F. Mailland, E. Monchieri, A. Guidi, R. Trucco, I. Musso, C. Lombardi, *The Conceptual Design Of The Team Italia Amalia Mission Rover*, Candidate For Google Lunar X Prize Challenge, 60th International Astronautical Congress, Daejeon, Sept. 2009.
219. G. Genta, A. Genta, *Modeling and Nonlinear Analysis of an Elastic Wheel for Low-Gravity Applications*, XXXVIII Conv. Naz. AIAS, Torino, Sept. 2009.
220. A. Tonoli, A. Bonfitto, G. Genta, M. Silvagni, H. Bleuler, *Selfsensing Active Magnetic Dampers for vibration control*, Twelfth International Symposium on Magnetic Bearings (ISMB12), Wuhan, Aug. 2010

221. A. Tonoli, N. Amati, G. Genta, F. Impinna, and J. G. Detoni, *A new stabilization technique for electrodynamic bearings*” Twelfth International Symposium on Magnetic Bearings (ISMB12), Wuhan, Aug. 2010, pp. 551–560
222. G. Genta, *Dynamic Modelling of a Wheeled Lunar Microrover*, 61st International Astronautical Congress, Prague, Oct. 2010
223. G. Genta, *Study of the Lateral Dynamics of a Large Pressurized Lunar Rover: Comparison Between Conventional and Slip-Steering*, 61st International Astronautical Congress, Prague, Oct. 2010
224. G. Genta, *Conventional and slip steering for multi-wheel planetary rovers*, Atti dell’ Accademia delle Scienze di Torino, Vol. 34, 2010.
225. G. Genta, C. Feng, A. Tonoli, *Second and Higher Order Harmonic Finite Elements for the Study of the Dynamics of Bladed Discs*, Atti dell’ Accademia delle Scienze di Torino, Vol. 34, 2010.
226. G. Genta, N. Amati, L. Altieri, *Inertial effect of rotative electromagnetic shock absorbers*, Atti dell’ Accademia delle Scienze di Torino, Vol. 34, 2010..
227. G. Genta, *Is the Development of New Technologies a Pre-requisite for Effective Space Exploration?*, 3rd Int. Conf. on Advanced Space Technologies, Dnepropetrovsk, Ukraine, April 2011.
228. G. Genta, *The Development of New Technologies as a Pre-requisite for Deep Space Exploration*, VII IAA Symposium on Near Term Advanced Space Missions, Aosta, July 2011
229. G. Genta, *Simplified Model of a Small Planetary Rover With Active Suspensions*, VII IAA Symposium on Near Term Advanced Space Missions, Aosta, July 2011.
230. M Augelli, G F Bignami, G Genta, *Project 242: Fission Fragments Direct Heating for Space Propulsion – Programme Synthesis and Applications to Space Exploration*, VII IAA Symposium on Near Term Advanced Space Missions, Aosta, July 2011.
231. Feng Chen, G. Genta, Guang Zhao, *Dynamic Modelling Of Wheeled Planetary Rovers*, 2011 Int. Conf. on Electronic & Mechanical Engineering and Information Technology, Harbin, Heilongjiang, China, Aug. 2011, IEEE CFP1124N-PRT ISBN: 978-1-61284-085-7.
232. G. Genta, *Dynamic Modelling of Planetary Rovers*, 63st International Astronautical Congress, Naples, Oct. 2012.
233. G. Genta, M. Silvagni, *Three-Dimensional FEM Rotordynamics and the So-Called Centrifugal Softening of Rotors*, Atti dell’ Accademia delle Scienze di Torino, Vol. 36, 2012.
234. G. Genta, *Biomorphism and Biomimetism in Machine Design: Why it May Not Work*, Atti dell’ Accademia delle Scienze di Torino, 2012.
235. G. Genta, *Space Exploration: a Matter for Governments or for Private Subjects?*, Conference Space Technologies: Present and Future, Dnepropetrovsk, April 2013.
236. G. Genta, *Designing, building and operating a robotic rover as a Student Project*, Conference Space Technologies: Present and Future, Dnepropetrovsk, April 2013.
237. G. Genta, A. Dupas, J. M. Salotti, *IAA Study Group On Global Human Mars System Missions Exploration: Status Report*, 8th IAA Symposium on The Future of Space Exploration: Towards The Stars, Torino, July, 2013.
238. G. Genta, *Private Space Exploration: A New Way for Starting a Spacefaring Society?*, 8th IAA Symposium on The Future of Space Exploration: Towards The Stars, Torino, July, 2013.
239. G. Genta, M. Silvagni, C. Qingwen, *Dynamic Analysis Of Rotors: Comparison Between the Simplified One-Dimensional Results and Those Obtained Through 3-D Modeling*, XXI Congresso nazionale AIMETA, Torino, Sept. 2013
240. G. Genta, F. Impinna, *Wheel-Ground Interaction In Planetary Rovers – Test Rig And Preliminary Tests*, XXI Congresso nazionale AIMETA, Torino, Sept. 2013,.
241. G. Genta, A. Dupas, J. M. Salotti, *IAA Study Group on Global Human Mars System Missions Exploration*, 64th International Astronautical Congress, Beijing, Sept. 2013.
242. G. Genta, F. Impinna, *Wheel-Ground Interaction In Planetary Rovers – Test Rig And Preliminary Tests*, 64th International Astronautical Congress, Beijing, Sept. 2013.
243. G. Genta, A. Dupas, J. M. Salotti, *White Cosmic Study on Global Human Mars System Missions Exploration*, IAA Space Exploration Conference, Washington, January 2014.
244. G. Genta, *Technologies for Human Space Exploration: Mission Dependence and Synergies*, IAA Space Exploration Conference, Washington, January 2014
245. M. Grimard, G. Vulpetti, G. Genta, *IAA Symposium Report - The Future of Space Exploration: Towards The Stars*, IAA Space Exploration Conference, Washington, January 2014
246. G. Genta, *Directional control of wheeled multibody rovers*, Atti dell’ Accademia delle Scienze di Torino, *Memorie Sc. Fis*, Vol. 37, 2013, 19-55
247. G. Genta, *Space missions to the exoplanets: Will they ever be possible*, 40th COSPAR Scientific Assembly, Moscow, August 2014.
248. G. Genta, *Kinetic Energy Storage: an Ideal Application for Magnetic Bearings*, ISMB 2014, Linz, August 2014.

249. J.G. Detoni, F. Impinna, N. Amati, A. Tonoli, M.P. Piccolo, G. Genta, *Stability of a 4 degree of freedom rotor on electrodynamic passive magnetic bearings*, ISMB 2014, Linz, August 2014.
250. G. Genta, *On the stabilizing effect of support asymmetry in rotordynamics*, 9th IFToMM International Conference on Rotor Dynamics, Milan, September, 2014.
251. G. Genta, A. Dupas, J. M. Salotti, *IAA Study Group on Global Human Mars System Missions Exploration*, 65th IAC, Toronto, September 2014.
252. G. Genta, *The Exoplanets as Targets for Future Interstellar Missions*, 65th IAC, Toronto, September 2014.
253. G. Genta, M. Marengo, *Design and Testing of Active Suspensions for Wheeled Planetary Rovers*, 65th IAC, Toronto, September 2014.
254. G. Genta, F. Impinna, C. Pizzamiglio, M. B. Limite, *Tests on Elastic Wheels for a Small Lunar Rover*, 65th IAC, Toronto, September 2014.
255. G. Genta, P. F. Maffione, *Sub-optimal Low-thrust Trajectories for Human Mars Exploration*, *Atti dell'Accademia delle Scienze di Torino, Memorie Sc. Fis.*, 38-39 (2014-2015), pp 87-126.
256. G. Genta, *On the effect of support asymmetry on rotordynamic instability*, *Atti dell'Accademia delle Scienze di Torino, Memorie Sc. Fis.*, 38-39 (2014-2015), pp 23-44.
257. G. Genta, *Human Mars missions: Why? How? When?*, 1^{3th} Int. Conf. on Fluid Mechanics & Aerodynamics, Salerno, June, 2015.
258. G. Genta, P. F. Maffione, *Fast low thrust trajectories for the exploration of the outer solar system*, 9th IAA Symposium on The Future of Space Exploration: Towards New Global Programmes, Torino, July, 2015.
259. G. Genta, P. F. Maffione, *Quick interplanetary trajectories in presence of a space elevator*, 9th IAA Symposium on The Future of Space Exploration: Towards New Global Programmes, Torino, July, 2015.
260. G. Genta, A. Dupas, J. M. Salotti, *IAA Study Group on Global Human Mars System Missions Exploration*, 9th IAA Symposium on The Future of Space Exploration: Towards New Global Programmes, Torino, July, 2015.
261. G. Genta, M. Dolci, *Simplified model for real time dynamic analysis of planetary rovers*, XXIII Congresso Nazionale AIMETA, Torino, Sept. 2015.
262. G. Genta, A. Dupas, J.M. Salotti, *IAA Study Group 3.16: Cosmic Study on Global Human Mars System Missions Exploration*, 66th IAC, Jerusalem, October 2015.
263. G. Genta, M. Dolci, *Synthesis model for real time dynamic analysis of planetary rovers*, XXIII Congresso Nazionale AIDAA, Torino, Nov.. 2015.
264. M. Dolci, S. Ferraris, G. Genta, P. Pellegrino, D. Richiardi, G. Scalise, *IXV Evolution Robotic Manipulator System*, XXIII Congresso Nazionale AIDAA, Torino, Nov.. 2015.
265. S.G. Bona, G. Genta, G. Mimmi, C.E. Rottenbacher, *The ancestors of the motor car: First steps in terrestrial locomotion*, *History of Engineering*, proceedings of the 2nd Int. Conf. Naples, April 2016.
266. G. Genta, C. Pizzamiglio, *Testing of planetary rover wheels*, MetroAeroSpace 2016, Firenze, June, 2016.
267. M. Dolci, G. Genta, S. Ferraris, *Robotic gripper technology for cargo transfer in low Earth orbit*, 67th IAC, Guadalajara, September 2016.
268. G. Genta, P. F. Maffione, *Effect of Specific Impulse Limitations on NEP and SEP Missions*, 67th IAC, Guadalajara, September 2016.
269. G. Genta, M. Dolci, *Robotic Gripper for Payload Capture in Low Earth Orbit*, Proceedings of the ASME 2016 International Mechanical Engineering Congress and Exposition, November 2016, Phoenix, Arizona, IMECE201665429.
270. G. Genta, *Space exploration: A matter for governments or for private operators?* 3rd Int. Conf. and Exhibition on Satellite & Space missions, Barcellona, May 2017.
271. M.D'Imperio; C.Pizzamiglio; D.Ludovico; D.Caldwell; G.Genta; F.Cannella, *Advanced Modelling Techniques for Flexible Robotic Systems*, In *International Conference on Robotics in Alpe-Adria Danube Region*, pp. 381-388. Springer, Cham, 2017.
272. G. Genta, *IAA SG 3.27: Towards The Utilization Of The Moon, Preparing For Mars Exploration*, 10th IAA Symposium on the Future of Space Exploration: Towards the Moon Village and Beyond, Torino, June 2017.
273. M. Baratta, G. Genta, D. Laurenzano, D. Misul, *Exploring the Surface of the Moon or of Mars: What Kind of Ground Vehicles Are Required?* 10th IAA Symposium on the Future of Space Exploration: Towards the Moon Village and Beyond, Torino, June 2017.
274. G. Genta, P. F. Maffione, *Fast Human Mars Missions: what are the actual requirements*, 10th IAA Symposium on the Future of Space Exploration: Towards the Moon Village and Beyond, Torino, June 2017.
275. G. Genta, P. F. Maffione, *Comparison Between Different Approaches to Interplanetary Mission Design*, 17th International Conference on Signal Processing, Computational Geometry and Artificial Vision (ISCGAV '17) Corfu, August, 2017.
276. G. Genta, P. F. Maffione, *Interplanetary Missions Performed Outside the Optimal Launch Windows*, 68th International Astronautical Congress, Adelaide, Sept. 2017.
277. Genta, C. Pizzamiglio, *Characterization of the Wheel-Terrain Interaction for Planetary Rover Wheels* 68th International Astronautical Congress, Adelaide, Sept. 2017.

278. C.E. Rottenbacher, E. Rovida, G. Genta, S.G. Bona, G. Mimmi, *Guido da Vigevano, From the Middle Ages a modern man*, History of Engineering, proceedings of the 3rd Int. Conf. Naples, April 2018
279. G. Genta and P. F. Maffione, *IRMA: A Graphical Tool for Interplanetary Mission Design*, CSCC2018, Palma di Maiorca, July 2018
280. F. Chang-Diaz, J. Carr, G. Genta, L. Johnson, P. F. Maffione, *Human Mars Missions Performed Using Solar Electric Propulsion*, 69th International Astronautical Congress, Bremen, Oct. 2018.
281. C. Caldera, G. Genta, C. Ostorero, G. Vecchi, M. Peroni, L. S. Valzano, *A Moon Base with Active Radiation Shielding*, 69th International Astronautical Congress, Bremen, Oct. 2018.
282. G. De Blasio, D. Riccobono, G. Genta, *3D Characterization of a Non-Stationary Inflated Light Sail for Ultra-Fast Interstellar Travel by Using Commercial Codes*, 69th International Astronautical Congress, Bremen, Oct. 2018.
283. G. Genta, *Return to the Moon: an essential step to build a spacefaring civilization*, 5th Manned Space Conference, Xian, October, 2018
284. G. Genta, O. Ventskovsky, L. Johnson, *Possible synergies between Moon and Mars Exploration*, 11th IAA Symposium on the Future of Space Exploration, Torino, June 2019.
285. G. Genta, R. Kezerashvili, *Achieving the required mobility in the solar system through Direct Fusion Drive*, 8th CSA-IAA Conference on Advanced Space Technology, Shanghai, China, sept. 2019.
286. F. Loparco, R. Galluzzi, G. Genta, Valentino. C. Ostorero, M. Peroni, L. S. Valzano, *A Modular Lunar Hotel*, 73th International Astronautical Congress, Paris, Sept.. 2022.
287. G. Genta, D. Riccobono, *Optimization of Interplanetary Trajectory for Direct Fusion Drive Spacecraft*, 73th International Astronautical Congress, Paris, Sept.. 2022.
288. G. Genta, *Advanced Propulsion for Fast Lunar Missions*, 73th International Astronautical Congress, Paris, Sept.. 2022.

Patents

1. G. Genta, L.M. Reyneri, *Veicolo autonomo a zampe a tre telai rigidi per esplorazione planetaria*. IT1999RM00453 19990719, 2001
2. Amati N, Genta G., Tonoli A, *Smorzatore di vibrazioni torsionali a correnti parassite*, IT2001TO01146 20011207. Dayco Europe. 2003.
3. Amati N, Genta G., Tonoli A, *Gruppo Puleggia Giunto di Trasmissione*, PCT EP0555643. Dayco Europe. 28-10-2005.
4. G. Genta, A. Genta, *Ruota elastica perfezionata per un veicolo*, Domanda di brevetto N° TO 2008 A-000665 presentata il 10 settembre, 2008
5. N. Amati, P. Bersezio, G. Genta, E. Vaniglia, E., *Veicolo acquatico di salvataggio*