PERSONAL INFORMATION

Mariagiovanna Minutillo

mminutillo@unisa.it

PRESENT POSITION

Full Professor
University of Salerno, Salerno, Italy

Research and TTM Manager in ATENA High-Technology District for Sustainable Energy Systems.

WORK EXPERIENCE

Academic Role

March 2015 - June 2021 — Associate Professor
University of Naples "Parthenope", Naples, Italy

Dec. 2009 – March 2015 — Assistant Professor
University of Naples "Parthenope", Naples, Italy

Dec. 2004 – Dec. 2009 — Assistant Professor
University of Cassino and Southern Lazio, Cassino, Italy

Other Academic activities

2011 – 2015 — Member of the Scientific Committee of the Industrial Engineering PhD program.
University of Naples "Parthenope", Naples, Italy

2013 – present — Member of the Scientific Committee of the Energy Science and Engineering PhD program.
University of Naples "Parthenope", Naples, Italy

EDUCATION AND TRAINING

Nov. 1999 – Nov.2002
Institute of Education
Degree

PhD Fellowship
University of Cassino and Southern Lazio, Cassino, Italy
Ph.D in Industrial Engineering

Nov. 1993 – July 1999
Institute of Education
Degree

University, Faculty of Mechanical Engineering
University of Cassino and Southern Lazio, Cassino, Italy
MSc degree in Mechanical Engineering

RESEARCH PROJECTS AND ACTIVITIES

The research involves: low temperature and high temperature fuel cells systems; fuel cells in mobile applications; technologies for hydrogen production and storage in refueling stations; hydrogen production by reforming systems for stationary or mobile applications; developing and optimization of internal combustion engine fueled with hydrocarbons and

hydrogen mixtures; cogeneration power plant based on fuel cell technologies; plasma gasification technologies for wastes treatment; environmental impact of power plants and pollutant dispersion analysis; microbial fuel cells technologies.

Principal Investigator

- FuelSOME - Multifuel SOFC system with Maritime Energy vectors, HORIZON-CL5-2021-D2-01, € 2.965.611,00
- H2PORTS - Implementing Fuel Cells and Hydrogen Technologies in Ports, EU Commission FCH JTI; 2019- 2022, € 3.999.947,50
- RESEARCH AND INNOVATION IN AUTOMOTIVE SECTOR – Funded by CAMPANIA REGION (Italy) under the program POR-CAMPANIA FSE (2014IT055FOPO20); 2018 – 2020, € 510.000,00
- HyLIVE - Hydrogen Light Innovative Vehicles, Funded by CAMPANIA REGION (Italy) under the program POR Campania FESR 2014-2020; 2018-2020, € 2.000.000,00
- SMART GENERATION – Sustainable systems and technologies for energy generation. Funded by Ministry of University and Research under the program PON Ricerca e Competitività 2007-2013; 2014-2017, € 7.837.677,52
- SMARTGEN – Fuel cells and Polygeneration hybrid systems based on fossil fuels and renewables sources, Funded by Ministry of University and Research under the program PON Ricerca e Competitività 2007-2013; – 2011-2015 € 4.961.705,00
- National Project “FIT ENERGIA 2005” - Development of an innovative prototype for the distributed generation of electric and thermal power with high efficiency and low environmental impact based on fuel cells fed by hydrogen from natural gas; WP7:"Integrated system", Funded by the Italian Ministry of Economic Development (2006-2008).

Research Team

- e-SHyIPS - Ecosystemic knowledge in Standards for Hydrogen Implementation on Passenger Ship, EU Commission FCH JTI – 2021-2024 € 2.500.000,00
- HERMES- High Efficiency Reversible technologies in fully renewable Multi-Energy System. Funded by Ministry of University and Research under the program PRIN 2017 (PRIN 2017F4S2L3); 2020-2022, € 1.199.538,00.
- ATENA FUTURE TECHNOLOGY, Funded by CAMPANIA REGION (Italy) under the program POR Campania FESR 2014-2020); 2018-2019, € 250.000,00
- MITO – Multimedia Information for Territorial Objects, Funded by CAMPANIA REGION (Italy) under the program PAC01_00119; 2013-2016, € 10.000.000,00

PUBBLICATIONS

International Journals

1. M. Minutillo, On-Board Fuel Processor Modelling for Hydrogen Enriched Gasoline Fuelled Engine, Int. J. of Hydrogen Energy, vol. 30,1483–1490, 2005. ISSN: 0360-3199. IF: 4.939; SJR:1.141

2. E. Jannelli, M. Minutillo, Simulation of the flue gas cleaning system in a RDF incineration power plant, Waste Management, vol. 27, pp. 684-690, 2007. ISSN: 0956-053X. IF:5.448; SJR:1.634
3. E. Jannelli, M. Minutillo, E. Galloni, Performance of a PEM Fuel Cell System Fuelled with Hydrogen Generated by a Fuel Processor, J. of Fuel Cell Science and Technology (ASME), Vol. 4 Issue 4, pp.435-440, Nov. 07. ISSN 1550624X
4. E Galloni, M. Minutillo, Performance Of A Spark Ignition Engine Fuelled With Reformate Gas Produced On-Board Vehicle, Int J. of Hydrogen Energy, vol. 32, pp. 2532– 2538, 2007. ISSN: 0360-3199. IF: 4.939; SJR:1.141
5. M. Minutillo, E. Jannelli, F. Tunzio, Experimental Results of a PEM System Operated on Hydrogen and Reformate, J. of Fuel Cell Science and Technology, 2008, Vol.5 Issue 1, 014502-1/014502-3. ISSN 1550624X
6. M. Minutillo, A. Perna, Behaviour Modelling of a PEMFC Operating On Diluted Hydrogen Feed, Int. Journal of Energy Research, vol.32, pp.1297-1308, 2008, DOI: 10.1002/er.1424. ISSN:1099-114X. IF: 3.741; SJR:0.785
7. M. Minutillo, A. Perna, Energy Analysis of a Residential CHP System based on a PEM Fuel Cell, J. of Fuel Cell Science and Technology, Vol. 6, February 2009. ISSN 1550624X
8. M. Minutillo, A. Perna, A novel approach for treatment of CO2 from fossil fired power plants, Part A: The integrated systems ITRPP, Int J. of Hydrogen Energy vol.34, pp 4014-4020, 2009. ISSN: 0360-3199. IF: 4.939; SJR:1.141
9. M. Minutillo, A. Perna, D. Di Bona, Modelling and Performance Analysis of an Integrated Plasma Gasification Combined Cycle (IPGCC) Power Plant, Energy Conversion and Management 50 (2009), pp. 2837-2842. ISSN: 0196-8904. IF: 8.208; SJR:2.924
10. M. Minutillo, A. Perna, A Novel Approach for Treatment of CO2 from Fossil Fired Power Plants. Part B: The Energy Suitability of Integrated Tri-Reforming Power Plants (ITRPPs) for Methanol Production, Int. J. of Hydrogen Energy, 35 (2010), pp.7012-7020. ISSN: 0360-3199. IF: 4.939; SJR:1.141
11. G. Galeno, M. Minutillo, A. Perna, From Waste to Electricity through Integrated Plasma Gasification/Fuel Cell (IPGFC) System, Int. J. of Hydrogen Energy, 36 (2011), pp. 1692-1701. ISSN: 0360-3199. IF: 4.939; SJR:1.141
12. D. Di Bona, E. Jannelli, M. Minutillo, A. Perna, Investigations on the Behaviour of 2 kW Natural Gas Fuel Processor, Int. J. of Hydrogen Energy, 36 (2011), pp. 7763-7770. ISSN: 0360-3199. IF: 4.939; SJR:1.141
13. R. Cozzolino, S.P. Cicconardi, E. Galloni, M. Minutillo, A. Perna, Theoretical And Experimental Investigations On Thermal Management Of A Pemfc Stack, Int. J. of Hydrogen Energy, 36 (2011), 8030-8037. ISSN: 0360-3199 ISSN: 0360-3199. IF: 4.939; SJR:1.141
14. F. Marignetti, M. Minutillo, A. Perna, E. Jannelli, Assessment of Fuel Cell Performance Under Different Air Stoichiometries and Fuel Composition, IEEE Transactions On Industrial Electronics, Vol. 58, n.6, June 2011. IF: 7.515; SJR:2.911
15. M. Minutillo, E. Jannelli, A. Perna, Experimental Characterization and Numerical Modeling of PEMFC Stacks designed for different application fields, Fuel Cells, 11 (6) (2011) 839-849. IF: 1.876; SJR: 0.565
16. G. Falcucci, E. Jannelli, M. Minutillo, S. Ubertini, Fluid Dynamic Analysis of High Temperature PEM Fuel Cells, J. of Fuel Cell Science and Technol., April 2012, Vol.9/ 021014-1.
17. G. Falcucci, E. Jannelli, M. Minutillo, S. Ubertini, J. Han, S.P. Yoon, S.W. Nam, Integrated numerical and experimental study of a MCFC-Plasma Gasifier energy system, Applied Energy 97 (2012) 734–742. IF:8.848; SJR: 3.607
18. E. Jannelli, M. Minutillo, A. Perna, Analyzing microcogeneration systems based on LT-PEMFC and HT-PEMFC by energy balances, Applied Energy 108 (2013) 82–91. IF:8.848; SJR: 3.607
19. E. Jannelli, M. Minutillo, R. Cozzolino, G. Falcucci, Thermodynamic performance assessment of a small size CCHP (combined cooling heating and power) system with numerical models, Energy 65 (2014) 240-249. ISSN: 0360-5442. IF: 6.082; SJR:2.166

20. M. Minutillo, A. Perna, Renewable Energy Storage System via coal hydrogasification with co-production of electricity and synthetic natural gas, Int. J. of Hydrogen Energy 39 (2014) 5793-5803, ISSN: 0360-3199. IF: 4.939; SJR:1.141
21. M. Minutillo, A. Perna, E. Jannelli, SOFC and MCFC system level modeling for hybrid plants performance prediction, Int. J. of Hydrogen Energy, 39 (2014) 21688-99, ISSN: 0360-3199. IF: 4.939; SJR:1.141
22. V. K. Krastev, G. Falcucci, E. Jannelli, M. Minutillo, R. Cozzolino, 3D CFD modeling and experimental characterization of HT PEM fuel cells at different anode gas compositions, Int. J. of Hydrogen Energy 39 (2014) 21663-72, ISSN: 0360-3199. IF: 4.939; SJR:1.141
23. E. Jannelli, M. Minutillo, A. Lubrano Lavadera, G. Falcucci, A small-scale compressed air energy storage (CAES) system for stand-alone renewable energy power plant for a radio base station: a sizing-design methodology, Energy 78 (2014) 313-322. ISSN: 0360-5442. IF: 6.082; SJR:2.166
24. A. Perna, M. Minutillo, E. Jannelli, Investigations on an advanced power system based on a high temperature polymer electrolyte membrane fuel cell and an organic Rankine cycle for heating and power production, Energy 88 (2015) 874-84. ISSN: 0360-5442. IF: 6.082; SJR:2.166
25. M. Minutillo, A. Lubrano Lavadera, E. Jannelli, Assessment of design and operating parameters for a small compressed air energy storage system integrated with a stand-alone renewable power plant, J. of Energy Storage 4 (2015) 135-144. ISSN: 2352-152X. IF: 3.762; SJR:0.962
26. A. Perna, M. Minutillo, S.P. Cicconardi, E. Jannelli, S. Scarfogliero, Conventional and advanced biomass gasification power plant designed for cogeneration purpose, Energy Procedia 82 (2015) 687-694. ISSN: 1876-6102. IF:1.15; SJR:0.468
27. A. Perna, M Minutillo, E. Jannelli, Hydrogen from Intermittent Renewable Energy Sources as Gasification Medium in Integrated Waste Gasification Combined Cycle Power Plants: A Performance Comparison, Energy 94 (2016) 457-465. ISSN: 0360-5442. IF: 6.082; SJR:2.166
28. A. Petrillo, F. De Felice, E. Jannelli, C. Autorino, M. Minutillo, A. Lubrano Lavadera, Life cycle assessment (LCA) and life cycle cost (LCC) analysis model for a stand-alone hybrid renewable energy system, Renewable Energy 95 (2016) 337-355. ISSN: 0960-1481. IF: 6.274; SJR:2.366
29. D. Frattini, G. Falcucci, M. Minutillo, C. Ferone, R. Cioffi, E. Jannelli, On the effect of different configurations in air-cathode MFCs fed by composite food waste for energy harvesting, Chemical Engineering Transactions 49 (2016), 85-90. ISSN: 2283-9216. IF: 0.76; SJR:0.316
30. D. Guida, M. Minutillo, Design methodology for a PEM fuel cell power system in a more electrical aircraft, Applied Energy 2017;192:446-456. ISSN: 0306-2619. IF:8.848; SJR: 3.607
31. N. Jannelli, RA Nastro, V. Cigolotti, M. Minutillo, G. Falcucci, Low pH, high salinity: Too much for microbial fuel cells?, Applied Energy 2017;192:543-550. ISSN: 0306-2619. IF:8.848; SJR: 3.607
32. E. Gambino, M. Toscanesi, F. Del Prete, F. Flagiello, G. Falcucci, M. Minutillo, M Trifuoggi, M. Guida, RA Nastro, E. Jannelli, Polycyclic Aromatic Hydrocarbons (PAHs) Degradation and Detoxification of Water Environment in Single-chamber Air-cathode Microbial Fuel Cells (MFCs), Fuel Cells. 2017;17(5): 618-626. ISSN:1615-6854. IF: 1.876; SJR: 0.565
33. A. Perna, M. Minutillo, E. Jannelli, V. Cigolotti, SW Nam, KJ Yoon, Performance assessment of a hybrid SOFC/MGT cogeneration power plant fed by syngas from a biomass down-draft gasifier, Applied Energy 2018;227:80–91. ISSN: 0306-2619. IF:8.848; SJR: 3.607
34. A. Perna, M. Minutillo, A. Lubrano Lavadera, E. Jannelli, Combining plasma gasification and solid oxide cell technologies in advanced power plants for waste to energy and electric energy storage applications, Waste Management 2018;73:424–438. ISSN: 0956-053X. IF:5.448; SJR:1.634
35. A. Perna, M. Minutillo, E. Jannelli, Designing and analyzing an electric energy

storage system based on reversible solid oxide cells, Energy Conversion and Management 159 (2018) 381–395. ISSN: 0196-8904. IF: 8.208; SJR:2.924

36. A. Perna, M. Minutillo, E. Jannelli, V. Cigolotti V, SW Nam, J. Han, Design and performance assessment of a combined heat, hydrogen and power (CHHP) system based on ammonia-fueled SOFC, Applied Energy 231(2018)1216–1229. ISSN: 0306-2619. IF:8.848; SJR: 3.607
37. M. Minutillo, Forcina A, Jannelli N, Lubrano Lavadera A, Assessment of a sustainable energy chain designed for promoting the hydrogen mobility by means of fuel-cell powered bicycles, Energy 153 (2018) 200-210. ISSN: 0360-5442. IF: 6.082; SJR:2.166
38. M. Minutillo, F. Flagiello, RA Nastro, P. Di Trolio, E. Jannelli, A. Perna, Performance of two different types of cathodes in microbial fuel cells for power generation from renewable sources, Energy Procedia 148 (2018) 1129-1134. ISSN: 1876-6102. IF:1.15; SJR:0.468
39. E. Jannelli E, P. Di Trolio, F. Flagiello, M. Minutillo, Development and Performance analysis of Biowaste based Microbial Fuel Cells fabricated employing Additive Manufacturing technologies, Energy Procedia 148 (2018)1135-1142.ISSN: 1876-6102. IF:1.15; SJR:0.468
40. P. Di Giorgio, P. Di Trolio, E. Jannelli, M. Minutillo, FV. Conte, Model based preliminary design and optimization of Internal Combustion Engine and Fuel Cell hybrid electric vehicle Energy Procedia 148 (2018) 1191-1198. ISSN: 1876-6102. IF:1.15; SJR:0.468
41. M. Minutillo, A. Perna, A. Sorce, Combined Hydrogen, Heat and Electricity Generation via Biogas Reforming: Energy and Economic Assessments, Int Journal of Hydrogen Energy 44 (2019) 23880-23898, ISSN: 0360-3199. IF: 4.939; SJR:1.141
42. M Alparone, M Minutillo, M Migliaccio, E Jannelli, N Massarotti, F Conventi, C Di Donato, F Nunziata, A Buono, E Rossi, A Gifuni, G Grassini, Hydrogen-based hybrid power unit for light vehicles: Assessment of energy performance and radiated electromagnetic emissions, Nuovo Cimento C Geophysics Space Physics, 2019;41, ISSN 1826-9885.
43. C. Florio, RA Nastro, F. Flagiello, M. Minutillo, D. Pirozzi, V. Pasquale, A. Ausiello, G. Toscano, E. Jannelli, S. Dumontet, Biohydrogen production from solid phase-microbial fuel cell spent substrate: A preliminary study, Journal of Cleaner Production, 2019;227:506-511, ISSN: 0959-6526. IF:7.246; SJR:1.886
44. M. Casazza, M. Lega, E. Jannelli, M. Minutillo, D. Jaffe, V. Severino, S. Ulgiati, 3D monitoring and modelling of air quality for sustainable urban port planning: Review and perspectives, Journal of Cleaner Production, 2019;231:1342-1352, ISSN: 0959-6526. IF:7.246; SJR:1.886
45. M. Minutillo, A. Perna, A. Sorce, Green hydrogen production plants via biogas steam and autothermal reforming processes: energy and exergy analyses, Applied Energy 277 (2020) 115452. ISSN: 0306-2619 IF:8.848; SJR: 3.607
46. P. Di Trolio, P. Di Giorgio, M. Genovese, E. Frasci, M. Minutillo, A hybrid power-unit based on a passive fuel cell/battery system for lightweight vehicles Applied Energy, 279 (2020), 115734. ISSN: 0306-2619. IF:8.848; SJR: 3.607
47. M. Minutillo, A. Perna, A. Forcina, S. Di Micco, E. Jannelli, Analyzing the Levelized Cost Of Hydrogen In Refueling Stations with On-Site Hydrogen Production via Water Electrolysis in the Italian Scenario. Int J. of Hydrogen Energy 2021; 46:13667-77. ISSN: 0360-3199IF: 4.939; SJR:1.141
48. M. Minutillo, A. Perna, P. Di Trolio, S. Di Micco, E. Jannelli, Techno-economics of novel refueling stations based on ammonia-to-hydrogen route and SOFC technology, Int J. of Hydrogen Energy, 2021;46(16):10059-71. ISSN: 0360-3199IF: 4.939; SJR:1.141
49. Minutillo, M., Di Micco, S., Di Giorgio, P., Erme, G., Jannelli, E., Investigating air-cathode microbial fuel cells performance under different serially and parallelly connected configurations, Energies, 2021;14(16): 5116

50. Perna, A., Minutillo, M., Di Micco, S., Jannelli, E., Design and Costs Analysis of Hydrogen Refuelling Stations Based on Different Hydrogen Sources and Plant Configurations, Energies, 2022;15(2): 541
51. Di Micco, S., Forcina, A., Minutillo, M., Perna, A., Power-to-hydrogen pathway in the transport sector: How to assure the economic sustainability of solar powered refueling stations, Silvestri, L., Energy Conversion and Management, 2022, 252, 115067
52. Di Micco, S., Mastropasqua, L., Cigolotti, V., Minutillo, M., Brouwer, J., A framework for the replacement analysis of a hydrogen-based polymer electrolyte membrane fuel cell technology on board ships: A step towards decarbonization in the maritime sector, Energy Conversion and Management, 2022, 267, 115893
53. Perna A, Jannelli E, Di Micco S, Romano F, Minutillo M, Designing, sizing and economic feasibility of a green hydrogen supply chain for maritime transportation, Energy Conversion and Management, 2023, 278, 116702.

Book Chapters

54. G. Fontana, E. Galloni, E. Jannelli, M. Minutillo, Performance and Fuel Consumption Estimation of a Hydrogen Enriched Gasoline Engine at Part-Load Operation, SAE technical Paper n.2002-01-2196, in Hydrogen and its Future as a Transportation Fuel, Edited by Daniel J. Holt, SAE Progress in Technology Series, pp.105-110, 2003. ISBN 9780768011289
55. RA. Nastro, G. Falcucci, M. Minutillo, E. Jannelli (2017). Microbial Fuel Cells in Solid Waste Valorization: Trends and Applications. Chapter 9 p. 159-171, in Modelling Trends in Solid and Hazardous Waste Management, Debashish Sengupta and Sudha Agrahari Editors. Springer, 2017, ISBN: 978-981-10-2409-2
56. A. Petrillo, F. De Felice, E. Jannelli, M. Minutillo. Life Cycle Cost Analysis of Hydrogen Energy Technologies. Chapter 5, p. 121-138. In: Hydrogen Economy Supply Chain, Life Cycle Analysis and Energy Transition for Sustainability. A. Scipioni, A. Manzardo and Jingzheng Ren editors. Academic Press, 2017 ISBN: 978-0-12-811132-1
57. A. Moreno A, V. Cigolotti V, M. Minutillo, A. Perna - Stationary Fuel Cells and Hybrid Systems Chapter 9, in Power Engineering, Advances and Challenges, Part A: Thermal, Hydro and Nuclear Power, CRC Press, 2018., ISBN 9781351784061.
58. A. Perna, M. Minutillo, Residential Cogeneration and Trigeneration with Fuel Cells, Chapter 9, in “Current Trends and Future Developments on (Bio-) Membranes”, 1st Edition, Cogeneration Systems and Membrane Technology,Elsevier, 2020, ISBN: 9780128178072
59. A. Petrillo, F. De Felice, E. Jannelli, M. Minutillo. Life cycle cost analysis of hydrogen energy Technologies, Chapter 6, p. 183-198. In: Hydrogen Economy Supply Chain, Life Cycle Analysis and Energy Transition for Sustainability. Second Edition. A. Scipioni, A. Manzardo and Jingzheng Ren Editors. Academic Press, 2023, Elsevier, ISBN 978-0-323-99514-6

Conference Proceedings

60. G. Fontana, E. Galloni, M. Minutillo, R. Palmaccio, R. Fiorenza, U. Di Martino, G. Formisano, Development of a New Combustion Chamber for a Small Spark Ignition Engine. Modeling In-Cylinder Phenomena, International Conference High-Tech Engines and Cars, Maggio 2002, Modena (Italy).
61. G. Fontana, E. Galloni, E. Jannelli, M. Minutillo, Numerical Modeling of a Spark-Ignition Engine Fueling with Premixed Lean Air-Gasoline-Hydrogen Mixtures”, 14a Word Hydrogen Energy Conference - WHEC, June 2002, Montreal (Canada).

62. G. Fontana, E. Galloni, M. Minutillo, R. Palmaccio, P. Cammarano The Effect of Spark Location in a Small S.I. Engine, International Conference High-Tech Engines and Cars, May 2003, Modena (Italy).
63. G. Fontana, E. Galloni, E. Jannelli, M. Minutillo, Different Technologies for Hydrogen Engine Fuelling", International Symposium Hypothesis V, Sept. 2003, Porto Conte (Italy).
64. M. Minutillo, F. Tunzio, Hydrogen from Landfill Gas: an Integrated Fuel Cell System International Symposium Hypothesis V, September 2003, Porto Conte (Italy).
65. E. Jannelli, M. Minutillo, E. Galloni, Simulation and Analysis of Landfill Gas Fuelled Microcogeneration Systems, ISWA 2004 World Environment Congress and Exhibition, October 2004, Roma (Italy).
66. M. Minutillo, E. Jannelli, Thermochemical modelling and analysis of a compact reforming system for PEM FC application, Proceedings of ASME FUELCELL2005, Third Int. Conference on Fuel Cell Science, Engineering and Technology, May 2005, Michigan, USA.
67. F. Tunzio, M. Minutillo, E. Jannelli, PEM FC generator fuelled by steam reforming system, 2005 Fuel Cell Seminar, November 2005, Palm Spring, California, USA.
68. M. Minutillo, E. Jannelli, Modelling and Testing A PEM Fuel Cell Fuelled by A Steam Reforming System, Proceedings of ASME FUELCELL2006, 4th International Conference on Fuel Cell Science, Engineering and Technology, June 19-21, 2006, Irvine, USA.
69. M. Minutillo, E. Jannelli, A. Perna, D. Di Bona, Designing and Operating Residential CHP Systems Based on PEM Fuel Cell, Proc.ASME FUELCELL2007, 5th Inter. Conference on Fuel Cell Science, Engineering and Technology, June 18-20, 2007, New York, USA.
70. P. Caramia, C. Di Perna, M. Minutillo, P. Varilone, P.Verde, On Energy Recovery Possibility at Test Facility of Generator Sets, Proceedings of International Conference on Clean Electrical Power, ICCEP '07, page 639-642, 2007.
71. E. Jannelli, M. Minutillo, A. Perna , D. Di Bona, M. Monsurrò, Performance Analysis of a Back-up Power Generator based on a PEMFC, Proceedings of World Hydrogen Technologies Convention, November 2007, Montecatini Terme (Italy).
72. A. Perna, S.P. Cicconardi, M. Minutillo, E. de Santis, A Dynamic Model for a PEM FC Power System, International Symposium Hypothesis VIII, April 2009, Lisbon (Portugal).
73. M. Minutillo, E. Galloni, A. Perna, G. Tomassi, Dynamic Behaviour of a PEMFC Fed with Different Fuelling Conditions, International Symposium Hypothesis VIII, April 2009, Lisbon.
74. E. Jannelli, F. Marignetti, M. Minutillo, A. Perna, Measuring the PEM Fuel Cell Performance in a Versatile Test Station, IECON2009 – The 35th Annual conference of the IEEE Industrial Electronics Society, November 3-5, 2009, Porto (Portugal).
75. S.P. Cicconardi, E. Jannelli, G. Falcucci, M. Minutillo, A. Perna, Experimental Analysis of PEMFC Stacks under Different Cooling and Humidification Systems, 3rd European Fuel Cell Technology & Applications Conference, December 15-18, 2009, Rome (Italy).
76. E. Galloni, M. Minutillo, A. Perna, Control Strategies Applied to a Residential CHP System Based on PEMFC Technology, Proceeding of ASME-ATI-UIT 2010 Conference on Thermal and Environmental Issues in Energy Systems, 16 – 19 May, 2010, Sorrento (Italy).
77. E. Fierimonte, E. Jannelli, M. Minutillo, S. Ubertini, J. Han, Y.P. Yoon, S.W. Nam, Development of a Molten Carbonate Fuel Cell Model for the performance prediction of Integrated Power Generation Systems, Proceedings of Third International Conference on Applied Energy - 16-18 May 2011 - Perugia, Italy. ISBN: 978-88-9058-430-5
78. S.P. Cicconardi, R. Cozzolino, M. Minutillo, A. Perna, Experimental Activity on

High Temperature PEM Fuel Cells, Proceedings of HYPOTHESIS Conference 10th Anniversary, Edinburgh 11-12 June 2013.

79. M. Minutillo, A. Perna, S. Ubertini, Development of a System-Level Model for Fuel Cell Power Units Operated with Syngas, International Conference of Numerical Analysis and Applied Mathematics (ICNAAM), First Minisymposium on Mathematics in Engineering and Technology, 22-28 September, 2014 Rhodes (Greece).
80. E. Jannelli, M. Minutillo, A. Lubrano Lavadera, C. Autorino, A. Carotenuto, Electric Energy Storage via Compressed Air Energy Storage (CAES) System in a Stand-Alone Renewable Energy Power Plant: Sensitivity Analysis, 7th International Conference on Sustainable Energy & Environmental Protection (SEEP Conference) 2014, 23-25 November 2014, Dubai-UAE. ISBN: 978-1-903978-49-8
81. S.P. Cicconardi, E. Jannelli, M. Minutillo, A. Perna, Thermal coupling of a high temperature PEM fuel cell with an Organic Rankine Cycle: plant configuration and performance analysis, 7th International Conference on Sustainable Energy & Environmental Protection (SEEP Conference) 2014, 23-25 November 2014, Dubai-UAE. ISBN: 978-1-903978-49-8
82. E. Jannelli, M.Minutillo, A. Perna, Hydrogen from intermittent renewable energy sources as plasma gas in integrated plasma gasification systems for waste treatment and electric energy production, 7th International Conference on Sustainable Energy & Environmental Protection (SEEP Conference) 2014, 23-25 November 2014, Dubai-UAE. ISBN: 978-1-903978-49-8
83. D. Frattini, G. Falcucci, M. Minutillo, C. Ferone, R. Cioffi, E. Jannelli, Influence of configuration and components on the performances of air-cathode single chamber MFCs fed by solid organic waste, to be presented at Euro-Mediterranean Hydrogen Technologies Conference (EmHyTeC) 9-12 December 2014, Taormina (Italy).
84. E. Jannelli, A. Lubrano Lavadera, M. Minutillo, A. Perna, From Waste to Energy: Performance Analysis of Plasma Gasification Systems Integrated With Combined Cycle Power Plants, ASME-ATI-UIT 2015 Conference on Thermal Energy Systems: Production, Storage, Utilization and the Environment 17–20 May 2015, Napoli, Italy, ISBN 978-88-98273-17-1
85. E. Jannelli, M. Minutillo, A. Lubrano Lavadera, A. Perna, A Hybrid Power Generation System with Renewable Hydrogen Energy System for Off-Grid Radio Base Stations, ASME-ATI-UIT 2015 Conference on Thermal Energy Systems: Production, Storage, Utilization and the Environment 17–20 May 2015, Napoli, Italy, ISBN 978-88-98273-17-1.
86. A. Lubrano Lavadera, E. Jannelli, M. Minutillo, A. Perna, S.P. Cicconardi, Investigations on an energy storage system based on high temperature fuel cells for an off-grid renewable power plant, HYdrogen POwer Theoretical and Engineering Solutions International Symposium 2015, Hypothesis XI, Toledo, Spain, 6 – 9 September 2015.
87. A. Petrillo, M. Minutillo, A. Lubrano Lavadera, S Mellino, C. Autorino, RA. Nastro, Life Cycle Assessment of a SOFC based microcogeneration system: comparative analysis with conventional technologies, Global Cleaner Production & Sustainable Consumption Conference, Barcelona –Spain, 1 - 4 November 2015
88. RA Nastro, G. Falcucci, DM Hodgson, M. Minutillo, M. Trifuoggi, M. Guida, C. Avignone-Rossa, S. Dumontet, E. Jannelli, S. Ulgiati, Utilization of Agro-industrial and Urban Waste as Feedstock in Microbial Fuel Cells (MFCs), Global Cleaner Production & Sustainable Consumption Conference, Barcelona –Spain, 1 - 4 November 2015.
89. A Perna, M. Minutillo, A. Lubrano Lavadera, Plasma Gasification and Fuel Cells technology for Waste to Energy Power Plants: Models Development and Performance Comparison, proceeding of 6th International Symposium on Energy from Biomass and Waste, 14-17 November 2016, Venice, Italy
90. M. Minutillo, A. Perna, A. Lubrano Lavadera, Stand-alone hybrid renewable energy systems with different energy storage technologies: plant

configurations and size optimization, HYPOTHESIS XII - June 28-30, 2017 - Syracuse, Italy

91. A. Perna, M.Minutillo, E. Jannelli, V. Cigolotti, H. Choi, J. Han, S.P. Yoon, S.W. Nam, Hydrogen-based Electrical Energy Storage: Experimental and Numerical Activity on a Reversible Solid Oxide Cell, HYPOTHESIS XII - June 28-30, 2017 - Syracuse, Italy
92. M. Minutillo, A. Perna, E. Jannelli, S. Ubertini, A. Sorce, Biofuel-based Poligeneration Energy System for Electricity, Heat and Mobility Demands: Plant Design and Energy Streams Management, 13th Conference on Sustainable Development on Energy, Water and Environment Systems (SDEWES) September 30 – October 4, 2018, Palermo (Italy)
93. A. Perna A, M. Minutillo, S. Di Micco, P. Di Trolio, E. Jannelli, Biogas and ammonia as hydrogen vectors for small refueling stations: Techno-economic assessment, AIP Conference Proceedings Vol. 2191, Article number 02017 (4th Conference of the Italian Thermal Machines Engineering Association, ATI 2019), 2019.
94. M. Minutillo, A. Perna, A. Sorce, Exergy analysis of a biomass-based multi-energy system, E3S Web of Conferences, Volume 113, Conference SUstainable PolyEnergy Generation and HaRvesting, SUPEHR 2019, Savona; Italy, 2019
95. M. Minutillo, A. Perna, P. Di Trolio, S. Di Micco, E. Jannelli, Techno-Economic Assessment of an Ammonia-fueled SOFC in Polygeneration Systems, 4th on Sustainable Development on Energy, Water and Environment Systems (SDEWES) 1–6 October, 2019 Dubrovnik (Croatia)
96. M. Minutillo, A. Perna, V. Cigolotti, SW Nam, J. Han, Hydrogen refueling stations based on ammonia decomposition by adopting different technologies: simulation and experimental validations, 8th World Hydrogen Technologies Convention (WHTC), Tokyo, June 2-7, 2019.
97. A. Perna A, M. Minutillo, S. Di Micco, V. Cigolotti, A. Pianese, Ammonia as hydrogen carrier for realizing distributed on-site refueling stations implementing PEMFC technology. E3S Web of Conferences 197, 05001 (2020). doi.org/10.1051/e3sconf/202019705001
98. M. Minutillo, RA. Nastro, S. Di Micco, E. Jannelli, R. Cioffi, M. Di Giuseppe, Performance Assessment of Multi-Electrodes Reactors for Scaling-up Microbial Fuel Cells. E3S Web of Conferences 197, 08020 (2020). doi.org/10.1051/e3sconf/202019708020.
99. A. Perna, M. Minutillo, A. Sorce, Design and Modelling of Technologies for Upgrading and Direct Methanation of biogas: energy analysis and economic assessment. 100 RES 2020 - Applied Energy Symposium (ICAE) 100% RENEWABLE: Strategies, technologies and challenges for a fossil free future. Pisa, Italy, October 25th –30th, 2020
100. S. Di Micco, L. Mastropasqua, V. Cigolotti, M. Minutillo, J. Brouwer, Hydrogen for the decarbonisation of maritime sector: feasibility analysis of on-board power-train system based on PEMFC technology, 16th on Sustainable Development on Energy, Water and Environment Systems (SDEWES 2021) 10-15 October, 2021 Dubrovnik (Croatia).
101. S. Di Micco, M. Minutillo, P. Di Giorgio, G. Erme, E. Jannelli, Stacked Air-cathode MFCs for small sensors power supplying, 16th on Sustainable Development on Energy, Water and Environment Systems (SDEWES 2021) 10-15 October, 2021 Dubrovnik (Croatia).
102. S. Di Micco, M. Minutillo, A. Perna, E. Jannelli, On-site solar powered refueling stations for green hydrogen production and distribution: performances and costs, E3S Web of Conferences, 2022;01005.
103. S. Di Micco, P. De Falco, M. Minutillo, A. Bracale, P. Caramia, A. Gifuni, G. Grassini, Performance assessment of stacked air-cathode microbial fuel cells under series and parallel electrical connections, E3S Web of Conferences, 2022, 08011.
104. S. Di Micco, M. Minutillo, L. Mastropasqua, V. Cigolotti, J. Brouwer, Ammonia-based Solid Oxide Fuel Cell for zero emission maritime power: a case study,

E3S Web of Conferences, 2022, 06007.

105. S. Di Micco, M. Minutillo, A. Forcina, V.Cigolotti, A. Perna, Feasibility analysis of an innovative naval on-board power-train system with hydrogen- based PEMFC technology, E3S Web of Conferences, 2022, 01005.
106. M. Minutillo, V. Cigolotti, G. Di Ilio, A. Bionda, E. Boonen, T. Wannemacher, Hydrogen-based technologies in maritime sector: technical analysis and prospective, E3S Web of Conferences 2022, 334, 06011.

Other several papers are published as Extended Abstracts in international conference proceedings, in national Conference proceedings and in national scientific journals.

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Gaeta, 14/04/2023