

NATRELLA GIANLUCA

Overview

- ? Unit: ELE
- ? Role: Ricercatore
- ? Grade: Ricercatore t.d. art. 24 c. 3 lett. A Legge 240/10 (t.pieno)
- ? SSD: IIND-08/B (Sistemi elettrici per l'energia)
- ? Scopus ID: 57638571300
- ? Unige Id: 497101
- ? Retrieved at: 2025-11-14T15:15:45.388635

Contact

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Career

- ? Dr, 2020-11-01 ? 2023-10-31
- ? Be, 2023-11-01 ? 2024-06-30
- ? Rd, 2024-08-01 ? 2027-07-31

Scopus Metrics

- ? absolute; Docs: 12; Journals: 5; Conferences: 7; Citations: 141; H-index: 5
- ? 15 years (2010-2025); Docs: 12; Journals: 5; Conferences: 7; Citations: 141; H-index: 5
- ? 10 years (2015-2025); Docs: 12; Journals: 5; Conferences: 7; Citations: 141; H-index: 5
- ? 05 years (2020-2025); Docs: 12; Journals: 5; Conferences: 7; Citations: 141; H-index: 5

Scopus Products

1.
 - ? Title: Full Tuning of Double Input Power System Stabilizers via Surrogate Optimization
 - ? Venue: 2025 IEEE Kiel Powertech Powertech 2025
 - ? Year: 2025
 - ? Type: Conference Proceeding
 - ? Subtype: Conference Paper
 - ? Citations: 0
 - ? DOI: 10.1109/PowerTech59965.2025.11180292
 - ? Scopus ID: 2-s2.0-105019317119
 - ? Authors: MacCì G.; Massucco S.; Natrella G.; Saviozzi M.; Conte F.; Giannuzzi G.; Tessitore S.
 - ? Keywords: Double Input Power System Stabilizer | Optimal Tuning | Power System Stabilizer
 - ? Source Id: 21101341419
 - ? Author Ids: 60150796500;6603357712;57638571300;56027556100;57151673600;25936117900;57211384304
 - ? Authoraffiliationids: 60025153;60025153;60025153;60025153;60005308;60122257;60122257
 - ? Corresponding: MacCì G.
2.
 - ? Title: Optimal Sizing and Operations of a Hydrogen-Based Multi-Energy Port System with Market Participation and Gas Grid Integration
 - ? Venue: Conference Proceedings 2025 IEEE International Conference on Environment and Electrical Engineering and 2025 IEEE Industrial and Commercial Power Systems Europe Eeeic I and Cps Europe 2025
 - ? Year: 2025
 - ? Type: Conference Proceeding

? Subtype: Conference Paper
? Citations: 0
? DOI: 10.1109/EEEIC/ICPSEurope64998.2025.11169295
? Scopus ID: 2-s2.0-105019039502
? Authors: Carcasci Carlo; Conte Francesco; D'Agostino Fabio; Guzzo Gabriele; Natrella Gianluca; Saviozzi Matteo
? Keywords: energy markets | gas network | Hydrogen | multi-energy system | port energy management
? Source Id: 21101340466
? Author Ids: 6701748483;57151673600;56553864200;57224441656;57638571300;56027556100
? Authoraffiliationids: 60021859;108398862;60025153;60021859;60025153;60025153
? Corresponding: Carcasci C.

3.

? Title: Experimental Validation of Electrothermal and Aging Parameter Identification for Lithium-Ion Batteries
? Venue: Energies
? Year: 2024
? Type: Journal
? Subtype: Article
? Citations: 1
? DOI: 10.3390/en17102269
? Scopus ID: 2-s2.0-85194402635
? eISSN: 19961073
? Volume: 17
? Issue: 10
? Authors: Conte Francesco; Giallongo Marco; Kaza Daniele; Natrella Gianluca; Tachibana Ryohei; Tsuji Shinji; Silvestro Federico; Vichi Giovanni
? Keywords: Li-ion battery degradation | parameter identification | performance and lifetime prediction | semi-empirical model

? Quartile:

2025:

? Control and Optimization (Q1, rank 11, percentile 94)
? Engineering (miscellaneous) (Q1, rank 38, percentile 86)
? Electrical and Electronic Engineering (Q1, rank 155, percentile 84)
? Energy Engineering and Power Technology (Q1, rank 71, percentile 78)
? Fuel Technology (Q2, rank 40, percentile 70)
? Renewable Energy, Sustainability and the Environment (Q2, rank 110, percentile 64)
? Energy (miscellaneous) (Q2, rank 39, percentile 64)

2024:

? Control and Optimization (Q1, rank 15, percentile 90)
? Engineering (miscellaneous) (Q1, rank 39, percentile 85)
? Electrical and Electronic Engineering (Q1, rank 173, percentile 82)
? Energy Engineering and Power Technology (Q1, rank 73, percentile 75)
? Fuel Technology (Q2, rank 38, percentile 71)
? Energy (miscellaneous) (Q2, rank 32, percentile 68)
? Renewable Energy, Sustainability and the Environment (Q2, rank 105, percentile 64)

? Source Id: 62932

? Author Ids: 57151673600;57854283800;57218924925;57638571300;59147313600;59146680100;23026343700;57210078993

? Authoraffiliationids:

60005308;118019107;60025153;60025153;126155770;126155770;60025153;118019107

? Corresponding: Conte F.

4.

? Title: Enhancing Management and Control of Renewable Energy Communities: A Practical

Implementation

- ? Venue: 2024 3rd International Conference on Energy Transition in the Mediterranean Area Synergy MED 2024
- ? Year: 2024
- ? Type: Conference Proceeding
- ? Subtype: Conference Paper
- ? Citations: 0
- ? DOI: 10.1109/SyNERYMED62435.2024.10799371
- ? Scopus ID: 2-s2.0-85215549109
- ? Authors: Di Fazio A. R.; Conte F.; Natrella G.
- ? Keywords: Battery Energy Storage Systems | Experimental Validation | Model Predictive Control | PV Systems | Renewable Energy Community | Software-in-the-Loop Simulation
- ? Source Id: 21101270338
- ? Author Ids: 24437779200;57151673600;57638571300
- ? Authoraffiliationids: 60001711;60005308;60025153
- ? Corresponding: Di Fazio A.R.

5.

- ? Title: Day-Ahead Programming of Energy Communities Participating in Pay-as-Bid Service Markets
- ? Venue: IEEE Power and Energy Society General Meeting
- ? Year: 2024
- ? Type: Conference Proceeding
- ? Subtype: Conference Paper
- ? Citations: 0
- ? Doi: 10.1109/Pesgm51994.2024.10688872
- ? Scopus ID: 2-s2.0-85207428013
- ? Issn: 19449925
- ? eISSN: 19449933
- ? Authors: Conte F.; Massucco S.; Natrella G.; Saviozzi M.; Silvestro F.
- ? Keywords: day-ahead programming | Renewable Energy Community | scenario-based optimization | service market
- ? Quartile:

2025:

- ? Electrical and Electronic Engineering (Q3, rank 622, percentile 37)
- ? Nuclear Energy and Engineering (Q3, rank 53, percentile 37)
- ? Energy Engineering and Power Technology (Q3, rank 208, percentile 36)
- ? Renewable Energy, Sustainability and the Environment (Q3, rank 232, percentile 25)

2024:

- ? Nuclear Energy and Engineering (Q3, rank 53, percentile 34)
- ? Electrical and Electronic Engineering (Q3, rank 682, percentile 29)
- ? Energy Engineering and Power Technology (Q3, rank 215, percentile 28)
- ? Renewable Energy, Sustainability and the Environment (Q4, rank 238, percentile 20)

- ? Source Id: 20600195623

- ? Author Ids: 57151673600;6603357712;57638571300;56027556100;23026343700

- ? Authoraffiliationids: 60005308;60025153;60025153;60025153;60025153

- ? Corresponding: Conte F.

6.

- ? Title: Modelling and optimal management of renewable energy communities using reversible solid oxide cells
- ? Venue: Applied Energy
- ? Year: 2023
- ? Type: Journal
- ? Subtype: Article
- ? Citations: 46

? DOI: 10.1016/j.apenergy.2023.120657
? Scopus ID: 2-s2.0-85146670642
? Issn: 03062619
? Volume: 334
? Authors: Bianchi F. R.; Bosio B.; Conte F.; Massucco S.; Mosaico G.; Natrella G.; Saviozzi M.
? Keywords: Green Hydrogen | Renewable Energy Communities | Reversible Solid Oxide Cells | Stochastic Model Predictive Control
? Quartile:
2025:
? Management, Monitoring, Policy and Law (Q1, rank 6, percentile 98)
? Mechanical Engineering (Q1, rank 14, percentile 98)
? Building and Construction (Q1, rank 5, percentile 98)
? Energy (all) (Q1, rank 5, percentile 94)
? Renewable Energy, Sustainability and the Environment (Q1, rank 22, percentile 93)
2023:
? Building and Construction (Q1, rank 1, percentile 99)
? Management, Monitoring, Policy and Law (Q1, rank 5, percentile 98)
? Mechanical Engineering (Q1, rank 12, percentile 98)
? Energy (all) (Q1, rank 4, percentile 95)
? Renewable Energy, Sustainability and the Environment (Q1, rank 15, percentile 94)
? Source Id: 28801
? Author Ids:
57214116004;55888255600;57151673600;6603357712;57208723957;57638571300;56027556100
? Authoraffiliationids: 60025153;60025153;60005308;60025153;60025153;60025153;60025153
? Corresponding: Bianchi F.R.

7.
? Title: A new hybrid AI optimal management method for renewable energy communities
? Venue: Energy and AI
? Year: 2022
? Type: Journal
? Subtype: Article
? Citations: 47
? DOI: 10.1016/j.egyai.2022.100197
? Scopus ID: 2-s2.0-85136013988
? eISSN: 26665468
? Volume: 10
? Authors: Conte Francesco; D'Antoni Federico; Natrella Gianluca; Merone Mario
? Keywords: Artificial Intelligence | Battery Energy Storage System management | Deep learning | Model Predictive Control | Renewable Energy Community
? Quartile:
2025:
? Engineering (miscellaneous) (Q1, rank 11, percentile 96)
? Artificial Intelligence (Q1, rank 37, percentile 92)
? Energy (all) (Q1, rank 8, percentile 90)
2022:
? Engineering (miscellaneous) (Q1, rank 8, percentile 95)
? Artificial Intelligence (Q1, rank 35, percentile 88)
? Energy (all) (Q1, rank 10, percentile 86)
? Source Id: 21101047378
? Author Ids: 57151673600;59170855000;57638571300;56102657200
? Authoraffiliationids: 60005308;60005308;60025153;60005308
? Corresponding: Conte F.

8.

? Title: Exergetic Analysis of DME Synthesis from CO₂ and Renewable Hydrogen
? Venue: Energies
? Year: 2022
? Type: Journal
? Subtype: Article
? Citations: 12
? DOI: 10.3390/en15103516
? Scopus ID: 2-s2.0-85130515093
? eISSN: 19961073
? Volume: 15
? Issue: 10
? Authors: De Falco Marcello; Natrella Gianluca; Capocelli Mauro; Popielak Paulina; So?tysik Marcelina; Wawrzyczak Dariusz; Majchrzak-Kuc?ba Izabela
? Keywords: carbon capture and utilization | exergy analysis | methanol and DME production
? Quartile:
2025:
? Control and Optimization (Q1, rank 11, percentile 94)
? Engineering (miscellaneous) (Q1, rank 38, percentile 86)
? Electrical and Electronic Engineering (Q1, rank 155, percentile 84)
? Energy Engineering and Power Technology (Q1, rank 71, percentile 78)
? Fuel Technology (Q2, rank 40, percentile 70)
? Renewable Energy, Sustainability and the Environment (Q2, rank 110, percentile 64)
? Energy (miscellaneous) (Q2, rank 39, percentile 64)
2022:
? Control and Optimization (Q1, rank 21, percentile 83)
? Engineering (miscellaneous) (Q1, rank 27, percentile 82)
? Electrical and Electronic Engineering (Q2, rank 197, percentile 73)
? Energy Engineering and Power Technology (Q2, rank 77, percentile 69)
? Energy (miscellaneous) (Q2, rank 18, percentile 67)
? Fuel Technology (Q2, rank 39, percentile 67)
? Renewable Energy, Sustainability and the Environment (Q2, rank 103, percentile 56)
? Source Id: 62932
? Author Ids:
22940372300;57638571300;57105937300;57703435700;57217081924;35301378800;56292151900
? Authoraffiliationids: 60005308;60025153;60005308;60009913;60009913;60009913;60009913
? Corresponding: De Falco M.

9.

? Title: Methods and Tools for the Management of Renewable Energy Communities: the ComER project
? Venue: 2022 Aeit International Annual Conference Aeit 2022
? Year: 2022
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 4
? Doi: 10.23919/Aeit56783.2022.9951776
? Scopus ID: 2-s2.0-85143587755
? Authors: Rita Di Fazio Anna; Losi Arturo; Russo Mario; Cacace Filippo; Conte Francesco; Iannello Giulio; Natrella Gianluca; Saviozzi Matteo
? Keywords: Energy Communities | Renewables | Self-Consumption Management and Control
? Source Id: 21101125262
? Author Ids: 24437779200;7004596459;56186338900;12239653700;57151673600;6701387714;57638571300;56027556100
? Authoraffiliationids:

60001711;60001711;60001711;60005308;60005308;60005308;60025153;60025153

? Corresponding: Rita Di Fazio A.

10.

? Title: Optimal Management of a Smart Port with Shore-Connection and Hydrogen Supplying by Stochastic Model Predictive Control

? Venue: IEEE Power and Energy Society General Meeting

? Year: 2022

? Type: Conference Proceeding

? Subtype: Conference Paper

? Citations: 17

? Doi: 10.1109/Pesgm48719.2022.9916817

? Scopus ID: 2-s2.0-85141492983

? Issn: 19449925

? eISSN: 19449933

? Volume: 2022-July

? Authors: Conte F.; D'Agostino F.; Kaza D.; Massucco S.; Natrella G.; Silvestro F.

? Keywords: Cold-Ironing | Hydrogen | Multi-Energy Systems | Smart Port | Stochastic Model Predictive Control

? Quartile:

2025:

? Electrical and Electronic Engineering (Q3, rank 622, percentile 37)

? Nuclear Energy and Engineering (Q3, rank 53, percentile 37)

? Energy Engineering and Power Technology (Q3, rank 208, percentile 36)

? Renewable Energy, Sustainability and the Environment (Q3, rank 232, percentile 25)

? Source Id: 20600195623

? Author Ids: 57151673600;56553864200;57218924925;6603357712;57638571300;23026343700

? Authoraffiliationids: 60005308;60025153;60025153;60025153;60025153;60025153

? Corresponding: Conte F.

11.

? Title: Optimal Management of Renewable Generation and Uncertain Demand with Reverse Fuel Cells by Stochastic Model Predictive Control

? Venue: 2022 17th International Conference on Probabilistic Methods Applied to Power Systems Pmaps 2022

? Year: 2022

? Type: Conference Proceeding

? Subtype: Conference Paper

? Citations: 4

? Doi: 10.1109/Pmaps53380.2022.9810605

? Scopus ID: 2-s2.0-85135098261

? Authors: Conte F.; Mosaico G.; Natrella G.; Saviozzi M.; Bianchi F. R.

? Keywords: Fuel Cells | Hydrogen | Renewable Energy Communities | Stochastic Model Predictive Control

? Source Id: 21101098702

? Author Ids: 57151673600;57208723957;57638571300;56027556100;57214116004

? Authoraffiliationids: 60005308;60025153;60025153;60025153;60025153

? Corresponding: Conte F.

12.

? Title: How to give a renewed chance to natural gas as feed for the production of hydrogen: Electric MSR coupled with CO₂ mineralization

? Venue: Cleaner Engineering and Technology

? Year: 2021

? Type: Journal

? Subtype: Article

? Citations: 10

? DOI: 10.1016/j.clet.2021.100280

? Scopus ID: 2-s2.0-85116057808

? eISSN: 26667908

? Volume: 5

? Authors: Natrella Gianluca; Borgogna Alessia; Salladini Annarita; Iaquaniello Gaetano

? Keywords: CO₂ mineralization | Electrical methane steam reforming | Hydrogen production | Water electrolysis

? Quartile:

2025:

? Engineering (miscellaneous) (Q1, rank 17, percentile 94)

? Environmental Engineering (Q1, rank 20, percentile 91)

2021:

? Engineering (miscellaneous) (Q3, rank 80, percentile 30)

? Environmental Engineering (Q3, rank 127, percentile 26)

? Source Id: 21101059780

? Author Ids: 57638571300;57194685941;36698159700;6603152491

? Authoraffiliationids: 60005308;123658660;123658660;60005308-123658660-126966040

? Corresponding: Natrella G.