Mohamed Becherif

List of Publications by Year
in descending order

103 papers	3,018 citations	136950 32 h-index	182427 51 g-index
108 all docs	108 docs citations	108 times ranked	2352 citing authors

#	Article	IF	Citations
1	Efficient control and multiâ€criteria energy scheduling of renewableâ€based utility grid via paretoâ€metaheuristic optimizers. IET Renewable Power Generation, 2022, 16, 1246-1266.	3.1	4
2	Optimal metaheuristic-based sliding mode control of VSC-HVDC transmission systems. Mathematics and Computers in Simulation, 2021, 179, 178-193.	4.4	10
3	The key issues of electric vehicle charging via hybrid power sources: Techno-economic viability, analysis, and recommendations. Renewable and Sustainable Energy Reviews, 2021, 138, 110534.	16.4	34
4	<scp>PIDâ€</scp> / <scp>FOPID</scp> â€based frequency control of zeroâ€carbon multisourcesâ€based interconnected power systems underderegulated scenarios. International Transactions on Electrical Energy Systems, 2021, 31, e12712.	1.9	18
5	Health-aware frequency separation method for online energy management of fuel cell hybrid vehicle considering efficient urban utilization. International Journal of Hydrogen Energy, 2021, 46, 16030-16047.	7.1	16
6	Thermal Control for Electric Vehicle Based on the Multistack Fuel Cells. Energy Technology, 2021, 9, 2100242.	3.8	6
7	Finite-State Predictive Current Control of a Standalone DFIG-Based Wind Power Generation Systems: Simulation and Experimental Analysis. Journal of Control, Automation and Electrical Systems, 2021, 32, 1332-1343.	2.0	7
8	Parameter estimation of triple diode photovoltaic model using an artificial ecosystemâ€based optimizer. International Transactions on Electrical Energy Systems, 2021, 31, e13043.	1.9	19
9	Dual-layer approach for systematic sizing and online energy management of fuel cell hybrid vehicles. Applied Energy, 2021, 300, 117345.	10.1	18
10	Efficient experimental energy management operating for FC/battery/SC vehicles via hybrid Artificial Neural Networks-Passivity Based Control. Renewable Energy, 2021, 178, 1291-1302.	8.9	22
11	Design and implementation of DTC based on AFLC and PSO of a PMSM. Mathematics and Computers in Simulation, 2020, 167, 340-355.	4.4	15
12	Analyze and evaluate of energy management system for fuel cell electric vehicle based on frequency splitting. Mathematics and Computers in Simulation, 2020, 167, 65-77.	4.4	18
13	Nonlinear control and optimization of hybrid electrical vehicle under sources limitation constraints. International Journal of Hydrogen Energy, 2020, 45, 11255-11266.	7.1	9
14	Triple hybrid system coupling fuel cell with wind turbine and thermal solar system. International Journal of Hydrogen Energy, 2020, 45, 11484-11491.	7.1	30
15	An iterative algorithm for simulating heat recovery from exhaust gas â€“ÂApplication on generators. Mathematics and Computers in Simulation, 2020, 167, 92-103.	4.4	6
16	Neural network power management for hybrid electric elevator application. Mathematics and Computers in Simulation, 2020, 167, 155-175.	4.4	6
17	Metaheuristic-based energy management strategies for fuel cell emergency power unit in electrical aircraft. International Journal of Hydrogen Energy, 2019, 44, 2390-2406.	7.1	31
18	On the use of nonâ€orthogonal multiple access for V2V message dissemination. IET Intelligent Transport Systems, 2019, 13, 1125-1129.	3.0	5

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19	Combined passivity based control and optimal control for energy management of fuel cell/battery hybrid system. Asian Journal of Control, 2019, 21, 1857-1868.	3.0	5
20	Preface â€•special issue on Control Applications in Renewable Energy Systems. Asian Journal of Control, 2019, 21, 1778-1780.	3.0	0
21	Cooperative Operation of Parallel Connected Boost Converters for Low Voltage-High Power Applications: An Experimental Approach. Energy Procedia, 2019, 162, 349-358.	1.8	8
22	Wind Energy Conversion System Topologies and Converters: Comparative Review. Energy Procedia, 2019, 162, 38-47.	1.8	56
23	Effect of Doubly Fed Induction Generator on Transient Stability Analysis under Fault Conditions. Energy Procedia, 2019, 162, 315-324.	1.8	7
24	Dynamic Behavior Analysis for Optimally Tuned On-Grid DFIG Systems. Energy Procedia, 2019, 162, 339-348.	1.8	11
25	Interconnection and damping assignment passivity based control for fuel cell and battery vehicle: Simulation and experimentation. International Journal of Hydrogen Energy, 2019, 44, 22467-22477.	7.1	14
26	How nonlinear control can enhance the automobile efficiency and reduce harmful emissions: China case study. Journal of Cleaner Production, 2019, 212, 70-80.	9.3	3
27	Survey on Passivity Based Control of Induction Machine. Asian Journal of Control, 2019, 21, 2137-2154.	3.0	1
28	Estimation of Battery Soc for Hybrid Electric Vehicle using Coulomb Counting Method. International Journal of Emerging Electric Power Systems, 2018, 19, .	0.8	5
29	Optimal gain scheduling of VSCâ€HVDC system sliding mode control via artificial bee colony and mine blast algorithms. IET Generation, Transmission and Distribution, 2018, 12, 661-669.	2.5	22
30	Adaptive thermal control for PEMFC systems with guaranteed performance. International Journal of Hydrogen Energy, 2018, 43, 11550-11558.	7.1	57
31	Dynamic performance enhancement for wind energy conversion system using Moth-Flame Optimization based blade pitch controller. Sustainable Energy Technologies and Assessments, 2018, 27, 206-212.	2.7	44
32	Energy management hypothesis for hybrid power system of H 2 /WT/PV/GMT via AI techniques. International Journal of Hydrogen Energy, 2018, 43, 3527-3541.	7.1	36
33	Determination of the health state of fuel cell vehicle for a clean transportation. Journal of Cleaner Production, 2018, 171, 1510-1519.	9.3	24
34	Novel Energy Management Technique for Hybrid Electric Vehicle via Interconnection and Damping Assignment Passivity Based Control. Renewable Energy, 2018, 119, 116-128.	8.9	36
35	Experimental study of energy management of FC/SC hybrid system using the Passivity Based Control. International Journal of Hydrogen Energy, 2018, 43, 11583-11592.	7.1	4
36	AI-based global MPPT for partial shaded grid connected PV plant via MFO approach. Solar Energy, 2018, 171, 593-603.	6.1	77

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37	Modeling of a Small Scale Wind Turbine for Water Pumping Process: Case Study. Journal of Environmental Accounting and Management, 2018, 6, 273-289.	0.5	1
38	Optimal energy control of a PV-fuel cell hybrid system. International Journal of Hydrogen Energy, 2017, 42, 1456-1465.	7.1	52
39	Optimal PV Location Choice Considering Static and Dynamic Constraints. International Journal of Emerging Electric Power Systems, 2017, 18, .	0.8	13
40	Efficient startâ€“up energy management via nonlinear control for ecoâ€“traction systems. Applied Energy, 2017, 187, 899-909.	10.1	13
41	New Connection of DFIG Wind Turbines to the Grid to Minimize Converter Number. International Journal of Emerging Electric Power Systems, 2017, 18, .	0.8	0
42	Carbone dioxide capture and utilization in gas turbine plants via the integration of power to gas. Petroleum, 2017, 3, 127-137.	2.8	9
43	Experimental validation for Li-ion battery modeling using Extended Kalman Filters. International Journal of Hydrogen Energy, 2017, 42, 25509-25517.	7.1	35
44	Dynamic Performance Enhancement of Synchronous Generator Excitation via Nonlinear Backstepping Control. International Journal of Emerging Electric Power Systems, 2017, 18, .	0.8	1
45	Extended kalman filter for accurate state of charge estimation of lithium-based batteries: a comparative analysis. International Journal of Hydrogen Energy, 2017, 42, 29033-29046.	7.1	88
46	Heat management methodology for enhanced global efficiency in hybrid electric vehicles. Case Studies in Thermal Engineering, 2017, 10, 325-334.	5.7	6
47	Multiâ€stack fuel cell efficiency enhancement based on thermal management. IET Electrical Systems in Transportation, 2017, 7, 65-73.	2.4	8
48	Experimental validation of differential flatness-based control applied to stand alone using photovoltaic/fuel cell/battery hybrid power sources. International Journal of Hydrogen Energy, 2017, 42, 1510-1517.	7.1	11
49	Dynamic modeling and experimental analysis of PEMFCs: A comparative study. International Journal of Hydrogen Energy, 2017, 42, 1544-1557.	7.1	69
50	Analytical modelling and experimental validation of proton exchange membrane electrolyser for hydrogen production. International Journal of Hydrogen Energy, 2017, 42, 1366-1374.	7.1	87
51	Fault diagnosis methods for Proton Exchange Membrane Fuel Cell system. International Journal of Hydrogen Energy, 2017, 42, 1534-1543.	7.1	63
52	Fuzzy logic approach based mppt for the dynamic performance improvement for PV systems. , 2017, , .		10
53	Optimal blade pitch control for enhancing the dynamic performance of wind power plants via metaheuristic optimisers. IET Electric Power Applications, 2017, 11, 1432-1440.	1.8	53
54	Experimental validation of a dual loop control of two phases interleaved boost converter for fuel cell applications. Journal of Fundamental and Applied Sciences, 2016, 8, 327.	0.2	4

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55	Dynamic Performance Comparison for MPPT-PV Systems using Hybrid Pspice/Matlab Simulation. International Journal of Emerging Electric Power Systems, 2016, 17, 529-539.	0.8	7
56	Hydrogen production horizon using solar energy in Biskra, Algeria. International Journal of Hydrogen Energy, 2016, 41, 21899-21912.	7.1	45
57	Dual loop controllers using PI, sliding mode and flatness controls applied to low voltage converters for fuel cell applications. International Journal of Hydrogen Energy, 2016, 41, 19154-19163.	7.1	34
58	Modeling and sizing of combined fuel cell-thermal solar system for energy generation. International Journal of Hydrogen Energy, 2016, 41, 19929-19935.	7.1	41
59	Detecting of Multi Phase Inter Turn Short Circuit in the Five Permanent Magnet Synchronous Motor. International Journal of Emerging Electric Power Systems, 2016, 17, 583-595.	0.8	8
60	A lumped fluidic model of an anode chamber for fault tolerant strategy design. International Journal of Hydrogen Energy, 2016, 41, 5037-5047.	7.1	12
61	Thermal Management for Efficiency Enhancement for Multi-Stack Fuel Cell Electric Vehicle. , 2015, , .		4
62	Multi-stack Fuel Cells Powering a Vehicle. Energy Procedia, 2015, 74, 308-319.	1.8	32
63	Reconfiguration solution for shaded PV panels using switching control. Renewable Energy, 2015, 82, 4-13.	8.9	79
64	Fuzzy logic-based water heating control methodology for the efficiency enhancement of hybrid PVâ€“PEM electrolyser systems. International Journal of Hydrogen Energy, 2015, 40, 2149-2161.	7.1	31
65	Modeling and simulation of a hybrid energy source based on solar energy and battery. International Journal of Hydrogen Energy, 2015, 40, 13702-13707.	7.1	19
66	Optimal Genetic-sliding Mode Control of VSC-HVDC Transmission Systems. Energy Procedia, 2015, 74, 1048-1060.	1.8	24
67	Energy Management of Fuel Cell/ Supercapacitor Hybrid Source Based on Linear and Sliding Mode Control. Energy Procedia, 2015, 74, 1258-1264.	1.8	36
68	A Combined Experimental and Simulation Study on the Effects of Irradiance and Temperature on Photovoltaic Modules. Energy Procedia, 2015, 75, 373-380.	1.8	28
69	Hydrogen Energy Storage: New Techno-Economic Emergence Solution Analysis. Energy Procedia, 2015, 74, 371-380.	1.8	71
70	Fuzzy logic and passivity based control applied to hybrid DC power source using fuel cell and battery. , 2015, , .		5
71	Flatness and sliding mode based controller of fuel cell and supercapacitors hybrid source. , 2015, , .		2
72	Modelling, simulation and identification of an engine air path electromechanical actuator. Control Engineering Practice, 2015, 34, 88-97.	5.5	8

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73	Modelling and Experimental Analysis of a PEM Electrolyser Powered by a Solar Photovoltaic Panel. Energy Procedia, 2014, 62, 714-722.	1.8	25
74	Observer design for induction motor: an approach based on the mean value theorem. Frontiers in Energy, 2014, 8, 426-433.	2.3	15
75	Energy management and optimal control strategies of fuel cell/supercapacitors hybrid vehicle. , 2014, , .		4
76	Optimal energy management control scheme for fuel cell hybrid vehicle. , 2014, , .		4
77	Online identification of semi-empirical model parameters for PEMFCs. International Journal of Hydrogen Energy, 2014, 39, 21165-21176.	7.1	91
78	Implementation and dual loop control of two phases interleaved boost converter for fuel cell applications. , 2014, , .		7
79	Implementation of MRAC controller of a DFIG based variable speed grid connected wind turbine. Energy Conversion and Management, 2014, 79, 281-288.	9.2	47
80	A double-fuzzy diagnostic methodology dedicated to online fault diagnosis of proton exchange membrane fuel cell stacks. Journal of Power Sources, 2014, 271, 570-581.	7.8	96
81	Dual Loop Control of Fuel Cell Source Using Non-isolated IBC-IDDB Converter for Hybrid Vehicle Applications. Energy Procedia, 2014, 50, 155-162.	1.8	13
82	Fuzzy Logic and Passivity-based Controller Applied to Electric Vehicle Using Fuel Cell and Supercapacitors Hybrid Source. Energy Procedia, 2014, 50, 619-626.	1.8	53
83	Optimal Sizing Design and Energy Management of Stand-alone Photovoltaic/Wind Generator Systems. Energy Procedia, 2014, 50, 163-170.	1.8	40
84	Fuzzy Logic Maximum Structure and State Feedback Control Strategies of the Electrical Car. Energy Procedia, 2014, 50, 178-185.	1.8	2
85	States Feedback Control Applied to the Electric Vehicle. Energy Procedia, 2014, 50, 186-193.	1.8	1
86	A Novel Adaptive Operation Mode based on Fuzzy Logic Control of Electrical Vehicle. Energy Procedia, 2014, 50, 194-201.	1.8	13
87	Nonlinear Flatness Control Applied to Supercapacitors Contribution in Hybrid Power Systems Using Photovoltaic Source and Batteries. Energy Procedia, 2014, 50, 333-341.	1.8	16
88	A review on non-model based diagnosis methodologies for PEM fuel cell stacks and systems. International Journal of Hydrogen Energy, 2013, 38, 8914-8926.	7.1	172
89	Energy management of fuel cell/ supercapacitor hybrid power sources based on the flatness control. , 2013, , .		12
90	A review on model-based diagnosis methodologies for PEMFCs. International Journal of Hydrogen Energy, 2013, 38, 7077-7091.	7.1	266

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91	Comparison of proton exchange membrane fuel cell static models. Renewable Energy, 2013, 56, 64-71.	8.9	67
92	Electrical equivalent model of a proton exchange membrane fuel cell with experimental validation. Renewable Energy, 2011, 36, 2582-2588.	8.9	32
93	Vehicle hybridization with fuel cell, supercapacitors and batteries by sliding mode control. Renewable Energy, 2011, 36, 2627-2634.	8.9	78
94	Passivity-Based Control applied to DC hybrid power source using fuel cell and supercapacitors. Energy Conversion and Management, 2010, 51, 1468-1475.	9.2	70
95	Three order state space modeling of proton exchange membrane fuel cell with energy function definition. Journal of Power Sources, 2010, 195, 6645-6651.	7.8	16
96	MPPT of a PEMFC based on air supply control of the motocompressor group. International Journal of Hydrogen Energy, 2010, 35, 12521-12530.	7.1	72
97	A nonlinear adaptive backstepping approach applied to a three phase PWM ACâ€“DC converter feeding induction heating. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 1515-1525.	3.3	32
98	A reduced-order model and a higher-order sliding-mode control of the air supply system of a proton-exchange-membrane fuel cell with experimental validation. , 2009, , .		3
99	Passivity-Based Control of Hybrid Power Sources using Fuel Cell, Supercapacitors, and Batteries on the DC link for Energy Traction System. , 2007, , .		16
100	Electrical Train Feeding By Association Of Supercapacitors, Photovoltaic And Wind Generators. , 2007, , .		6
101	PASSIVITY-BASED CONTROL OF HYBRID SOURCES: FUEL CELL AND BATTERY. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 585-590.	0.4	23
102	STABILITY AND ROBUSTNESS OF DISTURBED-PORT CONTROLLED HAMILTONIAN SYSTEMS WITH DISSIPATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 574-579.	0.4	20
103	Passivity-based control of a doubly-fed induction generator interconnected with an induction motor. , 0, , .		12