

# Edris Pouresmaeil

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

144  
papers

2,431  
citations

27  
h-index

45  
g-index

166  
ext. papers

3,090  
ext. citations

4.2  
avg, IF

5.71  
L-index

#	Paper	IF	Citations
144	Employing Machine Learning for Enhancing Transient Stability of Power Synchronization Control during Fault Conditions in Weak Grids. <i>IEEE Transactions on Smart Grid</i> , <b>2022</b> , 1-1	10.7	3
143	Adjustable unbalanced current controller for transformerless PV generation to suppress DC voltage ripples of inverter in low-voltage ride-through (LVRT) operation. <i>IET Renewable Power Generation</i> , <b>2022</b> , 16, 1194-1205	2.9	
142	Multiobjective Laguerre Functions-Based Discrete-Time Model Predictive Control: A Fast Inner-Loop Controller for Grid. <i>Electric Power Systems Research</i> , <b>2022</b> , 209, 107976	3.5	1
141	A Novel Control Strategy Based on an Adaptive Fuzzy Model Predictive Control for Frequency Regulation of a Microgrid with Uncertain and Time-Varying Parameters. <i>IEEE Access</i> , <b>2022</b> , 1-1	3.5	0
140	Enhanced control of voltage source converters considering virtual inertia theory. <i>International Transactions on Electrical Energy Systems</i> , <b>2021</b> , 31, e13245	2.2	0
139	Fault-Tolerant Operation Strategy for Reliability improvement of a Switched-Capacitor Multi-Level Inverter. <i>IEEE Transactions on Industrial Electronics</i> , <b>2021</b> , 1-1	8.9	1
138	Multi-Alternative Operation-Planning Problem of Wind Farms Participating in Gas and Electricity Markets. <i>IEEE Access</i> , <b>2021</b> , 9, 166825-166837	3.5	1
137	An Adaptive Parameter-Based Control Technique of Virtual Synchronous Generator for Smooth Transient Between Islanded and Grid-Connected Mode of Operation. <i>IEEE Access</i> , <b>2021</b> , 9, 137322-137337	3.5	1
136	Circuit Configuration and Modulation of a Seven-Level Switched-Capacitor Inverter. <i>IEEE Transactions on Power Electronics</i> , <b>2021</b> , 36, 7087-7096	7.2	15
135	A Control Technique Based on Distributed Virtual Inertia for High Penetration of Renewable Energies Under Weak Grid Conditions. <i>IEEE Systems Journal</i> , <b>2021</b> , 15, 1825-1834	4.3	11
134	. <i>IEEE Access</i> , <b>2021</b> , 9, 104915-104926	3.5	0
133	Provision of Synthetic Inertia Support for Converter-Dominated Weak Grids. <i>IEEE Systems Journal</i> , <b>2021</b> , 1-10	4.3	1
132	Simultaneous Optimization of Virtual Synchronous Generators (VSG) Parameters in Islanded Microgrids Supplying Induction Motors. <i>IEEE Access</i> , <b>2021</b> , 9, 124972-124985	3.5	3
131	Dual Two-Level Voltage Source Inverter Virtual Inertia Emulation: A Comparative Study. <i>Energies</i> , <b>2021</b> , 14, 1160	3.1	3
130	Systematic photovoltaic system power losses calculation and modeling using computational intelligence techniques. <i>Applied Energy</i> , <b>2021</b> , 284, 116396	10.7	3
129	An Extended Multilayer Thermal Model for Multichip IGBT Modules Considering Thermal Aging. <i>IEEE Access</i> , <b>2021</b> , 9, 84217-84230	3.5	3
128	Droop Method Development for Microgrids Control Considering Higher Order Sliding Mode Control Approach and Feeder Impedance Variation. <i>Applied Sciences (Switzerland)</i> , <b>2021</b> , 11, 967	2.6	2

127	Grid-Following DVI-Based Converter Operating in Weak Grids for Enhancing Frequency Stability. <i>IEEE Transactions on Power Delivery</i> , <b>2021</b> , 1-1	4.3	4
126	An Impedance Source Multi-Level Three Phase Inverter with Common Mode Voltage Elimination and Dead Time Compensation. <i>Electronics (Switzerland)</i> , <b>2020</b> , 9, 1639	2.6	2
125	A Novel Space Vector Modulation Scheme for a 10-Switch Converter. <i>Energies</i> , <b>2020</b> , 13, 1855	3.1	3
124	Single DC Source Multilevel Inverter with Changeable Gains and Levels for Low-Power Loads. <i>Electronics (Switzerland)</i> , <b>2020</b> , 9, 937	2.6	3
123	Resonance-Based Optimized Buck LED Driver Using Unequal Turn Ratio Coupled Inductance. <i>IEEE Transactions on Power Electronics</i> , <b>2020</b> , 35, 13068-13076	7.2	5
122	Power Quality Improvement with a Pulse Width Modulation Control Method in Modular Multilevel Converters under Varying Nonlinear Loads. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 3292	2.6	1
121	A Novel Control Strategy to Active Power Filter with Load Voltage Support Considering Current Harmonic Compensation. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 1664	2.6	5
120	Analysis of electrical behaviour of PV arrays covered with non-uniform snow. <i>Electronics Letters</i> , <b>2020</b> , 56, 192-194	1.1	1
119	A Hybrid Evolutionary-Based MPPT for Photovoltaic Systems Under Partial Shading Conditions. <i>IEEE Access</i> , <b>2020</b> , 8, 38481-38492	3.5	31
118	Virtual Inertia Implementation in Dual Two-Level Voltage Source Inverters <b>2020</b> ,		3
117	Microgrid Stability Analysis Considering Current State-Feedback <b>2020</b> ,		1
116	Enhancing Frequency Stability of Weak Grids with Modified Distributed Virtual Inertia Method <b>2020</b> ,		1
115	Employing Virtual Synchronous Generator with a New Control Technique for Grid Frequency Stabilization <b>2020</b> ,		2
114	Emulating Rotational Inertia of Synchronous Machines by a New Control Technique in Grid-Interactive Converters. <i>Sustainability</i> , <b>2020</b> , 12, 5346	3.6	6
113	Coordinated Power Sharing in Islanding Microgrids for Parallel Distributed Generations. <i>Electronics (Switzerland)</i> , <b>2020</b> , 9, 1927	2.6	6
112	X-Type Step-Up Multi-Level Inverter with Reduced Component Count Based on Switched-Capacitor Concept. <i>Electronics (Switzerland)</i> , <b>2020</b> , 9, 1987	2.6	6
111	Virtual Impedances Optimization to Enhance Microgrid Small-Signal Stability and Reactive Power Sharing. <i>IEEE Access</i> , <b>2020</b> , 8, 139691-139705	3.5	6
110	An Efficient H7 Single-Phase Photovoltaic Grid Connected Inverter for CMC Conceptualization and Mitigation Method. <i>Electronics (Switzerland)</i> , <b>2020</b> , 9, 1440	2.6	4

109	Finite-Time Disturbance-Observer-Based Integral Terminal Sliding Mode Controller for Three-Phase Synchronous Rectifier. <i>IEEE Access</i> , <b>2020</b> , 8, 152116-152130	3.5	11
108	Semi-valley switching method for buck LED driver to increase its efficiency and performance. <i>IET Power Electronics</i> , <b>2020</b> , 13, 1966-1973	2.2	1
107	. <i>IEEE Access</i> , <b>2020</b> , 8, 197484-197498	3.5	3
106	. <i>IEEE Systems Journal</i> , <b>2020</b> , 14, 813-823	4.3	17
105	Microgrid Frequency & Voltage Adjustment Applying Virtual Synchronous Generator <b>2019</b> ,		5
104	Optimal Management of an Energy Storage Unit in a PV-Based Microgrid Integrating Uncertainty and Risk. <i>Applied Sciences (Switzerland)</i> , <b>2019</b> , 9, 169	2.6	13
103	The Impact of Demand Response Programs on Reducing the Emissions and Cost of A Neighborhood Home Microgrid. <i>Applied Sciences (Switzerland)</i> , <b>2019</b> , 9, 2097	2.6	5
102	A Compound Current Limiter and Circuit Breaker. <i>Electronics (Switzerland)</i> , <b>2019</b> , 8, 551	2.6	16
101	A Modified Partial Power structure for Quasi Z-Source Converter to Improve Voltage Gain and Power Rating. <i>Energies</i> , <b>2019</b> , 12, 2139	3.1	5
100	Integration of Large Scale PV-Based Generation into Power Systems: A Survey. <i>Energies</i> , <b>2019</b> , 12, 1425	3.1	39
99	A Data-Driven Based Voltage Control Strategy for DC-DC Converters: Application to DC Microgrid. <i>Electronics (Switzerland)</i> , <b>2019</b> , 8, 493	2.6	7
98	Direct Power Control of Matrix Converter-Fed DFIG with Fixed Switching Frequency. <i>Sustainability</i> , <b>2019</b> , 11, 2604	3.6	9
97	Adapted near-state PWM for dual two-level inverters in order to reduce common-mode voltage and switching losses. <i>IET Power Electronics</i> , <b>2019</b> , 12, 676-685	2.2	7
96	Control of power electronics-based synchronous generator for the integration of renewable energies into the power grid. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2019</b> , 111, 300-314	5.1	13
95	Virtual Inertia and Mechanical Power-Based Control Strategy to Provide Stable Grid Operation under High Renewables Penetration. <i>Applied Sciences (Switzerland)</i> , <b>2019</b> , 9, 1043	2.6	10
94	Smart participation of PHEVs in controlling voltage and frequency of island microgrids. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2019</b> , 110, 510-522	5.1	12
93	An Innovative Dual-Boost Nine-Level Inverter with Low-Voltage Rating Switches. <i>Energies</i> , <b>2019</b> , 12, 2073	3.1	8
92	Design and Implementation of a New Algorithm for Enhancing MPPT Performance in Solar Cells. <i>Energies</i> , <b>2019</b> , 12, 519	3.1	3

91	A Novel Step-Up Single Source Multilevel Inverter: Topology, Operating Principle, and Modulation. <i>IEEE Transactions on Power Electronics</i> , <b>2019</b> , 34, 3269-3282	7.2	64
90	A Multi-Inductor H Bridge Fault Current Limiter. <i>Electronics (Switzerland)</i> , <b>2019</b> , 8, 795	2.6	6
89	Control of Grid-Tied Converters for Integration of Renewable Energy Sources into the Weak Grids <b>2019</b> ,		5
88	Particle swarm optimisation-based model and analysis of photovoltaic module characteristics in snowy conditions. <i>IET Renewable Power Generation</i> , <b>2019</b> , 13, 1950-1957	2.9	4
87	A New Modular Multilevel Inverter Based on Step-Up Switched-Capacitor Modules. <i>Energies</i> , <b>2019</b> , 12, 524	3.1	14
86	Large-Scale Grid Integration of Renewable Energy Resources with a Double Synchronous Controller. <i>Applied Sciences (Switzerland)</i> , <b>2019</b> , 9, 5548	2.6	
85	Control of MMC-Based STATCOM as an Effective Interface between Energy Sources and the Power Grid. <i>Electronics (Switzerland)</i> , <b>2019</b> , 8, 1264	2.6	1
84	The P-Type Module with Virtual DC Links to Increase Levels in Multilevel Inverters. <i>Electronics (Switzerland)</i> , <b>2019</b> , 8, 1460	2.6	4
83	Control technique for the operation of grid-tied converters with high penetration of renewable energy resources. <i>Electric Power Systems Research</i> , <b>2019</b> , 166, 18-28	3.5	29
82	Smart Residential Load Simulator for Energy Management in Smart Grids. <i>IEEE Transactions on Industrial Electronics</i> , <b>2019</b> , 66, 1443-1452	8.9	37
81	CVaR-based energy management scheme for optimal resilience and operational cost in commercial building microgrids. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2018</b> , 100, 1-9	5.1	115
80	Interfacing modular multilevel converters for grid integration of renewable energy sources. <i>Electric Power Systems Research</i> , <b>2018</b> , 160, 439-449	3.5	14
79	Framework for smart transactive energy in home-microgrids considering coalition formation and demand side management. <i>Sustainable Cities and Society</i> , <b>2018</b> , 40, 136-154	10.1	69
78	Optimal residential model predictive control energy management performance with PV microgeneration. <i>Computers and Operations Research</i> , <b>2018</b> , 96, 143-156	4.6	23
77	Load-frequency control in a multi-source power system connected to wind farms through multi terminal HVDC systems. <i>Computers and Operations Research</i> , <b>2018</b> , 96, 305-315	4.6	27
76	Smart transactive energy framework in grid-connected multiple home microgrids under independent and coalition operations. <i>Renewable Energy</i> , <b>2018</b> , 126, 95-106	8.1	153
75	Novel Control Strategy for Modular Multilevel Converters Based on Differential Flatness Theory. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2018</b> , 6, 888-897	5.6	30
74	A control method for operation of a power conditioner system based on fuel cell/supercapacitor. <i>Electrical Engineering</i> , <b>2018</b> , 100, 857-863	1.5	3

73	Model Predictive Control Home Energy Management and Optimization Strategy with Demand Response. <i>Applied Sciences (Switzerland)</i> , <b>2018</b> , 8, 408	2.6	57
72	A new energy management strategy for a grid connected wind turbine-battery storage power plant <b>2018</b> ,		5
71	A control strategy based on the upper and lower arms modulation functions of MMC in HVDC applications <b>2018</b> ,		8
70	Direct-Lyapunov-Based Control Scheme for Voltage Regulation in a Three-Phase Islanded Microgrid with Renewable Energy Sources. <i>Energies</i> , <b>2018</b> , 11, 1161	3.1	5
69	A multi-loop control technique for the stable operation of modular multilevel converters in HVDC transmission systems. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2018</b> , 96, 194-207	5.1	35
68	Investigating Wind Generation Investment Indices in Multi-Stage Planning <b>2018</b> ,		1
67	Energy Management of a Single Grid-Connected Home Microgrid for Determining Optimal Supply/Demand Bids <b>2018</b> ,		2
66	Dynamic Stochastic EPEC Model for Competition of Dominant Producers in Generation Expansion Planning <b>2018</b> ,		2
65	Investment Incentives in Competitive Electricity Markets. <i>Applied Sciences (Switzerland)</i> , <b>2018</b> , 8, 1978	2.6	27
64	A Centralized Smart Decision-Making Hierarchical Interactive Architecture for Multiple Home Microgrids in Retail Electricity Market. <i>Energies</i> , <b>2018</b> , 11, 3144	3.1	30
63	Single-Phase Active Power Harmonics Filter by Op-Amp Circuits and Power Electronics Devices. <i>Sustainability</i> , <b>2018</b> , 10, 4406	3.6	4
62	Long-Term Decision on Wind Investment with Considering Different Load Ranges of Power Plant for Sustainable Electricity Energy Market. <i>Sustainability</i> , <b>2018</b> , 10, 3811	3.6	24
61	Reserve Allocation of Photovoltaic Systems to Improve Frequency Stability in Hybrid Power Systems. <i>Energies</i> , <b>2018</b> , 11, 2583	3.1	14
60	Synchronous Resonant Control Technique to Address Power Grid Instability Problems Due to High Renewables Penetration. <i>Energies</i> , <b>2018</b> , 11, 2469	3.1	13
59	Angular Frequency Dynamic-Based Control Technique of a Grid-Interfaced Converter Emulated by a Synchronous Generator <b>2018</b> ,		1
58	Stability Analysis of a Synchronous Generator-Based Control Technique used in Large-Scale Grid Integration of Renewable Energy <b>2018</b> ,		2
57	Simulation and Comparison of Mathematical Models of PV Cells with Growing Levels of Complexity. <i>Energies</i> , <b>2018</b> , 11, 2902	3.1	15
56	A two stage hierarchical control approach for the optimal energy management in commercial building microgrids based on local wind power and PEVs. <i>Sustainable Cities and Society</i> , <b>2018</b> , 41, 332-340	10.1	90

55	A control strategy for a multi-terminal HVDC network integrating wind farms to the AC grid. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2017</b> , 89, 146-155	5.1	10
54	A seamless control scheme for a microgrid with renewable energy sources <b>2017</b> ,		2
53	Domestic appliances energy optimization with model predictive control. <i>Energy Conversion and Management</i> , <b>2017</b> , 142, 402-413	10.6	31
52	Energy optimization strategy with Model Predictive Control and demand response <b>2017</b> ,		3
51	Simulation study of a photovoltaic cell with increasing levels of model complexity <b>2017</b> ,		3
50	Home HVAC energy management and optimization with model predictive control <b>2017</b> ,		6
49	EV charging effect on a distribution transformer supplying a factory with local PV generation <b>2017</b> ,		1
48	Residential MPC controller performance in a household with PV microgeneration <b>2017</b> ,		3
47	Hybrid time triggered protocol for home wireless communications <b>2017</b> ,		1
46	Efficient remote control system using SMS and WiFi technology for outdoor security lighting applications <b>2017</b> ,		1
45	Dynamic Model, Control and Stability Analysis of MMC in HVDC Transmission Systems. <i>IEEE Transactions on Power Delivery</i> , <b>2017</b> , 32, 1471-1482	4.3	65
44	Double synchronous controller for integration of large-scale renewable energy sources into a low-inertia power grid <b>2017</b> ,		6
43	Function-based modulation control for modular multilevel converters under varying loading and parameters conditions. <i>IET Generation, Transmission and Distribution</i> , <b>2017</b> , 11, 3222-3230	2.5	23
42	Synchronous active proportional resonant-based control technique for high penetration of distributed generation units into power grids <b>2017</b> ,		5
41	A control approach for the operation of DG units under variations of interfacing impedance in grid-connected mode. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2016</b> , 74, 1-8	5.1	11
40	Unit commitment optimisation of hydro-thermal power systems in the day-ahead electricity market. <i>Cogent Engineering</i> , <b>2016</b> , 3, 1251009	1.5	2
39	Analysis and control of single-phase converters for integration of small-scaled renewable energy sources into the power grid <b>2016</b> ,		7
38	A control strategy for the stable operation of shunt active power filters in power grids. <i>Energy</i> , <b>2016</b> , 96, 325-334	7.9	26

37	A Novel DC-Bus Sensor-less MPPT Technique for Single-Stage PV Grid-Connected Inverters. <i>Energies</i> , <b>2016</b> , 9, 248	3.1	6
36	A Novel Modulation Function-Based Control of Modular Multilevel Converters for High Voltage Direct Current Transmission Systems. <i>Energies</i> , <b>2016</b> , 9, 867	3.1	16
35	A control technique for operation of single-phase converters in stand-alone operating mode <b>2016</b> ,		2
34	Integration of electric vehicles into a smart power grid: A technical review <b>2016</b> ,		12
33	Dynamic performance control of modular multilevel converters in HVDC transmission systems <b>2016</b> ,		2
32	<b>2016</b> ,		5
31	A control plan for the stable operation of microgrids during grid-connected and islanded modes. <i>Electric Power Systems Research</i> , <b>2015</b> , 129, 10-22	3.5	51
30	Control technique for enhancing the stable operation of distributed generation units within a microgrid. <i>Energy Conversion and Management</i> , <b>2015</b> , 97, 362-373	10.6	48
29	Multilevel converter control approach of active power filter for harmonics elimination in electric grids. <i>Energy</i> , <b>2015</b> , 84, 722-731	7.9	38
28	Integration of DG sources for compensation of unbalanced loads in the power grid <b>2015</b> ,		1
27	Multifunctional control of an NPC converter for the grid integration of renewable energy sources <b>2015</b> ,		3
26	Control of Modular Multilevel Converters for integration of distributed generation sources into the power grid <b>2015</b> ,		7
25	Enhancing home appliances energy optimization with solar power integration <b>2015</b> ,		8
24	Stable operation of distributed generation units in microgrid networks <b>2015</b> ,		1
23	MPC weights tuning role on the energy optimization in residential appliances <b>2015</b> ,		4
22	Control and stability analysis of interfaced converter in distributed generation technology <b>2015</b> ,		3
21	Model predictive control technique for energy optimization in residential appliances <b>2015</b> ,		3
20	A Multifunction Control Strategy for the Stable Operation of DG Units in Smart Grids. <i>IEEE Transactions on Smart Grid</i> , <b>2015</b> , 6, 598-607	10.7	42



19	Stable Integration of Power Electronics-Based DG Links to the Utility Grid with Interfacing Impedance Uncertainties. <i>IFIP Advances in Information and Communication Technology</i> , <b>2015</b> , 502-511	0.5	
18	Passivity-based control technique for integration of DG resources into the power grid. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2014</b> , 58, 281-290	5.1	37
17	Direct Lyapunov Control Technique for the Stable Operation of Multilevel Converter-Based Distributed Generation in Power Grid. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2014</b> , 2, 931-941	5.6	27
16	Direct Lyapunov control (DLC) technique for distributed generation (DG) technology. <i>Electrical Engineering</i> , <b>2014</b> , 96, 309-321	1.5	13
15	Active and reactive power ripple minimization in direct power control of matrix converter-fed DFIG. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2014</b> , 63, 600-608	5.1	22
14	Hysteresis current control technique of VSI for compensation of grid-connected unbalanced loads. <i>Electrical Engineering</i> , <b>2014</b> , 96, 27-35	1.5	12
13	A control algorithm for the stable operation of interfaced converters in microgrid systems <b>2014</b> ,		6
12	A flexible control strategy for integration of DG sources into the power grid <b>2014</b> ,		1
11	Digital Control of a Power Conditioner for Fuel Cell/Super-capacitor Hybrid System. <i>Electric Power Components and Systems</i> , <b>2014</b> , 42, 165-179	1	4
10	A Control Technique for Integration of DG Units to the Electrical Networks. <i>IEEE Transactions on Industrial Electronics</i> , <b>2013</b> , 60, 2881-2893	8.9	39
9	Control Scheme of Three-Level NPC Inverter for Integration of Renewable Energy Resources Into AC Grid. <i>IEEE Systems Journal</i> , <b>2012</b> , 6, 242-253	4.3	55
8	The frequency-independent control method for distributed generation systems. <i>Applied Energy</i> , <b>2012</b> , 96, 272-280	10.7	13
7	Electrical Drives and Power Electronics <b>2012</b> , 263-293		
6	A hybrid algorithm for fast detection and classification of voltage disturbances in electric power systems. <i>European Transactions on Electrical Power</i> , <b>2011</b> , 21, 555-564		8
5	Instantaneous active and reactive current control technique of shunt active power filter based on the three-level NPC inverter. <i>European Transactions on Electrical Power</i> , <b>2011</b> , 21, 2007-2022		23
4	Multilevel converters control for renewable energy integration to the power grid. <i>Energy</i> , <b>2011</b> , 36, 950-963	9.63	48
3	Economic viability of distributed energy resources relative to substation and feeder facilities expansion <b>2010</b> ,		3
2	A multi-objective control strategy for grid connection of DG (distributed generation) resources. <i>Energy</i> , <b>2010</b> , 35, 5022-5030	7.9	37

1 Distributed energy resources and benefits to the environment. *Renewable and Sustainable Energy Reviews*, **2010**, 14, 724-734

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