Ca Ramos-Paja

List of Publications by Year in Descending Order

104 papers	2,215 citations	27 h-index	45 g-index
119 ext. papers	2,723 ext. citations	3.2 avg, IF	5.35 L-index

#	Paper	IF	Citations
104	Sliding-Mode Control of a Photovoltaic System Based on a Flyback Converter for Microinverter Applications. *Applied Sciences (Switzerland)*, **2022**, 12, 1399	2.6	1
103	A low-cost system for real-time measuring of the sunlight incident angle using IoT.. *HardwareX*, **2022**, 11, e00272	2.7	2
102	Improved modelling of bypass diodes for photovoltaic applications. *AEJ - Alexandria Engineering Journal*, **2022**, 61, 6261-6273	6.1	1
101	PV Array Reconfiguration Based on Genetic Algorithm for Maximum Power Extraction and Energy Impact Analysis. *Sustainability*, **2022**, 14, 3764	3.6	0
100	Parameter Estimation of the Bishop Photovoltaic Model Using a Genetic Algorithm. *Applied Sciences (Switzerland)*, **2022**, 12, 2927	2.6	2
99	Optimal Allocation and Sizing of PV Generation Units in Distribution Networks via the Generalized Normal Distribution Optimization Approach. *Computers*, **2022**, 11, 53	1.9	1
98	Double Adaptive PI-Structure for Regulating a Microgrid DC Bus Using a Flyback-Based Battery Charger/Discharger Converter. *Computation*, **2022**, 10, 53	2.2	0
97	Low-cost system for sunlight incidence angle measurement using optical fiber.. *HardwareX*, **2022**, 11, e00302	2.7	1
96	Co-Design of the Control and Power Stages of a Boost-Based Rectifier with Power Factor Correction Depending on Performance Criteria. *Computation*, **2022**, 10, 61	2.2	1
95	Adaptive Sliding-Mode Controller for Flyback-Based PV Systems Featuring Constant Switching Frequency. *Mathematics*, **2022**, 10, 1255	2.3	2
94	Adaptive Control of Photovoltaic Systems Based on Dual Active Bridge Converters. *Computation*, **2022**, 10, 89	2.2	0
93	Design and Control of a Battery Charger/Discharger Based on the Flyback Topology. *Applied Sciences (Switzerland)*, **2021**, 11, 10506	2.6	4
92	Systematic analysis of control techniques for the dual active bridge converter in photovoltaic applications. *International Journal of Circuit Theory and Applications*, **2021**, 49, 3031-3052	2	3
91	Control-Oriented Model of Photovoltaic Systems Based on a Dual Active Bridge Converter. *Sustainability*, **2021**, 13, 7689	3.6	4
90	The Role of Renewable Energy System in Reshaping the Electrical Grid Scenario. *IEEE Open Journal of the Industrial Electronics Society*, **2021**, 2, 451-468	3.6	4
89	Optimal Location and Sizing of Distributed Generators in DC Networks Using a Hybrid Method Based on Parallel PBIL and PSO. *Electronics (Switzerland)*, **2020**, 9, 1808	2.6	5
88	Charging/discharging system based on zeta/sepic converter and a sliding mode controller for dc bus voltage regulation. *IET Power Electronics*, **2020**, 13, 1514-1527	2.2	10

87	Energy Management in PV Based Microgrids Designed for the Universidad Nacional de Colombia. *Sustainability*, **2020**, 12, 1219	3.6	12
86	Design Method of Dual Active Bridge Converters for Photovoltaic Systems with High Voltage Gain. *Energies*, **2020**, 13, 1711	3.1	6
85	Mathematical Model for Regular and Irregular PV Arrays with Improved Calculation Speed. *Sustainability*, **2020**, 12, 10684	3.6	3
84	Non-linear controller for storage systems with regulated outputvoltage and safecurrent slew-rate for the battery. *Revista UIS Ingenierías*, **2020**, 19, 117-129	0.3	0
83	An energy management system for optimal operation of BSS in DC distributed generation environments based on a parallel PSO algorithm. *Journal of Energy Storage*, **2020**, 29, 101488	7.8	33
82	Charger/discharger DC/DC converter with interleaved configuration for DC-bus regulation and battery protection. *Energy Science and Engineering*, **2020**, 8, 530-543	3.4	5
81	Sliding-mode control of a CuK converter for voltage regulation of a dc-bus. *Sustainable Energy Technologies and Assessments*, **2020**, 42, 100807	4.7	0
80	Fixed-frequency implementation of sliding-mode controllers for photovoltaic systems. *International Journal of Energy and Environmental Engineering*, **2019**, 10, 287-305	4	3
79	A Non-Invasive Procedure for Estimating the Exponential Model Parameters of Bypass Diodes in Photovoltaic Modules. *Energies*, **2019**, 12, 303	3.1	6
78	Enhanced simulation of total cross tied photovoltaic arrays. *Mathematics and Computers in Simulation*, **2019**, 158, 49-64	3.3	7
77	Hybrid Metaheuristic Optimization Methods for Optimal Location and Sizing DGs in DC Networks. *Communications in Computer and Information Science*, **2019**, 214-225	0.3	6
76	General modeling procedure for photovoltaic arrays. *Electric Power Systems Research*, **2018**, 155, 67-79	3.5	19
75	Optimal Power Dispatch of Small-Scale Standalone Microgrid Located in Colombian Territory. *Energies*, **2018**, 11, 1877	3.1	1
74	Linear power flow formulation for low-voltage DC power grids. *Electric Power Systems Research*, **2018**, 163, 375-381	3.5	54
73	Control of a Charger/Discharger DC/DC Converter with Improved Disturbance Rejection for Bus Regulation. *Energies*, **2018**, 11, 594	3.1	18
72	A Procedure for Modeling Photovoltaic Arrays under Any Configuration and Shading Conditions. *Energies*, **2018**, 11, 767	3.1	9
71	Optimal Sizing and Location of Distributed Generators Based on PBIL and PSO Techniques. *Energies* , **2018**, 11, 1018	3.1	59
70	Sliding-Mode Control of Distributed Maximum Power Point Tracking Converters Featuring Overvoltage Protection. *Energies*, **2018**, 11, 2220	3.1	5

69	Quantification of photovoltaic module degradation using model based indicators. *Mathematics and Computers in Simulation*, **2017**, 131, 101-113	3.3	20
68	A genetic algorithm for identifying the single diode model parameters of a photovoltaic panel. *Mathematics and Computers in Simulation*, **2017**, 131, 38-54	3.3	72
67	PV Simulation under Homogeneous Conditions **2017**, 45-80		1
66	Modeling the PV Power Conversion Chain **2017**, 127-164		
65	PV Models **2017**, 1-19		
64	**2017**,		5
63	Design and Control of a BuckBoost Charger-Discharger for DC-Bus Regulation in Microgrids. *Energies*, **2017**, 10, 1847	3.1	8
62	**2017**,		42
61	. *IEEE Journal of Photovoltaics*, **2016**, 6, 1210-1220	3.7	34
60	Improved Design of Sliding-Mode Controllers Based on the Requirements of MPPT Techniques. *IEEE Transactions on Power Electronics*, **2016**, 31, 235-247	7.2	76
59	Maximum power point tracking of photovoltaic systems based on the sliding mode control of the module admittance. *Electric Power Systems Research*, **2016**, 136, 125-134	3.5	46
58	Overvoltage Protection for Distributed Maximum Power Point Tracking Converters in Series Connection. *Communications in Computer and Information Science*, **2016**, 308-319	0.3	1
57	Reconfiguration of Urban Photovoltaic Arrays Using Commercial Devices. *Energies*, **2016**, 9, 2	3.1	19
56	Sliding-Mode Control of a Charger/Discharger DC/DC Converter for DC-Bus Regulation in Renewable Power Systems. *Energies*, **2016**, 9, 245	3.1	27
55	Fast calculation of the maximum power point of photovoltaic generators under partial shading. *Ingenieria E Investigacion*, **2016**, 36, 58	0.3	
54	Control of Photovoltaic Arrays: Dynamical Reconfiguration for Fighting Mismatched Conditions and Meeting Load Requests. *IEEE Industrial Electronics Magazine*, **2015**, 9, 62-76	6.2	55
53	Model-Based Degradation Analysis of Photovoltaic Modules Through Series Resistance Estimation. *IEEE Transactions on Industrial Electronics*, **2015**, 62, 7256-7265	8.9	44
52	Auto-tuning of PV controllers to improve the speed response and stability of the P&O algorithm. *Ingenieria E Investigacion*, **2015**, 35, 5-12	0.3	1

51	Sliding-Mode Controller for Maximum Power Point Tracking in Grid-Connected Photovoltaic Systems. *Energies*, **2015**, 8, 12363-12387	3.1	30
50	Reconfiguration of photovoltaic arrays based on genetic algorithm. *Revista Facultad De Ingeniería*, **2015**,	1	4
49	Maximum power point tracking in PV systems based on adaptive control and sliding mode control. *Revista Facultad De Ingeniería*, **2015**,	1	1
48	Fast estimation of MPPs in mismatched PV arrays based on lossless model **2015**,		1
47	A method for the fast estimation of the maximum power points in mismatched PV strings. *Electric Power Systems Research*, **2015**, 121, 115-125	3.5	9
46	Estimating the produced power by photovoltaic installations in shaded environments. *DYNA (Colombia)*, **2015**, 82, 37-43	0.6	4
45	A method for simulating large PV arrays that include reverse biased cells. *Applied Energy*, **2014**, 123, 157-167	1	22
44	Maximum power point tracking architectures for photovoltaic systems in mismatching conditions: a review. *IET Power Electronics*, **2014**, 7, 1396-1413	2.2	114
43	Modeling of asymmetrical boost converters. *Ingenieria E Investigacion*, **2014**, 34, 53-59	0.3	
42	A perturbation strategy for fuel consumption minimization in polymer electrolyte membrane fuel cells: Analysis, Design and FPGA implementation. *Applied Energy*, **2014**, 119, 21-32	10.7	48
41	Active pre-filters for dc/dc Boost regulators. *Ingenieria E Investigacion*, **2014**, 34, 49-54	0.3	
40	A technique for mismatched PV array simulation. *Renewable Energy*, **2013**, 55, 417-427	8.1	46
39	Reconfiguration analysis of photovoltaic arrays based on parameters estimation. *Simulation Modelling Practice and Theory*, **2013**, 35, 50-68	3.9	38
38	A new solution of maximum power point tracking based on sliding mode control **2013**,		3
37	Grid-Connected Photovoltaic Generation Plants: Components and Operation. *IEEE Industrial Electronics Magazine*, **2013**, 7, 6-20	6.2	294
36	Perturb and Observe MPPT algorithm with a current controller based on the sliding mode. *International Journal of Electrical Power and Energy Systems*, **2013**, 44, 346-356	5.1	94
35	A model of photovoltaic fields in mismatching conditions featuring an improved calculation speed. *Electric Power Systems Research*, **2013**, 96, 81-90	3.5	51
34	. *IEEE Transactions on Industrial Electronics*, **2013**, 60, 1168-1178	8.9	136

33	Photovoltaic modules diagnostic: An overview **2013**,		16
32	Asymmetrical Interleaved DC/DC Switching Converters for Photovoltaic and Fuel Cell Applications: Part 2: Control-Oriented Models. *Energies*, **2013**, 6, 5570-5596	3.1	9
31	Identification of excitation systems with the generator online. *Electric Power Systems Research*, **2012**, 87, 1-9	3.5	14
30	Calculation of excitation system controllers to fulfill IEEE standard performance indexes. *Electric Power Systems Research*, **2012**, 89, 196-203	3.5	8
29	Asymmetrical Interleaved DC/DC Switching Converters for Photovoltaic and Fuel Cell Applications: Part 1: Circuit Generation, Analysis and Design. *Energies*, **2012**, 5, 4590-4623	3.1	27
28	Design method of the perturb and observe controller parameters for photovoltaic applications **2012**,		2
27	Predictive control of a photovoltaic DC/DC converter **2012**,		1
26	Fuel cell emulator for oxygen excess ratio estimation on power electronics applications. *Computers and Electrical Engineering*, **2012**, 38, 926-937	4.3	29
25	DCM operation of interleaved DC/DC converters for PV applications **2012**,		4
24	Compensation of DC-link voltage oscillations in grid-connected PV systems based on high order dc/dc converters **2012**,		2
23	Granular control of photovoltaic arrays by means of a multi-output Maximum Power Point Tracking algorithm. *Progress in Photovoltaics: Research and Applications*, **2012**, 21, n/a-n/a	6.8	21
22	Modeling of photovoltaic fields in mismatching conditions by means of inflection voltages **2012**,		1
21	Modeling of Step-up Grid-Connected Photovoltaic Systems for Control Purposes. *Energies*, **2012**, 5, 1900-1926	3.1	31
20	PV field distributed maximum power point tracking by means of an active bypass converter **2011**,		18
19	A fast current-based MPPT technique based on sliding mode control **2011**,		8
18	Improving the perturb and observe Maximum Power Point Tracking by using Sliding Mode control **2011**,		2
17	DC/DC pre-regulator for input current ripple reduction and efficiency improvement. *Electric Power Systems Research*, **2011**, 81, 2048-2055	3.5	11
16	Switching and linear power stages evaluation for PEM fuel cell emulation. *International Journal of Circuit Theory and Applications*, **2011**, 39, 475-499	2	5

15	Modeling of photovoltaic fields in mismatched conditions for energy yield evaluations. *Electric Power Systems Research*, **2011**, 81, 1003-1013	3.5	92
14	Modeling and control of grid-connected photovoltaic systems for 100 Hz oscillations mitigation **2011**,		2
13	**2010**,		3
12	Fuel cell MPPT for fuel consumption optimization **2010**,		14
11	Minimizing the effects of shadowing in a PV module by means of active voltage sharing **2010**,		28
10	A PEM Fuel-Cell Model Featuring Oxygen-Excess-Ratio Estimation and Power-Electronics Interaction. *IEEE Transactions on Industrial Electronics*, **2010**, 57, 1914-1924	8.9	65
9	Integrated Learning Platform for Internet-Based Control-Engineering Education. *IEEE Transactions on Industrial Electronics*, **2010**, 57, 3284-3296	8.9	14
8	A multivariable MPPT algorithm for granular control of photovoltaic systems **2010**,		13
7	Mathematical analysis of hybrid topologies efficiency for PEM fuel cell power systems design. *International Journal of Electrical Power and Energy Systems*, **2010**, 32, 1049-1061	5.1	33
6	Minimum Fuel Consumption Strategy for PEM Fuel Cells. *IEEE Transactions on Industrial Electronics*, **2009**, 56, 685-696	8.9	90
5	Fuzzy-based modelling technique for PEMFC electrical power generation systems emulation. *IET Power Electronics*, **2009**, 2, 241-255	2.2	13
4	Evaluation of Fixed-Step Differential Equations Solution Methods for Fuel Cell Real-Time Simulation **2007**,		3
3	Models of PV Arrays under Non-homogeneous Conditions97-112		
2	PV Array Modeling at Cell Level under Non-homogeneous Conditions113-125		
1	Control of the Power Conversion Chain165-184		