Damian Giaouris

List of Publications by Year
in descending order

83 papers	2,269 citations	304743 22 h-index	223800 46 g-index
83 all docs	83 docs citations	83 times ranked	1698 citing authors

#	Article	IF	Citations
1	A stochastic framework for secure reconfiguration of active distribution networks. IET Generation, Transmission and Distribution, 2022, 16, 580-590.	2.5	2
2	Optimising Building-to-Building and Building-for-Grid Services Under Uncertainty: A Robust Rolling Horizon Approach. IEEE Transactions on Smart Grid, 2022, 13, 1453-1467.	9.0	12
3	A Joint Risk- and Security-Constrained Control Framework for Real-Time Energy Scheduling of Islanded Microgrids. IEEE Transactions on Smart Grid, 2022, 13, 3354-3368.	9.0	9
4	Probabilistic adaptive power pinch analysis for islanded hybrid energy storage systems. Journal of Energy Storage, 2022, 54, 105224.	8.1	3
5	Stochastic Procurement of Fast Reserve Services in Renewable Integrated Power Systems. IEEE Access, 2021, 9, 30946-30959.	4.2	5
6	Active Building as an Energy System: Concept, Challenges, and Outlook. IEEE Access, 2021, 9, 58009-58024.	4.2	16
7	Guest Editorial: On the role of energy storage systems in the grid of the future: Selected papers from the 2019 UK Energy Storage Conference. IET Smart Grid, 2021, 4, 135-138.	2.2	0
8	A Community-Based Building-to-Building Strategy for Multi-Objective Energy Management of Residential Microgrids. , 2021, , .		2
9	Application of Robust Receding Horizon controller for Real-Time Energy Management of Reconfigurable Islanded Microgrids. , 2021, , .		1
10	Improved Voltage Boundary With Model-Based Control Algorithm for Increased Torque in the Field Weakening Region of Induction Machines. IEEE Transactions on Transportation Electrification, 2021, 7, 1600-1614.	7.8	5
11	Boosting integration capacity of electric vehicles: A robust security constrained decision making. International Journal of Electrical Power and Energy Systems, 2021, 133, 107229.	5.5	3
12	Active Participation of Buildings in the Energy Networks: Dynamic/Operational Models and Control Challenges. Energies, 2021, 14, 7220.	3.1	11
13	Linearized Hybrid Stochastic/Robust Scheduling of Active Distribution Networks Encompassing PVs. IEEE Transactions on Smart Grid, 2020, 11, 357-367.	9.0	33
14	Reinforcement learning based adaptive power pinch analysis for energy management of stand-alone hybrid energy storage systems considering uncertainty. Energy, 2020, 193, 116622.	8.8	34
15	Application of the Filippov Method to PVâ€fed DCâ€DC converters modeled as hybridâ€DAEs. Engineering Reports, 2020, 2, e12237.	1.7	5
16	Piecewise Quadratic Slope Compensation Technique for DC-DC Switching Converters. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 5574-5585.	5.4	10
17	Demand Response Model Development for Smart Households Using Time of Use Tariffs and Optimal Controlâ€"The Isle of Wight Energy Autonomous Community Case Study. Energies, 2020, 13, 541.	3.1	11
18	Polynomial Curve Slope Compensation for Peak-Current-Mode-Controlled Power Converters. IEEE Transactions on Industrial Electronics, 2019, 66, 470-481.	7.9	18

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19	Probabilistic adaptive model predictive power pinch analysis (PoPA) energy management approach to uncertainty. Journal of Engineering, 2019, 2019, 4288-4292.	1.1	1
20	Coordinated Storage and Flexible Loads as a Network Service Provider: a Resilience-Oriented Paradigm. , 2019, , .		5
21	A new method on the limit cycle stability analysis of digitally controlled interleaved DC–DC converters. Control Engineering Practice, 2019, 90, 111-122.	5.5	4
22	Comparative Evaluation of Field Oriented Control and Direct Torque Control Methodologies in Field Weakening Regions for Interior Permanent Magnet Machines. , 2019, , .		6
23	A Resilience-Based Architecture for Joint Distributed Energy Resources Allocation and Hourly Network Reconfiguration. IEEE Transactions on Industrial Informatics, 2019, 15, 5444-5455.	11.3	72
24	Co–optimising distribution network adequacy and security by simultaneous utilisation of network reconfiguration and distributed energy resources. IET Generation, Transmission and Distribution, 2019, 13, 4747-4755.	2.5	17
25	A Case Study of Real Time Implementation of Extended Kalman Filter in Dual Core DSP for The On-line Estimation of Induction Machine Parameters. , 2019, , .		1
26	Advances on System Identification Techniques for DC–DC Switch Mode Power Converter Applications. IEEE Transactions on Power Electronics, 2019, 34, 6973-6990.	7.9	58
27	On-Line Estimation of Magnetizing Inductance and Rotor Resistance in Extended Kalman-Filter for Induction Machines. , 2018, , .		0
28	Adaptive Power Pinch Analysis for Energy management of Hybrid Energy Storage Systems. , 2018, , .		0
29	A systems approach for management of microgrids considering multiple energy carriers, stochastic loads, forecasting and demand side response. Applied Energy, 2018, 226, 546-559.	10.1	44
30	Design of robust digitally controlled DC–DC converters in the presence of strong interference. International Journal of Circuit Theory and Applications, 2017, 45, 1742-1759.	2.0	1
31	Nonlinear Analysis and Control of Interleaved Boost Converter Using Real-Time Cycle to Cycle Variable Slope Compensation. IEEE Transactions on Power Electronics, 2017, 32, 7256-7270.	7.9	41
32	Benefits of lithium-ion batteries for domestic users under TOU tariffs. , 2017, , .		1
33	Optimal cost-based model for sizing grid-connected PV and battery energy system. , 2017, , .		11
34	Avoiding instabilities in power electronic systems: toward an on–chip implementation. IET Power Electronics, 2017, 10, 1778-1787.	2.1	11
35	Fast–scale stability limits of a two–stage boost power converter. International Journal of Circuit Theory and Applications, 2016, 44, 1127-1141.	2.0	15
36	Power grand composite curves shaping for adaptive energy management of hybrid microgrids. Renewable Energy, 2016, 95, 433-448.	8.9	12

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37	Complex nonâ€linear phenomena and stability analysis of interconnected power converters used in distributed power systems. IET Power Electronics, 2016, 9, 855-863.	2.1	15
38	Design of PID controllers using Filippov's method for stable operation of DCâ€"DC converters. International Journal of Circuit Theory and Applications, 2016, 44, 1437-1454.	2.0	5
39	Adaptive Management of Renewable Energy Smart Grids Using a Power Grand Composite Curves Approach. Computer Aided Chemical Engineering, 2015, , 2411-2416.	0.5	1
40	Analysis and control of fast scale bifurcation in series connected DC drive operating in continuous conduction mode. , 2015, , .		0
41	Nonâ€linear modelling and stability analysis of resonant DCâ€"DC converters. IET Power Electronics, 2015, 8, 2492-2503.	2.1	10
42	A power grand composite curves approach for analysis and adaptive operation of renewable energy smart grids. Clean Technologies and Environmental Policy, 2015, 17, 1171-1193.	4.1	18
43	A Review on Stability Analysis Methods for Switching Mode Power Converters. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2015, 5, 302-315.	3.6	82
44	Nonlinear Dynamics and Bifurcation Analysis of a Boost Converter for Battery Charging in Photovoltaic Applications. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2014, 24, 1450142.	1.7	34
45	Nonlinear analysis for interleaved boost converters based on Monodromy matrix. , 2014, , .		7
46	Foldings and grazings of tori in current controlled interleaved boost converters. International Journal of Circuit Theory and Applications, 2014, 42, 1080-1091.	2.0	17
47	Stability of a boost converter fed from photovoltaic source. Solar Energy, 2013, 98, 458-471.	6.1	51
48	Stator current model reference adaptive systems speed estimator for regeneratingâ€mode lowâ€speed operation of sensorless induction motor drives. IET Electric Power Applications, 2013, 7, 597-606.	1.8	60
49	Performance investigation of a hybrid renewable power generation and storage system using systemic power management models. Energy, 2013, 61, 621-635.	8.8	46
50	Stability analysis of digital state feedback controlled boost converters. , 2013, , .		3
51	Effect of vehicle mass changes on the accuracy of Kalman filter estimation of electric vehicle speed. IET Electrical Systems in Transportation, 2013, 3, 67-78.	2.4	15
52	Dynamical analysis of single-inductor dual-output DC-DC converters. , 2013, , .		11
53	Reduced Inductance in DC-DC Converter Circuits via the Application of Filippovâ€™s Method. , 2013, , 295-311.		0
54	Complex Interaction Between Tori and Onset of Three-Frequency Quasi-Periodicity in a Current Mode Controlled Boost Converter. IEEE Transactions on Circuits and Systems I: Regular Papers, 2012, 59, 207-214.	5.4	53

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55	LOCAL BIFURCATIONS OF A QUASIPERIODIC ORBIT. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250289.	1.7	12
56	Active Online System Identification of Switch Mode DC–DC Power Converter Based on Efficient Recursive DCD-IIR Adaptive Filter. IEEE Transactions on Power Electronics, 2012, 27, 4425-4435.	7.9	109
57	Nonlinear stability analysis and a new design methodology for a PEM fuel cell fed DC–DC boost converter. International Journal of Hydrogen Energy, 2012, 37, 18205-18215.	7.1	22
58	Investigation of the near-grazing behavior in hard-impact oscillators using model-based TS fuzzy approach. Nonlinear Dynamics, 2012, 69, 1293-1309.	5.2	13
59	Efficient design of boost converters for fuel cells. , 2011, , .		0
60	An experimental assessment of a stator current MRAS based on neural networks for sensorless control of induction machines. , 2011, , .		10
61	Adaptive PD+I Control of a Switch-Mode DC&#x2013;DC Power Converter Using a Recursive FIR Predictor. IEEE Transactions on Industry Applications, 2011, 47, 2135-2144.	4.9	53
62	Novel MIMO 4-DOF position control for Capsule Endoscope. , 2011, , .		2
63	Distributed Static Series Compensation for distribution network line voltage profile improvement. , 2011, , .		7
64	Nonsmooth dynamics of electrical systems. , 2011, , .		1
65	Chaos, coexisting attractors, and fractal basin boundaries in DC drives with full-bridge converter. , 2010, , .		6
66	Stability Analysis and Control of Nonlinear Phenomena in Boost Converters Using Model-Based Takagi–Sugeno Fuzzy Approach. IEEE Transactions on Circuits and Systems I: Regular Papers, 2010, 57, 200-212.	5.4	51
67	MRAS Sensorless Vector Control of an Induction Motor Using New Sliding-Mode and Fuzzy-Logic Adaptation Mechanisms. IEEE Transactions on Energy Conversion, 2010, 25, 394-402.	5.2	200
68	System identification of PWM dc-dc converters during abrupt load changes. , 2009, , .		11
69	Application of Filippov method for the analysis of subharmonic instability in dc–dc converters. International Journal of Circuit Theory and Applications, 2009, 37, 899-919.	2.0	94
70	Sensorless Control of Induction Motor Drives at Very Low and Zero Speeds Using Neural Network Flux Observers. IEEE Transactions on Industrial Electronics, 2009, 56, 3029-3039.	7.9	125
71	Universal PLL Strategy for Sensorless Speed and Position Estimation of PMSM. , 2008, , .		22
72	Modeling and stability analysis of DC-DC buck converter via Takagi-Sugeno fuzzy approach. , 2008, , .		0

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73	Performance Evaluation of a Sensorless Induction Motor Drive at Very Low and Zero Speed Using a MRAS Speed Observer. , 2008, , .		10
74	Controlled AC Electrical Drives. IEEE Transactions on Industrial Electronics, 2008, 55, 481-491.	7.9	281
75	Wavelet Denoising for Electric Drives. IEEE Transactions on Industrial Electronics, 2008, 55, 543-550.	7.9	57
76	Stability Analysis of the Continuous-Conduction-Mode Buck Converter Via Filippov's Method. IEEE Transactions on Circuits and Systems I: Regular Papers, 2008, 55, 1084-1096.	5.4	186
77	A neural network based stator current MRAS observer for speed sensorless induction motor drives. , 2008, , .		11
78	Control of Fast Scale Bifurcations in Power-Factor Correction Converters. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2007, 54, 805-809.	2.2	62
79	Stability of switching circuits using complete-cycle solution matrices. , 2006, , .		5
80	Electric drives estimation and denoising schemes based on wavelet transforms. Industrial Electronics Society (IECON), Annual Conference of IEEE, 2006, , .	0.0	0
81	Low speed operation improvement of MRAS sensorless vector control induction motor drive using neural network flux observers. Industrial Electronics Society (IECON), Annual Conference of IEEE, 2006, , .	0.0	4
82	Control of switching circuits using complete-cycle solution matrices. , 2006, , .		6
83	Fuzzy Logic for Non-smooth Dynamical Systems. Advances in Computer and Electrical Engineering Book Series, 0, , 147-168.	0.3	1