Kuntal Mandal

List of Publications by Year
in descending order

33 papers	380 citations	11 h-index
33 all docs	33 docs citations	33 times ranked

840585

839398

18 g-index
316 citing authors

#	Article	IF	Citations
1	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.	3.5	53
2	Stability of a boost converter fed from photovoltaic source. Solar Energy, 2013, 98, 458-471.	2.9	51
3	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.	0.7	34
4	A New Algorithm for Small-Signal Analysis of DC–DC Converters. IEEE Transactions on Industrial Informatics, 2014, 10, 628-636.	7.2	25
5	Symmetry-Breaking Bifurcation in Series-Parallel Load Resonant DC-DC Converters. IEEE Transactions on Circuits and Systems I: Regular Papers, 2013, 60, 778-787.	3.5	23
6	An automated algorithm for stability analysis of hybrid dynamical systems. European Physical Journal: Special Topics, 2013, 222, 757-768.	1.2	22
7	Synchronization Phenomena in Microgrids With Capacitive Coupling. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2015, 5, 364-371.	2.7	17
8	Fast-scale stability limits of a two-stage boost power converter. International Journal of Circuit Theory and Applications, 2016, 44, 1127-1141.	1.3	15
9	Complex non-linear phenomena and stability analysis of interconnected power converters used in distributed power systems. IET Power Electronics, 2016, 9, 855-863.	1.5	15
10	Synchronization Phenomena in Interconnected Power Electronic Systems. IEEE Transactions on Circuits and Systems II: Express Briefs, 2016, 63, 221-225.	2.2	15
11	Self-compensation of DC–DC converters under peak current mode control. Electronics Letters, 2017, 53, 345-347.	0.5	15
12	Dynamical analysis of single-inductor dual-output DC-DC converters. , 2013, , .		11
13	Avoiding instabilities in power electronic systems: toward an on-chip implementation. IET Power Electronics, 2017, 10, 1778-1787.	1.5	11
14	Non-linear modelling and stability analysis of resonant DC–DC converters. IET Power Electronics, 2015, 8, 2492-2503.	1.5	10
15	Piecewise Quadratic Slope Compensation Technique for DC-DC Switching Converters. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 5574-5585.	3.5	10
16	Analysis of Discontinuity Induced Bifurcations in a Dual Input DC-DC Converter. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2015, 25, 1550071.	0.7	8
17	Nonaveraged control-oriented modeling and relative stability analysis of DC–DC switching converters. International Journal of Circuit Theory and Applications, 2018, 46, 565-580.	1.3	7
18	Bifurcations in load resonant DC-DC converters. , 2010, , .		5

#	Article	IF	Citations
19	Quasi-periodic route to chaos in load resonant DC-DC converters. , 2010, , .		4
20	Symmetry-breaking bifurcation in load resonant dc-dc converters. , 2011, , .		4
21	Control-oriented design guidelines to extend the stability margin of switching converters. , 2017, , .		4
22	Auto-Tuned Quadratic Slope Compensation for Current Mode Controlled DC-DC Converters. , 2020, , .		4
23	A Filippov method based analytical perspective on stability analysis of a DC–AC H–bridge inverter with nonlinear rectifier load. International Journal of Circuit Theory and Applications, 2022, 50, 1686-1708.	1.3	4
24	Design-Oriented Dynamical Analysis of Single-Phase H-Bridge Inverter. , 2020, , .		3
25	Performance Improvement of Electric Vehicle using Reset Switch and Bias. IFAC-PapersOnLine, 2022, 55, 144-149.	0.5	3
26	Bifurcations in frequency controlled load resonant DC-DC converters. , 2012, , .		2
27	Design of PV Emulator Fed MPPT Controlled DC-DC Boost Converter for Battery Charging. , 2020, , .		2
28	Determination of stable region of controller parameters for series-parallel resonant converter with capacitive output filter. , 2011, , .		1
29	Dynamical behaviors of interconnected converters in intermediate bus architecture. , 2014, , .		1
30	A novel nonlinear modulation technique for stabilizing DC-DC switching converters. , 2017, , .		1
31	Stability analysis of a high-step-Up DC grid-connected two-stage boost DC-DC converter. MATEC Web of Conferences, 2014, 16, 06002.	0.1	0
32	Design and Analysis of Digitally Controlled Algorithm-in-loop Newton-Raphson Method Based PV Emulator. , 2021, , .		0
33	Automated Algorithm to Determine Design Curves in Parameter Space for Interconnected Converters. , 2020, , .		0