

Tat-Sing Chow

List of Publications by Year in descending order

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times ranked

396
citing authors

#	ARTICLE	IF	CITATIONS
1	Simulation-based study of single-event burnout in 4H-SiC high-voltage vertical superjunction DMOSFET: Physical failure mechanism and robustness vs performance tradeoffs. Applied Physics Letters, 2022, 120, 043501.	3.3	1
2	Ion-Induced Mesoplasma Formation and Thermal Destruction in 4H-SiC Power MOSFET Devices. IEEE Transactions on Nuclear Science, 2021, 68, 651-658.	2.0	23
3	Irradiation Effects on Perpendicular Anisotropy Spin-Orbit Torque Magnetic Tunnel Junctions. IEEE Transactions on Nuclear Science, 2021, 68, 665-670.	2.0	13
4	Integrable Quasivertical GaN U-Shaped Trench-Gate Metal-Oxide-Semiconductor Field-Effect Transistors for Power and Optoelectronic Integrated Circuits. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900615.	1.8	4
5	Degradation of forward current density with increasing blocking voltage in diamond Schottky-pn diodes. Diamond and Related Materials, 2020, 104, 107736.	3.9	3
6	Performance projection of high-voltage, quasi-lateral diamond MOSFET for power electronics applications. Diamond and Related Materials, 2020, 104, 107741.	3.9	1
7	Monolithically Integrated GaN LED/Quasi-Vertical Power U-Shaped Trench-Gate MOSFET Pairs Using Selective Epi Removal. IEEE Electron Device Letters, 2019, 40, 1736-1739.	3.9	11
8	Heavy Ion Transport Modeling for Single-Event Burnout in SiC-Based Power Devices. IEEE Transactions on Nuclear Science, 2019, 66, 474-481.	2.0	31
9	GaN smart power devices and integrated circuits. , 2019, , 151-208.		3
10	Smart Power Devices and ICs Using GaAs and Wide and Extreme Bandgap Semiconductors. IEEE Transactions on Electron Devices, 2017, 64, 856-873.	3.0	106
11	Operating Principles, Design Considerations, and Experimental Characteristics of High-Voltage 4H-SiC Bidirectional IGBTs. IEEE Transactions on Electron Devices, 2017, 64, 888-896.	3.0	17
12	Current-Controlled Negative Resistance in High-Voltage 4H-SiC p-i-n Rectifiers. IEEE Transactions on Electron Devices, 2017, 64, 897-900.	3.0	3
13	Experimental Demonstration of High-Voltage 4H-SiC Bi-Directional IGBTs. IEEE Electron Device Letters, 2016, 37, 1033-1036.	3.9	10
14	Performance evaluation of channel length downscaling of various high voltage AlGaN/GaN power HEMTs. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1137-1144.	1.8	11
15	High voltage normally-off GaN MOSC-HEMTs on silicon substrates for power switching applications. , 2012, , .		11
16	3D Power Delivery for Microprocessors and High-Performance ASICs. IEEE Applied Power Electronics Conference and Exposition, 2007, , .	0.0	55
17	SPICE Model of SiC JFETs for Circuit Simulations. , 2006, , .		12
18	Mechanisms of Heavy Ion-Induced Single Event Burnout in 4H-SiC Power MOSFETs. Materials Science Forum, 0, 1004, 889-896.	0.3	10

#	ARTICLE	IF	CITATIONS
19	Robustness of Semi-Superjunction 4H-SiC Power DMOSFETs to Single-Event Burnout from Heavy Ion Bombardment. Materials Science Forum, 0, 1062, 683-687.	0.3	0