

# Cheng-Hao Yu

## List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	An Optimized Structure of 4H-SiC U-Shaped Trench Gate MOSFET. IEEE Transactions on Electron Devices, 2015, 62, 2774-2778.	3.0	40
2	4H-SiC Step Trench Gate Power Metal-Oxide-Semiconductor Field-Effect Transistor. IEEE Electron Device Letters, 2016, 37, 633-635.	3.9	31
3	Research of Single-Event Burnout in Power Planar VDMOSFETs by Localized Carrier Lifetime Control. IEEE Transactions on Electron Devices, 2015, 62, 143-148.	3.0	24
4	Single-Event Burnout Hardness for the 4H-SiC Trench-Gate MOSFETs Based on the Multi-Island Buffer Layer. IEEE Transactions on Electron Devices, 2019, 66, 4264-4272.	3.0	23
5	Research of Single-Event Burnout and Hardening of AlGaIn/GaN-Based MISFET. IEEE Transactions on Electron Devices, 2019, 66, 1118-1122.	3.0	20
6	A Novel Trench-Gated Power MOSFET With Reduced Gate Charge. IEEE Electron Device Letters, 2015, 36, 165-167.	3.9	17
7	High-Performance Split-Gate-Enhanced UMOSFET With Dual Channels. IEEE Transactions on Electron Devices, 2017, 64, 1455-1460.	3.0	17
8	Research of Single-Event Burnout in 4H-SiC JBS Diode by Low Carrier Lifetime Control. IEEE Transactions on Electron Devices, 2018, 65, 5434-5439.	3.0	17
9	High-Performance Split-Gate Enhanced UMOSFET With p-Pillar Structure. IEEE Transactions on Electron Devices, 2013, 60, 2302-2307.	3.0	15
10	Evaluation by Simulation of AlGaIn/GaN Schottky Barrier Diode (SBD) With Anode-Via Vertical Field Plate Structure. IEEE Transactions on Electron Devices, 2018, 65, 2552-2557.	3.0	15
11	4H-SiC Trench IGBT With Back-Side n-p-n Collector for Low Turn-OFF Loss. IEEE Transactions on Electron Devices, 2017, 64, 488-493.	3.0	14
12	Simulation Study on Single-Event Burnout in Rated 1.2-kV 4H-SiC Super-Junction VDMOS. IEEE Transactions on Electron Devices, 2021, 68, 5034-5040.	3.0	14
13	Single-Event Burnout Hardening of Power UMOSFETs With Integrated Schottky Diode. IEEE Transactions on Electron Devices, 2014, 61, 1464-1469.	3.0	13
14	TCAD Simulation of Breakdown-Enhanced AlGaIn/GaN-Based MISFET With Electrode-Connected p-i-n Diode in Buffer Layer. IEEE Transactions on Electron Devices, 2018, 65, 476-482.	3.0	13
15	An Improved $V_{CE} \rightarrow V_{OFF}$ Tradeoff and Snapback-Free RC-IGBT With Pillars. IEEE Transactions on Electron Devices, 2020, 67, 2859-2864.	3.0	11
16	Research of Single-Event Burnout in Floating Field Ring Termination of Power MOSFETs. IEEE Transactions on Electron Devices, 2017, 64, 2906-2911.	3.0	10
17	3D Numerical Simulation of a Z Gate Layout MOSFET for Radiation Tolerance. Micromachines, 2018, 9, 659.	2.9	9
18	Simulation Study of Single-Event Burnout in 1.5-kV 4H-SiC JTE Termination. IEEE Transactions on Electron Devices, 2021, 68, 3711-3715.	3.0	9

#	ARTICLE	IF	CITATIONS
19	Way of operation to improve performance for advanced split-gate resurf stepped oxide UMOSFET. IET Power Electronics, 2014, 7, 2964-2968.	2.1	8
20	Simulation Study of Single-Event Burnout in Power Trench ACCUFETs. IEEE Transactions on Nuclear Science, 2016, 63, 2709-2715.	2.0	8
21	Improving breakdown performance for SOI LDMOS with sidewall field plate. Micro and Nano Letters, 2019, 14, 420-423.	1.3	8
22	Simulation study of single event effects for split-gate enhanced power U-shape metal-oxide semiconductor field-effect transistor. IET Power Electronics, 2014, 7, 2895-2901.	2.1	7
23	Multiple Trench Split-gate SOI LDMOS Integrated With Schottky Rectifier. IEEE Transactions on Electron Devices, 2017, 64, 3028-3031.	3.0	7
24	An Optimized 4H-SiC Trench MOS Barrier Schottky (TMBS) Rectifier. IEEE Journal of the Electron Devices Society, 2018, 6, 1154-1158.	2.1	7
25	Study of TID Radiation Effects on the Breakdown Voltage of Buried P-Pillar SOI LDMOSFETs. IEEE Transactions on Device and Materials Reliability, 2021, 21, 303-309.	2.0	6
26	Low-leakage 4H-SiC junction barrier Schottky rectifier with sandwich P-type well. IET Power Electronics, 2015, 8, 672-677.	2.1	5
27	Impact of Heavy-Ion Irradiation in an 80-V Radiation-Hardened Split-Gate Trench Power UMOSFET. IEEE Transactions on Electron Devices, 2022, 69, 664-668.	3.0	5
28	A Semifloating Gate Controlled Camel Diode Radiation Dosimeter. IEEE Transactions on Electron Devices, 2016, 63, 2200-2204.	3.0	4
29	Reliability improvements in SOI-like MOSFET with ESD and self-heating effect. Micro and Nano Letters, 2018, 13, 1649-1652.	1.3	4
30	Low Turn-Off Loss 4H-SiC Insulated Gate Bipolar Transistor With a Trench Heterojunction Collector. IEEE Journal of the Electron Devices Society, 2020, 8, 1010-1015.	2.1	4
31	An Improved 4H-SiC Trench MOS Barrier Schottky Diode With Lower On-Resistance. IEEE Access, 2019, 7, 95710-95715.	4.2	3
32	A High-Performance SiC Super-Junction MOSFET With a Step-Doping Profile. IEEE Journal of the Electron Devices Society, 2021, 9, 1084-1092.	2.1	3
33	A Comparative Study on Heavy-Ion Irradiation Impact on p-Channel and n-Channel Power UMOSFETs. IEEE Transactions on Nuclear Science, 2022, 69, 1249-1256.	2.0	2
34	Novel Silicon on Insulator Monolithic Active Pixel Structure With Improved Radiation Total Ionizing Dose Tolerance and Reduced Crosstalk Between Sensor and Electronics. IEEE Transactions on Nuclear Science, 2015, 62, 1944-1949.	2.0	1