

Yung C Liang

List of Publications by Year in descending order

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60
papers

1,137
citations

471061

17
h-index

414034

32
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61
all docs

61
docs citations

61
times ranked

1493
citing authors

#	ARTICLE	IF	CITATIONS
1	Epitaxial ferroelectric BiFeO ₃ thin films for unassisted photocatalytic water splitting. Applied Physics Letters, 2013, 103, .	1.5	133
2	Photovoltaic mechanisms in ferroelectric thin films with the effects of the electrodes and interfaces. Applied Physics Letters, 2009, 95, .	1.5	124
3	Evidence of bulk photovoltaic effect and large tensor coefficient in ferroelectric BiFeO ₃ thin films. Physical Review B, 2011, 84, .	1.1	116
4	Effects of Gate Field Plates on the Surface State Related Current Collapse in AlGa _N /Ga _N HEMTs. IEEE Transactions on Power Electronics, 2014, 29, 2164-2173.	5.4	89
5	Photovoltaic characteristics in polycrystalline and epitaxial (Pb _{0.97} La _{0.03})(Zr _{0.52} Ti _{0.48})O ₃ ferroelectric thin films sandwiched between different top and bottom electrodes. Journal of Applied Physics, 2009, 105, .	1.1	83
6	On the electrostatic equilibrium of granular flow in pneumatic conveying systems. AIChE Journal, 2006, 52, 3775-3793.	1.8	57
7	Au-Free Normally-Off AlGa _N /Ga _N -on-Si MIS-HEMTs Using Combined Partially Recessed and Fluorinated Trap-Charge Gate Structures. IEEE Electron Device Letters, 2014, 35, 569-571.	2.2	47
8	Phenomenon of Drain Current Instability on p-Ga _N Gate AlGa _N /Ga _N HEMTs. IEEE Transactions on Electron Devices, 2015, 62, 339-345.	1.6	36
9	A direct methanol fuel cell system with passive fuel delivery based on liquid surface tension. Journal of Power Sources, 2007, 165, 185-195.	4.0	33
10	Design of Gradient Oxide-Bypassed Superjunction Power MOSFET Devices. IEEE Transactions on Power Electronics, 2007, 22, 1303-1310.	5.4	31
11	Monolithic integration design of Ga _N -based power chip including gate driver for high-temperature DC-DC converters. Japanese Journal of Applied Physics, 2019, 58, 056505.	0.8	31
12	Monolithic Ga _N Half-Bridge Stages With Integrated Gate Drivers for High Temperature DC-DC Buck Converters. IEEE Access, 2019, 7, 184375-184384.	2.6	29
13	All-GaN Power Integration: Devices to Functional Subcircuits and Converter ICs. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 31-41.	3.7	28
14	Modelling and analysis of a direct methanol fuel cell with under-rib mass transport and two-phase flow at the anode. Journal of Power Sources, 2009, 194, 712-729.	4.0	27
15	Superjunction Power LDMOS on Partial SOI Platform. , 2007, , .		26
16	A simple approach on junction temperature estimation for SiC MOSFET dynamic operation within safe operating area. , 2015, , .		24
17	Over-current protection scheme for SiC power MOSFET DC circuit breaker. , 2014, , .		22
18	Au-Free AlGa _N /Ga _N MIS-HEMTs With Embedded Current Sensing Structure for Power Switching Applications. IEEE Transactions on Electron Devices, 2017, 64, 3515-3518.	1.6	21

#	ARTICLE	IF	CITATIONS
19	Compact Physical Models for AlGaIn/GaN MIS-FinFET on Threshold Voltage and Saturation Current. IEEE Transactions on Electron Devices, 2018, 65, 1348-1354.	1.6	21
20	Progressive Development of Superjunction Power MOSFET Devices. IEEE Transactions on Electron Devices, 2008, 55, 211-219.	1.6	18
21	Design of power integrated circuits in full AlGaIn/GaN MIS-HEMT configuration for power conversion. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600562.	0.8	15
22	STABILITY AND MAGNITUDE OF PHOTOVOLTAGE IN FERROELECTRIC (Pb _{0.97} La _{0.03})(Zr _{0.52} Ti _{0.48})O ₃ THIN FILMS IN MULTI-CYCLE UV LIGHT ILLUMINATION. Integrated Ferroelectrics, 2007, 95, 105-116.	0.3	12
23	Realistic Trap Configuration Scheme With Fabrication Processes in Consideration for the Simulations of AlGaIn/GaN MIS-HEMT Devices. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2016, 4, 720-729.	3.7	11
24	New actuation method for push-pull electrostatic mems comb drive. IEEE Transactions on Industrial Electronics, 2003, 50, 1337-1339.	5.2	10
25	A Smart-Power Synchronous Rectifier by CMOS Process. IEEE Transactions on Power Electronics, 2010, 25, 2469-2477.	5.4	9
26	Junction temperature estimation and protection scheme for SiC MOSFET devices. , 2015, , .		9
27	Threshold voltage instability in AlGaIn/GaN HEMTs. , 2015, , .		9
28	Design and Experimental Demonstration of Integrated Over-Current Protection Circuit for GaN DC-DC Converters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 4270-4278.	3.7	7
29	A low-cost photovoltaic energy harvesting circuit for portable devices. , 2011, , .		6
30	An AlGaIn/GaN High Electron Mobility Transistor With a Built-In Light Emitter Using Radiative Recombination of Two-Dimensional Electron Gas and Holes. IEEE Journal of the Electron Devices Society, 2020, 8, 346-349.	1.2	5
31	Slanted Oxide-Bypassed Superjunction Power MOSFETs. , 2006, , .		4
32	Theoretical calculation and efficient simulations of power semiconductor AlGaIn/GaN HEMTs. , 2012, , .		4
33	A Novel GaN Metal-Insulator-Semiconductor High Electron Mobility Transistor Featuring Vertical Gate Structure. Micromachines, 2019, 10, 848.	1.4	4
34	A Novel Analytical Model for Ohmic Contacts to Planar Devices: Theoretical Design and Experimental Verification. IEEE Transactions on Electron Devices, 2021, 68, 299-306.	1.6	4
35	Title is missing!. Analog Integrated Circuits and Signal Processing, 2001, 29, 85-94.	0.9	3
36	A CMOS Compatible Smart Power Synchronous Rectifier. , 0, , .		3

#	ARTICLE	IF	CITATIONS
37	An FPGA based Digital Control Design for high-frequency DC-DC Converters. , 0, , .		3
38	PHOTO INDUCED CURRENT IN (Pb _{0.97} La _{0.03}) (Zr _{0.52} Ti _{0.48})O ₃ THIN FILMS OF DIFFERENT THICKNESSES. Integrated Ferroelectrics, 2007, 88, 58-67.	0.3	3
39	Low-Power Fuel Delivery With Concentration Regulation for Micro Direct Methanol Fuel Cell. IEEE Transactions on Industry Applications, 2011, 47, 1470-1479.	3.3	3
40	AlGa _N /Ga _N power HEMT devices for future energy conversion applications. , 2013, , .		3
41	Design of novel normally-off AlGa _N /Ga _N HEMTs with combined gate recess and floating charge structures. , 2013, , .		3
42	Physical mechanism on the suppression of dynamic resistance degradation by multi-mesa-channel in AlGa _N /Ga _N high electron mobility transistors. Applied Physics Letters, 2019, 115, 262101.	1.5	3
43	Design of Superjunction Power MOSFET Devices using the Gradient Oxide-Bypassed Structure. , 0, , .		2
44	Progression of Superjunction Power MOSFET Devices. , 2007, , .		1
45	Realistic simulation on reverse characteristics of SiC/Ga _N p-n junctions for high power semiconductor devices. , 2011, , .		1
46	Fin-shaped AlGa _N /Ga _N high electron mobility magnetoresistive sensor device. Applied Physics Letters, 2021, 118, 162104.	1.5	1
47	AlGa _N /Ga _N Metal-Insulator-Semiconductor (MIS)-HFETs Based DC-DC Boost Converters with Integrated Gate Drivers. , 2019, , .		1
48	A Self-contained Direct Methanol Fuel Cell with Surface Tension Fuel Delivery. , 2005, , .		0
49	A Consise Two-phase Flow Model for Direct Methanol Fuel Cell Performance Modelling. , 0, , .		0
50	Passive Fuel Delivery in Direct Methanol Fuel Cell by Surface Tension Driving Effect. Industrial Electronics Society (IECON), Annual Conference of IEEE, 2006, , .	0.0	0
51	Passive Direct Methanol Fuel Cell System with Adaptive Fuel Concentration Control based on Liquid Surface Tension. , 2007, , .		0
52	Realistic Simulation of Reverse Characteristics of 411-SiC Power Diode. , 2007, , .		0
53	An enabling device technology for future superjunction power integrated circuits. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	0
54	Low power fuel delivery with programmable concentration control for micro direct methanol fuel cells. , 2008, , .		0

#	ARTICLE	IF	CITATIONS
55	Development of low-cost ferroelectric PLZT devices for photovoltaic power generation. , 2010, , .		0
56	Development of a portable electrical capacitance tomography system. , 2011, , .		0
57	Applying kirigami models in teaching micro-electro-mechanical systems. , 2013, , .		0
58	Influences of gate drive on pulsed current collapse recovery in AlGa _N /Ga _N power HEMTs. , 2013, , .		0
59	Modelling of temperature dependence on current collapse phenomenon in AlGa _N /Ga _N HEMT devices. , 2013, , .		0
60	High-sensitivity AlGa _N /Ga _N magnetoresistive sensor device by profiling the AlGa _N layer. , 2021, , .		0