

Maria De Souza

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6130329/publications.pdf>

Version: 2024-02-01

83
papers

2,476
citations

411340

20
h-index

232693

48
g-index

84
all docs

84
docs citations

84
times ranked

3684
citing authors

#	ARTICLE	IF	CITATIONS
1	Hierarchically Interlaced 2D Copper Iodide/MXene Composite for High Thermoelectric Performance. Physica Status Solidi - Rapid Research Letters, 2022, 16, 2100419.	1.2	13
2	3D Microstructured Frequency Selective Surface Based on Carbonized Polyimide Films for Terahertz Applications. Advanced Optical Materials, 2022, 10, .	3.6	5
3	Reservoir Computing for Temporal Data Classification Using a Dynamic Solid Electrolyte ZnO Thin Film Transistor. Frontiers in Electronics, 2022, 3, .	2.0	6
4	Characterization of traps in a Power Amplifier using a time domain approach. , 2022, , .		0
5	Optimization of normally-off $\text{In}^2\text{-Ga}_2\text{O}_3$ MOSFET with high Ion and BFOM: A TCAD study. AIP Advances, 2022, 12, .	0.6	6
6	Reactive inkjet printing of graphene based flexible circuits and radio frequency antennas. Journal of Materials Chemistry C, 2021, 9, 13182-13192.	2.7	17
7	A Ta ₂ O ₅ /ZnO Synaptic SE-FET for supervised learning in a crossbar. , 2021, , .		0
8	Designing a Broadband Amplifier Without Loadâ€“Pull. IEEE Microwave and Wireless Components Letters, 2021, 31, 593-596.	2.0	9
9	Necessary conditions for steep switching in a constant Resistor-Capacitor RCFET. MRS Advances, 2021, 6, 540-545.	0.5	0
10	A p-Channel GaN Heterostructure Tunnel FET With High ON/OFF Current Ratio. IEEE Transactions on Electron Devices, 2019, 66, 2916-2922.	1.6	7
11	Off-State Operation of a Three Terminal Ionic FET for Logic-in-Memory. IEEE Journal of the Electron Devices Society, 2019, 7, 1232-1238.	1.2	4
12	High-Efficiency Modes Contiguous With Class B/J and Continuous Class F<inline-formula><tex-math notation="LaTeX">F^{1}</tex-math></inline-formula> Amplifiers. IEEE Microwave and Wireless Components Letters, 2019, 29, 137-139.	2.0	32
13	A methodology to design broadband matching networks for continuum mode PAs. , 2019, , .		2
14	Development of GaN Transducer and On-Chip Concentrator for Galvanic Current Sensing. IEEE Transactions on Electron Devices, 2019, 66, 4367-4372.	1.6	5
15	Diffusion-Controlled Faradaic Charge Storage in High-Performance Solid Electrolyte-Gated Zinc Oxide Thin-Film Transistors. ACS Applied Materials & Interfaces, 2018, 10, 9782-9791.	4.0	51
16	Investigation of the Effect of Weak Non-Linearities on P1dB and Efficiency of Class B/J/J* Amplifiers. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 1159-1163.	2.2	2
17	Impact of channel thickness on the performance of an E-mode p-channel MOSHFET in GaN. Applied Physics Letters, 2018, 112, .	1.5	6
18	The 2018 GaN power electronics roadmap. Journal Physics D: Applied Physics, 2018, 51, 163001.	1.3	843

#	ARTICLE	IF	CITATIONS
19	Numerical Analysis of 3-D Scaling Rules on a 1.2-kV Trench Clustered IGBT. IEEE Transactions on Electron Devices, 2018, 65, 1440-1446.	1.6	10
20	An Integrated On-Chip Flux Concentrator for Galvanic Current Sensing. IEEE Electron Device Letters, 2018, 39, 1752-1755.	2.2	3
21	Negative Capacitance beyond Ferroelectric Switches. ACS Applied Materials & Interfaces, 2018, 10, 19812-19819.	4.0	19
22	Modelling the threshold voltage of p-channel enhancement-mode GaN heterostructure field-effect transistors. IET Power Electronics, 2018, 11, 675-680.	1.5	9
23	Nanoionics-Based Three-Terminal Synaptic Device Using Zinc Oxide. ACS Applied Materials & Interfaces, 2017, 9, 1609-1618.	4.0	128
24	An E-Mode p-Channel GaN MOSHFET for a CMOS Compatible PMIC. IEEE Electron Device Letters, 2017, 38, 1449-1452.	2.2	5
25	A study of the performance of solar cells for indoor autonomous wireless sensors. , 2016, , .		12
26	Separation of bulk and contact interface degradation in thin film silicon solar cells. Journal of Renewable and Sustainable Energy, 2015, 7, 063115.	0.8	1
27	Design of Schottky Contacts for Optimum Performance of Thin-Film Silicon Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 22-27.	1.5	14
28	Designing high power RF amplifiers: An analytic approach. , 2014, , .		2
29	Extraction of Schottky barrier at the F-doped SnO ₂ /TiO ₂ interface in Dye Sensitized solar cells. Journal of Renewable and Sustainable Energy, 2014, 6, .	0.8	13
30	Transport mechanisms and effective Schottky barrier height of ZnO/a-Si:H and ZnO/ $\frac{1}{4}$ c-Si:H heterojunction solar cells. Journal of Applied Physics, 2013, 114, .	1.1	16
31	Are carbon nanotubes still a viable option for ITRS 2024?. , 2013, , .		4
32	Analytical techniques for the simulation of electron transport in semiconductor systems. , 2012, , .		0
33	RF power amplifier: pushing the boundaries of performance versus cost. Proceedings of SPIE, 2012, , .	0.8	0
34	Communication: Electronic band gaps of semiconducting zig-zag carbon nanotubes from many-body perturbation theory calculations. Journal of Chemical Physics, 2012, 136, 181101.	1.2	43
35	Extraction From Conductance-Frequency Measurements using a Transmission-Line Model in Weak Inversion of poly/TiN/HfO_2 nMOSFETs. IEEE Transactions on Electron Devices, 2012, 59, 827-834.	1.6	4
36	A Methodology for Extraction of the Density of Interface States in the Presence of Frequency Dispersion via the Conductance Technique. IEEE Transactions on Electron Devices, 2010, 57, 1642-1650.	1.6	7

#	ARTICLE	IF	CITATIONS
37	Evaluation of the Coulomb-limited mobility in high- $\hat{\epsilon}$ dielectric metal oxide semiconductor field effect transistors. Journal of Applied Physics, 2010, 107, 063706.	1.1	10
38	Anomalous n-type electrical behaviour of Pd-contacted CNTFET fabricated on small-diameter nanotube. Nanotechnology, 2010, 21, 215202.	1.3	6
39	Superlattice of resonators on monolayer graphene created by intercalated gold nanoclusters. Europhysics Letters, 2010, 91, 66004.	0.7	22
40	Class-D power amplifiers using LDMOS and GaN power devices: a comparative analysis. , 2010, , .		0
41	New analytical expressions for the design of linear power amplifier using GaN HEMTs. , 2009, , .		1
42	Role of hybridization on the Schottky barrier height of carbon nanotube field effect transistors. Physical Review B, 2009, 79, .	1.1	7
43	Comparative Analysis of VDMOS/LDMOS Power Transistors for RF Amplifiers. IEEE Transactions on Microwave Theory and Techniques, 2009, 57, 2643-2651.	2.9	9
44	Electronic properties of extended graphene nanomaterials from $\langle i \rangle GW \langle /i \rangle$ calculations. Physica Status Solidi (B): Basic Research, 2009, 246, 2572-2576.	0.7	26
45	Understanding the role of the insulator in the performance of ZnO TFTs. Thin Solid Films, 2009, 518, 1177-1179.	0.8	3
46	Surface intercalation of gold underneath a graphene monolayer on SiC(0001) studied by scanning tunneling microscopy and spectroscopy. Applied Physics Letters, 2009, 94, .	1.5	107
47	A Comparison of the Performance and Stability of ZnO-TFTs With Silicon Dioxide and Nitride as Gate Insulators. IEEE Transactions on Electron Devices, 2008, 55, 1109-1115.	1.6	88
48	Impact of aluminum nitride as an insulator on the performance of zinc oxide thin film transistors. Applied Physics Letters, 2008, 92, 093509.	1.5	26
49	The Effect of Gate-Bias Stress and Temperature on the Performance of ZnO Thin-Film Transistors. IEEE Transactions on Device and Materials Reliability, 2008, 8, 277-282.	1.5	28
50	Design for Reliability: The RF Power LDMOSFET. IEEE Transactions on Device and Materials Reliability, 2007, 7, 162-174.	1.5	24
51	Investigating the Stability of Thin Film Transistors with Zinc Oxide as the Channel Layer. , 2007, , .		4
52	Analytic Large-Signal Modeling of Silicon RF Power MOSFETs. IEEE Transactions on Microwave Theory and Techniques, 2007, 55, 829-837.	2.9	5
53	Analysis of $\{m P\}_{b}$ Centers in Ultrathin Hafnium Silicate Gate Stacks. IEEE Transactions on Electron Devices, 2007, 54, 2551-2555.	1.6	1
54	Impact of a Nonideal Metal Gate on Surface Optical Phonon-Limited Mobility in High- κ Gated MOSFETs. IEEE Transactions on Electron Devices, 2007, 54, 2991-2997.	1.6	18

#	ARTICLE	IF	CITATIONS
55	Investigating the stability of zinc oxide thin film transistors. Applied Physics Letters, 2006, 89, 263513.	1.5	288
56	MOS Control Device Concepts for AC-AC Matrix Converter Applications: The HCD Concept for High-Efficiency Anode-Gated Devices. IEEE Transactions on Electron Devices, 2005, 52, 2075-2080.	1.6	9
57	Innovation in Power Semiconductor Industry: Past and Future. IEEE Transactions on Engineering Management, 2005, 52, 429-439.	2.4	25
58	A low temperature combination method for the production of ZnO nanowires. Nanotechnology, 2005, 16, 2188-2192.	1.3	187
59	Impact of the size 4 cluster on low temperature indium diffusion in silicon. Journal of Physics Condensed Matter, 2005, 17, S2165-S2170.	0.7	0
60	Comparative Study of Drift Region Designs in RF LDMOSFETs. IEEE Transactions on Electron Devices, 2004, 51, 1296-1303.	1.6	29
61	Progress in MOS-controlled bipolar devices and edge termination technologies. Microelectronics Journal, 2004, 35, 235-248.	1.1	6
62	A novel double RESURF LDMOS for HVIC's. Microelectronics Journal, 2004, 35, 305-310.	1.1	26
63	Influence of mobility model on extraction of stress dependent source-drain series resistance. Microelectronics Reliability, 2004, 44, 25-32.	0.9	3
64	Experimental Evidence for Exciton Scaling Effects in Self-Assembled Molecular Wires. Physical Review Letters, 2004, 93, 257401.	2.9	24
65	A high performance RF LDMOSFET in thin film SOI technology with step drift profile. Solid-State Electronics, 2003, 47, 1937-1941.	0.8	37
66	Experimental demonstration of an ultra-fast double gate inversion layer emitter transistor (DG-ILET). IEEE Electron Device Letters, 2002, 23, 725-727.	2.2	28
67	Analysis of the breakdown voltage in SOI and SOS technologies. Solid-State Electronics, 2002, 46, 255-261.	0.8	6
68	Striped anode engineering: a concept for fast switching power devices. Solid-State Electronics, 2002, 46, 903-909.	0.8	18
69	The 6.5 kV clustered insulated gate bipolar transistor in homogeneous base technology. Solid-State Electronics, 2001, 45, 71-77.	0.8	4
70	A segmented anode, npn controlled lateral insulated gate bipolar transistor. Solid-State Electronics, 2001, 45, 1055-1058.	0.8	12
71	A novel metal field plate edge termination for power devices. Microelectronics Journal, 2001, 32, 323-326.	1.1	5
72	A study of fully coordinated precursors in silicon using the Ackland potential. Physica B: Condensed Matter, 2001, 304, 483-488.	1.3	4

#	ARTICLE	IF	CITATIONS
73	Radial confinement in lateral power devices. <i>Microelectronics Journal</i> , 2001, 32, 481-484.	1.1	3
74	A comparison of early stage hot carrier degradation behaviour in 5 and 3 V sub-micron low doped drain metal oxide semiconductor field effect transistors. <i>Microelectronics Reliability</i> , 2001, 41, 169-177.	0.9	4
75	A local charge control technique to improve the forward bias safe operating area of LIGBT. <i>Solid-State Electronics</i> , 2000, 44, 1213-1218.	0.8	3
76	A novel area efficient floating field limiting ring edge termination technique. <i>Solid-State Electronics</i> , 2000, 44, 1381-1386.	0.8	12
77	Trade-off between the Kirk effect and the breakdown performance in resurfed lateral bipolar transistors for high voltage, high frequency applications. <i>Solid-State Electronics</i> , 2000, 44, 1869-1873.	0.8	2
78	A novel trench clustered insulated gate bipolar transistor (TCIGBT). <i>IEEE Electron Device Letters</i> , 2000, 21, 613-615.	2.2	22
79	1200 V fully implanted JI technology. <i>Electronics Letters</i> , 2000, 36, 1587.	0.5	4
80	Planar Self-Interstitial in Silicon. <i>Physical Review Letters</i> , 1999, 83, 1799-1801.	2.9	12
81	A novel gate geometry for the IGBT: the trench planar insulated gate bipolar transistor (TPIGBT). <i>IEEE Electron Device Letters</i> , 1999, 20, 580-582.	2.2	14
82	A Monte Carlo study of the kickout mechanism of boron diffusion in silicon. <i>Journal of Applied Physics</i> , 1996, 79, 2418-2425.	1.1	4
83	An analysis of the kickout mechanism in silicon. <i>Solid-State Electronics</i> , 1995, 38, 867-872.	0.8	2