

Patrick Carey

List of Publications by Year in descending order

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34
papers

2,479
citations

471061

17
h-index

454577

30
g-index

34
all docs

34
docs citations

34
times ranked

2396
citing authors

#	ARTICLE	IF	CITATIONS
1	A review of Ga ₂ O ₃ materials, processing, and devices. Applied Physics Reviews, 2018, 5, .	5.5	1,816
2	Band alignment of Al ₂ O ₃ with (̂ ² 01) ̂ ² -Ga ₂ O ₃ . Vacuum, 2017, 142, 52-57.	1.6	57
3	Vertical geometry 33.2 A, 4.8 MWâ€‰cm ² Ga ₂ O ₃ field-plated Schottky rectifier arrays. Applied Physics Letters, 2019, 114, .	1.5	50
4	Ohmic contacts on n-type ̂ ² -Ga ₂ O ₃ using AZO/Ti/Au. AIP Advances, 2017, 7, .	0.6	48
5	Band offsets in ITO/Ga ₂ O ₃ heterostructures. Applied Surface Science, 2017, 422, 179-183.	3.1	46
6	Improvement of Ohmic contacts on Ga ₂ O ₃ through use of ITO-interlayers. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, .	0.6	42
7	Hydrogen plasma treatment of <i>̂ ² </i> -Ga ₂ O ₃ : Changes in electrical properties and deep trap spectra. Applied Physics Letters, 2019, 115, .	1.5	39
8	Valence and conduction band offsets in AZO/Ga ₂ O ₃ heterostructures. Vacuum, 2017, 141, 103-108.	1.6	38
9	Defects at the surface of ̂ ² -Ga ₂ O ₃ produced by Ar plasma exposure. APL Materials, 2019, 7, .	2.2	36
10	Operation Up to 500 Â°C of Al_{0.85}Ga_{0.15}N/Al_{0.7}Ga_{0.3}N High Electron Mobility Transistors. IEEE Journal of the Electron Devices Society, 2019, 7, 444-452.	1.2	36
11	Band alignment of atomic layer deposited SiO₂and HfSiO₄with \$(ar{2}01)\$ ̂ ² -Ga₂O₃. Japanese Journal of Applied Physics, 2017, 56, 071101.	0.8	33
12	Comparison of Dual-Stack Dielectric Field Plates on ̂ ² -Ga₂O₃ Schottky Rectifiers. ECS Journal of Solid State Science and Technology, 2019, 8, Q3221-Q3225.	0.9	30
13	Conduction and valence band offsets of LaAl ₂ O ₃ with (̂ ² 01) ̂ ² -Ga ₂ O ₃ . Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, .	0.6	29
14	Zika virus detection using antibody-immobilized disposable cover glass and AlGa _N /Ga _N high electron mobility transistors. Applied Physics Letters, 2018, 113, .	1.5	27
15	Rapid detection of cardiac troponin I using antibody-immobilized gate-pulsed AlGa _N /Ga _N high electron mobility transistor structures. Applied Physics Letters, 2017, 111, .	1.5	22
16	Extreme Temperature Operation of Ultra-Wide Bandgap AlGa _N High Electron Mobility Transistors. IEEE Transactions on Semiconductor Manufacturing, 2019, 32, 473-477.	1.4	19
17	Novel Coatings to Minimize Bacterial Adhesion and Promote Osteoblast Activity for Titanium Implants. Journal of Functional Biomaterials, 2020, 11, 42.	1.8	18
18	Fast SARS-CoV-2 virus detection using disposable cartridge strips and a semiconductor-based biosensor platform. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2021, 39, 033202.	0.6	14

#	ARTICLE	IF	CITATIONS
19	Vertical $\text{In}_2\text{Ga}_2\text{O}_3$ Schottky rectifiers with 750 V reverse breakdown voltage at 600 K. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 305103.	1.3	13
20	Antibacterial Properties of Charged TiN Surfaces for Dental Implant Application. <i>ChemistrySelect</i> , 2019, 4, 9185-9189.	0.7	10
21	Effects of Hydrogen Plasma Treatment Condition on Electrical Properties of $\text{In}_2\text{Ga}_2\text{O}_3$. <i>ECS Journal of Solid State Science and Technology</i> , 2019, 8, P661-P666.	0.9	7
22	Fast Cerebrospinal Fluid Detection Using Inexpensive Modular Packaging with Disposable Testing Strips. <i>Journal of the Electrochemical Society</i> , 2019, 166, B708-B712.	1.3	7
23	Review—Opportunities for Rapid, Sensitive Detection of Troponin and Cerebral Spinal Fluid Using Semiconductor Sensors. <i>Journal of the Electrochemical Society</i> , 2020, 167, 037507.	1.3	7
24	Hydroxyapatite Formation on Coated Titanium Implants Submerged in Simulated Body Fluid. <i>Materials</i> , 2020, 13, 5593.	1.3	7
25	A Two-Electrode, Double-Pulsed Sensor Readout Circuit for Cardiac Troponin I Measurement. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2020, 14, 1362-1370.	2.7	6
26	Rapid Electrochemical Detection for SARS-CoV-2 and Cardiac Troponin I Using Low-Cost, Disposable and Modular Biosensor System. , 2020, , .		5
27	Band alignments of dielectrics on (~ 201) $\text{In}_2\text{Ga}_2\text{O}_3$. , 2019, , 287-311.		3
28	Nanosensor networks for health-care applications. , 2020, , 405-417.		3
29	Digital biosensor for human cerebrospinal fluid detection with single-use sensing strips. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2022, 40, .	0.6	3
30	Alpha Particle Irradiation of High Aluminum Content AlGaN Polarization Doped Field Effect Transistors. <i>ECS Journal of Solid State Science and Technology</i> , 2020, 9, 035008.	0.9	2
31	Proton Irradiation of High Aluminum Content AlGaN Polarization Doped Field Effect Transistors. <i>ECS Journal of Solid State Science and Technology</i> , 2020, 9, 025003.	0.9	2
32	High temperature operation to 500 $\text{Å}^\circ\text{C}$ of AlGaN graded polarization-doped field-effect transistors. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2020, 38, .	0.6	2
33	Neutron Irradiation of AlGaN Polarization Doped Field Effect Transistors. <i>ECS Journal of Solid State Science and Technology</i> , 2020, 9, 065007.	0.9	2
34	The Galvanic Effect of Titanium and Amalgam in the Oral Environment. <i>Materials</i> , 2020, 13, 4425.	1.3	0