Chaker Fares

List of Publications by Year in Descending Order

54 papers	619 citations	12 h-index	21 g-index
65 ext. papers	825 ext. citations	2.7 avg, IF	4.29 L-index

#	Paper	IF	Citations
54	Digital biosensor for human cerebrospinal fluid detection with single-use sensing strips. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2022**, 40, 023202	1.3	1
53	Al Composition Dependence of Band Offsets for SiO2 on □(AlxGa1□)2O3. *ECS Journal of Solid State Science and Technology*, **2021**, 10, 113007	2	1
52	Vertical □Ga2O3 Schottky rectifiers with 750 V reverse breakdown voltage at 600 K. *Journal Physics D: Applied Physics*, **2021**, 54, 305103	3	4
51	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	1.3	6
50	Qualitative Analysis of Remineralization Capabilities of Bioactive Glass (NovaMin) and Fluoride on Hydroxyapatite (HA) Discs: An In Vitro Study. *Materials*, **2021**, 14,	3.5	3
49	Novel Coatings to Minimize Corrosion of Titanium in Oral Biofilm. *Materials*, **2021**, 14,	3.5	4
48	OH-Si complex in hydrogenated n-type □Ga2O3:Si. *Applied Physics Letters*, **2021**, 119, 062109	3.4	6
47	Nanostructured Surfaces to Promote Osteoblast Proliferation and Minimize Bacterial Adhesion on Titanium. *Materials*, **2021**, 14,	3.5	3
46	Temperature dependent performance of ITO Schottky contacts on □Ga2O3. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2021**, 39, 053405	2.9	6
45	Nitrogen ion-implanted resistive regions for edge termination of vertical Ga2O3 rectifiers. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2021**, 39, 063405	2.9	3
44	Effect of probe geometry during measurement of >100 A Ga2O3 vertical rectifiers. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2021**, 39, 013406	2.9	11
43	Titanium Corrosion in Peri-Implantitis. *Materials*, **2020**, 13,	3.5	1
42	Hydroxyapatite Formation on Coated Titanium Implants Submerged in Simulated Body Fluid. *Materials*, **2020**, 13,	3.5	3
41	Band offset determination for amorphous Al2O3 deposited on bulk AlN and atomic-layer epitaxial AlN on sapphire. *Applied Physics Letters*, **2020**, 117, 182103	3.4	1
40	Annealing Effects on the Band Alignment of ALD SiO2 on (InxGa1□)2O3 for x = 0.25□.74. *ECS Journal of Solid State Science and Technology*, **2020**, 9, 045001	2	
39	Annealing and N Plasma Treatment to Minimize Corrosion of SiC-Coated Glass-Ceramics. *Materials*, **2020**, 13,	3.5	2
38	Novel Coatings to Minimize Bacterial Adhesion and Promote Osteoblast Activity for Titanium Implants. *Journal of Functional Biomaterials*, **2020**, 11,	4.8	7

37	Novel Coating to Minimize Corrosion of Glass-Ceramics for Dental Applications. *Materials*, **2020**, 13,	3.5	7
36	Asymmetrical Contact Geometry to Reduce Forward-Bias Degradation in β-Ga2O3 Rectifiers. *ECS Journal of Solid State Science and Technology*, **2020**, 9, 035007	2	5
35	Changes in band alignment during annealing at 600 °C of ALD Al2O3 on (InxGa1−x)2O3 for x = 0.25–0.74. *Journal of Applied Physics*, **2020**, 127, 105701	2.5	3
34	Anti-Bacterial Properties and Biocompatibility of Novel SiC Coating for Dental Ceramic. *Journal of Functional Biomaterials*, **2020**, 11,	4.8	11
33	Demonstration of a SiC Protective Coating for Titanium Implants. *Materials*, **2020**, 13,	3.5	10
32	Rapid Electrochemical Detection for SARS-CoV-2 and Cardiac Troponin I Using Low-Cost, Disposable and Modular Biosensor System **2020**,		4
31	Forward bias degradation and thermal simulations of vertical geometry β-Ga2O3 Schottky rectifiers. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2019**, 37, 061205	1.3	11
30	Band Offsets of Insulating & Semiconducting Oxides on (AlxGa1-x)O3. *ECS Transactions*, **2019**, 92, 79-88	1	5
29	Effect of thermal annealing for W/β-Ga2O3 Schottky diodes up to 600 °C. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2019**, 37, 061201	1.3	10
28	Radiation damage effects in Ga2O3 materials and devices. *Journal of Materials Chemistry C*, **2019**, 7, 10-24	7.1	90
27	Device processing and junction formation needs for ultra-high power Ga2O3 electronics. *MRS Communications*, **2019**, 9, 77-87	2.7	11
26	Switching Behavior and Forward Bias Degradation of 700V, 0.2A, β-Ga2O3Vertical Geometry Rectifiers. *ECS Journal of Solid State Science and Technology*, **2019**, 8, Q3028-Q3033	2	12
25	Vertical geometry 33.2 A, 4.8 MW cm2 Ga2O3 field-plated Schottky rectifier arrays. *Applied Physics Letters*, **2019**, 114, 232106	3.4	26
24	Demonstration of SiO/SiC based protective coating for dental ceramic prostheses. *Journal of the American Ceramic Society*, **2019**, 102, 6591-6599	3.8	7
23	Damage Recovery and Dopant Diffusion in Si and Sn Ion Implanted β-Ga2O3. *ECS Journal of Solid State Science and Technology*, **2019**, 8, Q3133-Q3139	2	20
22	Reverse Breakdown in Large Area, Field-Plated, Vertical β-Ga2O3Rectifiers. *ECS Journal of Solid State Science and Technology*, **2019**, 8, Q3159-Q3164	2	16
21	Deep traps and persistent photocapacitance in β-(Al0.14 Ga0.86)2O3/Ga2O3 heterojunctions. *Journal of Applied Physics*, **2019**, 125, 095702	2.5	1
20	Valence and Conduction Band Offsets for InN and III-Nitride Ternary Alloys on (2̄01) Bulk β-Ga2O3. *ECS Journal of Solid State Science and Technology*, **2019**, 8, Q3154-Q3158	2	9

19	60Co Gamma Ray Damage in Homoepitaxial Ga2O3Schottky Rectifiers. *ECS Journal of Solid State Science and Technology*, **2019**, 8, Q3041-Q3045	2	10
18	Valence band offsets for ALD SiO2 and Al2O3 on (InxGa1)2O3 for x = 0.250.74. *APL Materials*, **2019**, 7, 071115	5.7	9
17	The role of annealing ambient on diffusion of implanted Si in Ga2O3. *AIP Advances*, **2019**, 9, 085111	1.5	18
16	Band Alignment of Atomic Layer Deposited SiO2 and Al2O3 on (AlxGa1-x)2O3 for x = 0.2-0.65. *ECS Journal of Solid State Science and Technology*, **2019**, 8, P351-P356	2	8
15	Valence- and Conduction-Band Offsets for Atomic-Layer-Deposited Al2O3 on (010) (Al0.14Ga0.86)2O3. *Journal of Electronic Materials*, **2019**, 48, 1568-1573	1.9	19
14	Effect of Annealing on the Band Alignment of ALD SiO2 on (AlxGa1-x)2O3 for x = 0.2 - 0.65. *ECS Journal of Solid State Science and Technology*, **2019**, 8, P751-P756	2	4
13	Annealing of Proton and Alpha Particle Damage in Au-W/Ga2O3 Rectifiers. *ECS Journal of Solid State Science and Technology*, **2019**, 8, P799-P804	2	1
12	Temperature-Dependent Electrical Characteristics of Ga2O3Diodes with W Schottky Contacts up to 500C. *ECS Journal of Solid State Science and Technology*, **2019**, 8, Q3007-Q3012	2	28
11	Valence and conduction band offsets for sputtered AZO and ITO on (010) (Al0.14Ga0.86)2O3. *Semiconductor Science and Technology*, **2019**, 34, 025006	1.8	6
10	Effect of Deposition Method on Valence Band Offsets of SiO2 and Al2O3 on (Al0.14Ga0.86)2O3. *ECS Journal of Solid State Science and Technology*, **2019**, 8, Q3001-Q3006	2	9
9	Effects of fluorine incorporation into Ga2O3. *Journal of Applied Physics*, **2018**, 123, 165706	2.5	16
8	Eighteen mega-electron-volt alpha-particle damage in homoepitaxial Ga2O3 Schottky rectifiers. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2018**, 36, 031205	1.3	13
7	Band alignment of atomic layer deposited SiO2 on (010) (Al0.14Ga0.86)2O3. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2018**, 36, 061207	1.3	15
6	Band Offsets for Atomic Layer Deposited HfSiO4 on (Al0.14Ga0.86)2O3. *ECS Journal of Solid State Science and Technology*, **2018**, 7, P519-P523	2	8
5	Valence band offsets for CuI on (-201) bulk Ga2O3 and epitaxial (010) (Al0.14Ga0.86)2O3. *Applied Physics Letters*, **2018**, 113, 182101	3.4	12
4	Effect of proton irradiation energy on SiNx/AlGaN/GaN metal-insulator semiconductor high electron mobility transistors. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2018**, 36, 052202	1.3	11
3	Defects responsible for charge carrier removal and correlation with deep level introduction in irradiated Ga2O3. *Applied Physics Letters*, **2018**, 113, 092102	3.4	46
2	Unipolar Electron Transport Polymers: A Thiazole Based All-Electron Acceptor Approach. *Chemistry of Materials*, **2016**, 28, 6045-6049	9.6	64

List of Publications

1	Effects of Downstream Plasma Exposure on Ga2O3 Rectifiers. *ECS Journal of Solid State Science and Technology*,	2	1