Abderraouf Boucherif

List of Publications by Year
in descending order

32	324	1040056	888059
papers	citations	9	17
		h-index	g-index

33	33	33	345
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Uprooting defects to enable high-performance IIIâ€“V optoelectronic devices on silicon. Nature Communications, 2019, 10, 4322.	12.8	44
2	Chemical Composition of Nanoporous Layer Formed by Electrochemical Etching of p-Type GaAs. Nanoscale Research Letters, 2016, 11, 446.	5.7	39
3	Fast growth synthesis of mesoporous germanium films by high frequency bipolar electrochemical etching. Electrochimica Acta, 2017, 232, 422-430.	5.2	33
4	Multijunction Solar Cell Designs Using Silicon Bottom Subcell and Porous Silicon Compliant Membrane. IEEE Journal of Photovoltaics, 2013, 3, 1125-1131.	2.5	25
5	Tunable conductivity in mesoporous germanium. Nanotechnology, 2018, 29, 215701.	2.6	17
6	Novel multijunction solar cell design for low cost, high concentration systems. Progress in Photovoltaics: Research and Applications, 2016, 24, 150-158.	8.1	16
7	Anisotropic mesoporous germanium nanostructures by fast bipolar electrochemical etching. Electrochimica Acta, 2021, 378, 137935.	5.2	15
8	Tamm phonon-polaritons: Localized states from phonon-light interactions. Applied Physics Letters, 2019, 114, .	3.3	14
9	Grapheneâ€“Mesoporous Si Nanocomposite as a Compliant Substrate for Heteroepitaxy. Small, 2017, 13, 1603269.	10.0	11
10	Extreme temperature stability of thermally insulating graphene-mesoporous-silicon nanocomposite. Nanotechnology, 2018, 29, 145701.	2.6	9
11	Al-enhanced N incorporation in GaNAs alloys grown by chemical beam epitaxy. Journal of Crystal Growth, 2013, 380, 256-260.	1.5	8
12	Structural, optical and terahertz properties of graphene-mesoporous silicon nanocomposites. Nanoscale Advances, 2020, 2, 340-346.	4.6	8
13	Costâ€effective energy harvesting at ultraâ€high concentration with duplicated concentrated photovoltaic solar cells. Energy Science and Engineering, 2020, 8, 2760-2770.	4.0	8
14	Control of mesoporous silicon initiation by cathodic passivation. Electrochemistry Communications, 2013, 36, 84-87.	4.7	7
15	Growth optimization and optical properties of AlGaNAs alloys. Journal of Applied Physics, 2014, 115, .	2.5	7
16	CVD growth of high-quality graphene over Ge (100) by annihilation of thermal pits. Carbon, 2021, 174, 214-226.	10.3	7
17	Near-infrared emission from mesoporous crystalline germanium. AIP Advances, 2014, 4, 107128.	1.3	6
18	Metastable States in Pressurized Bulk and Mesoporous Germanium. Journal of Physical Chemistry C, 2018, 122, 10929-10938.	3.1	6

#	Article	IF	Citations
19	Integration of 3D nanographene into mesoporous germanium. Nanoscale, 2020, 12, 23984-23994.	5.6	6
20	Shape control of cathodized germanium oxide nanoparticles. Electrochemistry Communications, 2021, 122, 106906.	4.7	6
21	A porous Ge/Si interface layer for defect-free III-V multi-junction solar cells on silicon. , 2019, , .		5
22	Inâ€Situ Transmission Electron Microscopy Observation of Germanium Growth on Freestanding Graphene: Unfolding Mechanism of 3D Crystal Growth During Van der Waals Epitaxy. Small, 2022, 18, e2101890.	10.0	5
23	Growth of Ge epilayers using iso-butylgermane (IBGe) and its memory effect in an III-V chemical beam epitaxy reactor. Journal of Crystal Growth, 2020, 547, 125807.	1.5	4
24	Monolithic integration of mesoporous germanium: A step toward high-performance on-chip anode. Materials Today Communications, 2021, 26, 101820.	1.9	4
25	Electrical and structural properties of AlGaNAs alloys grown by chemical beam epitaxy. Physica Status Solidi (B): Basic Research, 2016, 253, 918-922.	1.5	3
26	Optimization of p-doping in AlGaAs grown by CBE using TMA for AlGaAs/GaAs tunnel junctions. Journal of Crystal Growth, 2013, 374, 1-4.	1.5	2
27	III-V Multi-Junction Solar Cells on Si Substrates with a Voided Ge Interface Layer: A Modeling Study. , 2018, , .		2
28	Effect of sintering germanium epilayers on dislocation dynamics: From theory to experimental observation. Acta Materialia, 2020, 200, 608-618.	7.9	2
29	Probing the coupling between the components in a grapheneâ€“mesoporous germanium nanocomposite using high-pressure Raman spectroscopy. Nanoscale Advances, 2021, 3, 2577-2584.	4.6	2
30	Engineering dislocations and nanovoids for high-efficiency IIIâ€“V photovoltaic cells on silicon. AIP Conference Proceedings, 2020, , .	0.4	2
31	Capturing the Effects of Free Surfaces on Threading Dislocation Density Reduction. ECS Transactions, 2020, 98, 527-532.	0.5	1
32	Effect of voided germanium thin-films grown onto silicon substrate on dislocations evolution. , 2021, , .		0