Joseph Kioseoglou

List of Publications by Year in Descending Order

122 papers	1,269 citations	19 h-index	29 g-index
129 ext. papers	1,428 ext. citations	3.9 avg, IF	4.47 L-index

#	Paper	IF	Citations
122	p-Type Iodine-Doping of Cu3N and Its Conversion to CuI for the Fabrication of CuI/Cu3N p-n Heterojunctions. *Electronic Materials*, **2022**, 3, 15-26	0.8	1
121	Modulating the growth of chemically deposited ZnO nanowires and the formation of nitrogen- and hydrogen-related defects using pH adjustment. *Nanoscale Advances*, **2022**, 4, 1793-1807	5.1	1
120	Cost effective modification of SmCo5-type alloys. *AIP Advances*, **2022**, 12, 035343	1.5	
119	Data-driven simulation and characterisation of gold nanoparticle melting. *Nature Communications*, **2021**, 12, 6056	17.4	4
118	Ab Initio Study of the Electron–Phonon Coupling in Ultrathin Al Layers. *Journal of Low Temperature Physics*, **2021**, 203, 180-193	1.3	
117	Machine Learning in Magnetic Materials. *Physica Status Solidi (B): Basic Research*, **2021**, 258, 2000600	1.3	2
116	Engineering nitrogen- and hydrogen-related defects in ZnO nanowires using thermal annealing. *Physical Review Materials*, **2021**, 5,	3.2	3
115	Machine-learning interatomic potential for W-Mo alloys. *Journal of Physics Condensed Matter*, **2021**, 33,	1.8	5
114	NanoMaterialsCAD: Flexible Software for the Design of Nanostructures. *Advanced Theory and Simulations*, **2021**, 4, 2000232	3.5	0
113	Impact of Oxygen on the Properties of Cu3N and Cu3N1−xOx. *Journal of Physical Chemistry C*, **2021**, 125, 3680-3688	3.8	5
112	Large out-of-plane piezoelectric response of wurtzite InN under biaxial strain. *Modelling and Simulation in Materials Science and Engineering*, **2021**, 29, 065013	2	2
111	Structural and magnetic properties of SmCo5−xNiX intermetallic compounds. *Journal of Alloys and Compounds*, **2021**, 882, 160699	5.7	3
110	Zinc Vacancy–Hydrogen Complexes as Major Defects in ZnO Nanowires Grown by Chemical Bath Deposition. *Journal of Physical Chemistry C*, **2020**, 124, 16652-16662	3.8	14
109	Decorated Dislocations against Phonon Propagation for Thermal Management. *ACS Applied Energy Materials*, **2020**, 3, 2682-2694	6.1	5
108	Observation of the Direct Energy Band Gaps of Defect-Tolerant Cu3N by Ultrafast Pump-Probe Spectroscopy. *Journal of Physical Chemistry C*, **2020**, 124, 3459-3469	3.8	9
107	Modeling the structural characterization of nanostructures. *Frontiers of Nanoscience*, **2020**, 17, 207-227	0.7	
106	Observation of Metal to Metal Oxide Progression: A Study of Charge Transfer Phenomenon at Ru-CuO Interfaces. *ACS Nano*, **2019**, 13, 12425-12437	16.7	16

105	Atomic-resolution imaging of surface and core melting in individual size-selected Au nanoclusters on carbon. *Nature Communications*, **2019**, 10, 2583	17.4	27
104	Epitaxially Oriented Sn:In2O3 Nanowires Grown by the Vapor□liquid□Solid Mechanism on m-, r-, a-Al2O3 as Scaffolds for Nanostructured Solar Cells. *ACS Applied Energy Materials*, **2019**, 2, 4274-4283	6.1	3
103	Computational Modeling of Nanoparticle Coalescence. *Advanced Theory and Simulations*, **2019**, 2, 1900013	3.5	44
102	Core properties and the role of screw dislocations in the bulk n-type conductivity in InN. *Physical Chemistry Chemical Physics*, **2019**, 21, 15767-15778	3.6	2
101	Single Nanoparticle Activities in Ensemble: A Study on Pd Cluster Nanoportals for Electrochemical Oxygen Evolution Reaction. *Journal of Physical Chemistry C*, **2019**, 123, 26124-26135	3.8	10
100	Structural, Electronic and Vibrational Properties of Al4C3. *Physica Status Solidi (B): Basic Research*, **2019**, 256, 1900037	1.3	3
99	Nanoassemblies of ultrasmall clusters with remarkable activity in carbon dioxide conversion into C1 fuels. *Nanoscale*, **2019**, 11, 4683-4687	7.7	6
98	Emergence of valley selectivity in monolayer tin(II) sulphide. *Nanoscale Advances*, **2019**, 1, 4863-4869	5.1	1
97	Hydrogen Storage: Hydrogen Flux through Size Selected Pd Nanoparticles into Underlying Mg Nanofilms (Adv. Energy Mater. 4/2018). *Advanced Energy Materials*, **2018**, 8, 1870016	21.8	1
96	Impact of screw and edge dislocations on the thermal conductivity of individual nanowires and bulk GaN: a molecular dynamics study. *Physical Chemistry Chemical Physics*, **2018**, 20, 5159-5172	3.6	16
95	Hydrogen Flux through Size Selected Pd Nanoparticles into Underlying Mg Nanofilms. *Advanced Energy Materials*, **2018**, 8, 1701326	21.8	21
94	First-principles calculations of threading screw dislocations in AlN and InN. *Physical Review Materials*, **2018**, 2,	3.2	2
93	3-D Strain Fields in Low-Dimensional III□V Semiconductors: A Combined Finite Elements and HRTEM Approach. *Physica Status Solidi (A) Applications and Materials Science*, **2018**, 215, 1700409	1.6	1
92	Enhanced thermal conductivity in percolating nanocomposites: a molecular dynamics investigation. *Nanoscale*, **2018**, 10, 21732-21741	7.7	8
91	quantum transport in AB-stacked bilayer penta-silicene using atomic orbitals.. *RSC Advances*, **2018**, 8, 34041-34046	3.7	3
90	Hole-Doped 2D InSe for Spintronic Applications. *ACS Applied Nano Materials*, **2018**, 1, 6656-6665	5.6	23
89	Structural and electronic properties of a-edge dislocations along <1-100> in GaN. *Journal of Applied Physics*, **2018**, 123, 244301	2.5	4
88	Mechanism and crucial parameters on GaN nanocluster formation in a silica matrix. *Journal of Applied Physics*, **2017**, 121, 054301	2.5	7

87	Strain and elastic constants of GaN and InN. *Computational Condensed Matter*, **2017**, 10, 25-30	1.7	5
86	Intrinsic point defects in buckled and puckered arsenene: a first-principles study. *Physical Chemistry Chemical Physics*, **2017**, 19, 9862-9871	3.6	36
85	Strain field determination in III□V heteroepitaxy coupling finite elements with experimental and theoretical techniques at the nanoscale. *Journal of the Mechanical Behavior of Materials*, **2017**, 26, 1-8	1.9	
84	Thermal Oxidation of Size-Selected Pd Nanoparticles Supported on CuO Nanowires: The Role of the CuO□Pd Interface. *Chemistry of Materials*, **2017**, 29, 6153-6160	9.6	19
83	Ab initio investigation of the AlN:Er system. *Computational Materials Science*, **2017**, 138, 128-134	3.2	4
82	Tuning the onset of ferromagnetism in heterogeneous bimetallic nanoparticles by gas phase doping. *Physical Review Materials*, **2017**, 1,	3.2	19
81	Structural Properties and Defects of III-Nitride Semiconductors at the Nanoscale **2017**, 237-277		
80	Ab-initio electronic structure calculations and properties of [SixSn1 □x]3N4 ternary nitrides. *Thin Solid Films*, **2016**, 613, 43-47	2.2	3
79	Enhanced Stark Tuning of Single InAs (211)B Quantum Dots due to Nonlinear Piezoelectric Effect in Zincblende Nanostructures. *Physical Review Applied*, **2016**, 6,	4.3	8
78	Quantitative evaluation of the (211)B GaAs/InAs quantum dot heterostructure **2016**, 588-589		
77	Ordered structures in III-Nitride ternary alloys. *Computational Materials Science*, **2016**, 118, 22-31	3.2	8
76	The Metalorganic Vapour Phase Epitaxy Growth of AIIIBVHeterostructures Observed by Reflection Anisotropy Spectroscopy. *Acta Physica Polonica A*, **2016**, 129, A-75-A-78	0.6	1
75	Structure, strain, and composition profiling of InAs/GaAs(211)B quantum dot superlattices. *Journal of Applied Physics*, **2016**, 119, 034304	2.5	6
74	The influence of structural characteristics on the electronic and thermal properties of GaN/AlN core/shell nanowires. *Journal of Applied Physics*, **2016**, 119, 074304	2.5	7
73	Kinetic trapping through coalescence and the formation of patterned Ag-Cu nanoparticles. *Nanoscale*, **2016**, 8, 9780-90	7.7	61
72	Interfacial properties of self-assembled GaN nanowires on pre-processed Al2O3(0001) surfaces. *Materials Science in Semiconductor Processing*, **2016**, 55, 46-50	4.3	2
71	Energetic, structural and electronic properties of metal vacancies in strained AlN/GaN interfaces. *Journal of Physics Condensed Matter*, **2015**, 27, 125006	1.8	4
70	Structural and electronic properties of GaN nanowires with embedded InxGa1□N nanodisks. *Journal of Applied Physics*, **2015**, 118, 034301	2.5	11

69	Nanostructure and strain properties of core-shell GaAs/AlGaAs nanowires. *Semiconductor Science and Technology*, **2015**, 30, 114012	1.8	5
68	MOVPE prepared InAs/GaAs quantum dots covered by GaAsSb layer with long wavelength emission at 1.8 μm. *Journal of Crystal Growth*, **2015**, 414, 167-171	1.6	8
67	Structural and electronic properties of elastically strained InN/GaN quantum well multilayer heterostructures. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2014**, 11, 289-292		4
66	Thermal oxidation and facet-formation mechanisms of Si nanowires. *Physica Status Solidi - Rapid Research Letters*, **2014**, 8, 307-311	2.5	1
65	Selective area growth of well-ordered ZnO nanowire arrays with controllable polarity. *ACS Nano*, **2014**, 8, 4761-70	16.7	70
64	Broad compositional tunability of indium tin oxide nanowires grown by the vapor-liquid-solid mechanism. *APL Materials*, **2014**, 2, 056104	5.7	17
63	Endotaxially stabilized B2-FeSi nanodots in Si (100) via ion beam co-sputtering. *Applied Physics Letters*, **2014**, 104, 161903	3.4	7
62	Self-annihilation of inversion domains by high energy defects in III-Nitrides. *Applied Physics Letters*, **2014**, 104, 141914	3.4	5
61	Effect of the lower and upper interfaces on the quality of InAs/GaAs quantum dots. *Applied Surface Science*, **2014**, 301, 173-177	6.7	10
60	Nanostructure and strain in InGaN/GaN superlattices grown in GaN nanowires. *Nanotechnology*, **2013**, 24, 435702	3.4	49
59	Ultrafast pulsed laser deposition of carbon nanostructures: Structural and optical characterization. *Applied Surface Science*, **2013**, 278, 101-105	6.7	9
58	Structural properties of SnO2 nanowires and the effect of donor like defects on its charge distribution. *Physica Status Solidi (A) Applications and Materials Science*, **2013**, 210, 226-229	1.6	9
57	Atomic scale modeling of edge a-type dislocations in InN. *Physica Status Solidi (A) Applications and Materials Science*, **2013**, 210, 204-208	1.6	8
56	Structural and electronic properties of InGaN/GaN nanowires by the use of EELS. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2013**, 10, 105-108		1
55	Si nanostructures grown by picosecond high repetition rate pulsed laser deposition. *Applied Surface Science*, **2013**, 278, 67-70	6.7	4
54	Electron energy loss near edge structure of InxAl1−xN alloys. *Microelectronic Engineering*, **2013**, 112, 198-203	2.5	3
53	Atomic scale morphology, growth behaviour and electronic properties of semipolar {101[overline]3} GaN surfaces. *Journal of Physics Condensed Matter*, **2013**, 25, 045008	1.8	2
52	Nanostructural and electronic properties of polytypes in InN nanocolumns. *Journal of Applied Physics*, **2013**, 114, 074312	2.5	3

51	Combined vertically correlated InAs and GaAsSb quantum dots separated by triangular GaAsSb barrier. *Journal of Applied Physics*, **2013**, 114, 174305	2.5	8
50	Interfaces between nonpolar and semipolar III-nitride semiconductor orientations: Structure and defects. *Journal of Applied Physics*, **2012**, 111, 033507	2.5	4
49	Effect of doping on screw threading dislocations in AlN and their role as conductive nanowires. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2012**, 9, 484-487		2
48	Atomistic modeling and HRTEM analysis of misfit dislocations in InN/GaN heterostructures. *Applied Surface Science*, **2012**, 260, 23-28	6.7	5
47	Reconstructions and electronic structure of (112□2) and (112□2□) semipolar AlN surfaces. *Journal of Applied Physics*, **2012**, 112, 033510	2.5	7
46	Indium adsorption and incorporation mechanisms in AlN. *Journal of Materials Science*, **2011**, 46, 4377-4383	4.3	4
45	Effect of edge threading dislocations on the electronic structure of InN. *Applied Physics Letters*, **2011**, 98, 072103	3.4	22
44	Screw threading dislocations in AlN: Structural and electronic properties of In and O doped material. *Journal of Applied Physics*, **2011**, 110, 053715	2.5	13
43	Electronic structure of 1/6<202□3> partial dislocations in wurtzite GaN. *Journal of Applied Physics*, **2011**, 109, 083511	2.5	15
42	Nonlinear Finite Element and Atomistic Modelling of Dislocations in Heterostructures. *Advanced Structured Materials*, **2010**, 239-253	0.6	
41	Morphology and strain of self-assembled semipolar GaN quantum dots in (112□2) AlN. *Journal of Applied Physics*, **2010**, 108, 104304	2.5	20
40	Microstructure of N-face InN grown on Si (111) by plasma-assisted MBE using a thin GaN/AlN buffer layer. *Physica Status Solidi (A) Applications and Materials Science*, **2010**, 207, 1074-1078	1.6	6
39	Mechanism of compositional modulations in epitaxial InAlN films grown by molecular beam epitaxy. *Applied Physics Letters*, **2009**, 95, 021913	3.4	46
38	Indium migration paths in V-defects of InAlN grown by metal-organic vapor phase epitaxy. *Applied Physics Letters*, **2009**, 95, 071905	3.4	60
37	Strain accommodation and interfacial structure of AlN interlayers in GaN. *Crystal Research and Technology*, **2009**, 44, 1170-1180	1.3	5
36	Nonsingular dislocation and crack fields: implications to small volumes. *Microsystem Technologies*, **2009**, 15, 117-121	1.7	10
35	Magnesium adsorption and incorporation in InN (0001) and surfaces: A first-principles study. *Applied Surface Science*, **2009**, 255, 8475-8482	6.7	3
34	Core models of a-edge threading dislocations in wurtzite III(Al,Ga,In)-nitrides. *Physica Status Solidi (A) Applications and Materials Science*, **2009**, 206, 1931-1935	1.6	12

33	Polar AlN/GaN interfaces: Structures and energetics. *Physica Status Solidi (A) Applications and Materials Science*, **2009**, 206, 1892-1897	1.6	17
32	Energetics of oxygen adsorption and incorporation at InN polar surface: A first-principles study. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2009**, 6, S364-S367		2
31	Electron Microscopy Characterization of a Graded AlN/GaN Multilayer Grown by Plasma-Assisted MBE. *Springer Proceedings in Physics*, **2008**, 66-68	0.2	
30	Dislocation core investigation by geometric phase analysis and the dislocation density tensor. *Journal Physics D: Applied Physics*, **2008**, 41, 035408	3	37
29	Microstructure of defects in InGaN/GaN quantum well heterostructures. *Journal of Physics: Conference Series*, **2008**, 126, 012048	0.3	2
28	Crystallization of amorphous silicon thin films: comparison between experimental and computer simulation results. *Journal of Materials Science*, **2008**, 43, 3976-3981	4.3	
27	Study of InN/GaN interfaces using molecular dynamics. *Journal of Materials Science*, **2008**, 43, 3982-3988	4.3	13
26	Electron microscopy investigation of extended defects in a-plane gallium nitride layers grown on r-plane sapphire by molecular beam epitaxy. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2008**, 5, 3748-3751		6
25	Defect characterization and analysis of III-V nanowires grown by Ni-promoted MBE. *Physica Status Solidi (A) Applications and Materials Science*, **2008**, 205, 2589-2592	1.6	7
24	Strain relaxation in AlN/GaN heterostructures grown by molecular beam epitaxy. *Physica Status Solidi (A) Applications and Materials Science*, **2008**, 205, 2569-2572	1.6	9
23	Interatomic potential calculations of III(Al, In)N planar defects with a III-species environment approach. *Physica Status Solidi (B): Basic Research*, **2008**, 245, 1118-1124	1.3	18
22	Misfit analysis of the InN/GaN interface through HRTEM image simulations **2008**, 651-652		
21	Misfit reduction by a spinel layer formed during the epitaxial growth of ZnO on sapphire using a MgO buffer layer. *Journal of Crystal Growth*, **2007**, 308, 314-320	1.6	18
20	3D modelling of misfit networks in the interface region of heterostructures. *Journal Physics D: Applied Physics*, **2007**, 40, 4084-4091	3	11
19	Strain distribution of thin InN epilayers grown on (0001) GaN templates by molecular beam epitaxy. *Applied Physics Letters*, **2007**, 90, 061920	3.4	11
18	Structural properties of quaternary InAlGaN MQW grown by plasma-assisted MBE. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 2151-2155	1.6	
17	Analysis of partial dislocations in wurtzite GaN using gradient elasticity. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 2161-2166	1.6	20
16	Mixed partial dislocation core structure in GaN by high resolution electron microscopy. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 2156-2160	1.6	8

15	Energetics of the 30? Shockley partial dislocation in wurtzite GaN. *Superlattices and Microstructures*, **2006**, 40, 458-463	2.8	9
14	Atomic simulations and HRTEM observations of a □18 tilt grain boundary in GaN. *Physica Status Solidi (A) Applications and Materials Science*, **2005**, 202, 799-803	1.6	2
13	Partial dislocations in wurtzite GaN. *Physica Status Solidi (A) Applications and Materials Science*, **2005** , 202, 2888-2899	1.6	21
12	Twin formation in sputter-grown ZnO□Al2O3(0001) epitaxial film: A real time x-ray scattering study. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2004**, 22, 2159-2162	2.9	4
11	Atomic structures and energies of partial dislocations in wurtzite GaN. *Physical Review B*, **2004**, 70,	3.3	27
10	Junction lines of inversion domain boundaries with stacking faults in GaN. *Physical Review B*, **2004**, 70,	3.3	10
9	Microstructural assessment of InN-on-GaN films grown by plasma-assisted MBE. *Superlattices and Microstructures*, **2004**, 36, 509-515	2.8	11
8	Microstructure of planar defects and their interactions in wurtzite GaN films. *Solid-State Electronics*, **2003**, 47, 553-557	1.7	11
7	Atomic structure and energy of junctions between inversion domain boundaries and stacking faults in wurtzite GaN. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2003**, 2464-2469		1
6	A modified empirical potential for energetic calculations of planar defects in GaN. *Computational Materials Science*, **2003**, 27, 43-49	3.2	39
5	Interfacial and defect structures in multilayered GaN/AlN films. *Journal of Physics Condensed Matter* , **2002**, 14, 13277-13283	1.8	7
4	Atomic-scale models of interactions between inversion domain boundaries and intrinsic basal stacking faults in GaN. *Diamond and Related Materials*, **2002**, 11, 905-909	3.5	8
3	Structural transition of inversion domain boundaries through interactions with stacking faults in epitaxial GaN. *Physical Review B*, **2001**, 64,	3.3	24
2	Interaction Between Basal Stacking Faults and Prismatic Inversion Domain Boundaries in GaN. *Materials Research Society Symposia Proceedings*, **2000**, 639, 3441		1
1	Microstructure of GaN Films Grown by RF-Plasma Assisted Molecular Beam Epitaxy. *Materials Research Society Symposia Proceedings*, **2000**, 639, 3471		8