Joseph Kioseoglou

List of Publications by Year
in descending order

125	1,608	304743	395702
papers	citations	22 h-index	33 g-index

129	129	129	2062
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Selective Area Growth of Well-Ordered ZnO Nanowire Arrays with Controllable Polarity. ACS Nano, 2014, 8, 4761-4770.	14.6	78
2	Kinetic trapping through coalescence and the formation of patterned Agâ€“Cu nanoparticles. Nanoscale, 2016, 8, 9780-9790.	5.6	75
3	Indium migration paths in V-defects of InAlN grown by metal-organic vapor phase epitaxy. Applied Physics Letters, 2009, 95, 071905.	3.3	64
4	Computational Modeling of Nanoparticle Coalescence. Advanced Theory and Simulations, 2019, 2, 1900013.	2.8	59
5	Nanostructure and strain in InGaN/GaN superlattices grown in GaN nanowires. Nanotechnology, 2013, 24, 435702.	2.6	58
6	Mechanism of compositional modulations in epitaxial InAlN films grown by molecular beam epitaxy. Applied Physics Letters, 2009, 95, .	3.3	48
7	Atomic-resolution imaging of surface and core melting in individual size-selected Au nanoclusters on carbon. Nature Communications, 2019, 10, 2583.	12.8	48
8	Dislocation core investigation by geometric phase analysis and the dislocation density tensor. Journal Physics D: Applied Physics, 2008, 41, 035408.	2.8	44
9	A modified empirical potential for energetic calculations of planar defects in GaN. Computational Materials Science, 2003, 27, 43-49.	3.0	42
10	Hole-Doped 2D InSe for Spintronic Applications. ACS Applied Nano Materials, 2018, 1, 6656-6665.	5.0	41
11	Intrinsic point defects in buckled and puckered arsenene: a first-principles study. Physical Chemistry Chemical Physics, 2017, 19, 9862-9871.	2.8	38
12	Zinc Vacancyâ€“Hydrogen Complexes as Major Defects in ZnO Nanowires Grown by Chemical Bath Deposition. Journal of Physical Chemistry C, 2020, 124, 16652-16662.	3.1	33
13	Atomic structures and energies of partial dislocations in wurtzite GaN. Physical Review B, 2004, 70, .	3.2	29
14	Tuning the onset of ferromagnetism in heterogeneous bimetallic nanoparticles by gas phase doping. Physical Review Materials, 2017, 1, .	2.4	29
15	Data-driven simulation and characterisation of gold nanoparticle melting. Nature Communications, 2021, 12, 6056.	12.8	29
16	Structural transition of inversion domain boundaries through interactions with stacking faults in epitaxial GaN. Physical Review B, 2001, 64, .	3.2	26
17	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.	2.8	26
18	Hydrogen Flux through Size Selected Pd Nanoparticles into Underlying Mg Nanofilms. Advanced Energy Materials, 2018, 8, 1701326.	19.5	26

#	Article	IF	Citations
19	Analysis of partial dislocations in wurtzite GaN using gradient elasticity. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 2161-2166.	1.8	25
20	Thermal Oxidation of Size-Selected Pd Nanoparticles Supported on CuO Nanowires: The Role of the CuOâ€“Pd Interface. Chemistry of Materials, 2017, 29, 6153-6160.	6.7	25
21	Partial dislocations in wurtzite GaN. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 2888-2899.	1.8	23
22	Effect of edge threading dislocations on the electronic structure of InN. Applied Physics Letters, 2011, 98, .	3.3	23
23	Interatomic potential calculations of III(Al, In)â€“N planar defects with a IIIâ€species environment approach. Physica Status Solidi (B): Basic Research, 2008, 245, 1118-1124.	1.5	22
24	In Situ Observation of Metal to Metal Oxide Progression: A Study of Charge Transfer Phenomenon at Ruâ€“CuO Interfaces. ACS Nano, 2019, 13, 12425-12437.	14.6	22
25	Polar AlN/GaN interfaces: Structures and energetics. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1892-1897.	1.8	20
26	Morphology and strain of self-assembled semipolar GaN quantum dots in (112Â¯2) AlN. Journal of Applied Physics, 2010, 108, .	2.5	20
27	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.	1.5	18
28	Broad compositional tunability of indium tin oxide nanowires grown by the vapor-liquid-solid mechanism. APL Materials, 2014, 2, .	5.1	18
29	Machine Learning in Magnetic Materials. Physica Status Solidi (B): Basic Research, 2021, 258, 2000600.	1.5	18
30	Electronic structure of 1/6ã€ˆ202Â¯3ã€‰ partial dislocations in wurtzite GaN. Journal of Applied Physics, 2011, 109, .	2.5	16
31	Study of InN/GaN interfaces using molecular dynamics. Journal of Materials Science, 2008, 43, 3982-3988.	3.7	15
32	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
33	Ultrafast pulsed laser deposition of carbon nanostructures: Structural and optical characterization. Applied Surface Science, 2013, 278, 101-105.	6.1	13
34	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.	3.1	13
35	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.	3.1	13
36	Microstructure of planar defects and their interactions in wurtzite GaN films. Solid-State Electronics, 2003, 47, 553-557.	1.4	12

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37	Strain distribution of thin InN epilayers grown on (0001) GaN templates by molecular beam epitaxy. Applied Physics Letters, 2007, 90, 061920.	3.3	12
38	Core models of aâ€edge threading dislocations in wurtzite III(Al,Ga,In)â€nitrides. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1931-1935.	1.8	12
39	Junction lines of inversion domain boundaries with stacking faults in GaN. Physical Review B, 2004, 70, .	3.2	11
40	Microstructural assessment of InN-on-GaN films grown by plasma-assisted MBE. Superlattices and Microstructures, 2004, 36, 509-515.	3.1	11
41	Energetics of the 30â˜ Shockley partial dislocation in wurtzite GaN. Superlattices and Microstructures, 2006, 40, 458-463.	3.1	11
42	3D modelling of misfit networks in the interface region of heterostructures. Journal Physics D: Applied Physics, 2007, 40, 4084-4091.	2.8	11
43	Nonsingular dislocation and crack fields: implications to small volumes. Microsystem Technologies, 2009, 15, 117-121.	2.0	11
44	Structural and electronic properties of GaN nanowires with embedded InxGa1â^'xN nanodisks. Journal of Applied Physics, 2015, 118, 034301.	2.5	11
45	Enhanced thermal conductivity in percolating nanocomposites: a molecular dynamics investigation. Nanoscale, 2018, 10, 21732-21741.	5.6	11
46	Impact of Oxygen on the Properties of Cu₃N and Cu_{3â€“x}N_{1â€“x}O_x. Journal of Physical Chemistry C, 2021, 125, 3680-3688.	3.1	11
47	Machine-learning interatomic potential for Wâ€“Mo alloys. Journal of Physics Condensed Matter, 2021, 33, 315403.	1.8	11
48	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.	4.6	11
49	Strain relaxation in AlN/GaN heterostructures grown by molecular beam epitaxy. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2569-2572.	1.8	10
50	Effect of the lower and upper interfaces on the quality of InAs/GaAs quantum dots. Applied Surface Science, 2014, 301, 173-177.	6.1	10
51	Engineering nitrogen- and hydrogen-related defects in ZnO nanowires using thermal annealing. Physical Review Materials, 2021, 5, .	2.4	10
52	Microstructure of GaN Films Grown by RF-Plasma Assisted Molecular Beam Epitaxy. Materials Research Society Symposia Proceedings, 2000, 639, 3471.	0.1	9
53	Interfacial and defect structures in multilayered GaN/AlN films. Journal of Physics Condensed Matter, 2002, 14, 13277-13283.	1.8	9
54	Mixed partial dislocation core structure in GaN by high resolution electron microscopy. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 2156-2160.	1.8	9

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55	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.	1.8	9
56	MOVPE prepared InAs/GaAs quantum dots covered by GaAsSb layer with long wavelength emission at 1.8Âµm. Journal of Crystal Growth, 2015, 414, 167-171.	1.5	9
57	Enhanced Stark Tuning of Single InAs(211)BQuantum Dots due to Nonlinear Piezoelectric Effect in Zincblende Nanostructures. Physical Review Applied, 2016, 6, .	3.8	9
58	Ordered structures in III-Nitride ternary alloys. Computational Materials Science, 2016, 118, 22-31.	3.0	9
59	Atomic-scale models of interactions between inversion domain boundaries and intrinsic basal stacking faults in GaN. Diamond and Related Materials, 2002, 11, 905-909.	3.9	8
60	Atomic scale modeling of edge aâ€type dislocations in InN. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 204-208.	1.8	8
61	Combined vertically correlated InAs and GaAsSb quantum dots separated by triangular GaAsSb barrier. Journal of Applied Physics, 2013, 114, 174305.	2.5	8
62	Endotaxially stabilized B2-FeSi nanodots in Si (100) via ion beam co-sputtering. Applied Physics Letters, 2014, 104, .	3.3	8
63	The influence of structural characteristics on the electronic and thermal properties of GaN/AlN core/shell nanowires. Journal of Applied Physics, 2016, 119, .	2.5	8
64	Nanoassemblies of ultrasmall clusters with remarkable activity in carbon dioxide conversion into C1 fuels. Nanoscale, 2019, 11, 4683-4687.	5.6	8
65	Decorated Dislocations against Phonon Propagation for Thermal Management. ACS Applied Energy Materials, 2020, 3, 2682-2694.	5.1	8
66	p-Type Iodine-Doping of Cu3N and Its Conversion to Î³-CuI for the Fabrication of Î³-CuI/Cu3N p-n Heterojunctions. Electronic Materials, 2022, 3, 15-26.	1.9	8
67	Defect characterization and analysis of IIIâ€V nanowires grown by Niâ€promoted MBE. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2589-2592.	1.8	7
68	Microstructure of Nâ€face InN grown on Si (111) by plasmaâ€assisted MBE using a thin GaNâ€“AlN buffer layer. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1074-1078.	1.8	7
69	Reconstructions and electronic structure of (112Â¯2) and (112Â¯2Â¯) semipolar AlN surfaces. Journal of Applied Physics, 2012, 112, 033510.	2.5	7
70	Structure, strain, and composition profiling of InAs/GaAs(211)B quantum dot superlattices. Journal of Applied Physics, 2016, 119, .	2.5	7
71	Mechanism and crucial parameters on GaN nanocluster formation in a silica matrix. Journal of Applied Physics, 2017, 121, 054301.	2.5	7
72	Epitaxially Oriented Sn:In₂O₃ Nanowires Grown by the Vaporâ€“Liquidâ€“Solid Mechanism on m-, r-, a-Al₂O₃ as Scaffolds for Nanostructured Solar Cells. ACS Applied Energy Materials, 2019, 2, 4274-4283.	5.1	7

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73	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.	0.8	6
74	Strain accommodation and interfacial structure of AlN interlayers in GaN. Crystal Research and Technology, 2009, 44, 1170-1180.	1.3	6
75	Self-annihilation of inversion domains by high energy defects in III-Nitrides. Applied Physics Letters, 2014, 104, .	3.3	6
76	Nanostructure and strain properties of core-shell GaAs/AlGaAs nanowires. Semiconductor Science and Technology, 2015, 30, 114012.	2.0	6
77	Strain and elastic constants of GaN and InN. Computational Condensed Matter, 2017, 10, 25-30.	2.1	6
78	Structural and electronic properties of a-edge dislocations along âŸ¨1-100âŸ© in GaN. Journal of Applied Physics, 2018, 123, .	2.5	6
79	Structural and magnetic properties of SmCo5âˆ’xNiX intermetallic compounds. Journal of Alloys and Compounds, 2021, 882, 160699.	5.5	6
80	First-principles calculations of threading screw dislocations in AlN and InN. Physical Review Materials, 2018, 2, .	2.4	6
81	Atomistic modeling and HRTEM analysis of misfit dislocations in InN/GaN heterostructures. Applied Surface Science, 2012, 260, 23-28.	6.1	5
82	Si nanostructures grown by picosecond high repetition rate pulsed laser deposition. Applied Surface Science, 2013, 278, 67-70.	6.1	5
83	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.	0.8	5
84	Energetic, structural and electronic properties of metal vacancies in strained AlN/GaN interfaces. Journal of Physics Condensed Matter, 2015, 27, 125006.	1.8	5
85	Structural, Electronic and Vibrational Properties of Al₄C₃. Physica Status Solidi (B): Basic Research, 2019, 256, 1900037.	1.5	5
86	Ab initio, artificial neural network predictions and experimental synthesis of mischmetal alloying in Smâ€“Co permanent magnets. Nanoscale, 2022, 14, 5824-5839.	5.6	5
87	Twin formation in sputter-grown ZnOâˆ•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.	2.1	4
88	Indium adsorption and incorporation mechanisms in AlN. Journal of Materials Science, 2011, 46, 4377-4383.	3.7	4
89	Interfaces between nonpolar and semipolar III-nitride semiconductor orientations: Structure and defects. Journal of Applied Physics, 2012, 111, 033507.	2.5	4
90	Ab-initio electronic structure calculations and properties of [SixSn1âˆ’x]3N4 ternary nitrides. Thin Solid Films, 2016, 613, 43-47.	1.8	4

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91	Ab initio investigation of the AlN:Er system. Computational Materials Science, 2017, 138, 128-134.	3.0	4
92	Bonding of Gold Nanoclusters on Graphene with and without Point Defects. Nanomaterials, 2020, 10, 2109.	4.1	4
93	Magnesium adsorption and incorporation in InN (0001) and surfaces: A first-principles study. Applied Surface Science, 2009, 255, 8475-8482.	6.1	3
94	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.	0.8	3
95	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.	0.8	3
96	Electron energy loss near edge structure of InxAl1â^'xN alloys. Microelectronic Engineering, 2013, 112, 198-203.	2.4	3
97	Atomic scale morphology, growth behaviour and electronic properties of semipolar ${ 1 0ar {1}3} $ GaN surfaces. Journal of Physics Condensed Matter, 2013, 25, 045008.	1.8	3
98	Nanostructural and electronic properties of polytypes in InN nanocolumns. Journal of Applied Physics, 2013, 114, 074312.	2.5	3
99	Interfacial properties of self-assembled GaN nanowires on pre-processed Al2O3(0001) surfaces. Materials Science in Semiconductor Processing, 2016, 55, 46-50.	4.0	3
100	Ab initio quantum transport in AB-stacked bilayer penta-silicene using atomic orbitals. RSC Advances, 2018, 8, 34041-34046.	3.6	3
101	Large out-of-plane piezoelectric response of wurtzite InN under biaxial strain. Modelling and Simulation in Materials Science and Engineering, 2021, 29, 065013.	2.0	3
102	Atomic simulations and HRTEM observations of a Î£ 18 tilt grain boundary in GaN. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 799-803.	1.8	2
103	Microstructure of defects in InGaN/GaN quantum well heterostructures. Journal of Physics: Conference Series, 2008, 126, 012048.	0.4	2
104	Core properties and the role of screw dislocations in the bulk n-type conductivity in InN. Physical Chemistry Chemical Physics, 2019, 21, 15767-15778.	2.8	2
105	Emergence of valley selectivity in monolayer tin(<scp>ii</scp>) sulphide. Nanoscale Advances, 2019, 1, 4863-4869.	4.6	2
106	NanoMaterialsCAD: Flexible Software for the Design of Nanostructures. Advanced Theory and Simulations, 2021, 4, 2000232.	2.8	2
107	Ab Initio Study of the Electronâ€“Phonon Coupling in Ultrathin Al Layers. Journal of Low Temperature Physics, 2021, 203, 180-193.	1.4	2
108	Interaction Between Basal Stacking Faults and Prismatic Inversion Domain Boundaries in GaN. Materials Research Society Symposia Proceedings, 2000, 639, 3441.	0.1	1

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109	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, 0, 2464-2469.	0.8	1
110	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.	0.8	1
111	Thermal oxidation and facetâ€formation mechanisms of Si nanowires. Physica Status Solidi - Rapid Research Letters, 2014, 8, 307-311.	2.4	1
112	Hydrogen Storage: Hydrogen Flux through Size Selected Pd Nanoparticles into Underlying Mg Nanofilms (Adv. Energy Mater. 4/2018). Advanced Energy Materials, 2018, 8, 1870016.	19.5	1
113	3â€Ð Strain Fields in Lowâ€Ðimensional IIIâ€“V Semiconductors: A Combined Finite Elements and HRTEM Approach. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700409.	1.8	1
114	The Metalorganic Vapour Phase Epitaxy Growth of AIIIBVHeterostructures Observed by Reflection Anisotropy Spectroscopy. Acta Physica Polonica A, 2016, 129, A-75-A-78.	0.5	1
115	An ab initio study of size-selected Pd nanocluster catalysts for the hydrogenation of 1-pentyne. Physical Chemistry Chemical Physics, 2022, 24, 3231-3237.	2.8	1
116	Cost effective modification of SmCo5-type alloys. AIP Advances, 2022, 12, .	1.3	1
117	Structural properties of quaternary InAlGaN MQW grown by plasma-assisted MBE. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 2151-2155.	1.8	0
118	Crystallization of amorphous silicon thin films: comparison between experimental and computer simulation results. Journal of Materials Science, 2008, 43, 3976-3981.	3.7	0
119	Electron Microscopy Characterization of a Graded AlN/GaN Multilayer Grown by Plasma-Assisted MBE. Springer Proceedings in Physics, 2008, , 66-68.	0.2	0
120	Nonlinear Finite Element and Atomistic Modelling of Dislocations in Heterostructures. Advanced Structured Materials, 2010, , 239-253.	0.5	0
121	Different polarities of InN (0001) heterostructures on Si (111) substrates. , 2014, , .		0
122	Strain field determination in IIIâ€“V heteroepitaxy coupling finite elements with experimental and theoretical techniques at the nanoscale. Journal of the Mechanical Behavior of Materials, 2017, 26, 1-8.	1.8	0
123	Structural Properties and Defects of IIIâ€Nitride Semiconductors at the Nanoscale. , 2017, , 237-277.		0
124	Modeling the structural characterization of nanostructures. Frontiers of Nanoscience, 2020, 17, 207-227.	0.6	0
125	Misfit analysis of the InN/GaN interface through HRTEM image simulations. , 2008, , 651-652.		0