

# Baishakhi

## List of Publications by Year in descending order

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42  
papers

736  
citations

623734

14  
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552781

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times ranked

1096  
citing authors

#	ARTICLE	IF	CITATIONS
1	Phase transformation in MOCVD growth of $(\text{Al}_x\text{Ga}_{1-x})_2\text{O}_3$ thin films. <i>APL Materials</i> , 2020, 8, .	5.1	75
2	Coke Formation in a Zeolite Crystal During the Methanol-to-Hydrocarbons Reaction as Studied with Atom Probe Tomography. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 11173-11177.	13.8	74
3	Atom probe analysis of AlN interlayers in AlGaN/AlN/GaN heterostructures. <i>Applied Physics Letters</i> , 2013, 102, .	3.3	62
4	Flexible $\text{Ga}_2\text{O}_3$ Nanomembrane Schottky Barrier Diodes. <i>Advanced Electronic Materials</i> , 2019, 5, 1800714.	5.1	47
5	GaN-based high-electron-mobility transistor structures with homogeneous lattice-matched InAlN barriers grown by plasma-assisted molecular beam epitaxy. <i>Semiconductor Science and Technology</i> , 2014, 29, 045011.	2.0	42
6	Electron transport in unipolar InGaN/GaN multiple quantum well structures grown by $\text{NH}_3$ molecular beam epitaxy. <i>Journal of Applied Physics</i> , 2015, 117, .	2.5	42
7	Resolving the degradation pathways in high-voltage oxides for high-energy-density lithium-ion batteries; Alternation in chemistry, composition and crystal structures. <i>Nano Energy</i> , 2017, 36, 76-84.	16.0	30
8	Isolating Clusters of Light Elements in Molecular Sieves with Atom Probe Tomography. <i>Journal of the American Chemical Society</i> , 2018, 140, 9154-9158.	13.7	27
9	Pure AlN layers in metal-polar AlGaN/AlN/GaN and AlN/GaN heterostructures grown by low-temperature ammonia-based molecular beam epitaxy. <i>Semiconductor Science and Technology</i> , 2015, 30, 055010.	2.0	26
10	Structural, band and electrical characterization of $\text{In}_{0.19}\text{Ga}_{0.81}\text{O}_3$ films grown by molecular beam epitaxy on Sn doped $\text{In}_2\text{O}_3$ substrate. <i>Journal of Applied Physics</i> , 2019, 126, .	2.5	26
11	Bio-milling technique for the size reduction of chemically synthesized $\text{BiMnO}_3$ nanoplates. <i>Journal of Materials Chemistry</i> , 2007, 17, 3910.	6.7	25
12	Atom Probe Tomography of Compound Semiconductors for Photovoltaic and Light-Emitting Device Applications. <i>Microscopy Today</i> , 2012, 20, 18-24.	0.3	25
13	A combined approach of atom probe tomography and unsupervised machine learning to understand phase transformation in $(\text{Al}_x\text{Ga}_{1-x})_2\text{O}_3$ . <i>Applied Physics Letters</i> , 2020, 116, .	3.3	21
14	Hillock assisted p-type enhancement in N-polar GaN:Mg films grown by MOCVD. <i>Scientific Reports</i> , 2020, 10, 1426.	3.3	19
15	New Atom Probe Tomography Reconstruction Algorithm for Multilayered Samples: Beyond the Hemispherical Constraint. <i>Microscopy and Microanalysis</i> , 2017, 23, 247-254.	0.4	15
16	Prediction of optical band gap of $\text{In}_{1-x}\text{Ga}_x\text{O}_3$ using material informatics. <i>Materials Discovery</i> , 2018, 11, 1-5.	3.3	14
17	Atomic scale investigation of chemical heterogeneity in $\text{In}_{1-x}\text{Ga}_x\text{O}_3$ films using atom probe tomography. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	14
18	Direct observation of site-specific dopant substitution in Si doped $(\text{Al}_x\text{Ga}_{1-x})_2\text{O}_3$ . <i>Physical Chemistry Physics</i> , 2021, 54, 184001.	2.8	13

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19	Atom probe tomography studies of Al <sub>2</sub> O <sub>3</sub> gate dielectrics on GaN. Journal of Applied Physics, 2014, 116, 134101.	2.5	12
20	Vertical transport through AlGa <sub>N</sub> barriers in heterostructures grown by ammonia molecular beam epitaxy and metalorganic chemical vapor deposition. Semiconductor Science and Technology, 2017, 32, 025010.	2.0	11
21	Analysis of Vegard's law for lattice matching In <sub>x</sub> Al <sub>1-x</sub> N to GaN by metalorganic chemical vapor deposition. Journal of Crystal Growth, 2017, 475, 127-135.	1.5	11
22	Response to "Comment on "Phase transformation in MOCVD growth of (Al <sub>x</sub> Ga <sub>1-x</sub> ) <sub>2</sub> O <sub>3</sub> thin films" [APL Mater. 8, 089101 (2020)]. APL Materials, 2020, 8, .	5.1	11
23	Effects of cation stoichiometry on surface morphology and crystallinity of ZnGe <sub>2</sub> films grown on GaN by metalorganic chemical vapor deposition. AIP Advances, 2020, 10, .	1.3	11
24	Characterization of a dielectric/GaN system using atom probe tomography. Applied Physics Letters, 2013, 103, .	3.3	8
25	Demonstration of isotype GaN/AlN/GaN heterobarrier diodes by NH <sub>3</sub> -molecular beam epitaxy. Applied Physics Letters, 2015, 106, .	3.3	8
26	Medium-range ordering, structural heterogeneity, and their influence on properties of Zr-Cu-Co-Al metallic glasses. Physical Review Materials, 2021, 5, .	2.4	8
27	Probing structural and chemical evolution in (Al <sub>x</sub> Ga <sub>1-x</sub> ) <sub>2</sub> O <sub>3</sub> using atom probe tomography: A review. Journal of Materials Research, 2021, 36, 52-69.	2.6	7
28	Characterization of N-polar AlN in GaN/AlN/(Al,Ga)N heterostructures grown by metal-organic chemical vapor deposition. Semiconductor Science and Technology, 2017, 32, 115004.	2.0	6
29	Dopant-defect interactions in Mg-doped GaN via atom probe tomography. Applied Physics Letters, 2021, 119, .	3.3	6
30	Nanoscale Chemical Imaging of Coking Mechanisms in a Zeolite ZSM-5 Crystal by Atom Probe Tomography. Microscopy and Microanalysis, 2017, 23, 674-675.	0.4	5
31	Nanoscale compositional analysis of wurtzite AlN thin film using atom probe tomography. Applied Physics Letters, 2020, 117, 232103.	3.3	5
32	Correlation between thickness dependent nanoscale structural chemistry and superconducting properties of ultrathin epitaxial NbN films. Materials Chemistry and Physics, 2022, 282, 125962.	4.0	5
33	Nanoscale chemistry and ion segregation in zirconia-based ceramic at grain boundaries by atom probe tomography. Scripta Materialia, 2022, 213, 114603.	5.2	5
34	Exploring Helium Mitigation in Ferritic Alloys by Advanced Microscopy. Microscopy and Microanalysis, 2015, 21, 753-754.	0.4	4
35	Understanding the Growth Mechanism of In <sub>2</sub> (Al <sub>x</sub> Ga <sub>1-x</sub> ) <sub>2</sub> O <sub>3</sub> by Atom Probe Tomography. Microscopy and Microanalysis, 2019, 25, 2508-2509.	0.4	4
36	Application of Atom Probe Tomography for Advancing GaN Based Technology. International Journal of High Speed Electronics and Systems, 2019, 28, 1940005.	0.7	4

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37	Probing Heterogeneity in Bovine Enamel Composition through Nanoscale Chemical Imaging using Atom Probe Tomography. Archives of Oral Biology, 2020, 112, 104682.	1.8	4
38	Field emission studies of silver nanoparticles synthesized by electron cyclotron resonance plasma. Applied Surface Science, 2011, 257, 7184-7189.	6.1	2
39	Correlation of Multiplicity and Chemistry in Al <sub>x</sub> Ga <sub>1-x</sub> N Heterostructure via Atom Probe Tomography. Microscopy and Microanalysis, 2020, 26, 95-101.	0.4	1
40	A comprehensive review on the effects of local microstructures and nanoscale chemical features on B-III-nitride films. Journal of Materials Research, 0, , 1.	2.6	1
41	Field Evaporation Behavior of Ternary Compound Semiconductor In <sub>x</sub> Al <sub>1-x</sub> N. Microscopy and Microanalysis, 2017, 23, 636-637.	0.4	0
42	Probing structural and chemical evolution in (Al <sub>x</sub> Ga <sub>1-x</sub> ) <sub>2</sub> O <sub>3</sub> using atom probe tomography: A review. Journal of Materials Research, 2021, 36, 1-18.	2.6	0