

Bastien Bonef

List of Publications by Year in descending order

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41
papers

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44
times ranked

883
citing authors

#	ARTICLE	IF	CITATIONS
1	Localization landscape theory of disorder in semiconductors. II. Urbach tails of disordered quantum well layers. <i>Physical Review B</i> , 2017, 95, .	1.1	78
2	AlGaN Deep-Ultraviolet Light-Emitting Diodes Grown on SiC Substrates. <i>ACS Photonics</i> , 2020, 7, 554-561.	3.2	59
3	1550-nm InGaAsP multi-quantum-well structures selectively grown on v-groove-patterned SOI substrates. <i>Applied Physics Letters</i> , 2017, 111, .	1.5	56
4	Polarized monolithic white semipolar (20°±21) InGaN light-emitting diodes grown on high quality (20°±21) GaN/sapphire templates and its application to visible light communication. <i>Nano Energy</i> , 2020, 67, 104236.	8.2	53
5	Efficient Semipolar (11°±22) 550 nm Yellow/Green InGaN Light-Emitting Diodes on Low Defect Density (11°±22) GaN/Sapphire Templates. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 36417-36422.	4.0	49
6	Study of efficient semipolar (11-22) InGaN green micro-light-emitting diodes on high-quality (11-22) GaN/sapphire template. <i>Optics Express</i> , 2019, 27, 24154.	1.7	43
7	Indium segregation in N-polar InGaN quantum wells evidenced by energy dispersive X-ray spectroscopy and atom probe tomography. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	34
8	Atom probe tomography of nitride semiconductors. <i>Scripta Materialia</i> , 2018, 148, 75-81.	2.6	34
9	Nanometer scale composition study of MBE grown B GaN performed by atom probe tomography. <i>Journal of Applied Physics</i> , 2017, 121, .	1.1	26
10	Dopant radial inhomogeneity in Mg-doped GaN nanowires. <i>Nanotechnology</i> , 2018, 29, 255706.	1.3	19
11	Composition Analysis of III-Nitrides at the Nanometer Scale: Comparison of Energy Dispersive X-ray Spectroscopy and Atom Probe Tomography. <i>Nanoscale Research Letters</i> , 2016, 11, 461.	3.1	17
12	Fast Diffusion and Segregation along Threading Dislocations in Semiconductor Heterostructures. <i>Nano Letters</i> , 2019, 19, 1428-1436.	4.5	17
13	Growth of coherent B GaN films using BBr ₃ gas as a boron source in plasma assisted molecular beam epitaxy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2017, 35, .	0.9	16
14	Barriers to carrier transport in multiple quantum well nitride-based $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -plane green light emitting diodes. <i>Physical Review Materials</i> , 2020, 4, .	0.9	16
15	Atomic arrangement at ZnTe/CdSe interfaces determined by high resolution scanning transmission electron microscopy and atom probe tomography. <i>Applied Physics Letters</i> , 2015, 106, 051904.	1.5	15
16	Semipolar $(20^\circ \pm 21)^\circ$ GaN templates on sapphire: 432 nm InGaN light-emitting diodes and light extraction simulations. <i>Applied Physics Express</i> , 2018, 11, 036501.	1.1	14
17	Compositional accuracy in atom probe tomography analyses performed on III-N light emitting diodes. <i>Journal of Applied Physics</i> , 2019, 126, 124307.	1.1	14
18	Demonstration of Electrically Injected Semipolar Laser Diodes Grown on Low-Cost and Scalable Sapphire Substrates. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 47106-47111.	4.0	13

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19	560-nm InGaN micro-LEDs on low-defect-density and scalable (20-21) semipolar GaN on patterned sapphire substrates. <i>Optics Express</i> , 2020, 28, 18150.	1.7	13
20	Electrical properties and interface abruptness of AlSiO gate dielectric grown on 0001 \bar{A} -N-polar and (0001) Ga-polar GaN. <i>Applied Physics Letters</i> , 2019, 115, 172104.	1.5	11
21	Interfacial chemistry in a ZnTe/CdSe superlattice studied by atom probe tomography and transmission electron microscopy strain measurements. <i>Journal of Microscopy</i> , 2016, 262, 178-182.	0.8	10
22	Strain compensated superlattices on <i>m</i> -plane gallium nitride by ammonia molecular beam epitaxy. <i>Journal of Applied Physics</i> , 2017, 122, .	1.1	10
23	High indium content homogenous InAlN layers grown by plasma-assisted molecular beam epitaxy. <i>Journal of Crystal Growth</i> , 2016, 454, 164-172.	0.7	9
24	Improved Vertical Carrier Transport for Green III-Nitride LEDs Using Alloy Quantum Barriers. <i>Physical Review Materials</i> , 2018, 2, .	1.3	9
25	Structural and optical properties of nonpolar <i>m</i> - and <i>a</i> -plane GaN/AlGaIn heterostructures for narrow-linewidth mid-infrared intersubband transitions. <i>Applied Physics Letters</i> , 2020, 116, 201103.	1.5	7
26	Characterization of N-polar AlN in GaN/AlN/(Al,Ga)N heterostructures grown by metal-organic chemical vapor deposition. <i>Semiconductor Science and Technology</i> , 2017, 32, 115004.	1.0	6
27	Carrier dynamics of two distinct localized centers in 530-nm InGaIn green light-emitting diodes. <i>Superlattices and Microstructures</i> , 2018, 113, 684-689.	1.4	6
28	Characterization of InGaIn quantum dots grown by metalorganic chemical vapor deposition. <i>Semiconductor Science and Technology</i> , 2019, 34, 125002.	1.0	6
29	Multi-microscopy nanoscale characterization of the doping profile in a hybrid Mg/Ge-doped tunnel junction. <i>Nanotechnology</i> , 2020, 31, 465706.	1.3	6
30	High conductivity n-Al _{0.6} Ga _{0.4} N by ammonia-assisted molecular beam epitaxy for buried tunnel junctions in UV emitters. <i>Optics Express</i> , 2021, 29, 40781.	1.7	5
31	Atomic Scale Structural Characterization of Epitaxial (Cd,Cr)Te Magnetic Semiconductor. <i>Microscopy and Microanalysis</i> , 2017, 23, 717-723.	0.2	4
32	High spatial resolution correlated investigation of Zn segregation to stacking faults in ZnTe/CdSe nanostructures. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	4
33	Quantitative investigation of indium distribution in InN wetting layers and dots grown by metalorganic chemical vapor deposition. <i>Applied Physics Express</i> , 2020, 13, 065005.	1.1	4
34	Pipe-diffusion-enriched dislocations and interfaces in SnSe/PbSe heterostructures. <i>Physical Review Materials</i> , 2021, 5, .	0.9	4
35	Nanometer scale structural and compositional inhomogeneities of half-Heusler CoTi _{1-x} Fe _x Sb thin films. <i>Journal of Applied Physics</i> , 2019, 125, 205301.	1.1	2

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37	BBr ₃ as a boron source in plasma-assisted molecular beam epitaxy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2019, 37, 061502.	0.9	2
38	High nitrogen flux plasma-assisted molecular beam epitaxy growth of In _x Ga _{1-x} N films. <i>Journal of Crystal Growth</i> , 2020, 546, 125738.	0.7	2
39	Atom Probe Tomography Quantification of Alloy Fluctuations in (Al,In,Ga)N. <i>Microscopy and Microanalysis</i> , 2017, 23, 716-717.	0.2	1
40	High Spatial Resolution Energy Dispersive X-ray Spectroscopy and Atom Probe Tomography study of Indium segregation in N-polar InGaN Quantum Wells. <i>Microscopy and Microanalysis</i> , 2017, 23, 1448-1449.	0.2	1
41	Advances in heteroepitaxial integration of III-V and IV-VI semiconductors with electron channeling contrast imaging. <i>Microscopy and Microanalysis</i> , 2021, 27, 908-910.	0.2	0