Ke Jiang

List of Publications by Year
in descending order

29 papers	987 citations	516710 16 h-index	454955 30 g-index
30 all docs	30 docs citations	30 times ranked	1113 citing authors

#	ARTICLE	IF	CITATIONS
1	Realization of a Highâ€Performance GaN UV Detector by Nanoplasmonic Enhancement. Advanced Materials, 2012, 24, 845-849.	21.0	243
2	Influence of threading dislocations on GaN-based metal-semiconductor-metal ultraviolet photodetectors. Applied Physics Letters, 2011, 98, .	3.3	72
3	In situ observation of two-step growth of AlN on sapphire using high-temperature metalâ€“organic chemical vapour deposition. CrystEngComm, 2013, 15, 6066.	2.6	71
4	Influence of the growth temperature of AlN nucleation layer on AlN template grown by high-temperature MOCVD. Materials Letters, 2014, 114, 26-28.	2.6	70
5	Enhanced spectral response of an AlGaN-based solar-blind ultraviolet photodetector with Al nanoparticles. Optics Express, 2014, 22, 24286.	3.4	68
6	Improved performance of GaN metal-semiconductor-metal ultraviolet detectors by depositing SiO2 nanoparticles on a GaN surface. Applied Physics Letters, 2011, 98, .	3.3	48
7	Quantum engineering of non-equilibrium efficient p-doping in ultra-wide band-gap nitrides. Light: Science and Applications, 2021, 10, 69.	16.6	42
8	2â€‰â€‰Gbps free-space ultraviolet-C communication based on a high-bandwidth micro-LED achieved with pre-equalization. Optics Letters, 2021, 46, 2147.	3.3	42
9	Defect evolution in AlN templates on PVD-AlN/sapphire substrates by thermal annealing. CrystEngComm, 2018, 20, 4623-4629.	2.6	39
10	The formation mechanism of voids in physical vapor deposited AlN epilayer during high temperature annealing. Applied Physics Letters, 2020, 116, .	3.3	28
11	Polarization assisted self-powered GaN-based UV photodetector with high responsivity. Photonics Research, 2021, 9, 734.	7.0	28
12	Polarization-enhanced AlGaN solar-blind ultraviolet detectors. Photonics Research, 2020, 8, 1243.	7.0	26
13	The defect evolution in homoepitaxial AlN layers grown by high-temperature metalâ€“organic chemical vapor deposition. CrystEngComm, 2018, 20, 2720-2728.	2.6	25
14	Improved nucleation of AlN on <i>in situ</i> nitrogen doped graphene for GaN quasi-van der Waals epitaxy. Applied Physics Letters, 2020, 117, .	3.3	22
15	Review on the Progress of AlGaN-based Ultraviolet Light-Emitting Diodes. Fundamental Research, 2021, 1, 717-734.	3.3	20
16	Suppressing the compositional non-uniformity of AlGaN grown on a HVPE-AlN template with large macro-steps. CrystEngComm, 2019, 21, 4864-4873.	2.6	18
17	Elimination of the internal electrostatic field in two-dimensional GaN-based semiconductors. Npj 2D Materials and Applications, 2020, 4, .	7.9	16
18	A high-response ultraviolet photodetector by integrating GaN nanoparticles with graphene. Journal of Alloys and Compounds, 2021, 868, 159281.	5.5	15

#	Article	IF	Citations
19	Multiple-quantum-well-induced unipolar carrier transport multiplication in AlGaN solar-blind ultraviolet photodiode. Photonics Research, 2021, 9, 1907.	7.0	13
20	Modulating the Surface State of SiC to Control Carrier Transport in Graphene/SiC. Small, 2018, 14, e1801273.	10.0	12
21	Construction of van der Waals substrates for largely mismatched heteroepitaxy systems using first principles. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	5.1	11
22	Influence of Dislocations on the Refractive Index of AlN by Nanoscale Strain Field. Nanoscale Research Letters, 2019, 14, 184.	5.7	11
23	Carrier behavior in the vicinity of pit defects in GaN characterized by ultraviolet light-assisted Kelvin probe force microscopy. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	5.1	8
24	Cation Vacancy in Wide Bandgap IIIâ€Nitrides as Singleâ€Photon Emitter: A Firstâ€Principles Investigation. Advanced Science, 2021, 8, e2100100.	11.2	8
25	Hybrid metal/Ga₂O₃/GaN ultraviolet detector for obtaining low dark current and high responsivity. Optics Letters, 2022, 47, 1561.	3.3	8
26	<i>In situ</i> fabrication of Al surface plasmon nanoparticles by metalâ€“organic chemical vapor deposition for enhanced performance of AlGaN deep ultraviolet detectors. Nanoscale Advances, 2020, 2, 1854-1858.	4.6	7
27	Point Defects in Monolayer <i>h</i>-AlN as Candidates for Single-Photon Emission. ACS Applied Materials & Interfaces, 2021, 13, 37380-37387.	8.0	7
28	Suppressing the luminescence of V-related point-defect in AlGaN grown by MOCVD on HVPE-AlN. Applied Surface Science, 2020, 520, 146369.	6.1	6
29	Regulating the Valence Level Arrangement of High-Al-content AlGaN Quantum Wells Using Additional Potentials with Mg Doping. Physical Chemistry Chemical Physics, 2022, , .	2.8	1