Bin Chen

List of Publications by Year
in descending order

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46	785	586496 16	591227 27
papers	citations	h-index	g-index

46	46	46	1333
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Observation and Control of Unidirectional Ballistic Dynamics of Nanoparticles at a Liquidâ€“Gas Interface by 4D Electron Microscopy. ACS Nano, 2021, 15, 6801-6810.	7.3	3
2	Shape Evolution and Control of Wurtzite CdSe Nanocrystals through a Facile One-Pot Strategy. Journal of Physical Chemistry C, 2021, 125, 18905-18915.	1.5	4
3	Versatile Printing of Substantial Liquid Cells for Efficiently Imaging In Situ Liquid-Phase Dynamics. Nano Letters, 2021, 21, 6882-6890.	4.5	2
4	Chirality Affecting Reaction Dynamics of HgS Nanostructures Simultaneously Visualized in Real and Reciprocal Space. ACS Nano, 2021, 15, 16255-16265.	7.3	3
5	Visualizing the Redox Reaction Dynamics of Perovskite Nanocrystals in Real and Reciprocal Space. Journal of Physical Chemistry Letters, 2020, 11, 2550-2558.	2.1	7
6	Four-Dimensional Probing of Phase-Reaction Dynamics in Au/GaAs Nanowires. Nano Letters, 2019, 19, 781-786.	4.5	3
7	Optical Quenching of Magnetic Vortex Visualized In Situ by Lorentz Electron Microscopy. Microscopy and Microanalysis, 2018, 24, 912-913.	0.2	0
8	Optical manipulation of magnetic vortices visualized in situ by Lorentz electron microscopy. Science Advances, 2018, 4, eaat3077.	4.7	39
9	Direct Visualization of Photomorphic Reaction Dynamics of Plasmonic Nanoparticles in Liquid by Four-Dimensional Electron Microscopy. Journal of Physical Chemistry Letters, 2018, 9, 4045-4052.	2.1	10
10	Surface defects generated by intrinsic origins on 4H-SiC epitaxial wafers observed by scanning electron microscopy. Microscopy (Oxford, England), 2017, 66, 95-102.	0.7	5
11	Imaging rotational dynamics of nanoparticles in liquid by 4D electron microscopy. Science, 2017, 355, 494-498.	6.0	74
12	Photoinduced nanobubble-driven superfast diffusion of nanoparticles imaged by 4D electron microscopy. Science Advances, 2017, 3, e1701160.	4.7	39
13	Dynamics and control of gold-encapped gallium arsenide nanowires imaged by 4D electron microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12876-12881.	3.3	13
14	Analysis of Dislocation Structures in 4Hâ€SiC by Synchrotron Xâ€Ray Topography. Electrical Engineering in Japan (English Translation of Denki Gakkai Ronbunshi), 2016, 197, 3-17.	0.2	7
15	Surface defects generated by extrinsic origins on 4H-SiC epitaxial-wafers observed by scanning electron microscopy. Microscopy (Oxford, England), 2016, 66, 103-109.	0.7	4
16	Helical Growth of Aluminum Nitride: New Insights into Its Growth Habit from Nanostructures to Single Crystals. Scientific Reports, 2015, 5, 10087.	1.6	18
17	Analysis of Dislocation Structures in 4H-SiC by Synchrotron X-ray Topography. IEEJ Transactions on Fundamentals and Materials, 2015, 135, 768-779.	0.2	1
18	Deformation-induced phase transformation in 4Hâ€“SiC nanopillars. Acta Materialia, 2014, 80, 392-399.	3.8	16

#	Article	IF	Citations
19	In situ monitoring of stacking fault formation and its carrier lifetime mediation in p-type 4H-SiC. Applied Physics Letters, 2014, 105, 042104.	1.5	9
20	Effect of Fe impurity on the dislocations in 4H-SiC: Insights from electrical and optical characterization. Japanese Journal of Applied Physics, 2014, 53, 05FG01.	0.8	2
21	Elemental diffusion during the droplet epitaxy growth of In(Ga)As/GaAs(001) quantum dots by metal-organic chemical vapor deposition. Applied Physics Letters, 2014, 104, .	1.5	4
22	Contrast analysis of Shockley partial dislocations in 4H-SiC observed by synchrotron Bergâ€“Barrett X-ray topography. Philosophical Magazine, 2014, 94, 1674-1685.	0.7	35
23	Cheap, Gram-Scale Fabrication of BN Nanosheets via Substitution Reaction of Graphite Powders and Their Use for Mechanical Reinforcement of Polymers. Scientific Reports, 2014, 4, 4211.	1.6	39
24	Preferential nucleation and growth of InAs/GaAs(001) quantum dots on defected sites by droplet epitaxy. Scripta Materialia, 2013, 69, 638-641.	2.6	4
25	Strengthening Brittle Semiconductor Nanowires through Stacking Faults: Insights from in Situ Mechanical Testing. Nano Letters, 2013, 13, 4369-4373.	4.5	45
26	Attraction of semiconductor nanowires: An in situ observation. Acta Materialia, 2013, 61, 7166-7172.	3.8	10
27	Anelastic Behavior in GaAs Semiconductor Nanowires. Nano Letters, 2013, 13, 3169-3172.	4.5	39
28	Tuning minority-carrier lifetime through stacking fault defects: The case of polytypic SiC. Applied Physics Letters, 2012, 100, .	1.5	20
29	Can misfit dislocations be located above the interface of InAs/GaAs (001) epitaxial quantum dots?. Nanoscale Research Letters, 2012, 7, 486.	3.1	3
30	Self-healing in fractured GaAs nanowires. Acta Materialia, 2012, 60, 5593-5600.	3.8	9
31	Direct imaging and optical activities of stacking faults in 4H-SiC homoepitaxial films. Journal of Applied Physics, 2012, 111, 053513.	1.1	9
32	Surface defects and accompanying imperfections in 4Hâ€“SiC: Optical, structural and electrical characterization. Acta Materialia, 2012, 60, 51-58.	3.8	50
33	Comparison of dislocation behavior in Siâ€•and Câ€face 4Hâ€SiC. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1278-1281.	0.8	3
34	Electrical and Optical Properties of Stacking Faults in 4H-SiC Devices. Journal of Electronic Materials, 2010, 39, 684-687.	1.0	14
35	Evidence for a general mechanism modulating carrier lifetime in SiC. Physical Review B, 2010, 81, .	1.1	21
36	Pinning of recombination-enhanced dislocation motion in 4Hâ€“SiC: Role of Cu and EH1 complex. Applied Physics Letters, 2010, 96, .	1.5	23

#	Article	IF	Citations
37	Electron-beam-induced current and cathodoluminescence study of dislocation arrays in 4H-SiC homoepitaxial layers. Journal of Applied Physics, 2009, 106, .	1.1	23
38	Electrical activities of stacking faults and partial dislocations in 4H-SiC homoepitaxial films. Superlattices and Microstructures, 2009, 45, 295-300.	1.4	8
39	Structural characterization and iron detection at Î£3 grain boundaries in multicrystalline silicon. Journal of Applied Physics, 2009, 105, 113502.	1.1	53
40	Cathodoluminescence study of dislocation-related luminescence from small-angle grain boundaries in multicrystalline silicon. Applied Physics Letters, 2009, 94, 112103.	1.5	17
41	Electron-beam-induced current study of electrical activity of dislocations in 4Hâ€“SiC homoeptaxial film. Journal of Materials Science: Materials in Electronics, 2008, 19, 219-223.	1.1	14
42	Electron-beam-induced current study of stacking faults and partial dislocations in 4H-SiC Schottky diode. Applied Physics Letters, 2008, 93, .	1.5	39
43	Correlation between residual strain and electrically active grain boundaries in multicrystalline silicon. Applied Physics Letters, 2008, 93, .	1.5	34
44	Dielectric Properties of Boron Nitride-Aluminium Nitride Composites Prepared by Spark Plasma Sintering. Key Engineering Materials, 2007, 336-338, 796-798.	0.4	1
45	Grain Boundaries in Multicrystalline Si. Solid State Phenomena, 0, 156-158, 19-26.	0.3	9
46	D-Line Emission from Small Angle Grain Boundaries in Multicrystalline Si. Solid State Phenomena, 0, 156-158, 561-565.	0.3	0