Jiyang Fan

List of Publications by Year
in descending order

81 papers	2,402 citations	304743 22 h-index	206112 48 g-index
85 all docs	85 docs citations	85 times ranked	2790 citing authors

#	ARTICLE	IF	CITATIONS
1	Low-dimensional SiC nanostructures: Fabrication, luminescence, and electrical properties. Progress in Materials Science, 2006, 51, 983-1031.	32.8	312
2	Experimental Evidence for the Quantum Confinement Effect in 3C-SiC Nanocrystallites. Physical Review Letters, 2005, 94, 026102.	7.8	288
3	Group IV Nanoparticles: Synthesis, Properties, and Biological Applications. Small, 2010, 6, 2080-2098.	10.0	264
4	Synthesis and low-temperature photoluminescence properties of SnO2nanowires and nanobelts. Nanotechnology, 2006, 17, 1695-1699.	2.6	228
5	3Câ€“SiC Nanocrystals as Fluorescent Biological Labels. Small, 2008, 4, 1058-1062.	10.0	165
6	Red shift in the photoluminescence of colloidal carbon quantum dots induced by photon reabsorption. Applied Physics Letters, 2014, 104, .	3.3	86
7	Luminescence from colloidal 3C-SiC nanocrystals in different solvents. Applied Physics Letters, 2006, 88, 041909.	3.3	76
8	Fabrication and photoluminescence of SiC quantum dots stemming from 3C, 6H, and 4H polytypes of bulk SiC. Applied Physics Letters, 2012, 101, .	3.3	68
9	C8-structured carbon quantum dots: Synthesis, blue and green double luminescence, and origins of surface defects. Carbon, 2014, 79, 165-173.	10.3	67
10	Silicon Carbide Nanostructures. Engineering Materials and Processes, 2014, , .	0.4	63
11	<i>In Situ</i> Phase-Transition Crystallization of All-Inorganic Water-Resistant Exciton-Radiative Heteroepitaxial CsPbBr₃â€“CsPb₂Br₅ Coreâ€“Shell Perovskite Nanocrystals. Chemistry of Materials, 2021, 33, 4948-4959.	6.7	47
12	Luminescent silicon carbide nanocrystallites in 3C-SiCâˆ•polystyrene films. Applied Physics Letters, 2005, 86, 171903.	3.3	38
13	Multistage growth of monocrystalline ZnO nanowires and twin-nanorods: oriented attachment and role of the spontaneous polarization force. CrystEngComm, 2016, 18, 6492-6501.	2.6	36
14	Identification of luminescent surface defect in SiC quantum dots. Applied Physics Letters, 2015, 106, .	3.3	33
15	Stability of luminescent 3C-SiC nanocrystallites in aqueous solution. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 360, 336-338.	2.1	31
16	Vacuum electron field emission from SnO2 nanowhiskers annealed in N2 and O2 atmospheres. Applied Physics Letters, 2006, 88, 013109.	3.3	29
17	Critical Roles of High- and Low-Frequency Optical Phonons in Photodynamics of Zero-Dimensional Perovskite-like (C₆H₂₂N₄Cl₃)SnCl₃ Crystals. Journal of Physical Chemistry Letters, 2019, 10, 7586-7593.	4.6	28
18	Enhanced and tunable blue luminescence from CdS nanocrystalâ€“polymer composites. Scripta Materialia, 2006, 55, 1123-1126.	5.2	25

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19	Microstructure and infrared spectral properties of porous polycrystalline and nanocrystalline cubic silicon carbide. Applied Physics Letters, 2009, 95, 021906.	3.3	25
20	Quasi-self-trapped Frenkel-exciton near-UV luminescence with large Stokes shift in wide-bandgap Cs4PbCl6 nanocrystals. Applied Physics Letters, 2018, 112, .	3.3	24
21	Experimental evidence of Î± â†' Î² phase transformation in SiC quantum dots and their size-dependent luminescence. Applied Physics Letters, 2014, 105, .	3.3	22
22	Quantum confinement luminescence of trigonal cesium lead bromide quantum dots. Applied Surface Science, 2019, 466, 119-125.	6.1	22
23	UV-blue photoluminescence from close-packed SiC nanocrystal film. Applied Physics Letters, 2011, 98, .	3.3	18
24	Highly bright tunable blue-violet photoluminescence in SiC nanocrystalâ€"sodium dodecyl sulfonate crosslinked network. Nanoscale, 2012, 4, 3044.	5.6	18
25	Giant photoluminescence enhancement in SiC nanocrystals by resonant semiconductor excitonâ€"metal surface plasmon coupling. Nanotechnology, 2013, 24, 025201.	2.6	18
26	Excitation and recombination photodynamics in colloidal cubic SiC nanocrystals. Applied Physics Letters, 2010, 97, .	3.3	17
27	Hydrothermal synthesis of well crystallized C₈and diamond nanocrystals and pH-controlled C₈â†" diamond phase transition. CrystEngComm, 2017, 19, 1248-1252.	2.6	17
28	Room-temperature synthesis of various allotropes of carbon nanostructures (graphene, graphene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 using ethanol and potassium hydroxide. Carbon, 2021, 179, 133-141.	10.3	17
29	Fabryâ€"Perot Mode-Limited High-Purcell-Enhanced Spontaneous Emission from <i>In Situ</i> Laser-Induced CsPbBr₃ Quantum Dots in CsPb₂Br₅ Microcavities. Nano Letters, 2022, 22, 355-365.	9.1	17
30	Universal role of oxygen in full-visible-region photoluminescence of diamond nanocrystals. Carbon, 2016, 109, 40-48.	10.3	16
31	Quantitative Modeling of Self-Assembly Growth of Luminescent Colloidal CH₃NH₃PbBr₃ Nanocrystals. Journal of Physical Chemistry C, 2019, 123, 13110-13121.	3.1	16
32	Carrier accumulation enhanced Auger recombination and inner self-heating-induced spectrum fluctuation in CsPbBr3 perovskite nanocrystal light-emitting devices. Applied Physics Letters, 2019, 115, .	3.3	15
33	Identification of the reconstruction and bonding structure of SiC nanocrystal surface by infrared spectroscopy. Applied Surface Science, 2011, 258, 627-630.	6.1	14
34	Luminescent amorphous alumina nanoparticles in toluene solution. Journal of Physics Condensed Matter, 2006, 18, 9937-9942.	1.8	13
35	Optical spectroscopy reveals transition of CuInS2/ZnS to CuxZn1â^'xInS2/ZnS:Cu alloyed quantum dots with resultant double-defect luminescence. APL Materials, 2016, 4, .	5.1	13
36	Photon absorption and emission properties of 7â€‰Ã… SiC nanoclusters: Electronic gap, surface state, and quantum size effect. Applied Physics Letters, 2016, 109, .	3.3	12

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37	Quantum confinement effect in 6H-SiC quantum dots observed via plasmonâ€“exciton coupling-induced defect-luminescence quenching. Applied Physics Letters, 2017, 110, .	3.3	12
38	General Properties of Bulk SiC. Engineering Materials and Processes, 2014, , 7-114.	0.4	11
39	Influence of crystallization temperature on fluorescence of n-diamond quantum dots. Nanotechnology, 2020, 31, 505712.	2.6	11
40	One-Center and Two-Center Self-Trapped Excitons in Zero-Dimensional Hybrid Copper Halides: Tricolor Luminescence with High Quantum Yields. Journal of Physical Chemistry Letters, 2022, 13, 1373-1381.	4.6	11
41	Si-based solid blue emitters from 3C-SiC nanocrystals. Applied Physics A: Materials Science and Processing, 2006, 82, 485-487.	2.3	10
42	Analytical model of photon reabsorption in ZnO quantum dots with size and concentration dependent dual-color photoluminescence. Journal of Applied Physics, 2017, 121, .	2.5	10
43	Role of Polyhedron Unit in Distinct Photophysics of Zero-Dimensional Organicâ€“Inorganic Hybrid Tin Halide Compounds. Journal of Physical Chemistry Letters, 2021, 12, 5765-5773.	4.6	10
44	A study on transmitted intensity of disturbance for air-spaced Glan-type polarizing prisms. Optics Communications, 2003, 223, 11-16.	2.1	9
45	Interference effects on indium tin oxide enhanced Raman scattering. Journal of Applied Physics, 2012, 111, .	2.5	9
46	Photoluminescence and light reabsorption in SiC quantum dots embedded in binary-polyelectrolyte solid matrix. Journal of Applied Physics, 2012, 112, .	2.5	9
47	Role of Octahedron Alloying in Photodynamics of Leadâ€Free Halide Double Perovskite Nanoplatelets. Advanced Optical Materials, 2022, 10, .	7.3	9
48	Surface-enhanced Raman spectroscopy on transparent fume-etched ITO-glass surface. Applied Surface Science, 2014, 309, 250-254.	6.1	8
49	Interaction between indium tin oxide nanoparticles and cytochrome <i>c</i>: A surface-enhanced Raman scattering and absorption spectroscopic study. Journal of Applied Physics, 2015, 117, .	2.5	8
50	Cs/CsPbX3 (X = Br, Cl) epitaxial heteronanocrystals with magic-angle stable/metastable grain boundary. Applied Physics Letters, 2017, 110, .	3.3	7
51	Quasi-White Light-Emitting Devices Based on SiC Quantum Dots. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800171.	2.4	6
52	æ¼å…°ï¼æ±å§†é€Šåå…‰æ£±é•œé€å°„è°±æ‰°åŠ¨ä¼˜åŒ–ç”ç©¶. Chinese Optics Letters, 2010, 8, 428.	2.9	5
53	Synthesis and photoluminescence of semiconductor quantum dots/cetyltrimethylammonium bromide vesicle core/shell nanostructures. Applied Surface Science, 2013, 276, 359-362.	6.1	5
54	Carrier recombination spatial transfer by reduced potential barrier causes blue/red switchable luminescence in C8 carbon quantum dots/organic hybrid light-emitting devices. APL Materials, 2016, 4, .	5.1	5

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55	Strong fluorescence quenching of carbon dots by mercury(II) ions: Ground-state electron transfer and diminished oscillator strength. Diamond and Related Materials, 2022, 126, 109076.	3.9	5
56	Mo-containing diamond-like carbon films with blue emission. Journal of Crystal Growth, 2005, 281, 538-542.	1.5	4
57	Synthesis and luminescence properties of silica-coated cubic silicon carbide nanocrystal composites. Micro and Nano Letters, 2011, 6, 878.	1.3	4
58	Plasmon-assisted photoluminescence enhancement of SiC nanocrystals by proximal silver nanoparticles. Applied Surface Science, 2012, 258, 10140-10143.	6.1	4
59	Core and Surface Electronic States and Phonon Modes in SiC Quantum Dots Studied by Optical Spectroscopy and Hybrid TDDFT. Journal of Physical Chemistry C, 2021, 125, 7259-7266.	3.1	4
60	Transmission intensity disturbance in a rotating polarizer. Optics Communications, 2008, 281, 197-201.	2.1	3
61	Reversible/Irreversible Photobleaching of Fluorescent Surface Defects of SiC Quantum Dots: Mechanism and Sensing of Solar UV Irradiation. Advanced Materials Interfaces, 2019, 6, 1900272.	3.7	3
62	Interaction between indium tin oxide nanoparticles and ferricytochrome c: Conformation, redox state, and adsorption scheme. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2019, 213, 64-72.	3.9	3
63	Origin of proton induced fluorescence quenching of colloidal carbon dots: reshaping of SchrÃ¶dinger wavefunctions and huge red shift of transition energy. Nanotechnology, 2022, 33, 205503.	2.6	3
64	The influence of the shell on magnetic properties of CdS: Mn/SiO2 composite nanoparticles. Applied Physics A: Materials Science and Processing, 2009, 97, 277-280.	2.3	2
65	SiC Nanostructured Films. Engineering Materials and Processes, 2014, , 295-315.	0.4	2
66	Experimental evidences of defect luminescence spanning red to near-infrared in strongly quantum confined sub-4Ânm CuInSe₂ quantum dots approaching crystallization limit. Applied Physics Express, 2021, 14, 075001.	2.4	2
67	Greenâ€"white color switchable light-emitting devices based on laterally fused cesium lead bromide perovskite nanowires. Applied Physics Letters, 2021, 119, .	3.3	2
68	Cooccurrence of pH-sensitive shifting blue and immobile green triple surface-state fluorescence in ultrasmall super body-centered cubic carbon quantum dots. Nanotechnology, 2022, 33, 385704.	2.6	2
69	Analysis of the random disturbance in transmission intensity for Lippich prisms. Optik, 2011, 122, 1615-1618.	2.9	1
70	SiC Nanotubes. Engineering Materials and Processes, 2014, , 271-294.	0.4	1
71	Luminescence Properties of ZnO Twin Nanorodâ€"Ag Heteronanocrystals and Interfacial Excitonâ€"Surface Plasmon Coupling. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1700375.	2.4	1
72	Luminescent Photonic Crystals with Extremeâ€•UV Bandgaps Made of CuInSe 2 Quantum Dots. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000757.	1.8	1

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73	Resonant defect recombination-localized surface plasmon energy transfer and exciton dominated fluorescence in ZnOâ€"Auâ€"ZnO multi-interfaced heteronanocrystals. Journal of Chemical Physics, 2022, 156, 174705.	3.0	1
74	Nanoparticle-mediated nonclassical crystal growth of sodium fluorosilicate nanowires and nanoplates. AIP Advances, 2011, 1, .	1.3	0
75	Porous SiC. Engineering Materials and Processes, 2014, , 115-130.	0.4	0
76	Biological Applications. Engineering Materials and Processes, 2014, , 317-330.	0.4	0
77	Luminescence Properties of ZnO Twin Nanorodâ€"Ag Heteronanocrystals and Interfacial Excitonâ€"Surface Plasmon Coupling (Phys. Status Solidi RRL 2/2018). Physica Status Solidi - Rapid Research Letters, 2018, 12, 1870306.	2.4	0
78	Sensing: Reversible/Irreversible Photobleaching of Fluorescent Surface Defects of SiC Quantum Dots: Mechanism and Sensing of Solar UV Irradiation (Adv. Mater. Interfaces 11/2019). Advanced Materials Interfaces, 2019, 6, 1970070.	3.7	0
79	Stability of the structure and redox state of ferricytochrome c in the desolvation process. Vibrational Spectroscopy, 2021, 113, 103220.	2.2	0
80	SiC Nanowires. Engineering Materials and Processes, 2014, , 195-269.	0.4	0
81	Native surface oxidation yields SiC-SiO2 core-shell quantum dots with improved quantum efficiency. Journal of Chemical Physics, 2022, 156, 094705.	3.0	0