Jiyang Fan

List of Publications by Citations

78 papers	1,995 citations	19 h-index	43 g-index
85 ext. papers	2,187 ext. citations	4.8 avg, IF	4.9 L-index

#	Paper	IF	Citations
78	Low-dimensional SiC nanostructures: Fabrication, luminescence, and electrical properties. *Progress in Materials Science*, **2006**, 51, 983-1031	42.2	275
77	Experimental evidence for the quantum confinement effect in 3C-SiC nanocrystallites. *Physical Review Letters*, **2005**, 94, 026102	7.4	264
76	Group IV nanoparticles: synthesis, properties, and biological applications. *Small*, **2010**, 6, 2080-98	11	242
75	Synthesis and low-temperature photoluminescence properties of SnO2 nanowires and nanobelts. *Nanotechnology*, **2006**, 17, 1695-9	3.4	205
74	3C-SiC nanocrystals as fluorescent biological labels. *Small*, **2008**, 4, 1058-62	11	154
73	Luminescence from colloidal 3C-SiC nanocrystals in different solvents. *Applied Physics Letters*, **2006**, 88, 041909	3.4	73
72	Red shift in the photoluminescence of colloidal carbon quantum dots induced by photon reabsorption. *Applied Physics Letters*, **2014**, 104, 091902	3.4	66
71	Fabrication and photoluminescence of SiC quantum dots stemming from 3C, 6H, and 4H polytypes of bulk SiC. *Applied Physics Letters*, **2012**, 101, 131906	3.4	54
70	C8-structured carbon quantum dots: Synthesis, blue and green double luminescence, and origins of surface defects. *Carbon*, **2014**, 79, 165-173	10.4	53
69	Silicon Carbide Nanostructures. *Engineering Materials and Processes*, **2014**,		35
68	Luminescent silicon carbide nanocrystallites in 3C-SiC–polystyrene films. *Applied Physics Letters*, **2005**, 86, 171903	3.4	34
67	Vacuum electron field emission from SnO2 nanowhiskers annealed in N2 and O2 atmospheres. *Applied Physics Letters*, **2006**, 88, 013109	3.4	29
66	Stability of luminescent 3C-SiC nanocrystallites in aqueous solution. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2006**, 360, 336-338	2.3	29
65	Identification of luminescent surface defect in SiC quantum dots. *Applied Physics Letters*, **2015**, 106, 053115	3.4	28
64	Multistage growth of monocrystalline ZnO nanowires and twin-nanorods: oriented attachment and role of the spontaneous polarization force. *CrystEngComm*, **2016**, 18, 6492-6501	3.3	27
63	Enhanced and tunable blue luminescence from CdS nanocrystal–polymer composites. *Scripta Materialia*, **2006**, 55, 1123-1126	5.6	23
62	Quasi-self-trapped Frenkel-exciton near-UV luminescence with large Stokes shift in wide-bandgap Cs4PbCl6 nanocrystals. *Applied Physics Letters*, **2018**, 112, 183101	3.4	22

61	Experimental evidence of □-□ phase transformation in SiC quantum dots and their size-dependent luminescence. *Applied Physics Letters*, **2014**, 105, 193110	3.4	19
60	Microstructure and infrared spectral properties of porous polycrystalline and nanocrystalline cubic silicon carbide. *Applied Physics Letters*, **2009**, 95, 021906	3.4	19
59	Quantum confinement luminescence of trigonal cesium lead bromide quantum dots. *Applied Surface Science*, **2019**, 466, 119-125	6.7	18
58	Giant photoluminescence enhancement in SiC nanocrystals by resonant semiconductor exciton-metal surface plasmon coupling. *Nanotechnology*, **2013**, 24, 025201	3.4	17
57	Excitation and recombination photodynamics in colloidal cubic SiC nanocrystals. *Applied Physics Letters*, **2010**, 97, 191911	3.4	17
56	Highly bright tunable blue-violet photoluminescence in SiC nanocrystal-sodium dodecyl sulfonate crosslinked network. *Nanoscale*, **2012**, 4, 3044-6	7.7	16
55	UV-blue photoluminescence from close-packed SiC nanocrystal film. *Applied Physics Letters*, **2011**, 98, 081913	3.4	16
54	Critical Roles of High- and Low-Frequency Optical Phonons in Photodynamics of Zero-Dimensional Perovskite-like (CHNCl)SnCl Crystals. *Journal of Physical Chemistry Letters*, **2019**, 10, 7586-7593	6.4	16
53	Identification of the reconstruction and bonding structure of SiC nanocrystal surface by infrared spectroscopy. *Applied Surface Science*, **2011**, 258, 627-630	6.7	14
52	Luminescent amorphous alumina nanoparticles in toluene solution. *Journal of Physics Condensed Matter*, **2006**, 18, 9937-9942	1.8	13
51	Carrier accumulation enhanced Auger recombination and inner self-heating-induced spectrum fluctuation in CsPbBr3 perovskite nanocrystal light-emitting devices. *Applied Physics Letters*, **2019**, 115, 243503	3.4	12
50	In Situ Phase-Transition Crystallization of All-Inorganic Water-Resistant Exciton-Radiative Heteroepitaxial CsPbBr3□CsPb2Br5 Core□Shell Perovskite Nanocrystals. *Chemistry of Materials*, **2021**, 33, 4948-4959	9.6	11
49	Photon absorption and emission properties of 7 □SiC nanoclusters: Electronic gap, surface state, and quantum size effect. *Applied Physics Letters*, **2016**, 109, 013104	3.4	11
48	Quantum confinement effect in 6H-SiC quantum dots observed via plasmon□exciton coupling-induced defect-luminescence quenching. *Applied Physics Letters*, **2017**, 110, 123104	3.4	10
47	Quantitative Modeling of Self-Assembly Growth of Luminescent Colloidal CH3NH3PbBr3 Nanocrystals. *Journal of Physical Chemistry C*, **2019**,	3.8	10
46	Optical spectroscopy reveals transition of CuInS2/ZnS to CuxZn1□InS2/ZnS:Cu alloyed quantum dots with resultant double-defect luminescence. *APL Materials*, **2016**, 4, 126101	5.7	10
45	Analytical model of photon reabsorption in ZnO quantum dots with size and concentration dependent dual-color photoluminescence. *Journal of Applied Physics*, **2017**, 121, 054309	2.5	9
44	Hydrothermal synthesis of well crystallized C8 and diamond nanocrystals and pH-controlled C8 <-s diamond phase transition. *CrystEngComm*, **2017**, 19, 1248-1252	3.3	9

43	Photoluminescence and light reabsorption in SiC quantum dots embedded in binary-polyelectrolyte solid matrix. *Journal of Applied Physics*, **2012**, 112, 094315	2.5	9
42	Universal role of oxygen in full-visible-region photoluminescence of diamond nanocrystals. *Carbon*, **2016**, 109, 40-48	10.4	9
41	Surface-enhanced Raman spectroscopy on transparent fume-etched ITO-glass surface. *Applied Surface Science*, **2014**, 309, 250-254	6.7	8
40	Interference effects on indium tin oxide enhanced Raman scattering. *Journal of Applied Physics*, **2012**, 111, 033110	2.5	8
39	Si-based solid blue emitters from 3C-SiC nanocrystals. *Applied Physics A: Materials Science and Processing*, **2006**, 82, 485-487	2.6	8
38	A study on transmitted intensity of disturbance for air-spaced Glan-type polarizing prisms. *Optics Communications*, **2003**, 223, 11-16	2	8
37	Cs/CsPbX3 (X = Br, Cl) epitaxial heteronanocrystals with magic-angle stable/metastable grain boundary. *Applied Physics Letters*, **2017**, 110, 193105	3.4	7
36	Interaction between indium tin oxide nanoparticles and cytochrome c: A surface-enhanced Raman scattering and absorption spectroscopic study. *Journal of Applied Physics*, **2015**, 117, 245307	2.5	7
35	Role of Polyhedron Unit in Distinct Photophysics of Zero-Dimensional Organic-Inorganic Hybrid Tin Halide Compounds. *Journal of Physical Chemistry Letters*, **2021**, 5765-5773	6.4	6
34	Quasi-White Light-Emitting Devices Based on SiC Quantum Dots. *Physica Status Solidi - Rapid Research Letters*, **2018**, 12, 1800171	2.5	5
33	Synthesis and photoluminescence of semiconductor quantum dots/cetyltrimethylammonium bromide vesicle core/shell nanostructures. *Applied Surface Science*, **2013**, 276, 359-362	6.7	5
32	General Properties of Bulk SiC. *Engineering Materials and Processes*, **2014**, 7-114		5
31	Suppressing the disturbance in the transmission spectrum of Glan-Thompson-type prism polarizers. *Chinese Optics Letters*, **2010**, 8, 428-430	2.2	5
30	Fabry-Perot Mode-Limited High-Purcell-Enhanced Spontaneous Emission from Laser-Induced CsPbBr Quantum Dots in CsPbBr Microcavities.. *Nano Letters*, **2021**,	11.5	5
29	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, 046102	5.7	5
28	Plasmon-assisted photoluminescence enhancement of SiC nanocrystals by proximal silver nanoparticles. *Applied Surface Science*, **2012**, 258, 10140-10143	6.7	4
27	Synthesis and luminescence properties of silica-coated cubic silicon carbide nanocrystal composites. *Micro and Nano Letters*, **2011**, 6, 878	0.9	4
26	Mo-containing diamond-like carbon films with blue emission. *Journal of Crystal Growth*, **2005**, 281, 538-542	1.6	4

25	Influence of crystallization temperature on fluorescence of n-diamond quantum dots. *Nanotechnology*, **2020**, 31, 505712	3.4	4
24	Transmission intensity disturbance in a rotating polarizer. *Optics Communications*, **2008**, 281, 197-201	2	3
23	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	4.4	3
22	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	2.6	2
21	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	3.8	2
20	Room-temperature synthesis of various allotropes of carbon nanostructures (graphene, graphene polyhedra, carbon nanotubes and nano-onions, n-diamond nanocrystals) with aid of ultrasonic shock using ethanol and potassium hydroxide. *Carbon*, **2021**, 179, 133-141	10.4	2
19	Luminescence Properties of ZnO Twin Nanorod–Ag Heteronanocrystals and Interfacial Exciton–Surface Plasmon Coupling. *Physica Status Solidi - Rapid Research Letters*, **2018**, 12, 1700375	2.5	1
18	Analysis of the random disturbance in transmission intensity for Lippich prisms. *Optik*, **2011**, 122, 1615-1618	2.5	1
17	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	6.4	1
16	Luminescent Photonic Crystals with Extreme-UV Bandgaps Made of CuInSe2 Quantum Dots. *Physica Status Solidi (A) Applications and Materials Science*, **2021**, 218, 2000757	1.6	1
15	Reversible/Irreversible Photobleaching of Fluorescent Surface Defects of SiC Quantum Dots: Mechanism and Sensing of Solar UV Irradiation. *Advanced Materials Interfaces*, **2019**, 6, 1900272	4.6	0
14	Experimental evidences of defect luminescence spanning red to near-infrared in strongly quantum confined sub-4-nm CuInSe2 quantum dots approaching crystallization limit. *Applied Physics Express*,	2.4	0
13	Green–white color switchable light-emitting devices based on laterally fused cesium lead bromide perovskite nanowires. *Applied Physics Letters*, **2021**, 119, 033505	3.4	0
12	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	3.5	0
11	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	4.6	
10	Luminescence Properties of ZnO Twin Nanorod–Ag Heteronanocrystals and Interfacial Exciton–Surface Plasmon Coupling (Phys. Status Solidi RRL 2/2018). *Physica Status Solidi - Rapid Research Letters*, **2018**, 12, 1870306	2.5	
9	SiC Nanotubes. *Engineering Materials and Processes*, **2014**, 271-294		
8	Porous SiC. *Engineering Materials and Processes*, **2014**, 115-130		

7	Biological Applications. *Engineering Materials and Processes*, **2014**, 317-330	
6	SiC Nanostructured Films. *Engineering Materials and Processes*, **2014**, 295-315	
5	Nanoparticle-mediated nonclassical crystal growth of sodium fluorosilicate nanowires and nanoplates. *AIP Advances*, **2011**, 1, 042165	1.5
4	Native surface oxidation yields SiC-SiO core-shell quantum dots with improved quantum efficiency.. *Journal of Chemical Physics*, **2022**, 156, 094705	3.9
3	SiC Nanowires. *Engineering Materials and Processes*, **2014**, 195-269	
2	Stability of the structure and redox state of ferricytochrome c in the desolvation process. *Vibrational Spectroscopy*, **2021**, 113, 103220	2.1
1	Resonant defect recombination-localized surface plasmon energy transfer and exciton dominated fluorescence in ZnO-Au-ZnO multi-interfaced heteronanocrystals.. *Journal of Chemical Physics*, **2022**, 156, 174705	3.9