Yupeng Zhang

List of Publications by Year
in descending order

87 papers	9,678 citations	50276 46 h-index	51608 86 g-index
87 all docs	87 docs citations	87 times ranked	15441 citing authors

#	Article	IF	Citations
1	Probing the dynamic structural changes of <scp>DNA</scp> using ultrafast laser pulse in grapheneâ€based optofluidic device. InformaÄnÃ-MateriÃ¡ly, 2021, 3, 316-326.	17.3	4
2	Overcoming the Electroluminescence Efficiency Limitations in Quantumâ€Dot Lightâ€Emitting Diodes. Advanced Optical Materials, 2019, 7, 1900695.	7.3	26
3	Robust Aboveâ€Roomâ€Temperature Ferromagnetism in Fewâ€Layer Antimonene Triggered by Nonmagnetic Adatoms. Advanced Functional Materials, 2019, 29, 1808746.	14.9	38
4	Engineering ultrafast charge transfer in a bismuthene/perovskite nanohybrid. Nanoscale, 2019, 11, 2637-2643.	5.6	51
5	Emerging two-dimensional monoelemental materials (Xenes) for biomedical applications. Chemical Society Reviews, 2019, 48, 2891-2912.	38.1	482
6	Ferroelectric-Driven Exciton and Trion Modulation in Monolayer Molybdenum and Tungsten Diselenides. ACS Nano, 2019, 13, 5335-5343.	14.6	61
7	Superior Magnetoresistance Performance of Hybrid Graphene Foam/Metal Sulfide Nanocrystal Devices. ACS Applied Materials & Interfaces, 2019, 11, 19397-19403.	8.0	26
8	Flexible photodetectors based on reticulated SWNT/perovskite quantum dot heterostructures with ultrahigh durability. Nanoscale, 2019, 11, 8020-8026.	5.6	30
9	Graphene Heterostructure Integrated Optical Fiber Bragg Grating for Light Motion Tracking and Ultrabroadband Photodetection from 400 nm to 10.768 Âµm. Advanced Functional Materials, 2019, 29, 1807274.	14.9	26
10	Shortâ€Chain Ligandâ€Passivated Stable Î±â€CsPbI₃ Quantum Dot for Allâ€Inorganic Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1900991.	14.9	216
11	Photonics and optoelectronics using nano-structured hybrid perovskite media and their optical cavities. Physics Reports, 2019, 795, 1-51.	25.6	303
12	Structure optimization of perovskite quantum dot light-emitting diodes. Nanoscale, 2019, 11, 5021-5029.	5.6	48
13	Ultrasensitive detection of miRNA with an antimonene-based surface plasmon resonance sensor. Nature Communications, 2019, 10, 28.	12.8	475
14	Ultrathin GeSe Nanosheets: From Systematic Synthesis to Studies of Carrier Dynamics and Applications for a High-Performance UVâ€“Vis Photodetector. ACS Applied Materials & Interfaces, 2019, 11, 4278-4287.	8.0	105
15	Strong Depletion in Hybrid Perovskite pâ€“n Junctions Induced by Local Electronic Doping. Advanced Materials, 2018, 30, e1705792.	21.0	141
16	Reliable Synthesis of Largeâ€Area Monolayer WS₂ Single Crystals, Films, and Heterostructures with Extraordinary Photoluminescence Induced by Water Intercalation. Advanced Optical Materials, 2018, 6, 1701347.	7.3	28
17	Band Structure Engineering in 2D Materials for Optoelectronic Applications. Advanced Materials Technologies, 2018, 3, 1800072.	5.8	78
18	In-plane anisotropic and ultra-low-loss polaritons in a natural van der Waals crystal. Nature, 2018, 562, 557-562.	27.8	506

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19	Photonics and Optoelectronics of 2D Metalâ€Halide Perovskites. Small, 2018, 14, e1800682.	10.0	168
20	Ytterbium-doped fiber laser passively mode locked by evanescent field interaction with CH₃NH₃SnI₃ perovskite saturable absorber. Journal Physics D: Applied Physics, 2018, 51, 375106.	2.8	25
21	Room temperature in-plane ferroelectricity in van der Waals In ₂ Se ₃. Science Advances, 2018, 4, eaar7720.	10.3	224
22	Role of Surface Recombination in Halide Perovskite Nanoplatelets. ACS Applied Materials & Interfaces, 2018, 10, 31586-31593.	8.0	41
23	Degradation of Two-Dimensional CH₃NH₃PbI₃ Perovskite and CH₃NH₃PbI₃/Graphene Heterostructure. ACS Applied Materials & Interfaces, 2018, 10, 24258-24265.	8.0	40
24	Direct Observation of 2D Electrostatics and Ohmic Contacts in Template-Grown Graphene/WS₂ Heterostructures. ACS Nano, 2017, 11, 2785-2793.	14.6	74
25	The Lightâ€Induced Fieldâ€Effect Solar Cell Concept â€“ Perovskite Nanoparticle Coating Introduces Polarization Enhancing Silicon Cell Efficiency. Advanced Materials, 2017, 29, 1606370.	21.0	35
26	Near-Infrared Photodetectors Based on MoTe₂ /Graphene Heterostructure with High Responsivity and Flexibility. Small, 2017, 13, 1700268.	10.0	200
27	Present Perspectives of Advanced Characterization Techniques in TiO₂-Based Photocatalysts. ACS Applied Materials & Interfaces, 2017, 9, 23265-23286.	8.0	112
28	Lightâ€Emitting Diodes: Solutionâ€Processed Extremely Efficient Multicolor Perovskite Lightâ€Emitting Diodes Utilizing Doped Electron Transport Layer (Adv. Funct. Mater. 21/2017). Advanced Functional Materials, 2017, 27, .	14.9	0
29	Controlled Growth of Monocrystalline Organoâ€Lead Halide Perovskite and Its Application in Photonic Devices. Angewandte Chemie - International Edition, 2017, 56, 12486-12491.	13.8	54
30	Solutionâ€Processed Extremely Efficient Multicolor Perovskite Lightâ€Emitting Diodes Utilizing Doped Electron Transport Layer. Advanced Functional Materials, 2017, 27, 1606874.	14.9	96
31	Two-Dimensional CH₃NH₃PbI₃ Perovskite Nanosheets for Ultrafast Pulsed Fiber Lasers. ACS Applied Materials & Interfaces, 2017, 9, 12759-12765.	8.0	296
32	Highly Efficient and Air-Stable Infrared Photodetector Based on 2D Layered Grapheneâ€“Black Phosphorus Heterostructure. ACS Applied Materials & Interfaces, 2017, 9, 36137-36145.	8.0	185
33	Infrared Nanoimaging Reveals the Surface Metallic Plasmons in Topological Insulator. ACS Photonics, 2017, 4, 3055-3062.	6.6	27
34	Dipole-field-assisted charge extraction in metal-perovskite-metal back-contact solar cells. Nature Communications, 2017, 8, 613.	12.8	66
35	Synthesis of Ultrathin Composition Graded Doped Lateral WSe2/WS2Heterostructures. ACS Applied Materials & Interfaces, 2017, 9, 34204-34212.	8.0	22
36	Flexible Broadband Graphene Photodetectors Enhanced by Plasmonic Cu_{3â^'}_xP Colloidal Nanocrystals. Small, 2017, 13, 1701881.	10.0	63

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37	Phase Segregation Enhanced Ion Movement in Efficient Inorganic CsPbIBr₂ Solar Cells. Advanced Energy Materials, 2017, 7, 1700946.	19.5	318
38	Edge-riched graphene nanoribbon for high capacity electrode materials. Electrochimica Acta, 2017, 250, 84-90.	5.2	34
39	Directing nucleation and growth kinetics in solution-processed hybrid perovskite thin-films. Science China Materials, 2017, 60, 617-628.	6.3	64
40	The Roadmap of Grapheneâ€Based Optical Biochemical Sensors. Advanced Functional Materials, 2017, 27, 1603918.	14.9	68
41	Photocatalytic mechanism of high-activity anatase TiO2 with exposed (001) facets from molecular-atomic scale: HRTEM and Raman studies. Frontiers of Materials Science, 2017, 11, 358-365.	2.2	2
42	Largeâ€Scale Production of Bismuth Chalcogenide and Graphene Heterostructure and Its Application for Flexible Broadband Photodetector. Advanced Electronic Materials, 2016, 2, 1600077.	5.1	33
43	Reversible Structural Swellâ€“Shrink and Recoverable Optical Properties in Hybrid Inorganicâ€“Organic Perovskite. ACS Nano, 2016, 10, 7031-7038.	14.6	68
44	Design of high-performance memristor cell using W-implanted SiO2 films. Applied Physics Letters, 2016, 108, .	3.3	21
45	Enhanced quantum efficiency from a mosaic of two dimensional MoS₂formed onto aminosilane functionalised substrates. Nanoscale, 2016, 8, 12258-12266.	5.6	18
46	Synthesis, properties, and optical applications of low-dimensional perovskites. Chemical Communications, 2016, 52, 13637-13655.	4.1	252
47	Atomically thin lateral pâ€“n junction photodetector with large effective detection area. 2D Materials, 2016, 3, 041001.	4.4	78
48	Rational design of an ITO/CuS nanosheet network composite film as a counter electrode for flexible dye sensitized solar cells. Journal of Materials Chemistry C, 2016, 4, 8130-8134.	5.5	17
49	Efficient Excitation of Multiple Plasmonic Modes on Three-Dimensional Graphene: An Unexplored Dimension. ACS Photonics, 2016, 3, 1986-1992.	6.6	42
50	Photonics and optoelectronics of two-dimensional materials beyond graphene. Nanotechnology, 2016, 27, 462001.	2.6	259
51	Strain Relaxation of Monolayer WS₂ on Plastic Substrate. Advanced Functional Materials, 2016, 26, 8707-8714.	14.9	97
52	Scalable Production of a Few-Layer MoS₂/WS₂ Vertical Heterojunction Array and Its Application for Photodetectors. ACS Nano, 2016, 10, 573-580.	14.6	362
53	Two-Dimensional CH₃NH₃PbI₃ Perovskite: Synthesis and Optoelectronic Application. ACS Nano, 2016, 10, 3536-3542.	14.6	359
54	Wavelength-tunable waveguides based on polycrystalline organicâ€“inorganic perovskite microwires. Nanoscale, 2016, 8, 6258-6264.	5.6	76

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55	Effect of Interlayer Coupling on Ultrafast Charge Transfer from Semiconducting Molecules to Mono- and Bilayer Graphene. Physical Review Applied, 2015, 4, .	3.8	19
56	Facile Synthesis of Carbon Nanosphere/NiCo2O4 Core-shell Sub-microspheres for High Performance Supercapacitor. Scientific Reports, 2015, 5, 12903.	3.3	115
57	Lattice distortion mechanism study of TiO2 nanoparticles during photocatalysis degradation and reactivation. AIP Advances, 2015, 5, .	1.3	13
58	Hybrid Grapheneâ€“Perovskite Phototransistors with Ultrahigh Responsivity and Gain. Advanced Optical Materials, 2015, 3, 1389-1396.	7.3	240
59	Monolayer graphene on nanostructured Ag for enhancement of surface-enhanced Raman scattering stable platform. Nanotechnology, 2015, 26, 125603.	2.6	23
60	Enhanced Performance of nano-Bi2WO6-Graphene as Pseudocapacitor Electrodes by Charge Transfer Channel. Scientific Reports, 2015, 5, 8624.	3.3	22
61	Synthesis and Transfer of Large-Area Monolayer WS₂ Crystals: Moving Toward the Recyclable Use of Sapphire Substrates. ACS Nano, 2015, 9, 6178-6187.	14.6	200
62	Surface doping of La ions into ZnO nanocrystals to lower the optimal working temperature for HCHO sensing properties. Physical Chemistry Chemical Physics, 2015, 17, 27437-27445.	2.8	61
63	Controlled synthesis of graphene nanoribbons for field effect transistors. Journal of Alloys and Compounds, 2015, 649, 933-938.	5.5	7
64	A high energy output nanogenerator based on reduced graphene oxide. Nanoscale, 2015, 7, 18147-18151.	5.6	23
65	Synthesis of nitrogen doped graphene from graphene oxide within an ammonia flame for high performance supercapacitors. RSC Advances, 2014, 4, 55394-55399.	3.6	77
66	Preparation of ZnO/graphene heterojunction via high temperature and its photocatalytic property. Journal of Materials Science, 2014, 49, 1854-1860.	3.7	23
67	Preparation of porous microâ€“nano-structure NiO/ZnO heterojunction and its photocatalytic property. RSC Advances, 2014, 4, 3090-3095.	3.6	97
68	Preparation of a ZnO/TiO2 vertical-nanoneedle-on-film heterojunction and its photocatalytic properties. RSC Advances, 2014, 4, 18186.	3.6	23
69	Unusual electroluminescence from n-ZnO@i-MgO coreâ€“shell nanowire color-tunable light-emitting diode at reverse bias. Physical Chemistry Chemical Physics, 2014, 16, 9302-9308.	2.8	18
70	Mechanical property enhancement of PVDF/graphene composite based on a high-quality graphene. Journal of Materials Science, 2014, 49, 8311-8316.	3.7	32
71	In situ synthesis of CdS decorated titanate nanosheets with highly efficient visible-light-induced photoactivity. Applied Surface Science, 2014, 305, 459-465.	6.1	10
72	Near-ultraviolet light-emitting diodes realized from n-ZnO nanorod/p-GaN direct-bonding heterostructures. Journal of Luminescence, 2013, 137, 116-120.	3.1	30

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73	CNTs/TiO2 composites and its electrochemical properties after UV light irradiation. Progress in Natural Science: Materials International, 2013, 23, 164-169.	4.4	32
74	Strain induced chemical potential difference between monolayer graphene sheets. Nanoscale, 2013, 5, 2616.	5.6	16
75	High quality graphene sheets from graphene oxide by hot-pressing. Carbon, 2013, 54, 143-148.	10.3	82
76	A novel route to ZnO/TiO₂ heterojunction composite fibers. Journal of Materials Research, 2013, 28, 507-512.	2.6	32
77	Improved and orange emission from an n-ZnO/p-Si heterojunction light emitting device with NiO as the intermediate layer. Applied Physics Letters, 2012, 101, .	3.3	24
78	High-voltage electric-field-induced growth of aligned â€œcow-nipple-likeâ€•submicro-nano carbon isomeric structure via chemical vapor deposition. Journal of Applied Physics, 2012, 112, 114310.	2.5	5
79	Raman Spectroscopy: A New Approach to Measure the Percentage of Anatase TiO₂ Exposed (001) Facets. Journal of Physical Chemistry C, 2012, 116, 7515-7519.	3.1	672
80	The production of nitrogen-doped graphene from mixed amine plus ethanol flames. Thin Solid Films, 2012, 520, 6850-6855.	1.8	36
81	Characterization of Oxygen Vacancy Associates within Hydrogenated TiO₂: A Positron Annihilation Study. Journal of Physical Chemistry C, 2012, 116, 22619-22624.	3.1	487
82	Measurements of mechanical properties and number of layers of graphene from nano-indentation. Diamond and Related Materials, 2012, 24, 1-5.	3.9	149
83	<scp><scp>N</scp></scp>Â+Â<scp><scp>Ni</scp></scp> Codoped Anatase <scp><scp>TiO</scp></scp>₂ Nanocrystals with Exposed {001} Facets Through Twoâ€Step Hydrothermal Route. Journal of the American Ceramic Society, 2012, 95, 2951-2956.	3.8	35
84	Photocatalytic and degradation mechanisms of anatase TiO2: a HRTEM study. Catalysis Science and Technology, 2011, 1, 273.	4.1	89
85	Engineering Nanostructured <scp><scp>Bi₂WO₆â€“TiO₂</scp></scp> Toward Effective Utilization of Natural Light in Photocatalysis. Journal of the American Ceramic Society, 2011, 94, 4157-4161.	3.8	68
86	TiO2/graphene composite from thermal reaction of graphene oxide and its photocatalytic activity in visible light. Journal of Materials Science, 2011, 46, 2622-2626.	3.7	333
87	Direct synthesis of high concentration N-doped coiled carbon nanofibers from amine flames and its electrochemical properties. Journal of Power Sources, 2011, 196, 7868-7873.	7.8	45