Xue-Feng Yu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8409949/publications.pdf

Version: 2024-02-01

239 papers	19,261 citations	13827 67 h-index	12910 131 g-index
252 all docs	252 docs citations	252 times ranked	18414 citing authors

#	Article	IF	Citations
1	Ultrasmall Black Phosphorus Quantum Dots: Synthesis and Use as Photothermal Agents. Angewandte Chemie - International Edition, 2015, 54, 11526-11530.	7.2	906
2	Mechanically exfoliated black phosphorus as a new saturable absorber for both Q-switching and Mode-locking laser operation. Optics Express, 2015, 23, 12823.	1.7	866
3	From Black Phosphorus to Phosphorene: Basic Solvent Exfoliation, Evolution of Raman Scattering, and Applications to Ultrafast Photonics. Advanced Functional Materials, 2015, 25, 6996-7002.	7.8	862
4	Biodegradable black phosphorus-based nanospheres for in vivo photothermal cancer therapy. Nature Communications, 2016, 7, 12967.	5.8	835
5	Enhanced Microwave Absorption Performance from Magnetic Coupling of Magnetic Nanoparticles Suspended within Hierarchically Tubular Composite. Advanced Functional Materials, 2019, 29, 1901448.	7.8	566
6	Surface Coordination of Black Phosphorus for Robust Air and Water Stability. Angewandte Chemie - International Edition, 2016, 55, 5003-5007.	7.2	479
7	Metalâ€Ionâ€Modified Black Phosphorus with Enhanced Stability and Transistor Performance. Advanced Materials, 2017, 29, 1703811.	11.1	431
8	MOF-derived yolk-shell Ni@C@ZnO Schottky contact structure for enhanced microwave absorption. Chemical Engineering Journal, 2020, 383, 123099.	6.6	407
9	Microfiber-based few-layer black phosphorus saturable absorber for ultra-fast fiber laser. Optics Express, 2015, 23, 20030.	1.7	399
10	Solvothermal Synthesis and Ultrafast Photonics of Black Phosphorus Quantum Dots. Advanced Optical Materials, 2016, 4, 1223-1229.	3.6	326
11	Fluorine-free preparation of titanium carbide MXene quantum dots with high near-infrared photothermal performances for cancer therapy. Nanoscale, 2017, 9, 17859-17864.	2.8	299
12	Boosted Interfacial Polarization from Multishell TiO₂@Fe₃O₄@PPy Heterojunction for Enhanced Microwave Absorption. Small, 2019, 15, e1902885.	5.2	293
13	Blackâ€Phosphorusâ€Incorporated Hydrogel as a Sprayable and Biodegradable Photothermal Platform for Postsurgical Treatment of Cancer. Advanced Science, 2018, 5, 1700848.	5.6	289
14	Rose-bengal-conjugated gold nanorods for inÂvivo photodynamic and photothermal oral cancer therapies. Biomaterials, 2014, 35, 1954-1966.	5.7	276
15	TiL₄â€Coordinated Black Phosphorus Quantum Dots as an Efficient Contrast Agent for In Vivo Photoacoustic Imaging of Cancer. Small, 2017, 13, 1602896.	5.2	251
16	Small gold nanorods laden macrophages for enhanced tumor coverage in photothermal therapy. Biomaterials, 2016, 74, 144-154.	5.7	247
17	A CRISPRâ€“Cas9-triggered strand displacement amplification method for ultrasensitive DNA detection. Nature Communications, 2018, 9, 5012.	5.8	244
18	Inâ€Plane Black Phosphorus/Dicobalt Phosphide Heterostructure for Efficient Electrocatalysis. Angewandte Chemie - International Edition, 2018, 57, 2600-2604.	7.2	209

#	Article	IF	Citations
19	Dopant-controlled synthesis of water-soluble hexagonal NaYF4 nanorods with efficient upconversion fluorescence for multicolor bioimaging. Nano Research, 2010, 3, 51-60.	5.8	207
20	Oriented Polarization Tuning Broadband Absorption from Flexible Hierarchical ZnO Arrays Vertically Supported on Carbon Cloth. Small, 2019, 15, e1900900.	5.2	205
21	Metabolizable Ultrathin Bi₂Se₃ Nanosheets in Imagingâ€Guided Photothermal Therapy. Small, 2016, 12, 4136-4145.	5.2	203
22	Gold-nanorods-siRNA nanoplex for improved photothermal therapy by gene silencing. Biomaterials, 2016, 78, 27-39.	5.7	192
23	Synthesis of Auâ€“CdS Coreâ€“Shell Heteroâ€Nanorods with Efficient Excitonâ€“Plasmon Interactions. Advanced Functional Materials, 2011, 21, 1788-1794.	7.8	171
24	Morphology-controlled synthesis and excellent microwave absorption performance of ZnCo₂O₄ nanostructures via a self-assembly process of flake units. Nanoscale, 2019, 11, 2694-2702.	2.8	166
25	Evaporative Selfâ€Assembly of Gold Nanorods into Macroscopic 3D Plasmonic Superlattice Arrays. Advanced Materials, 2016, 28, 2511-2517.	11.1	160
26	Stable and Multifunctional Dye-Modified Black Phosphorus Nanosheets for Near-Infrared Imaging-Guided Photothermal Therapy. Chemistry of Materials, 2017, 29, 7131-7139.	3.2	158
27	Propertyâ€“Activity Relationship of Black Phosphorus at the Nanoâ€“Bio Interface: From Molecules to Organisms. Chemical Reviews, 2020, 120, 2288-2346.	23.0	158
28	Enhanced Cytosolic Delivery and Release of CRISPR/Cas9 by Black Phosphorus Nanosheets for Genome Editing. Angewandte Chemie - International Edition, 2018, 57, 10268-10272.	7.2	154
29	Magnetic Iron Oxide Nanoparticle (IONP) Synthesis to Applications: Present and Future. Materials, 2020, 13, 4644.	1.3	154
30	Size-dependent nonlinear optical properties of black phosphorus nanosheets and their applications in ultrafast photonics. Journal of Materials Chemistry C, 2017, 5, 3007-3013.	2.7	150
31	Designing Coreâ€“Shell Gold and Selenium Nanocomposites for Cancer Radiochemotherapy. ACS Nano, 2017, 11, 4848-4858.	7.3	150
32	The biocompatibility of quantum dot probes used for the targeted imaging of hepatocellular carcinoma metastasis. Biomaterials, 2008, 29, 4170-4176.	5.7	145
33	Improved Biocompatibility of Black Phosphorus Nanosheets by Chemical Modification. Angewandte Chemie - International Edition, 2017, 56, 14488-14493.	7.2	143
34	Highly Efficient Fluorescence of NdF₃/SiO₂ Core/Shell Nanoparticles and the Applications for in vivo NIR Detection. Advanced Materials, 2008, 20, 4118-4123.	11.1	142
35	Two-dimensional black phosphorus: Synthesis, modification, properties, and applications. Materials Science and Engineering Reports, 2017, 120, 1-33.	14.8	130
36	3D hierarchical local heterojunction of MoS2/FeS2 for enhanced microwave absorption. Chemical Engineering Journal, 2020, 379, 122241.	6.6	128

#	Article	IF	Citations
37	Surface chemistry but not aspect ratio mediates the biological toxicity of gold nanorods in vitro and in vivo. Scientific Reports, 2015, 5, 11398.	1.6	124
38	Interrogating the Escherichia coli cell cycle by cell dimension perturbations. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 15000-15005.	3.3	124
39	Atomically Dispersed Indium Sites for Selective CO₂ Electroreduction to Formic Acid. ACS Nano, 2021, 15, 5671-5678.	7.3	121
40	Black Phosphorus Based Photocathodes in Wideband Bifacial Dyeâ€Sensitized Solar Cells. Advanced Materials, 2016, 28, 8937-8944.	11.1	116
41	Surface Coordination of Black Phosphorus for Robust Air and Water Stability. Angewandte Chemie, 2016, 128, 5087-5091.	1.6	116
42	Near-infrared light-triggered drug delivery system based on black phosphorus for inÂvivo bone regeneration. Biomaterials, 2018, 179, 164-174.	5.7	115
43	Conductive-network enhanced microwave absorption performance from carbon coated defect-rich Fe2O3 anchored on multi-wall carbon nanotubes. Carbon, 2019, 155, 298-308.	5.4	113
44	Black Phosphorus: Bioactive Nanomaterials with Inherent and Selective Chemotherapeutic Effects. Angewandte Chemie - International Edition, 2019, 58, 769-774.	7.2	113
45	Broadband spatial self-phase modulation of black phosphorous. Optics Letters, 2016, 41, 1704.	1.7	111
46	Neurotoxin-conjugated upconversion nanoprobes for direct visualization ofÂtumors under near-infrared irradiation. Biomaterials, 2010, 31, 8724-8731.	5.7	109
47	PLLA Nanofibrous Paper-Based Plasmonic Substrate with Tailored Hydrophilicity for Focusing SERS Detection. ACS Applied Materials & Interfaces, 2015, 7, 5391-5399.	4.0	109
48	Electrostatic Self-Assembly of Ti₃C₂T_x MXene and Gold Nanorods as an Efficient Surface-Enhanced Raman Scattering Platform for Reliable and High-Sensitivity Determination of Organic Pollutants. ACS Sensors, 2019, 4, 2303-2310.	4.0	106
49	Black Phosphorus/Platinum Heterostructure: A Highly Efficient Photocatalyst for Solarâ€Driven Chemical Reactions. Advanced Materials, 2018, 30, e1803641.	11.1	105
50	Sequentially Triggered Delivery System of Black Phosphorus Quantum Dots with Surface Charge-Switching Ability for Precise Tumor Radiosensitization. ACS Nano, 2018, 12, 12401-12415.	7.3	100
51	Ultraviolet saturable absorption and ultrafast carrier dynamics in ultrasmall black phosphorus quantum dots. Nanoscale, 2017, 9, 4683-4690.	2.8	98
52	Phaseâ€Changing Microcapsules Incorporated with Black Phosphorus for Efficient Solar Energy Storage. Advanced Science, 2020, 7, 2000602.	5.6	95
53	Biodegradable near-infrared-photoresponsive shape memory implants based on black phosphorus nanofillers. Biomaterials, 2018, 164, 11-21.	5.7	94
54	Stable black phosphorus/Bi2O3 heterostructures for synergistic cancer radiotherapy. Biomaterials, 2018, 171, 12-22.	5.7	94

#	Article	IF	Citations
55	A Novel Hybridâ€Layered Organic Phototransistor Enables Efficient Intermolecular Charge Transfer and Carrier Transport for Ultrasensitive Photodetection. Advanced Materials, 2019, 31, e1900763.	11.1	89
56	Efficient Enrichment and Self-Assembly of Hybrid Nanoparticles into Removable and Magnetic SERS Substrates for Sensitive Detection of Environmental Pollutants. ACS Applied Materials & Interfaces, 2017, 9, 7472-7480.	4.0	84
57	Symmetric and Asymmetric Auâ€“AgCdSe Hybrid Nanorods. Nano Letters, 2012, 12, 5281-5286.	4.5	81
58	Linker-free covalent immobilization of heparin, SDF-1Î±, and CD47 on PTFE surface for antithrombogenicity, endothelialization and anti-inflammation. Biomaterials, 2017, 140, 201-211.	5.7	80
59	Rapid Activation of Platinum with Black Phosphorus for Efficient Hydrogen Evolution. Angewandte Chemie - International Edition, 2019, 58, 19060-19066.	7.2	79
60	A Lowâ€Cost Metalâ€Free Photocatalyst Based on Black Phosphorus. Advanced Science, 2019, 6, 1801321.	5.6	79
61	One-pot synthesis of CdSâ€“reduced graphene oxide 3D composites with enhanced photocatalytic properties. CrystEngComm, 2014, 16, 399-405.	1.3	77
62	Fewâ€Layered Black Phosphorus: From Fabrication and Customization to Biomedical Applications. Small, 2018, 14, 1702830.	5.2	76
63	Immunofluorescence detection with quantum dot bioconjugates for hepatoma in vivo. Journal of Biomedical Optics, 2007, 12, 014008.	1.4	74
64	Bimodal optical diagnostics of oral cancer based on Rose Bengal conjugated gold nanorod platform. Biomaterials, 2013, 34, 4274-4283.	5.7	74
65	Black Phosphorus-Based Multimodal Nanoagent: Showing Targeted Combinatory Therapeutics against Cancer Metastasis. Nano Letters, 2019, 19, 5587-5594.	4.5	73
66	Decorated ultrathin bismuth selenide nanosheets as targeted theranostic agents for in vivo imaging guided cancer radiation therapy. NPG Asia Materials, 2017, 9, e439-e439.	3.8	70
67	Photoelectrochemical Synthesis of Ammonia with Black Phosphorus. Advanced Functional Materials, 2020, 30, 2002731.	7.8	69
68	Optical and Optoelectronic Properties of Black Phosphorus and Recent Photonic and Optoelectronic Applications. Small Methods, 2019, 3, 1900165.	4.6	68
69	Plasmon-Mediated Radiative Energy Transfer across a Silver Nanowire Array via Resonant Transmission and Subwavelength Imaging. ACS Nano, 2010, 4, 5003-5010.	7.3	67
70	Ferromagnetic Co₂₀Ni₈₀ nanoparticles encapsulated inside reduced graphene oxide layers with superior microwave absorption performance. Journal of Materials Chemistry C, 2019, 7, 2943-2953.	2.7	66
71	Synthesis of Highly Luminescent and Anion-Exchangeable Cerium-Doped Layered Yttrium Hydroxides for Sensing and Photofunctional Applications. Advanced Functional Materials, 2011, 21, 4388-4396.	7.8	65
72	Lanthanideâ€Coordinated Black Phosphorus. Small, 2018, 14, e1801405.	5.2	65

#	Article	IF	Citations
73	Black phosphorus based fiber optic biosensor for ultrasensitive cancer diagnosis. Biosensors and Bioelectronics, 2019, 137, 140-147.	5.3	64
74	Cell-borne 2D nanomaterials for efficient cancer targeting and photothermal therapy. Biomaterials, 2017, 133, 37-48.	5.7	63
75	Black phosphorus: a two-dimensional reductant for in situ nanofabrication. Npj 2D Materials and Applications, 2017, 1, .	3.9	63
76	Opportunities and challenges for aqueous metal-proton batteries. Matter, 2021, 4, 1252-1273.	5.0	63
77	Paper-based plasmonic platform for sensitive, noninvasive, and rapid cancer screening. Biosensors and Bioelectronics, 2014, 54, 128-134.	5.3	62
78	Intrinsic bioactivity of black phosphorus nanomaterials on mitotic centrosome destabilization through suppression of PLK1 kinase. Nature Nanotechnology, 2021, 16, 1150-1160.	15.6	62
79	Indocyanine green-loaded gold nanostars for sensitive SERS imaging and subcellular monitoring of photothermal therapy. Nanoscale, 2017, 9, 11888-11901.	2.8	61
80	Mapping the elastic properties of two-dimensional MoS2 via bimodal atomic force microscopy and finite element simulation. Npj Computational Materials, 2018, 4, .	3.5	61
81	Optical properties of Au/Ag core/shell nanoshuttles. Optics Express, 2008, 16, 14288.	1.7	60
82	pHâ€Ðependent Degradation of Layered Black Phosphorus: Essential Role of Hydroxide Ions. Angewandte Chemie - International Edition, 2019, 58, 467-471.	7.2	60
83	Different-sized black phosphorus nanosheets with good cytocompatibility and high photothermal performance. RSC Advances, 2017, 7, 14618-14624.	1.7	58
84	Crystalline Red Phosphorus Nanoribbons: Largeâ€Scale Synthesis and Electrochemical Nitrogen Fixation. Angewandte Chemie - International Edition, 2020, 59, 14383-14387.	7.2	58
85	Edge-Rich Black Phosphorus for Photocatalytic Nitrogen Fixation. Journal of Physical Chemistry Letters, 2020, 11, 1052-1058.	2.1	57
86	2D materials inks toward smart flexible electronics. Materials Today, 2021, 50, 116-148.	8.3	57
87	Direct Synthesis of Metalâ€Ðoped Phosphorene with Enhanced Electrocatalytic Hydrogen Evolution. Small Methods, 2019, 3, 1900083.	4.6	56
88	Biodegradable Bi₂O₂Se Quantum Dots for Photoacoustic Imagingâ€Guided Cancer Photothermal Therapy. Small, 2020, 16, e1905208.	5.2	56
89	Mediated Drug Release from Nanovehicles by Black Phosphorus Quantum Dots for Efficient Therapy of Chronic Obstructive Pulmonary Disease. Angewandte Chemie - International Edition, 2020, 59, 20568-20576.	7.2	56
90	Inâ€Plane Black Phosphorus/Dicobalt Phosphide Heterostructure for Efficient Electrocatalysis. Angewandte Chemie, 2018, 130, 2630-2634.	1.6	55

#	Article	IF	Citations
91	Black phosphorus integrated tilted fiber grating for ultrasensitive heavy metal sensing. Sensors and Actuators B: Chemical, 2018, 257, 1093-1098.	4.0	53
92	Synthesis of lipidâ€“black phosphorus quantum dot bilayer vesicles for near-infrared-controlled drug release. Chemical Communications, 2018, 54, 6060-6063.	2.2	53
93	Synthesis of high-quality black phosphorus sponges for all-solid-state supercapacitors. Materials Horizons, 2019, 6, 176-181.	6.4	53
94	Solution-dispersible Au nanocube dimers with greatly enhanced two-photon luminescence and SERS. Nanoscale, 2013, 5, 5368.	2.8	51
95	Metabolizable Small Gold Nanorods: Size-dependent Cytotoxicity, Cell Uptake and In Vivo Biodistribution. ACS Biomaterials Science and Engineering, 2016, 2, 789-797.	2.6	51
96	Photochemical Activity of Black Phosphorus for Nearâ€Infrared Light Controlled In Situ Biomineralization. Advanced Science, 2020, 7, 2000439.	5.6	51
97	Synthesis of different-sized gold nanostars for Raman bioimaging and photothermal therapy in cancer nanotheranostics. Science China Chemistry, 2017, 60, 1219-1229.	4.2	49
98	Molybdenum diselenide â€“ black phosphorus heterostructures for electrocatalytic hydrogen evolution. Applied Surface Science, 2019, 467-468, 328-334.	3.1	47
99	Detection of coronavirus in environmental surveillance and risk monitoring for pandemic control. Chemical Society Reviews, 2021, 50, 3656-3676.	18.7	46
100	Hierarchical coupling effect in hollow Ni/NiFe2O4-CNTs microsphere via spray-drying for enhanced oxygen evolution electrocatalysis. Nano Research, 2020, 13, 437-446.	5.8	45
101	Tri-phase all-optical switching and broadband nonlinear optical response in Bi_2Se_3 nanosheets. Optics Express, 2017, 25, 18346.	1.7	44
102	Synthesis of gold/rare-earth-vanadate core/shell nanorods for integrating plasmon resonance and fluorescence. Nano Research, 2015, 8, 2548-2561.	5.8	43
103	Enhanced Cytosolic Delivery and Release of CRISPR/Cas9 by Black Phosphorus Nanosheets for Genome Editing. Angewandte Chemie, 2018, 130, 10425-10429.	1.6	43
104	Homogeneous Immunoassay Based on Two-Photon Excitation Fluorescence Resonance Energy Transfer. Analytical Chemistry, 2008, 80, 7735-7741.	3.2	42
105	Synthesis of bright upconversion submicrocrystals for high-contrast imaging of latent-fingerprints with cyanoacrylate fuming. RSC Advances, 2015, 5, 79525-79531.	1.7	42
106	Calcium Phosphate Mineralized Black Phosphorous with Enhanced Functionality and Anticancer Bioactivity. Advanced Functional Materials, 2020, 30, 2003069.	7.8	42
107	Crystal structure and optical properties of silver nanorings. Applied Physics Letters, 2009, 94, 153102.	1.5	41
108	Optoelectronic Artificial Synapses Based on Two-Dimensional Transitional-Metal Trichalcogenide. ACS Applied Materials & Interfaces, 2021, 13, 30797-30805.	4.0	41

#	Article	IF	Citations
109	Synthesis of highly fluorescent LaF3:Ln3+/LaF3 core/shell nanocrystals by a surfactant-free aqueous solution route. Journal of Solid State Chemistry, 2009, 182, 597-601.	1.4	40
110	Black phosphorous nanosheet: A novel immune-potentiating nanoadjuvant for near-infrared-improved immunotherapy. Biomaterials, 2021, 273, 120788.	5.7	40
111	Modulation of Phosphorene for Optimal Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2019, 11, 37787-37795.	4.0	38
112	Ultrathin and Ultrasensitive Direct Xâ€ray Detector Based on Heterojunction Phototransistors. Advanced Materials, 2021, 33, e2101717.	11.1	38
113	A Unique Disintegrationâ€“Reassembly Route to Mesoporous Titania Nanocrystalline Hollow Spheres with Enhanced Photocatalytic Activity. Advanced Functional Materials, 2018, 28, 1704208.	7.8	37
114	Fluorescence Analysis with Quantum Dot Probes for Hepatoma Under One- and Two-Photon Excitation. Journal of Fluorescence, 2007, 17, 243-247.	1.3	36
115	In situ growth of all-inorganic perovskite nanocrystals on black phosphorus nanosheets. Chemical Communications, 2018, 54, 2365-2368.	2.2	36
116	Synergistic Antibacterial Activity of Black Phosphorus Nanosheets Modified with Titanium Aminobenzenesulfanato Complexes. ACS Applied Nano Materials, 2019, 2, 1202-1209.	2.4	36
117	Bilayer Bismuth Selenide nanoplatelets based saturable absorber for ultra-short pulse generation (Invited). Optics Communications, 2017, 395, 55-60.	1.0	35
118	Black Phosphorus: Bioactive Nanomaterials with Inherent and Selective Chemotherapeutic Effects. Angewandte Chemie, 2019, 131, 779-784.	1.6	34
119	Tunable Plasmon Enhancement of Gold/Semiconductor Core/Shell Heteroâ€Nanorods with Siteâ€Selectively Grown Shell. Advanced Optical Materials, 2014, 2, 679-686.	3.6	32
120	2D Material-Based Nanofibrous Membrane for Photothermal Cancer Therapy. ACS Applied Materials & Interfaces, 2018, 10, 1155-1163.	4.0	32
121	Recent Advances in Quantum Effects of 2D Materials. Advanced Quantum Technologies, 2019, 2, 1800111.	1.8	32
122	Black Phosphorus Based Multicolor Light-Modulated Transparent Memristor with Enhanced Resistive Switching Performance. ACS Applied Materials & Interfaces, 2020, 12, 25108-25114.	4.0	32
123	Sensitive and selective ctDNA detection based on functionalized black phosphorus nanosheets. Biosensors and Bioelectronics, 2020, 165, 112384.	5.3	32
124	High-capacity and small-polarization aluminum organic batteries based on sustainable quinone-based cathodes with Al3+ insertion. Cell Reports Physical Science, 2021, 2, 100354.	2.8	32
125	Mechanical properties and applications of 2D black phosphorus. Journal of Applied Physics, 2020, 128, .	1.1	31
126	InSe Nanosheets for Efficient NIR-II-Responsive Drug Release. ACS Applied Materials & Interfaces, 2019, 11, 27521-27528.	4.0	30

#	Article	IF	Citations
127	Dual-emitting nanocomposites derived from rare-earth compound nanotubes for ratiometric fluorescence sensing applications. Nanoscale, 2013, 5, 1629.	2.8	29
128	Synthesis of hollow rare-earth compound nanoparticles by a universal sacrificial template method. CrystEngComm, 2014, 16, 6141-6148.	1.3	29
129	Sensitive and Robust Colorimetric Sensing of Sulfide Anion by Plasmonic Nanosensors Based on Quick Crystal Growth. Plasmonics, 2014, 9, 11-16.	1.8	28
130	Lactose-Functionalized Gold Nanorods for Sensitive and Rapid Serological Diagnosis of Cancer. ACS Applied Materials & Interfaces, 2016, 8, 5813-5820.	4.0	28
131	Nitrogen Dioxide Gas Sensor Based on Liquid-Phase-Exfoliated Black Phosphorus Nanosheets. ACS Applied Nano Materials, 2020, 3, 6440-6447.	2.4	28
132	Improved microwave absorption performance of a multi-dimensional Fe₂O₃/CNTCM@CN assembly achieved by enhanced dielectric relaxation. Journal of Materials Chemistry C, 2020, 8, 5715-5726.	2.7	28
133	Surface and interface control of black phosphorus. CheM, 2022, 8, 632-662.	5.8	28
134	Elastic properties and intrinsic strength of two-dimensional InSe flakes. Nanotechnology, 2019, 30, 335703.	1.3	27
135	Bioactive phospho-therapy with black phosphorus for in vivo tumor suppression. Theranostics, 2020, 10, 4720-4736.	4.6	26
136	The data-intensive scientific revolution occurring where two-dimensional materials meet machine learning. Cell Reports Physical Science, 2021, 2, 100482.	2.8	26
137	Plasma treatment of polyether-ether-ketone: A means of obtaining desirable biomedical characteristics. European Polymer Journal, 2019, 118, 561-577.	2.6	25
138	Rapid detection of SARS-CoV-2 viral nucleic acids based on surface enhanced infrared absorption spectroscopy. Nanoscale, 2021, 13, 10133-10142.	2.8	25
139	Lattice contraction tailoring in perovskite oxides towards improvement of oxygen electrode catalytic activity. Chemical Engineering Journal, 2021, 421, 129698.	6.6	25
140	The electrical, thermal, and thermoelectric properties of black phosphorus. APL Materials, 2020, 8, .	2.2	25
141	Synthesis of carboxyl-capped and bright YVO4:Eu,Bi nanoparticles and their applications in immunochromatographic test strip assay. Materials Research Bulletin, 2013, 48, 4454-4459.	2.7	24
142	Rapid and scalable production of high-quality phosphorene by plasmaâ€“liquid technology. Chemical Communications, 2020, 56, 221-224.	2.2	24
143	Understanding angle-resolved polarized Raman scattering from black phosphorus at normal and oblique laser incidences. Science Bulletin, 2020, 65, 1894-1900.	4.3	24
144	Machine Learningâ€Aided Crystal Facet Rational Design with Ionic Liquid Controllable Synthesis. Small, 2021, 17, e2100024.	5.2	24

#	Article	IF	Citations
145	Whole-Brain Mapping the Direct Inputs of Dorsal and Ventral CA1 Projection Neurons. Frontiers in Neural Circuits, 2021, 15, 643230.	1.4	24
146	Synthetic preparations and atomic scale engineering of silver nanoparticles for biomedical applications. Nanoscale, 2021, 13, 13923-13942.	2.8	23
147	Editing the Shape Morphing of Monocomponent Natural Polysaccharide Hydrogel Films. Research, 2021, 2021, 9786128.	2.8	23
148	Tailoring nonlinear optical properties of Bi2Se3 through ion irradiation. Scientific Reports, 2016, 6, 21799.	1.6	22
149	Growth of metalâ€“semiconductor coreâ€“multishell nanorods with optimized field confinement and nonlinear enhancement. Nanoscale, 2016, 8, 11969-11975.	2.8	22
150	Improved Biocompatibility of Black Phosphorus Nanosheets by Chemical Modification. Angewandte Chemie, 2017, 129, 14680-14685.	1.6	22
151	Recent advances in cell-mediated nanomaterial delivery systems for photothermal therapy. Journal of Materials Chemistry B, 2018, 6, 1296-1311.	2.9	22
152	Efficient manganese luminescence induced by Ce3+-Mn2+ energy transfer in rare earth fluoride and phosphate nanocrystals. Nanoscale Research Letters, 2011, 6, 119.	3.1	21
153	Competitive Reaction Pathway for Siteâ€Selective Conjugation of Raman Dyes to Hotspots on Gold Nanorods for Greatly Enhanced SERS Performance. Small, 2014, 10, 4012-4019.	5.2	21
154	Microwave-heating synthesis and sensing applications of bright gold nanoclusters. Materials Research Bulletin, 2011, 46, 2418-2421.	2.7	20
155	Microwave-assisted synthesis of surface-passivated doped ZnSe quantum dots with enhanced fluorescence. Chemical Physics Letters, 2011, 510, 135-138.	1.2	19
156	Cells nanomechanics by atomic force microscopy: focus on interactions at nanoscale. Advances in Physics: X, 2021, 6, .	1.5	18
157	Molybdenum Diphosphide Nanorods with Laserâ€Potentiated Peroxidase Catalytic/Mildâ€Photothermal Therapy of Oral Cancer. Advanced Science, 2022, 9, e2101527.	5.6	18
158	Ultralow Lightâ€Power Consuming Photonic Synapses Based on Ultrasensitive Perovskite/Indiumâ€Galliumâ€Zincâ€Oxide Heterojunction Phototransistors. Advanced Electronic Materials, 2022, 8, .	2.6	18
159	GdVO₄:Eu³⁺,Bi³⁺ Nanoparticles as a Contrast Agent for MRI and Luminescence Bioimaging. ACS Omega, 2019, 4, 15806-15814.	1.6	17
160	Black Phosphorus Nanomaterials Regulate the Aggregation of Amyloidâ€Î². ChemNanoMat, 2019, 5, 606-611.	1.5	17
161	Inherent Chemotherapeutic Antiâ€Cancer Effects of Lowâ€Dimensional Nanomaterials. Chemistry - A European Journal, 2019, 25, 10995-11006.	1.7	17
162	Polarization-enhanced three-dimensional Co₃O₄/MoO₂/C flowers as efficient microwave absorbers. Journal of Materials Chemistry C, 2020, 8, 10248-10256.	2.7	17

#	Article	IF	Citations
163	Black Phosphorus Allâ€Fiber Sensor for Highly Responsive Humidity Detection. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900697.	1.2	17
164	Electrocatalysis enabled transformation of earth-abundant water, nitrogen and carbon dioxide for a sustainable future. Materials Advances, 2022, 3, 1359-1400.	2.6	17
165	Fabrication of rare-earth/quantum-dot nanocomposites for color-tunable sensing applications. Journal of Nanoparticle Research, 2011, 13, 525-531.	0.8	16
166	Near-infrared optical performances of two Bi₂Se₃nanosheets. RSC Advances, 2017, 7, 50234-50238.	1.7	16
167	Air-stable n-doped black phosphorus transistor by thermal deposition of metal adatoms. Nanotechnology, 2019, 30, 135201.	1.3	16
168	Black phosphorus: Versatile twoâ€dimensional materials in cancer therapies. View, 2021, 2, 20200043.	2.7	16
169	In situ preparation of Mn-doped perovskite nanocrystalline films and application to white light emitting devices. Journal of Colloid and Interface Science, 2022, 606, 1163-1169.	5.0	16
170	Size-dependent flame retardancy of black phosphorus nanosheets. Nanoscale, 2022, 14, 2599-2604.	2.8	16
171	Filtration-based water treatment system embedded with black phosphorus for NIR-triggered disinfection. Environmental Science: Nano, 2019, 6, 2977-2985.	2.2	15
172	Template growth of Au/Ag nanocomposites on phosphorene for sensitive SERS detection of pesticides. Nanotechnology, 2019, 30, 275604.	1.3	15
173	A versatile solar-powered vapor generating membrane for multi-media purification. Separation and Purification Technology, 2021, 260, 117952.	3.9	15
174	High temperature sensitivity of manganese-assisted excitonic photoluminescence from inverted core/shell ZnSe:Mn/CdSe nanocrystals. Applied Physics Letters, 2010, 96, .	1.5	14
175	Preparation and Optical Properties of CdS Nanocrystals Prepared by a Mechanical Alloying Process. Journal of Physical Chemistry C, 2010, 114, 290-293.	1.5	14
176	Side-to-side alignment of gold nanorods with polarization-free characteristic for highly reproducible surface enhanced Raman scattering. Applied Physics Letters, 2014, 105, 211902.	1.5	14
177	Enhanced cytocompatibility and reduced genotoxicity of polydimethylsiloxane modified by plasma immersion ion implantation. Colloids and Surfaces B: Biointerfaces, 2016, 148, 139-146.	2.5	14
178	Modification of Layered Graphitic Carbon Nitride by Nitrogen Plasma for Improved Electrocatalytic Hydrogen Evolution. Nanomaterials, 2019, 9, 568.	1.9	14
179	Activating Carbon Nitride by BP@Ni for the Enhanced Photocatalytic Hydrogen Evolution and Selective Benzyl Alcohol Oxidation. ACS Applied Materials & Interfaces, 2021, 13, 50988-50995.	4.0	14
180	Multifunctional Layered Gadolinium Hydroxide Nanoplates for Ultrahigh Field Magnetic Resonance Imaging, Computed Tomography and Fluorescence Bioimaging. Journal of Biomedical Nanotechnology, 2014, 10, 3620-3630.	0.5	13

#	Article	IF	Citations
181	Rapid Activation of Platinum with Black Phosphorus for Efficient Hydrogen Evolution. Angewandte Chemie, 2019, 131, 19236-19242.	1.6	13
182	Photothermal and Enhanced Photocatalytic Therapies Conduce to Synergistic Anticancer Phototherapy with Biodegradable Titanium Diselenide Nanosheets. Small, 2021, 17, e2103239.	5.2	13
183	Stepwise synthesis of cubic Au-AgCdS core-shell nanostructures with tunable plasmon resonances and fluorescence. Optics Express, 2013, 21, 24793.	1.7	12
184	Thicknessâ€Dependent Structural Stability and Anisotropy of Black Phosphorus. Advanced Electronic Materials, 2019, 5, 1800712.	2.6	11
185	From Octahedron Crystals to 2D Silicon Nanosheets: Facetâ€Selective Cleavage and Biophotonic Applications. Small, 2020, 16, e2003594.	5.2	11
186	Strategy for improving the activity and selectivity of CO2 electroreduction on flexible carbon materials for carbon neutral. Applied Energy, 2021, 298, 117196.	5.1	11
187	Topochemical Synthesis of Copper Phosphide Nanoribbons for Flexible Optoelectronic Memristors. Advanced Functional Materials, 0, , 2110900.	7.8	11
188	Facile mass production of self-supported two-dimensional transition metal oxides for catalytic applications. Chemical Communications, 2019, 55, 11406-11409.	2.2	10
189	Silica-coated and annealed CdS nanowires with enhanced photoluminescence. Optics Express, 2013, 21, 3253.	1.7	9
190	pHâ€Dependent Degradation of Layered Black Phosphorus: Essential Role of Hydroxide Ions. Angewandte Chemie, 2018, 131, 477.	1.6	9
191	Goldâ€patterned microarray chips for ultrasensitive surfaceâ€enhanced Raman scattering detection of ultratrace samples. Journal of Raman Spectroscopy, 2019, 50, 26-33.	1.2	9
192	Insight into the overpotentials of electrocatalytic hydrogen evolution on black phosphorus decorated with metal clusters. Electrochimica Acta, 2020, 358, 136902.	2.6	9
193	Crystalline Red Phosphorus Nanoribbons: Largeâ€Scale Synthesis and Electrochemical Nitrogen Fixation. Angewandte Chemie, 2020, 132, 14489-14493.	1.6	9
194	Silicon monophosphides with controlled size and crystallinity for enhanced lithium anodic performance. Nanoscale, 2021, 13, 51-58.	2.8	9
195	Drawing-fabrication of multifarious nanoplasmonic platform on PLLA paper for optimized SERS performance. Journal of Raman Spectroscopy, 2016, 47, 687-691.	1.2	8
196	Facile synthesis of flower-shaped Au/GdVO4:Eu core/shell nanoparticles by using citrate as stabilizer and complexing agent. RSC Advances, 2016, 6, 9612-9618.	1.7	8
197	Mediated Drug Release from Nanovehicles by Black Phosphorus Quantum Dots for Efficient Therapy of Chronic Obstructive Pulmonary Disease. Angewandte Chemie, 2020, 132, 20749-20757.	1.6	8
198	Subsurface intercalation activating basal plane of black phosphorus for nitrogen reduction. Journal of Energy Chemistry, 2021, 60, 293-299.	7.1	8

#	Article	IF	Citations
199	Vivid structural colors from long-range ordered and carbon-integrated colloidal photonic crystals. Optics Express, 2018, 26, 27001.	1.7	8
200	Black Phosphorus: An Effective Feedstock for the Synthesis of Phosphorus-Based Chemicals. CCS Chemistry, 2019, 1, 166-172.	4.6	8
201	High Temperature Seedless Synthesis of Au NRs Using BDAC/CTAB Co-surfactant. Chinese Journal of Chemical Physics, 2008, 21, 476-480.	0.6	7
202	Quantum Dots: Solvothermal Synthesis and Ultrafast Photonics of Black Phosphorus Quantum Dots (Advanced Optical Materials 8/2016). Advanced Optical Materials, 2016, 4, 1222-1222.	3.6	7
203	Integration of data-intensive, machine learning and robotic experimental approaches for accelerated discovery of catalysts in renewable energy-related reactions. Materials Reports Energy, 2021, 1, 100049.	1.7	7
204	A facile approach for hierarchical architectures of an enzymeâ€“metalâ€“organic framework biocatalyst with high activity and stability. Nanoscale, 2022, 14, 3929-3934.	2.8	7
205	Tunable nonlinear optical absorption in semiconductor nanocrystals doped with transition metal ions. Journal of Applied Physics, 2012, 112, 074305.	1.1	6
206	Microwave synthesis of Cu-doped ternary ZnCdS quantum dots with composition-controllable photoluminescence. Wuhan University Journal of Natural Sciences, 2012, 17, 217-222.	0.2	6
207	Facile Synthesis of Au Nanocube-CdS Core-Shell Nanocomposites with Enhanced Photocatalytic Activity. Chinese Physics Letters, 2014, 31, 064203.	1.3	6
208	Phosphorene: From Black Phosphorus to Phosphorene: Basic Solvent Exfoliation, Evolution of Raman Scattering, and Applications to Ultrafast Photonics (Adv. Funct. Mater. 45/2015). Advanced Functional Materials, 2015, 25, 7100-7100.	7.8	6
209	Morphological control of gold nanorods via thermally driven bi-surfactant growth and application for detection of heavy metal ions. Nanotechnology, 2018, 29, 334001.	1.3	6
210	Intercalator-assisted plasma-liquid technology: an efficient exfoliation method for few-layer two-dimensional materials. Science China Materials, 2020, 63, 2079-2085.	3.5	5
211	Complete ablation of resistant tumors with photosensitive black phosphorus quantum dots-based lipid nanocapsules. Chemical Engineering Journal, 2021, 421, 127879.	6.6	5
212	Carrier-Free Cellular Transport of CRISPR/Cas9 Ribonucleoprotein for Genome Editing by Cold Atmospheric Plasma. Biology, 2021, 10, 1038.	1.3	5
213	Sensitive direct x-ray detectors based on the Inâ€“Gaâ€“Znâ€“O/perovskite heterojunction phototransistor. Flexible and Printed Electronics, 2022, 7, 014013.	1.5	5
214	Photothermal Therapy: Metabolizable Ultrathin Bi2Se3Nanosheets in Imaging-Guided Photothermal Therapy (Small 30/2016). Small, 2016, 12, 4158-4158.	5.2	4
215	Detection of serum phospholipids by microchannel-integrated black phosphorus-assisted laser desorption/ionization mass spectrometry. Talanta, 2022, 237, 122978.	2.9	4
216	Unique Interaction between Layered Black Phosphorus and Nitrogen Dioxide. Nanomaterials, 2022, 12, 2011.	1.9	4

#	Article	IF	Citations
217	Controlled assembly of gold and rare-earth upconversion nanoparticles for ratiometric sensing applications. Wuhan University Journal of Natural Sciences, 2013, 18, 277-282.	0.2	3
218	Gold Nanorods: Evaporative Selfâ€Assembly of Gold Nanorods into Macroscopic 3D Plasmonic Superlattice Arrays (Adv. Mater. 13/2016). Advanced Materials, 2016, 28, 2466-2466.	11.1	3
219	Black Phosphorus: Lanthanide-Coordinated Black Phosphorus (Small 29/2018). Small, 2018, 14, 1870134.	5.2	3
220	Progress of fabrication and surface modification of 2D black phosphorus. Chinese Science Bulletin, 2017, 62, 2252-2261.	0.4	3
221	Black Phosphorus: Thickness-Dependent Structural Stability and Anisotropy of Black Phosphorus (Adv. Electron. Mater. 3/2019). Advanced Electronic Materials, 2019, 5, 1970012.	2.6	2
222	Synthesis and Properties of Shape-Stabilized Phase Change Materials Based on Poly(triallyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542 Tc	1.6	2
223	The complete solution of PACS based on B/S mode. , 0, , .		1
224	CHARGE TRANSFER FROM MONOLAYERED CdSe/ZnS QUANTUM DOTS TO C₆₀. Modern Physics Letters B, 2009, 23, 1663-1669.	1.0	1
225	Optical properties and ferromagnetism of ternary Cd1â^'x Mn x Te nanocrystals. Journal of Nanoparticle Research, 2011, 13, 5799-5807.	0.8	1
226	Near-infrared absorption imaging and processing technologies based on gold nanorods. Wuhan University Journal of Natural Sciences, 2013, 18, 307-312.	0.2	1
227	Neurotoxin-directed synthesis and in vitro evaluation of Au nanoclusters. RSC Advances, 2015, 5, 29647-29652.	1.7	1
228	Plasmon-Enhanced Fluorescence of Rare Earth Nanocrystals. International Journal of Behavioral and Consultation Therapy, 2017, , 15-37.	0.4	1
229	RÃ¼cktitelbild: Improved Biocompatibility of Black Phosphorus Nanosheets by Chemical Modification (Angew. Chem. 46/2017). Angewandte Chemie, 2017, 129, 14966-14966.	1.6	1
230	Photoelectrochemical Ammonia Synthesis: Photoelectrochemical Synthesis of Ammonia with Black Phosphorus (Adv. Funct. Mater. 24/2020). Advanced Functional Materials, 2020, 30, 2070156.	7.8	1
231	Unveiling a Hidden Event in Fluorescence Correlative Microscopy by AFM Nanomechanical Analysis. Frontiers in Molecular Biosciences, 2021, 8, 669361.	1.6	1
232	Reversal in optical nonlinearities of Bi₂Se₃ nanosheets dispersion influenced by resonance absorption. Optics Express, 2019, 27, 21741.	1.7	1
233	A water-soluble membrane for SARS-CoV-2 viral nucleic acid sampling and detection. Nanoscale, 2021, 13, 18084-18088.	2.8	1
234	Finite phosphorene derived partial reduction of metal organic framework nanofoams for enhanced lithium storage capability. Journal of Power Sources, 2022, 525, 231025.	4.0	1

#	Article	IF	Citations
235	RÃ¼cktitelbild: Surface Coordination of Black Phosphorus for Robust Air and Water Stability (Angew.) Tj ETQq1 1 0.784314 rgBT /Ov	1.6	0
236	Frontispiece: Inherent Chemotherapeutic Antiâ€Cancer Effects of Lowâ€Dimensional Nanomaterials. Chemistry - A European Journal, 2019, 25, .	1.7	0
237	Black phosphorus-coated tilted fiber Bragg grating for ultrasensitive ion sensing. , 2017, , .		0
238	Molybdenum Diphosphide Nanorods with Laserâ€Potentiated Peroxidase Catalytic/Mildâ€Photothermal Therapy of Oral Cancer (Adv. Sci. 1/2022). Advanced Science, 2022, 9, .	5.6	0
239	Topochemical Synthesis of Copper Phosphide Nanoribbons for Flexible Optoelectronic Memristors (Adv. Funct. Mater. 14/2022). Advanced Functional Materials, 2022, 32, .	7.8	0