

# Gang Zhao

## List of Publications by Year in descending order

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204  
papers

8,066  
citations

41258

49  
h-index

74018

75  
g-index

209  
all docs

209  
docs citations

209  
times ranked

9590  
citing authors

#	ARTICLE	IF	CITATIONS
1	Chitosan-Decorated Doxorubicin-Encapsulated Nanoparticle Targets and Eliminates Tumor Reinitiating Cancer Stem-like Cells. <i>ACS Nano</i> , 2015, 9, 5725-5740.	7.3	241
2	Mapping flood susceptibility in mountainous areas on a national scale in China. <i>Science of the Total Environment</i> , 2018, 615, 1133-1142.	3.9	234
3	Nanotopographical surfaces for stem cell fate control: Engineering mechanobiology from the bottom. <i>Nano Today</i> , 2014, 9, 759-784.	6.2	220
4	Assessment of urban flood susceptibility using semi-supervised machine learning model. <i>Science of the Total Environment</i> , 2019, 659, 940-949.	3.9	163
5	Ice Inhibition for Cryopreservation: Materials, Strategies, and Challenges. <i>Advanced Science</i> , 2021, 8, 2002425.	5.6	141
6	Conjugated Energetic Salts Based on Fused Rings: Insensitive and Highly Dense Materials. <i>Journal of the American Chemical Society</i> , 2018, 140, 15001-15007.	6.6	134
7	Construction of Longan-like hybrid structures by anchoring nickel hydroxide on yolk-shell polypyrrole for asymmetric supercapacitors. <i>Nano Energy</i> , 2019, 56, 207-215.	8.2	132
8	Utilizing photocorrosion-recrystallization to prepare a highly stable and efficient CdS/WS <sub>2</sub> nanocomposite photocatalyst for hydrogen evolution. <i>Applied Catalysis B: Environmental</i> , 2016, 199, 466-472.	10.8	129
9	Recent advances in the improvement of g-C <sub>3</sub> N <sub>4</sub> based photocatalytic materials. <i>Chinese Chemical Letters</i> , 2021, 32, 13-20.	4.8	128
10	Fluorinated graphene: facile solution preparation and tailorable properties by fluorine-content tuning. <i>Journal of Materials Chemistry A</i> , 2014, 2, 8782-8789.	5.2	121
11	Recent Progress in Flexible Pressure Sensors Based Electronic Skin. <i>Advanced Engineering Materials</i> , 2021, 23, 2001187.	1.6	115
12	Phase junction CdS: High efficient and stable photocatalyst for hydrogen generation. <i>Applied Catalysis B: Environmental</i> , 2018, 221, 179-186.	10.8	111
13	Electrospun nanofibers promote wound healing: theories, techniques, and perspectives. <i>Journal of Materials Chemistry B</i> , 2021, 9, 3106-3130.	2.9	109
14	Precise targeting of POLR2A as a therapeutic strategy for human triple negative breast cancer. <i>Nature Nanotechnology</i> , 2019, 14, 388-397.	15.6	107
15	Nanoparticle-Mediated Intracellular Delivery Enables Cryopreservation of Human Adipose-Derived Stem Cells Using Trehalose as the Sole Cryoprotectant. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 5017-5028.	4.0	105
16	Reduced graphene oxide-CdS nanocomposites with enhanced visible-light photoactivity synthesized using ionic-liquid precursors. <i>New Journal of Chemistry</i> , 2014, 38, 4312-4320.	1.4	103
17	One-Step Exfoliation and Hydroxylation of Boron Nitride Nanosheets with Enhanced Optical Limiting Performance. <i>Advanced Optical Materials</i> , 2016, 4, 141-146.	3.6	99
18	All-Aqueous-Phase Microfluidics for Cell Encapsulation. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 4826-4832.	4.0	99

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19	A Novel Mild Phase Transition to Prepare Black Phosphorus Nanosheets with Excellent Energy Applications. <i>Small</i> , 2017, 13, 1602243.	5.2	97
20	Estimating reservoir evaporation losses for the United States: Fusing remote sensing and modeling approaches. <i>Remote Sensing of Environment</i> , 2019, 226, 109-124.	4.6	97
21	Stencil Printing of Liquid Metal upon Electrospun Nanofibers Enables High-Performance Flexible Electronics. <i>ACS Nano</i> , 2021, 15, 19364-19376.	7.3	97
22	Integrating a reservoir regulation scheme into a spatially distributed hydrological model. <i>Advances in Water Resources</i> , 2016, 98, 16-31.	1.7	94
23	Rational design of sensitivity enhanced and stability improved TEA gas sensor assembled with Pd nanoparticles-functionalized In <sub>2</sub> O <sub>3</sub> composites. <i>Sensors and Actuators B: Chemical</i> , 2019, 285, 1-10.	4.0	93
24	Perovskite CsPbBr <sub>3</sub> crystals: growth and applications. <i>Journal of Materials Chemistry C</i> , 2020, 8, 6326-6341.	2.7	87
25	Alginate Hydrogel Microencapsulation Inhibits Devitrification and Enables Large Volume Low CPA Cell Vitrification. <i>Advanced Functional Materials</i> , 2015, 25, 6839-6850.	7.8	86
26	Microfluidics for cryopreservation. <i>Biotechnology Advances</i> , 2017, 35, 323-336.	6.0	84
27	Simultaneous immunoassays of dual prostate cancer markers using a SERS-based microdroplet channel. <i>Biosensors and Bioelectronics</i> , 2018, 119, 126-133.	5.3	82
28	Hierarchically hollow structured NiCo <sub>2</sub> S <sub>4</sub> @NiS for high-performance flexible hybrid supercapacitors. <i>Nanoscale</i> , 2020, 12, 4686-4694.	2.8	80
29	Automatic Correction of Contaminated Images for Assessment of Reservoir Surface Area Dynamics. <i>Geophysical Research Letters</i> , 2018, 45, 6092-6099.	1.5	79
30	Magnetic induction heating of superparamagnetic nanoparticles during rewarming augments the recovery of hUCM-MSCs cryopreserved by vitrification. <i>Acta Biomaterialia</i> , 2016, 33, 264-274.	4.1	74
31	Bis(3-nitro-1-(trinitromethyl)-1 <i>H</i> -1,2,4-triazol-5-yl)methanone: An Applicable and Very Dense Green Oxidizer. <i>Journal of the American Chemical Society</i> , 2019, 141, 19581-19584.	6.6	71
32	Chemical Weathering-Exfoliation of Atom-Thick Transition Metal Dichalcogenides and Their Ultrafast Saturable Absorption Properties. <i>Advanced Functional Materials</i> , 2015, 25, 5292-5299.	7.8	69
33	Hydrogel Encapsulation Facilitates Rapid Cooling Cryopreservation of Stem Cell-Laden Core-Shell Microcapsules as Cell-Biomaterial Constructs. <i>Advanced Healthcare Materials</i> , 2017, 6, 1700988.	3.9	68
34	Dual Suppression Effect of Magnetic Induction Heating and Microencapsulation on Ice Crystallization Enables Low-Cryoprotectant Vitrification of Stem Cell-Alginate Hydrogel Constructs. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 16822-16835.	4.0	67
35	Phase-transformation engineering in MoS <sub>2</sub> on carbon cloth as flexible binder-free anode for enhancing lithium storage. <i>Journal of Alloys and Compounds</i> , 2017, 716, 112-118.	2.8	66
36	Effect of blood flow and metabolism on multidimensional heat transfer during cryosurgery. <i>Medical Engineering and Physics</i> , 2007, 29, 205-215.	0.8	65

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37	Predehydration and Ice Seeding in the Presence of Trehalose Enable Cell Cryopreservation. ACS Biomaterials Science and Engineering, 2017, 3, 1758-1768.	2.6	64
38	Preparation of 2D MoS <sub>2</sub> /Graphene Heterostructure through a Monolayer Intercalation Method and its Application as an Optical Modulator in Pulsed Laser Generation. Advanced Optical Materials, 2015, 3, 937-942.	3.6	62
39	Nickel-cobalt based aqueous flexible solid state supercapacitors with high energy density by controllable surface modification. Journal of Power Sources, 2019, 427, 56-61.	4.0	62
40	Drone-based entanglement distribution towards mobile quantum networks. National Science Review, 2020, 7, 921-928.	4.6	61
41	Design of p-n homojunctions in metal-free carbon nitride photocatalyst for overall water splitting. Chinese Journal of Catalysis, 2021, 42, 501-509.	6.9	61
42	2D New Nonmetal Photocatalyst of Sulfur-Doped h-BN Nanosheets with High Photocatalytic Activity. Advanced Materials Interfaces, 2019, 6, 1900062.	1.9	58
43	Optical-Relayed Entanglement Distribution Using Drones as Mobile Nodes. Physical Review Letters, 2021, 126, 020503.	2.9	57
44	A high-resolution bathymetry dataset for global reservoirs using multi-source satellite imagery and altimetry. Remote Sensing of Environment, 2020, 244, 111831.	4.6	56
45	Highly sensitive and low working temperature detection of trace triethylamine based on TiO <sub>2</sub> nanoparticles decorated CuO nanosheets sensors. Sensors and Actuators B: Chemical, 2019, 301, 127019.	4.0	55
46	Self-water-absorption-type two-dimensional composite photocatalyst with high-efficiency water absorption and overall water-splitting performance. , 2022, 1, 100008.		55
47	Statistical Downscaling of Temperature with the Random Forest Model. Advances in Meteorology, 2017, 2017, 1-11.	0.6	54
48	Metal-organic framework derived NiCoP hollow polyhedrons electrocatalyst for pH-universal hydrogen evolution reaction. Chinese Chemical Letters, 2021, 32, 119-124.	4.8	54
49	Ether-Water Hybrid Electrolyte Contributing to Excellent Mg Ion Storage in Layered Sodium Vanadate. ACS Nano, 2022, 16, 6093-6102.	7.3	54
50	Cold-Responsive Nanoparticle Enables Intracellular Delivery and Rapid Release of Trehalose for Organic-Solvent-Free Cryopreservation. Nano Letters, 2019, 19, 9051-9061.	4.5	53
51	Fabrication of electrospun Bi <sub>2</sub> WO <sub>6</sub> microbelts with enhanced visible photocatalytic degradation activity. Journal of Alloys and Compounds, 2013, 578, 12-16.	2.8	52
52	Large-quantity and continuous preparation of two-dimensional nanosheets. Nanoscale, 2016, 8, 5407-5411.	2.8	52
53	Efficient Construction of Energetic Materials via Nonmetallic Catalytic Carbon-Carbon Cleavage/Oxime-Release-Coupling Reactions. Journal of the American Chemical Society, 2018, 140, 3560-3563.	6.6	50
54	Controllable Synthesis of Bi <sub>2</sub> WO <sub>6</sub> Nanofibrous Mat by Electrospinning and Enhanced Visible Photocatalytic Degradation Performances. Industrial & Engineering Chemistry Research, 2012, 51, 10307-10312.	1.8	49

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55	Overcoming Ovarian Cancer Drug Resistance with a Cold Responsive Nanomaterial. ACS Central Science, 2018, 4, 567-581.	5.3	49
56	Past and future trends of vehicle emissions in Tianjin, China, from 2000 to 2030. Atmospheric Environment, 2019, 209, 182-191.	1.9	49
57	Flash Flood Risk Analysis Based on Machine Learning Techniques in the Yunnan Province, China. Remote Sensing, 2019, 11, 170.	1.8	49
58	Ultrawide-bandgap semiconductor AlN crystals: growth and applications. Journal of Materials Chemistry C, 2021, 9, 1852-1873.	2.7	49
59	Broadband atomic-layer MoS <sub>2</sub> optical modulators for ultrafast pulse generations in the visible range. Optics Letters, 2017, 42, 547.	1.7	47
60	New 2D Carbon Nitride Organic Materials Synthesis with Huge Application Prospects in CN Photocatalyst. Small, 2018, 14, e1704138.	5.2	47
61	Femtosecond solid-state laser based on tungsten disulfide saturable absorber. Optics Express, 2015, 23, 27292.	1.7	46
62	Effects of Urbanization and Climate Change on Peak Flows over the San Antonio River Basin, Texas. Journal of Hydrometeorology, 2016, 17, 2371-2389.	0.7	45
63	Universal model for intracellular ice formation and its growth. AIChE Journal, 2006, 52, 2596-2606.	1.8	43
64	Construction of Polynitro Compounds as High-Performance Oxidizers via a Two-Step Nitration of Various Functional Groups. Organic Letters, 2019, 21, 1073-1077.	2.4	43
65	Cocatalysts from types, preparation to applications in the field of photocatalysis. Nanoscale, 2021, 13, 10649-10667.	2.8	43
66	Hollow polyhedron structure of amorphous Ni-Co-S/Co(OH) <sub>2</sub> for high performance supercapacitors. Chinese Chemical Letters, 2021, 32, 2453-2458.	4.8	43
67	Quantification of cell viability and rapid screening anti-cancer drug utilizing nanomechanical fluctuation. Biosensors and Bioelectronics, 2016, 77, 164-173.	5.3	42
68	Designing flexible asymmetric supercapacitor with high energy density by electrode engineering and charge matching mechanism. Chemical Engineering Journal, 2022, 429, 132406.	6.6	42
69	Theoretical evaluation of the treatment effectiveness of a novel coaxial multi-slot antenna for conformal microwave ablation of tumors. International Journal of Heat and Mass Transfer, 2015, 90, 81-91.	2.5	41
70	Metal-Free Graphitic Carbon Nitride Photocatalyst Goes Into Two-Dimensional Time. Frontiers in Chemistry, 2018, 6, 551.	1.8	41
71	Biocarbon based template synthesis of uniform lamellar MoS <sub>2</sub> nanoflowers with excellent energy storage performance in lithium-ion battery and supercapacitors. Electrochimica Acta, 2020, 331, 135262.	2.6	41
72	Two-dimensional wide band-gap nitride semiconductor GaN and AlN materials: properties, fabrication and applications. Journal of Materials Chemistry C, 2021, 9, 17201-17232.	2.7	40

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73	Ultrabright Multiplexed Energy-Time-Entangled Photon Generation from Lithium Niobate on Insulator Chip. <i>Physical Review Applied</i> , 2021, 15, .	1.5	39
74	Graphene-Assisted Exfoliation of Molybdenum Disulfide to Fabricate 2D Heterostructure for Enhancing Lithium Storage. <i>Advanced Materials Interfaces</i> , 2017, 4, 1601187.	1.9	38
75	A study of the osmotic characteristics, water permeability, and cryoprotectant permeability of human vaginal immune cells. <i>Cryobiology</i> , 2016, 72, 93-99.	0.3	37
76	A microfluidic perfusion approach for on-chip characterization of the transport properties of human oocytes. <i>Lab on A Chip</i> , 2017, 17, 1297-1305.	3.1	37
77	Photo-enhanced electrocatalysis of sea-urchin shaped Ni <sub>3</sub> (VO <sub>4</sub> ) <sub>2</sub> for the hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 18038-18043.	5.2	37
78	New Promises from an Old Friend: Iodine-Rich Compounds as Prospective Energetic Biocidal Agents. <i>Accounts of Chemical Research</i> , 2021, 54, 332-343.	7.6	37
79	Cold-Responsive Nanocapsules Enable the Sole Cryoprotectant Rehalose Cryopreservation of $\beta^2$ Cell-Laden Hydrogels for Diabetes Treatment. <i>Small</i> , 2019, 15, e1904290.	5.2	36
80	Enhanced Microwave Hyperthermia of Cancer Cells with Fullerene. <i>Molecular Pharmaceutics</i> , 2016, 13, 2184-2192.	2.3	35
81	Parametric analysis and optimization of transcritical-subcritical dual-loop organic Rankine cycle using zeotropic mixtures for engine waste heat recovery. <i>Energy Conversion and Management</i> , 2019, 195, 770-787.	4.4	35
82	Multifunctional Photo- and Magneto-responsive Graphene Oxide-Fe <sub>3</sub> O <sub>4</sub> Nanocomposite-Alginate Hydrogel Platform for Ice Recrystallization Inhibition. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 12379-12388.	4.0	35
83	Fabrication of two-dimensional nanosheets via water freezing expansion exfoliation. <i>Nanotechnology</i> , 2014, 25, 495302.	1.3	34
84	Near-infrared laser mediated modulation of ice crystallization by two-dimensional nanosheets enables high-survival recovery of biological cells from cryogenic temperatures. <i>Nanoscale</i> , 2018, 10, 11760-11774.	2.8	33
85	Selecting Suitable Substituents for Energetic Materials Based on a Fused Triazolo-[1,2,4,5]tetrazine Ring. <i>ACS Applied Energy Materials</i> , 2020, 3, 5510-5516.	2.5	33
86	Miniaturized Metal-Dielectric-Hybrid Fiber Tip Grating for Refractive Index Sensing. <i>IEEE Photonics Technology Letters</i> , 2011, 23, 1712-1714.	1.3	32
87	The crucial role of zona pellucida in cryopreservation of oocytes by vitrification. <i>Cryobiology</i> , 2015, 71, 350-355.	0.3	32
88	Fabrication of CdS/BNNSs nanocomposites with broadband solar absorption for efficient photocatalytic hydrogen evolution. <i>CrystEngComm</i> , 2016, 18, 631-637.	1.3	32
89	Estimating lake temperature profile and evaporation losses by leveraging MODIS LST data. <i>Remote Sensing of Environment</i> , 2020, 251, 112104.	4.6	32
90	Improvement of nickel-cobalt-based supercapacitors energy storage performance by modification of elements. <i>Journal of Colloid and Interface Science</i> , 2021, 602, 712-720.	5.0	32

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91	Quantifying the effects of urbanization on floods in a changing environment to promote water security – A case study of two adjacent basins in Texas. <i>Journal of Hydrology</i> , 2020, 589, 125154.	2.3	31
92	Near-Infrared Light-, Magneto-, and pH-Responsive GO-Fe <sub>3</sub> O <sub>4</sub> /Poly( <i>N</i> -isopropylacrylamide)/alginate Nanocomposite Hydrogel Microcapsules for Controlled Drug Release. <i>Langmuir</i> , 2021, 37, 5522-5530.	1.6	31
93	An improved hot probe for measuring thermal conductivity of liquids. <i>Measurement Science and Technology</i> , 2005, 16, 1430-1435.	1.4	30
94	Numerical simulation of the effect of superparamagnetic nanoparticles on microwave rewarming of cryopreserved tissues. <i>Cryobiology</i> , 2014, 68, 234-243.	0.3	30
95	MOF-derived the direct Z-scheme g-C <sub>3</sub> N <sub>4</sub> /TiO <sub>2</sub> with enhanced visible photocatalytic activity. <i>Journal of Sol-Gel Science and Technology</i> , 2020, 93, 123-130.	1.1	30
96	Flourishing Self-Healing Surface Materials: Recent Progresses and Challenges. <i>Advanced Materials Interfaces</i> , 2020, 7, 1901959.	1.9	30
97	The effect of solution nonideality on modeling transmembrane water transport and diffusion-limited intracellular ice formation during cryopreservation. <i>Journal of Applied Physics</i> , 2014, 115, 144701.	1.1	29
98	Synthesis of monoclinic BiVO <sub>4</sub> microribbons by sol-gel combined with electrospinning process and photocatalytic degradation performances. <i>Journal of Sol-Gel Science and Technology</i> , 2014, 70, 24-32.	1.1	29
99	Three-dimensional numerical simulation of the effects of fractal vascular trees on tissue temperature and intracellular ice formation during combined cancer therapy of cryosurgery and hyperthermia. <i>Applied Thermal Engineering</i> , 2015, 90, 296-304.	3.0	29
100	Active Contour-Based Cell Segmentation During Freezing and Its Application in Cryopreservation. <i>IEEE Transactions on Biomedical Engineering</i> , 2015, 62, 284-295.	2.5	27
101	Novel carbon dots/BiOBr nanocomposites with enhanced UV and visible light driven photocatalytic activity. <i>RSC Advances</i> , 2015, 5, 31057-31063.	1.7	27
102	A microfluidic platform with cell-scale precise temperature control for simultaneous investigation of the osmotic responses of multiple oocytes. <i>Lab on A Chip</i> , 2019, 19, 1929-1940.	3.1	27
103	A Mini Review of the Preparation and Photocatalytic Properties of Two-Dimensional Materials. <i>Frontiers in Chemistry</i> , 2020, 8, 582146.	1.8	27
104	Synergistic Ice Inhibition Effect Enhances Rapid Freezing Cryopreservation with Low Concentration of Cryoprotectants. <i>Advanced Science</i> , 2021, 8, 2003387.	5.6	26
105	Synthesis of multishelled SnO <sub>x</sub> /Co <sub>3</sub> O <sub>4</sub> amorphous/crystalline heterophase with galvanic replacement reaction for superior HCHO sensing. <i>Sensors and Actuators B: Chemical</i> , 2022, 350, 130876.	4.0	26
106	Characteristics of Artemether-Loaded Poly(lactic-co-glycolic) Acid Microparticles Fabricated by Coaxial Electrospray: Validation of Enhanced Encapsulation Efficiency and Bioavailability. <i>Molecular Pharmaceutics</i> , 2017, 14, 4725-4733.	2.3	25
107	Impact of urbanization on rainfall-runoff processes: case study in the Liangshui River Basin in Beijing, China. <i>Proceedings of the International Association of Hydrological Sciences</i> , 0, 373, 7-12.	1.0	25
108	Trifluoromethylation of haloarenes with a new trifluoro-methylating reagent Cu(O <sub>2</sub> CCF <sub>2</sub> SO <sub>2</sub> F) <sub>2</sub> . <i>RSC Advances</i> , 2016, 6, 50250-50254.	1.7	24



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109	A modeling framework for evaluating the drought resilience of a surface water supply system under non-stationarity. <i>Journal of Hydrology</i> , 2018, 563, 22-32.	2.3	24
110	Energy and Biocides Storage Compounds: Synthesis and Characterization of Energetic Bridged Bis(triiodoazoles). <i>Inorganic Chemistry</i> , 2017, 56, 13547-13552.	1.9	23
111	Magnetothermal heating facilitates the cryogenic recovery of stem cell-laden alginate-Fe <sub>3</sub> O <sub>4</sub> nanocomposite hydrogels. <i>Biomaterials Science</i> , 2018, 6, 3139-3151.	2.6	23
112	Control of Biohazards: A High Performance Energetic Polycyclized Iodine-Containing Biocide. <i>Inorganic Chemistry</i> , 2018, 57, 8673-8680.	1.9	23
113	Intermolecular Weak Hydrogen Bonding (Het-H-N/O): an Effective Strategy for the Synthesis of Monosubstituted 1,2,4,5-Tetrazine-Based Energetic Materials with Excellent Sensitivity. <i>Journal of Organic Chemistry</i> , 2019, 84, 16019-16026.	1.7	23
114	Fine-tuned dehydration by trehalose enables the cryopreservation of RBCs with unusually low concentrations of glycerol. <i>Journal of Materials Chemistry B</i> , 2021, 9, 295-306.	2.9	23
115	Preparation of Bi <sub>2</sub> WO <sub>6</sub> by Electrospinning: Researching Their Synthesis Mechanism and Photocatalytic Activity. <i>Journal of Cluster Science</i> , 2011, 22, 621-631.	1.7	22
116	Effects of trehalose vitrification and artificial oocyte activation on the development competence of human immature oocytes. <i>Cryobiology</i> , 2017, 74, 43-49.	0.3	22
117	New Generation Agent Defeat Weapons: Energetic N, N-dimethylene-bridged Polyiodoazoles. <i>Chemistry - A European Journal</i> , 2017, 23, 16753-16757.	1.7	22
118	Two-phase heat transfer model for multiprobe cryosurgery. <i>Applied Thermal Engineering</i> , 2017, 113, 47-57.	3.0	22
119	Ultra-broadband nonlinear optical response of two-dimensional h-BN nanosheets and their hybrid gel glasses. <i>Nanoscale</i> , 2018, 10, 4276-4283.	2.8	22
120	Development of a portable and sensitive blood serum test system using LED-based absorption photometry and pump-free microfluidic technology. <i>Sensors and Actuators B: Chemical</i> , 2019, 286, 86-93.	4.0	22
121	Retrofitting low-cost heating ventilation and air-conditioning systems for energy management in buildings. <i>Applied Energy</i> , 2019, 236, 648-661.	5.1	22
122	Defect engineering in Co-doped Ni <sub>3</sub> S <sub>2</sub> nanosheets as cathode for high-performance aqueous zinc ion battery. <i>Journal of Materials Science and Technology</i> , 2022, 118, 190-198.	5.6	22
123	Periodically poled LiNbO <sub>3</sub> crystals from 1D and 2D to 3D. <i>Science China Technological Sciences</i> , 2020, 63, 1110-1126.	2.0	21
124	Fabrication and characterization of electrospun orthorhombic InVO <sub>4</sub> nanofibers. <i>Applied Surface Science</i> , 2012, 258, 3789-3794.	3.1	20
125	Effects of vitrification cryopreservation on follicular morphology and stress relaxation behaviors of human ovarian tissues: sucrose versus trehalose as the non-permeable protective agent. <i>Human Reproduction</i> , 2015, 30, 877-883.	0.4	20
126	The Unusual Properties of Polytetrafluoroethylene Enable Massive Volume Vitrification of Stem Cells with Low Concentration Cryoprotectants. <i>Advanced Materials Technologies</i> , 2019, 4, 1800289.	3.0	20



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127	Design of nickel cobalt molybdate regulated by boronizing for high-performance supercapacitor applications. <i>Nanoscale</i> , 2020, 12, 17849-17857.	2.8	20
128	Alkylated graphene nanosheets for supercapacitor electrodes: High performance and chain length effect. <i>Carbon</i> , 2015, 94, 114-119.	5.4	19
129	An Improved Model for Nucleation-Limited Ice Formation in Living Cells during Freezing. <i>PLoS ONE</i> , 2014, 9, e98132.	1.1	18
130	Diffraction Interference Induced Superfocusing in Nonlinear Talbot Effect. <i>Scientific Reports</i> , 2015, 4, 6134.	1.6	18
131	High-precision approach based on microfluidic perfusion chamber for quantitative analysis of biophysical properties of cell membrane. <i>International Journal of Heat and Mass Transfer</i> , 2015, 86, 869-879.	2.5	18
132	1,3,5-Triiodo-2,4,6-trinitrobenzene (TITNB) from benzene: Balancing performance and high thermal stability of functional energetic materials. <i>Chemical Engineering Journal</i> , 2019, 378, 122119.	6.6	18
133	Stretchable, breathable, and highly sensitive capacitive and self-powered electronic skin based on core-shell nanofibers. <i>Nanoscale</i> , 2022, 14, 6600-6611.	2.8	18
134	Vitrification of stem cell-laden core-shell microfibers with unusually low concentrations of cryoprotective agents. <i>Biomaterials Science</i> , 2019, 7, 889-900.	2.6	17
135	Investigation of Electromagnetic Resonance Rewarming Enhanced by Magnetic Nanoparticles for Cryopreservation. <i>Langmuir</i> , 2019, 35, 7560-7570.	1.6	17
136	Rational construction of phosphate layer to optimize Cu-regulated Fe <sub>3</sub> O <sub>4</sub> as anode material with promoted energy storage performance for rechargeable Ni-Fe batteries. <i>Journal of Materials Science and Technology</i> , 2022, 108, 133-141.	5.6	17
137	A New Computational Fluid Dynamics Method for In-Depth Investigation of Flow Dynamics in Roller Pump Systems. <i>Artificial Organs</i> , 2014, 38, E106-17.	1.0	16
138	Nanomechanical sensors for direct and rapid characterization of sperm motility based on nanoscale vibrations. <i>Nanoscale</i> , 2017, 9, 18258-18267.	2.8	16
139	Towards Global Hydrological Drought Monitoring Using Remotely Sensed Reservoir Surface Area. <i>Geophysical Research Letters</i> , 2019, 46, 13027-13035.	1.5	16
140	A Safe and Scaled-Up Route to Inert Ammonia Oxide Hydroxylammonium Azide (H <sub>7</sub> N <sub>5</sub> O <sub>2</sub> ), Hydrazinium Azide (H <sub>5</sub> N <sub>5</sub> ), and Ammonium Azide (H <sub>4</sub> N <sub>4</sub> ). <i>ACS Applied Energy Materials</i> , 2019, 2, 6919-6923.	2.5	16
141	Functional energetic biocides by coupling of energetic and biocidal polyiodo building blocks. <i>Chemical Engineering Journal</i> , 2019, 368, 244-251.	6.6	16
142	Thermodynamic analysis of an innovative transcritical CO <sub>2</sub> parallel Rankine cycle driven by engine waste heat and liquefied natural gas cold. <i>Energy Conversion and Management</i> , 2020, 209, 112583.	4.4	16
143	Hydrogel-Based Multifunctional Dressing Combining Magnetothermally Responsive Drug Delivery and Stem Cell Therapy for Enhanced Wound Healing. <i>Advanced Therapeutics</i> , 2020, 3, 2000001.	1.6	16
144	Design of Multilayered Porous Aluminum Nitride for Supercapacitor Applications. <i>Energy &amp; Fuels</i> , 2021, 35, 12628-12636.	2.5	16

#	ARTICLE	IF	CITATIONS
145	Trapped water of human erythrocytes and its application in cryopreservation. <i>Biophysical Chemistry</i> , 2004, 107, 189-195.	1.5	15
146	Engineering interfacial coupling between 3D net-like Ni <sub>3</sub> (VO <sub>4</sub> ) <sub>2</sub> ultrathin nanosheets and MoS <sub>2</sub> on carbon fiber cloth for boosting hydrogen evolution reaction. <i>Journal of Colloid and Interface Science</i> , 2022, 611, 336-345.	5.0	15
147	Preparation and characterization of hollow In <sub>2</sub> O <sub>3</sub> /Co <sub>3</sub> O <sub>4</sub> heterostructured microribbons by electrospinning process. <i>Journal of Sol-Gel Science and Technology</i> , 2012, 61, 169-174.	1.1	14
148	Synthesis of TiO <sub>2</sub> /Bi <sub>2</sub> WO <sub>6</sub> nanofibers with electrospinning technique for photocatalytic methyl blue degradation. <i>Journal of Sol-Gel Science and Technology</i> , 2013, 66, 406-412.	1.1	14
149	Theoretical investigation of a novel microwave antenna aided cryovial for rapid and uniform rewarming of frozen cryoprotective agent solutions. <i>Applied Thermal Engineering</i> , 2015, 89, 968-977.	3.0	14
150	Coupled experimental-modeling analyses of heat transfer in ex-vivo VS55-perfused porcine hepatic tissue being plunged in liquid nitrogen for vitreous cryopreservation. <i>International Journal of Heat and Mass Transfer</i> , 2017, 106, 970-979.	2.5	14
151	Point-of-Care Assessment of Hemostasis with a Love-Mode Surface Acoustic Wave Sensor. <i>ACS Sensors</i> , 2020, 5, 282-291.	4.0	14
152	Inhibition Effect of Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene on Ice Crystals Combined with Laser-Mediated Heating Facilitates High-Performance Cryopreservation. <i>ACS Nano</i> , 2022, 16, 8837-8850.	7.3	14
153	Biotransport and intracellular ice formation phenomena in freezing human embryonic kidney cells (HEK293T). <i>Cryobiology</i> , 2014, 68, 294-302.	0.3	13
154	Improving the density and properties of nitrogen-rich scaffolds by the introduction of a Ca-NO <sub>2</sub> group. <i>New Journal of Chemistry</i> , 2018, 42, 16162-16166.	1.4	13
155	Uncertainty Assessment of Urban Hydrological Modelling from a Multiple Objective Perspective. <i>Water (Switzerland)</i> , 2020, 12, 1393.	1.2	13
156	Effect of hydroxyapatite nanoparticles on osmotic responses of pig iliac endothelial cells. <i>Cryobiology</i> , 2014, 69, 273-280.	0.3	12
157	Vitreous Cryopreservation of Human Umbilical Vein Endothelial Cells with Low Concentration of Cryoprotective Agents for Vascular Tissue Engineering. <i>Tissue Engineering - Part C: Methods</i> , 2016, 22, 964-973.	1.1	12
158	Determination of the Membrane Permeability to Water of Human Vaginal Mucosal Immune Cells at Subzero Temperatures Using Differential Scanning Calorimetry. <i>Biopreservation and Biobanking</i> , 2016, 14, 307-313.	0.5	12
159	<i>p</i> T Properties of 2,3,3,3-Tetrafluoroprop-1-ene (HFO-1234yf) in the Gaseous Phase. <i>Journal of Chemical &amp; Engineering Data</i> , 2017, 62, 3353-3359.	1.0	12
160	Sensing Cell Membrane Biophysical Properties for Detection of High Quality Human Oocytes. <i>ACS Sensors</i> , 2019, 4, 192-199.	4.0	12
161	NASA's MODIS/VIIRS Global Water Reservoir Product Suite from Moderate Resolution Remote Sensing Data. <i>Remote Sensing</i> , 2021, 13, 565.	1.8	12
162	Assessing threshold values for eutrophication management using Bayesian method in Yuqiao Reservoir, North China. <i>Environmental Monitoring and Assessment</i> , 2015, 187, 195.	1.3	11

#	ARTICLE	IF	CITATIONS
163	Prevention of Osmotic Injury to Human Umbilical Vein Endothelial Cells for Biopreservation: A First Step Toward Biobanking of Endothelial Cells for Vascular Tissue Engineering. <i>Tissue Engineering - Part C: Methods</i> , 2016, 22, 270-279.	1.1	11
164	Effect of distribution tabs on mass transfer of artificial kidney. <i>AIChE Journal</i> , 2004, 50, 786-790.	1.8	10
165	High accuracy thermal conductivity measurement of aqueous cryoprotective agents and semi-rigid biological tissues using a microfabricated thermal sensor. <i>Scientific Reports</i> , 2015, 5, 10377.	1.6	10
166	Microencapsulation Facilitates Low-Cryoprotectant Vitrification of Human Umbilical Vein Endothelial Cells. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 5273-5283.	2.6	10
167	The implications of future climate change on the blue water footprint of hydropower in the contiguous US <sup>*</sup> . <i>Environmental Research Letters</i> , 2021, 16, 034003.	2.2	10
168	Amorphous Ni-Co-S nanocages assembled with nanosheet arrays as cathode for high-performance zinc ion battery. <i>Chinese Chemical Letters</i> , 2022, 33, 3272-3276.	4.8	10
169	High Sensitivity, Broad Working Range, Comfortable, and Biofriendly Wearable Strain Sensor for Electronic Skin. <i>Advanced Materials Technologies</i> , 2022, 7, .	3.0	10
170	Physics-Guided Long Short-Term Memory Network for Streamflow and Flood Simulations in the Lancang-Mekong River Basin. <i>Water (Switzerland)</i> , 2022, 14, 1429.	1.2	10
171	Microfabricated thermal conductivity sensor: a high resolution tool for quantitative thermal property measurement of biomaterials and solutions. <i>Biomedical Microdevices</i> , 2011, 13, 923-928.	1.4	9
172	Novel Bi <sub>2</sub> WO <sub>6</sub> flower type structure controllable synthesis and enhanced visible photocatalytic degradation performances. <i>Journal of Nanoparticle Research</i> , 2013, 15, 1.	0.8	9
173	Why the hydrothermal fluorinated method can improve photocatalytic activity of carbon nitride. <i>Chinese Chemical Letters</i> , 2021, 32, 277-281.	4.8	9
174	Dual Dependence of Cryobiological Properties of Sf21 Cell Membrane on the Temperature and the Concentration of the Cryoprotectant. <i>PLoS ONE</i> , 2013, 8, e72836.	1.1	9
175	Label-Free and Noninvasive Single-Cell Characterization for the Viscoelastic Properties of Cryopreserved Human Red Blood Cells Using a Dielectrophoresis-On-a-Chip Approach. <i>Analytical Chemistry</i> , 2022, 94, 10245-10255.	3.2	9
176	One-Dimensional Bi <sub>2</sub> WO <sub>6</sub> Nanofibers Controllable Synthesis by Electrospinning and Enhanced Visible Photocatalytic Degradation Performances. <i>Journal of Cluster Science</i> , 2013, 24, 523-530.	1.7	8
177	Measurement of the biophysical properties of porcine adipose-derived stem cells by a microperfusion system. <i>Cryobiology</i> , 2014, 69, 442-450.	0.3	8
178	Preparation of Low-Dimensional Bismuth Tungstate (Bi <sub>2</sub> WO <sub>6</sub> ) Photocatalyst by Electrospinning. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019, 216, 1900035.	0.8	8
179	Artificial Blood Vessel Frameworks from 3D Printing-Based Super-Assembly as <i>In Vitro</i> Models for Early Diagnosis of Intracranial Aneurysms. <i>Chemistry of Materials</i> , 2020, 32, 3188-3198.	3.2	8
180	Impacts of urbanization, antecedent rainfall event, and cyclone tracks on extreme floods at Houston reservoirs during Hurricane Harvey. <i>Environmental Research Letters</i> , 2020, 15, 124012.	2.2	7

#	ARTICLE	IF	CITATIONS
181	Statistical Estimation of Red Blood Cell Osmotic Damage During Cryoprotective Agent Removal from Cryopreserved Blood. <i>Biopreservation and Biobanking</i> , 2013, 11, 299-308.	0.5	6
182	2D WS <sub>2</sub> co-catalysts induce the growth of CdS and enhance the photocatalytic performance. <i>CrystEngComm</i> , 2021, 23, 4451-4458.	1.3	6
183	Hydrogel Microencapsulation Enhances Cryopreservation of Red Blood Cells with Trehalose. <i>ACS Biomaterials Science and Engineering</i> , 2022, 8, 2066-2075.	2.6	6
184	Effect of iron oxide nanoparticles on the permeability properties of Sf21 cells. <i>Cryobiology</i> , 2016, 72, 21-26.	0.3	5
185	Synthesis of WS <sub>1.76</sub> Te <sub>0.24</sub> alloy through chemical vapor transport and its high-performance saturable absorption. <i>Scientific Reports</i> , 2019, 9, 19457.	1.6	5
186	Controlled Release of Cryoprotectants by Near-Infrared Irradiation for Improved Cell Cryopreservation. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 2520-2529.	2.6	5
187	Midinfrared Tunable Laser with Noncritical Frequency Matching in Box Resonator Geometry. <i>Physical Review Letters</i> , 2021, 127, 213902.	2.9	5
188	Modelling the Vegetation Response to Climate Changes in the Yarlung Zangbo River Basin Using Random Forest. <i>Water (Switzerland)</i> , 2020, 12, 1433.	1.2	4
189	Grass modelling in data-limited areas by incorporating MODIS data products. <i>Field Crops Research</i> , 2021, 271, 108250.	2.3	4
190	Bimetal phosphide as high efficiency and stable bifunctional electrocatalysts for hydrogen and oxygen evolution reaction in alkaline solution. <i>RSC Advances</i> , 2022, 12, 9051-9057.	1.7	4
191	The Natural Cryoprotectant Honey for Fertility Cryopreservation. <i>Bioengineering</i> , 2022, 9, 88.	1.6	4
192	Approaches to extract thermal properties from dual-thermistor heat pulse experimental data. <i>Measurement Science and Technology</i> , 2004, 15, 221-226.	1.4	3
193	Comparative study of glass transformation of glycerol-H <sub>2</sub> O-NaCl ternary system and glycerol-PBS complex system. <i>Thermochimica Acta</i> , 2004, 419, 131-134.	1.2	3
194	Influence of hydroxyapatite nanoparticles on the viscosity of dimethyl sulfoxide-H <sub>2</sub> O-NaCl and glycerol-H <sub>2</sub> O-NaCl ternary systems at subzero temperatures. <i>Cryobiology</i> , 2014, 69, 291-298.	0.3	3
195	Improving supercapacitor performance of alkylated graphene nanosheets via partial fluorination on their alkyl chains. <i>RSC Advances</i> , 2015, 5, 92159-92164.	1.7	3
196	Comparison of the Fitting Validity Between the 2P Model and the Nondilute Solution Model Using Statistical Methods in Modeling Cell Membrane Permeabilities. <i>Biopreservation and Biobanking</i> , 2016, 14, 39-44.	0.5	2
197	Non-conductive ion extraction molds biomass into dual cross-linked structures with defect as both commercial conductor and electrode active material. <i>Journal of Energy Storage</i> , 2022, 52, 105043.	3.9	2
198	2.8 $\mu$ m Passively Q-switched solid state pulse laser based on MoS <sub>2</sub> /Graphene heterojunction. , 2017, , .		1

#	ARTICLE	IF	CITATIONS
199	New Properties of Two-dimensional Materials: Highly Effective Thermal Catalytic Degradation Activity. ChemistrySelect, 2018, 3, 10133-10138.	0.7	1
200	Comparison study of trapped water in human erythrocytes by EPC and DSC method and its application. Science in China Series D: Earth Sciences, 2004, 47, 343.	0.9	1
201	Recent progress of mechanism of mineralization process induced by $Ta_2O_5$ / PCL scaffolds. Journal of Applied Polymer Science, 0, , .	1.3	1
202	Low-Temperature Floating Plasma Oxidation of Poly-SiGe. Materials Research Society Symposia Proceedings, 1998, 508, 157.	0.1	0
203	Determination of cell volume during equilibrium freezing process. Science Bulletin, 2003, 48, 1551.	1.7	0
204	Construction of multidimensional CdS@MoS <sub>2</sub> heterojunction for enhancing the activity and transfer efficiency of photogenerated carriers. New Journal of Chemistry, 0, , .	1.4	0