Yanfeng Zhang

List of Publications by Year in Descending Order

121 papers	8,239 citations	45 h-index	89 g-index
124 ext. papers	9,828 ext. citations	11.3 avg, IF	6.14 L-index

#	Paper	IF	Citations
121	Isospecific Polymerization of Halide- and Amino-Substituted Styrenes Using a Bis(phenolate) Titanium Catalyst. *Catalysts*, **2022**, 12, 439	4	
120	Effect of substrate symmetry on the orientations of MoS monolayers. *Nanotechnology*, **2021**, 32, 095601	3.4	2
119	Optogenetics-Inspired Neuromorphic Optoelectronic Synaptic Transistors with Optically Modulated Plasticity. *Advanced Optical Materials*, **2021**, 9, 2002232	8.1	9
118	Bilayer of polyelectrolyte films for spontaneous power generation in air up to an integrated 1,000 V output. *Nature Nanotechnology*, **2021**, 16, 811-819	28.7	44
117	A Library of Atomically Thin 2D Materials Featuring the Conductive-Point Resistive Switching Phenomenon. *Case Reports in Obstetrics and Gynecology*, **2021**, 33, e2007792	0.8	3
116	Bandgap control in two-dimensional semiconductors via coherent doping of plasmonic hot electrons. *Nature Communications*, **2021**, 12, 4332	17.4	6
115	Magnetic Moments Induced by Atomic Vacancies in Transition Metal Dichalcogenide Flakes. *Advanced Materials*, **2021**, 33, e2005465	24	18
114	Bacterial Cellulose Composite Solid Polymer Electrolyte With High Tensile Strength and Lithium Dendrite Inhibition for Long Life Battery. *Energy and Environmental Materials*, **2021**, 4, 434-443	13	15
113	Out-of-Plane Deformations Determined Mechanics of Vanadium Disulfide (VS) Sheets. *ACS Applied Materials & Interfaces*, **2021**, 13, 3040-3050	9.5	6
112	Two-Dimensional Metallic Vanadium Ditelluride as a High-Performance Electrode Material. *ACS Nano*, **2021**, 15, 1858-1868	16.7	11
111	Identifying the Intermediate Free-Carrier Dynamics Across the Charge Separation in Monolayer MoS/ReSe Heterostructures. *ACS Nano*, **2021**, 15, 16760-16768	16.7	4
110	A Library of Atomically Thin 2D Materials Featuring the Conductive-Point Resistive Switching Phenomenon. *Advanced Materials*, **2021**, 33, 2007792	24	27
109	2D Palladium Diselenide: Giant Thickness-Tunable Bandgap and Robust Air Stability of 2D Palladium Diselenide (Small 19/2020). *Small*, **2020**, 16, 2070106	11	
108	Roles of salts in the chemical vapor deposition synthesis of two-dimensional transition metal chalcogenides. *Dalton Transactions*, **2020**, 49, 10319-10327	4.3	18
107	Two-Dimensional Metallic NiTe with Ultrahigh Environmental Stability, Conductivity, and Electrocatalytic Activity. *ACS Nano*, **2020**, 14, 9011-9020	16.7	27
106	A polymeric prodrug for non-invasive, real-time reporting drug release based on □turn-on□ fluorescent probes. *Reactive and Functional Polymers*, **2020**, 154, 104649	4.6	1
105	Extremely Tough, Puncture-Resistant, Transparent, and Photoluminescent Polyurethane Elastomers for Crack Self-Diagnose and Healing Tracking. *ACS Applied Materials & Interfaces*, **2020**, 12, 30847-30855	9.5	34

104	Wafer-scale single-crystal hexagonal boron nitride monolayers on Cu′(111). *Nature*, **2020**, 579, 219-223	50.4	209
103	H-Bonding Supramolecular Hydrogels with Promising Mechanical Strength and Shape Memory Properties for Postoperative Antiadhesion Application. *ACS Applied Materials & Interfaces*, **2020**, 12, 34161-34169	9.5	18
102	Molten-Salt-Assisted Chemical Vapor Deposition Process for Substitutional Doping of Monolayer MoS and Effectively Altering the Electronic Structure and Phononic Properties. *Advanced Science*, **2020**, 7, 2001080	13.6	15
101	Revealing Strong Plasmon-Exciton Coupling between Nanogap Resonators and Two-Dimensional Semiconductors at Ambient Conditions. *Physical Review Letters*, **2020**, 124, 063902	7.4	39
100	Salt-assisted growth and ultrafast photocarrier dynamics of large-sized monolayer ReSe2. *Nano Research*, **2020**, 13, 667-675	10	12
99	Hexagonal boron nitride induces anion trapping in a polyethylene oxide based solid polymer electrolyte for lithium dendrite inhibition. *Journal of Materials Chemistry A*, **2020**, 8, 9579-9589	13	26
98	A composite solid polymer electrolyte incorporating MnO2 nanosheets with reinforced mechanical properties and electrochemical stability for lithium metal batteries. *Journal of Materials Chemistry A*, **2020**, 8, 2021-2032	13	64
97	Controlled Growth and Thickness-Dependent Conduction-Type Transition of 2D Ferrimagnetic Cr S Semiconductors. *Advanced Materials*, **2020**, 32, e1905896	24	58
96	Isometric Thionated Naphthalene Diimides As Organic Cathodes for High Capacity Lithium Batteries. *Chemistry of Materials*, **2020**, 32, 10575-10583	9.6	8
95	Large-Scale Thin CsPbBr Single-Crystal Film Grown on Sapphire Chemical Vapor Deposition: Toward Laser Array Application. *ACS Nano*, **2020**, 14, 15605-15615	16.7	51
94	Scalable salt-templated directed synthesis of high-quality MoS2 nanosheets powders towards energetic and environmental applications. *Nano Research*, **2020**, 13, 3098-3104	10	9
93	Giant Thickness-Tunable Bandgap and Robust Air Stability of 2D Palladium Diselenide. *Small*, **2020**, 16, e2000754	11	11
92	Anisotropic Growth and Scanning Tunneling Microscopy Identification of Ultrathin Even-Layered PdSe Ribbons. *Small*, **2019**, 15, e1902789	11	36
91	The Marriage of Carborane with Chalcogen Atoms: Nonconjugation, □Conjugation, and Intramolecular Charge Transfer. *Organic Letters*, **2019**, 21, 8285-8289	6.2	8
90	Scalable Production of Two-Dimensional Metallic Transition Metal Dichalcogenide Nanosheet Powders Using NaCl Templates toward Electrocatalytic Applications. *Journal of the American Chemical Society*, **2019**, 141, 18694-18703	16.4	34
89	Chemical Vapor Deposition Grown Large-Scale Atomically Thin Platinum Diselenide with Semimetal-Semiconductor Transition. *ACS Nano*, **2019**, 13, 8442-8451	16.7	60
88	Reconfigurable Poly(urea-urethane) Thermoset Based on Hindered Urea Bonds with Triple-Shape-Memory Performance. *Macromolecular Chemistry and Physics*, **2019**, 220, 1900148	2.6	17
87	Catalyst-Free One-Step Preparation of Self-Crosslinked pH-Responsive Vesicles. *Macromolecular Rapid Communications*, **2019**, 40, e1900149	4.8	5

86	Tunable and Processable Shape-Memory Materials Based on Solvent-Free, Catalyst-Free Polycondensation between Formaldehyde and Diamine at Room Temperature. *ACS Macro Letters*, **2019**, 582-587	6.6	32
85	Microscopic insights into the catalytic mechanisms of monolayer MoS2 and its heterostructures in hydrogen evolution reaction. *Nano Research*, **2019**, 12, 2140-2149	10	27
84	Tunable Valley Polarized Plasmon-Exciton Polaritons in Two-Dimensional Semiconductors. *ACS Nano*, **2019**, 13, 1333-1341	16.7	22
83	Thinnest Nonvolatile Memory Based on Monolayer h-BN. *Advanced Materials*, **2019**, 31, e1806790	24	105
82	Cationic Chalcogenoviologen Derivatives for Photodynamic Antimicrobial Therapy and Skin Regeneration. *Chemistry - A European Journal*, **2019**, 25, 13472-13478	4.8	16
81	Thickness Tunable Wedding-Cake-like MoS Flakes for High-Performance Optoelectronics. *ACS Nano* , **2019**, 13, 3649-3658	16.7	52
80	Boosting the electrocatalytic activity of amorphous molybdenum sulfide nanoflakes via nickel sulfide decoration. *Nanoscale*, **2019**, 11, 22971-22979	7.7	9
79	Intercalation-Mediated Synthesis and Interfacial Coupling Effect Exploration of Unconventional Graphene/PtSe Vertical Heterostructures. *ACS Applied Materials & Interfaces*, **2019**, 11, 48221-48229	8.5	3
78	2D Metallic Transitional Metal Dichalcogenides for Electrochemical Hydrogen Evolution. *Energy Technology*, **2019**, 7, 1801025	3.5	2
77	Space-confined growth of monolayer ReSe2 under a graphene layer on Au foils. *Nano Research*, **2019**, 12, 149-157	10	15
76	Vertical 1T-TaS Synthesis on Nanoporous Gold for High-Performance Electrocatalytic Applications. *Advanced Materials*, **2018**, 30, e1705916	24	55
75	Batch production of 6-inch uniform monolayer molybdenum disulfide catalyzed by sodium in glass. *Nature Communications*, **2018**, 9, 979	17.4	224
74	All-Inorganic Perovskite Nanowires-InGaZnO Heterojunction for High-Performance Ultraviolet-Visible Photodetectors. *ACS Applied Materials & Interfaces*, **2018**, 10, 7231-7238	9.5	40
73	Surface Plasmon Enhanced Strong Exciton-Photon Coupling in Hybrid Inorganic-Organic Perovskite Nanowires. *Nano Letters*, **2018**, 18, 3335-3343	11.5	99
72	Direct synthesis and in situ characterization of monolayer parallelogrammic rhenium diselenide on gold foil. *Communications Chemistry*, **2018**, 1,	6.3	44
71	Ultrafast Charge Transfer in Perovskite Nanowire/2D Transition Metal Dichalcogenide Heterostructures. *Journal of Physical Chemistry Letters*, **2018**, 9, 1655-1662	6.4	44
70	Application of chemical vapor deposited monolayer ReSe2 in the electrocatalytic hydrogen evolution reaction. *Nano Research*, **2018**, 11, 1787-1797	10	48
69	Low Threshold Fabry-Pérot Mode Lasing from Lead Iodide Trapezoidal Nanoplatelets. *Small*, **2018**, 14, e1801938	11	15

68	An Enzyme-Responsive "Turn-on" Fluorescence Polymeric Superamphiphile as a Potential Visualizable Phosphate Prodrug Delivery Vehicle. *Macromolecular Bioscience*, **2018**, 18, e1800045	5.5	4
67	High-Temperature Continuous-Wave Pumped Lasing from Large-Area Monolayer Semiconductors Grown by Chemical Vapor Deposition. *ACS Nano*, **2018**, 12, 9390-9396	16.7	29
66	Ultrathin CsPbX Nanowire Arrays with Strong Emission Anisotropy. *Advanced Materials*, **2018**, 30, e1801805	24	95
65	Atomristor: Nonvolatile Resistance Switching in Atomic Sheets of Transition Metal Dichalcogenides. *Nano Letters*, **2018**, 18, 434-441	11.5	226
64	Heterostructured graphene quantum dot/WSe2/Si photodetector with suppressed dark current and improved detectivity. *Nano Research*, **2018**, 11, 3233-3243	10	38
63	Self-Powered MoS2/PDPP3T Heterotransistor-Based Broadband Photodetectors. *Advanced Electronic Materials*, **2018**, 5, 1800580	6.4	10
62	Chemical Vapor Deposition Grown Wafer-Scale 2D Tantalum Diselenide with Robust Charge-Density-Wave Order. *Advanced Materials*, **2018**, 30, e1804616	24	45
61	Decoupling the Interaction between Wet-Transferred MoS2 and Graphite Substrate by an Interfacial Water Layer. *Advanced Materials Interfaces*, **2018**, 5, 1800641	4.6	10
60	Transformation of monolayer MoS2 into multiphasic MoTe2: Chalcogen atom-exchange synthesis route. *Nano Research*, **2017**, 10, 2761-2771	10	11
59	Progress in Controllable Construction and Energy-Related Applications of MX2/Graphene and MX2/MX2 Heterostructures. *ChemNanoMat*, **2017**, 3, 340-351	3.5	4
58	Quick one-pot synthesis of amorphous carbon-coated cobalt ferrite twin elliptical frustums for enhanced lithium storage capability. *Journal of Materials Chemistry A*, **2017**, 5, 8062-8069	13	40
57	Novel Transfer Behaviors in 2D MoS2/WSe2 Heterotransistor and Its Applications in Visible-Near Infrared Photodetection. *Advanced Electronic Materials*, **2017**, 3, 1600502	6.4	40
56	Vanadium Diselenide Single Crystals: Van der Waals Epitaxial Growth of 2D Metallic Vanadium Diselenide Single Crystals and their Extra-High Electrical Conductivity (Adv. Mater. 37/2017). *Advanced Materials*, **2017**, 29,	24	16
55	Surface State Mediated Interlayer Excitons in a 2D Nonlayered Layered Semiconductor Heterojunction. *Advanced Electronic Materials*, **2017**, 3, 1700373	6.4	13
54	Two-dimensional metallic tantalum disulfide as a hydrogen evolution catalyst. *Nature Communications*, **2017**, 8, 958	17.4	143
53	Van der Waals Epitaxial Growth of 2D Metallic Vanadium Diselenide Single Crystals and their Extra-High Electrical Conductivity. *Advanced Materials*, **2017**, 29, 1702359	24	135
52	Supramolecular Assembly of Comb-like Macromolecules Induced by Chemical Reactions that Modulate the Macromolecular Interactions In Situ. *Journal of the American Chemical Society*, **2017**, 139, 11106-11116	16.4	17
51	Folding Cooperativity of Synthetic Polypeptides with or without Tertiary Interactions. *ACS Macro Letters*, **2017**, 6, 733-737	6.6	4

50	Quasi-freestanding, striped WS2 monolayer with an invariable band gap on Au(001). *Nano Research*, **2017**, 10, 3875-3884	10	7
49	Malleable and Recyclable Poly(urea-urethane) Thermosets bearing Hindered Urea Bonds. *Advanced Materials*, **2016**, 28, 7646-51	24	230
48	Suppression of Hepatic Inflammation via Systemic siRNA Delivery by Membrane-Disruptive and Endosomolytic Helical Polypeptide Hybrid Nanoparticles. *ACS Nano*, **2016**, 10, 1859-70	16.7	82
47	Periodic Modulation of the Doping Level in Striped MoS Superstructures. *ACS Nano*, **2016**, 10, 3461-8	16.7	26
46	Monolayer MoS2 Dendrites on a Symmetry-Disparate SrTiO3 (001) Substrate: Formation Mechanism and Interface Interaction. *Advanced Functional Materials*, **2016**, 26, 3299-3305	15.6	44
45	Recent Advances in Controlling Syntheses and Energy Related Applications of MX2 and MX2/Graphene Heterostructures. *Advanced Energy Materials*, **2016**, 6, 1600459	21.8	35
44	Temperature-Mediated Selective Growth of MoS /WS and WS /MoS Vertical Stacks on Au Foils for Direct Photocatalytic Applications. *Advanced Materials*, **2016**, 28, 10664-10672	24	142
43	Narrow-Gap Quantum Wires Arising from the Edges of Monolayer MoS2 Synthesized on Graphene. *Advanced Materials Interfaces*, **2016**, 3, 1600332	4.6	23
42	UV-responsive degradable polymers derived from 1-(4-aminophenyl) ethane-1,2-diol. *Journal of Polymer Science Part A*, **2015**, 53, 1161-1168	2.5	13
41	Chemical vapor deposition of monolayer WS2 nanosheets on Au foils toward direct application in hydrogen evolution. *Nano Research*, **2015**, 8, 2881-2890	10	75
40	Functional polyesters derived from alternating copolymerization of norbornene anhydride and epoxides. *Polymer Chemistry*, **2015**, 6, 3586-3590	4.9	30
39	Dimeric drug polymeric nanoparticles with exceptionally high drug loading and quantitative loading efficiency. *Journal of the American Chemical Society*, **2015**, 137, 3458-61	16.4	240
38	Non-invasive, real-time reporting drug release in vitro and in vivo. *Chemical Communications*, **2015**, 51, 6948-51	5.8	44
37	Trigger chemistries for better industrial formulations. *ACS Applied Materials & Interfaces*, **2015**, 7, 6369-82	9.5	50
36	All Chemical Vapor Deposition Synthesis and Intrinsic Bandgap Observation of MoS2 /Graphene Heterostructures. *Advanced Materials*, **2015**, 27, 7086-92	24	100
35	Substrate Facet Effect on the Growth of Monolayer MoS2 on Au Foils. *ACS Nano*, **2015**, 9, 4017-25	16.7	78
34	Redox-Responsive Self-Assembled Chain-Shattering Polymeric Therapeutics. *Biomaterials Science*, **2015**, 3, 1061-5	7.4	30
33	Materials, designs, and operational characteristics for fully biodegradable primary batteries. *Advanced Materials*, **2014**, 26, 3879-84	24	211

32	Recent advances in amino acid N-carboxyanhydrides and synthetic polypeptides: chemistry, self-assembly and biological applications. *Chemical Communications*, **2014**, 50, 139-55	5.8	224
31	Dynamic urea bond for the design of reversible and self-healing polymers. *Nature Communications*, **2014**, 5, 3218	17.4	560
30	Ultrafast charge transfer in atomically thin MoS2/WS2 heterostructures. *Nature Nanotechnology*, **2014**, 9, 682-6	28.7	1432
29	Trigger-Responsive Poly(β-amino ester) Hydrogels.. *ACS Macro Letters*, **2014**, 3, 693-697	6.6	40
28	PEG-Polypeptide Dual Brush Block Copolymers: Synthesis and Application in Nanoparticle Surface PEGylation. *ACS Macro Letters*, **2013**, 2, 809-813	6.6	29
27	Mn atomic layers under inert covers of graphene and hexagonal boron nitride prepared on Rh(111). *Nano Research*, **2013**, 6, 887-896	10	21
26	Trigger-responsive chain-shattering polymers. *Polymer Chemistry*, **2013**, 4, 224-228	4.9	38
25	Cationic, helical polypeptide-based gene delivery for IMR-90 fibroblasts and human embryonic stem cells. *Biomaterials Science*, **2013**, 1, 719-727	7.4	28
24	Redox-Responsive, Core Cross-Linked Polyester Micelles. *ACS Macro Letters*, **2013**, 2, 40-44	6.6	110
23	Nucleation-controlled polymerization of nanoparticles into supramolecular structures. *Journal of the American Chemical Society*, **2013**, 135, 11417-20	16.4	48
22	Chain-shattering polymeric therapeutics with on-demand drug-release capability. *Angewandte Chemie - International Edition*, **2013**, 52, 6435-9	16.4	118
21	Chain-Shattering Polymeric Therapeutics with On-Demand Drug-Release Capability. *Angewandte Chemie*, **2013**, 125, 6563-6567	3.6	23
20	Synthesis of water-soluble poly(α-hydroxy acids) from living ring-opening polymerization of O-benzyl-L-serine carboxyanhydrides. *ACS Macro Letters*, **2012**, 1, 441-444	6.6	48
19	Different growth behaviors of ambient pressure chemical vapor deposition graphene on Ni(111) and Ni films: A scanning tunneling microscopy study. *Nano Research*, **2012**, 5, 402-411	10	55
18	Effect of Chain Length on Cytotoxicity and Endocytosis of Cationic Polymers. *Macromolecules*, **2011**, 44, 2050-2057	5.5	86
17	Water-Soluble Polypeptides with Elongated, Charged Side Chains Adopt Ultra-Stable Helical Conformations. *Macromolecules*, **2011**, 44, 6641-6644	5.5	64
16	Interrupted Helical Structure of Grafted Polypeptides in Brush-Like Macromolecules. *Macromolecules*, **2011**, 44, 8699-8708	5.5	26
15	Unique Thermo-Induced Sequential Gel/Sol/Gel Transition of Responsive Multiblock Copolymer-Based Hydrogels. *Macromolecules*, **2010**, 43, 5184-5187	5.5	44

14	Multi-Responsive Supramolecular Double Hydrophilic Diblock Copolymer Driven by Host-Guest Inclusion Complexation between β-Cyclodextrin and Adamantyl Moieties. *Macromolecular Chemistry and Physics*, **2009**, 210, 2125-2137	2.6	86
13	Synthesis and Aggregation Behavior of Multi-Responsive Double Hydrophilic ABC Miktoarm Star Terpolymer. *Macromolecular Rapid Communications*, **2009**, 30, 941-7	4.8	63
12	Micelles possessing mixed cores and thermoresponsive shells fabricated from well-defined amphiphilic ABC miktoarm star terpolymers. *Journal of Polymer Science Part A*, **2009**, 47, 1636-1650	2.5	58
11	One-pot synthesis of ABC miktoarm star terpolymers by coupling ATRP, ROP, and click chemistry techniques. *Journal of Polymer Science Part A*, **2009**, 47, 3066-3077	2.5	60
10	Synthesis and supramolecular self-assembly of stimuli-responsive water-soluble Janus-type heteroarm star copolymers. *Soft Matter*, **2009**, 5, 3932	3.6	67
9	Facile preparation of well-defined AB2 Y-shaped miktoarm star polypeptide copolymer via the combination of ring-opening polymerization and click chemistry. *Biomacromolecules*, **2008**, 9, 2586-93	6.9	117
8	Fabrication of Hybrid Silica Nanoparticles Densely Grafted with Thermoresponsive Poly(N-isopropylacrylamide) Brushes of Controlled Thickness via Surface-Initiated Atom Transfer Radical Polymerization. *Chemistry of Materials*, **2008**, 20, 101-109	9.6	195
7	Facile fabrication of hybrid nanoparticles surface grafted with multi-responsive polymer brushes via block copolymer micellization and self-catalyzed core gelation. *Journal of Polymer Science Part A* , **2008**, 46, 2379-2389	2.5	29
6	Fabrication of Fullerene-Containing Hybrid Vesicles via Supramolecular Self-Assembly of a Well-Defined Amphiphilic Block Copolymer Incorporated with a Single C60 Moiety at the Diblock Junction Point. *Macromolecular Rapid Communications*, **2008**, 29, 340-346	4.8	24
5	Stimuli-Responsive Double Hydrophilic Block Copolymer Micelles with Switchable Catalytic Activity. *Macromolecules*, **2007**, 40, 3538-3546	5.5	141
4	Micellization Kinetics of a Novel Multi-Responsive Double Hydrophilic Diblock Copolymer Studied by Stopped-Flow pH and Temperature Jump. *Macromolecular Chemistry and Physics*, **2007**, 208, 2492-2501	2.6	38
3	Single-Step in Situ Preparation of Polymer-Grafted Multi-Walled Carbon Nanotube Composites under 60Co γ-Ray Irradiation. *Chemistry of Materials*, **2006**, 18, 2929-2934	9.6	76
2	Fabrication of Hybrid Nanoparticles with Thermoresponsive Coronas via a Self-Assembling Approach. *Macromolecules*, **2005**, 38, 9813-9820	5.5	79
1	Double hydrophilic block copolymer monolayer protected hybrid gold nanoparticles and their shell cross-linking. *Journal of Physical Chemistry B*, **2005**, 109, 22159-66	3.4	99