Yanfeng Zhang

List of Publications by Year in descending order

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30070 11,365 122 54 citations h-index papers

104 g-index 124 124 124 16413 docs citations times ranked citing authors all docs

29157

#	Article	IF	CITATIONS
1	Ultrafast charge transfer in atomically thin MoS2/WS2 heterostructures. Nature Nanotechnology, 2014, 9, 682-686.	31.5	1,838
2	Dynamic urea bond for the design of reversible and self-healing polymers. Nature Communications, 2014, 5, 3218.	12.8	738
3	Wafer-scale single-crystal hexagonal boron nitride monolayers on CuÂ(111). Nature, 2020, 579, 219-223.	27.8	409
4	Atomristor: Nonvolatile Resistance Switching in Atomic Sheets of Transition Metal Dichalcogenides. Nano Letters, 2018, 18, 434-441.	9.1	375
5	Batch production of 6-inch uniform monolayer molybdenum disulfide catalyzed by sodium in glass. Nature Communications, 2018, 9, 979.	12.8	338
6	Malleable and Recyclable Poly(ureaâ€urethane) Thermosets bearing Hindered Urea Bonds. Advanced Materials, 2016, 28, 7646-7651.	21.0	318
7	Dimeric Drug Polymeric Nanoparticles with Exceptionally High Drug Loading and Quantitative Loading Efficiency. Journal of the American Chemical Society, 2015, 137, 3458-3461.	13.7	294
8	Materials, Designs, and Operational Characteristics for Fully Biodegradable Primary Batteries. Advanced Materials, 2014, 26, 3879-3884.	21.0	263
9	Recent advances in amino acid N-carboxyanhydrides and synthetic polypeptides: chemistry, self-assembly and biological applications. Chemical Communications, 2014, 50, 139-155.	4.1	256
10	Fabrication of Hybrid Silica Nanoparticles Densely Grafted with Thermoresponsive Poly(<i>N</i> -isopropylacrylamide) Brushes of Controlled Thickness via Surface-Initiated Atom Transfer Radical Polymerization. Chemistry of Materials, 2008, 20, 101-109.	6.7	208
11	Bilayer of polyelectrolyte films for spontaneous power generation in air up to an integrated 1,000 V output. Nature Nanotechnology, 2021, 16, 811-819.	31.5	193
12	Two-dimensional metallic tantalum disulfide as a hydrogen evolution catalyst. Nature Communications, 2017, 8, 958.	12.8	191
13	Van der Waals Epitaxial Growth of 2D Metallic Vanadium Diselenide Single Crystals and their Extraâ€High Electrical Conductivity. Advanced Materials, 2017, 29, 1702359.	21.0	191
14	Temperatureâ€Mediated Selective Growth of MoS ₂ /WS ₂ and WS ₂ /MoS ₂ Vertical Stacks on Au Foils for Direct Photocatalytic Applications. Advanced Materials, 2016, 28, 10664-10672.	21.0	188
15	Thinnest Nonvolatile Memory Based on Monolayer hâ€BN. Advanced Materials, 2019, 31, e1806790.	21.0	174
16	Stimuli-Responsive Double Hydrophilic Block Copolymer Micelles with Switchable Catalytic Activity. Macromolecules, 2007, 40, 3538-3546.	4.8	153
17	Ultrathin CsPbX ₃ Nanowire Arrays with Strong Emission Anisotropy. Advanced Materials, 2018, 30, e1801805.	21.0	135
18	Surface Plasmon Enhanced Strong Exciton–Photon Coupling in Hybrid Inorganic–Organic Perovskite Nanowires. Nano Letters, 2018, 18, 3335-3343.	9.1	133

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19	Chainâ€Shattering Polymeric Therapeutics with Onâ€Demand Drugâ€Release Capability. Angewandte Chemie - International Edition, 2013, 52, 6435-6439.	13.8	132
20	All Chemical Vapor Deposition Synthesis and Intrinsic Bandgap Observation of MoS ₂ /Graphene Heterostructures. Advanced Materials, 2015, 27, 7086-7092.	21.0	132
21	Facile Preparation of Well-Defined AB ₂ Y-Shaped Miktoarm Star Polypeptide Copolymer via the Combination of Ring-Opening Polymerization and Click Chemistry. Biomacromolecules, 2008, 9, 2586-2593.	5.4	123
22	A composite solid polymer electrolyte incorporating MnO ₂ nanosheets with reinforced mechanical properties and electrochemical stability for lithium metal batteries. Journal of Materials Chemistry A, 2020, 8, 2021-2032.	10.3	118
23	Redox-Responsive, Core Cross-Linked Polyester Micelles. ACS Macro Letters, 2013, 2, 40-44.	4.8	116
24	Controlled Growth and Thicknessâ€Dependent Conductionâ€Type Transition of 2D Ferrimagnetic Cr ₂ S ₃ Semiconductors. Advanced Materials, 2020, 32, e1905896.	21.0	114
25	Large-Scale Thin CsPbBr ₃ Single-Crystal Film Grown on Sapphire <i>via</i> Chemical Vapor Deposition: Toward Laser Array Application. ACS Nano, 2020, 14, 15605-15615.	14.6	112
26	Suppression of Hepatic Inflammation <i>via</i> Systemic siRNA Delivery by Membrane-Disruptive and Endosomolytic Helical Polypeptide Hybrid Nanoparticles. ACS Nano, 2016, 10, 1859-1870.	14.6	107
27	Effect of Chain Length on Cytotoxicity and Endocytosis of Cationic Polymers. Macromolecules, 2011, 44, 2050-2057.	4.8	105
28	Double Hydrophilic Block Copolymer Monolayer Protected Hybrid Gold Nanoparticles and Their Shell Cross-Linking. Journal of Physical Chemistry B, 2005, 109, 22159-22166.	2.6	102
29	Substrate Facet Effect on the Growth of Monolayer MoS ₂ on Au Foils. ACS Nano, 2015, 9, 4017-4025.	14.6	97
30	Extremely Tough, Puncture-Resistant, Transparent, and Photoluminescent Polyurethane Elastomers for Crack Self-Diagnose and Healing Tracking. ACS Applied Materials & Samp; Interfaces, 2020, 12, 30847-30855.	8.0	92
31	Chemical vapor deposition of monolayer WS2 nanosheets on Au foils toward direct application in hydrogen evolution. Nano Research, 2015, 8, 2881-2890.	10.4	91
32	Multiâ€Responsive Supramolecular Double Hydrophilic Diblock Copolymer Driven by Hostâ€Guest Inclusion Complexation between $\langle i \rangle \hat{l}^2 \langle j \rangle \hat{a}$ €Cyclodextrin and Adamantyl Moieties. Macromolecular Chemistry and Physics, 2009, 210, 2125-2137.	2.2	90
33	Chemical Vapor Deposition Grown Large-Scale Atomically Thin Platinum Diselenide with Semimetal–Semiconductor Transition. ACS Nano, 2019, 13, 8442-8451.	14.6	87
34	Revealing Strong Plasmon-Exciton Coupling between Nanogap Resonators and Two-Dimensional Semiconductors at Ambient Conditions. Physical Review Letters, 2020, 124, 063902.	7.8	85
35	Fabrication of Hybrid Nanoparticles with Thermoresponsive Coronas via a Self-Assembling Approach. Macromolecules, 2005, 38, 9813-9820.	4.8	82
36	Single-Step in Situ Preparation of Polymer-Grafted Multi-Walled Carbon Nanotube Composites under 60Co Î ³ -Ray Irradiation. Chemistry of Materials, 2006, 18, 2929-2934.	6.7	82

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37	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.	10.3	81
38	Vertical 1Tâ€TaS ₂ Synthesis on Nanoporous Gold for Highâ€Performance Electrocatalytic Applications. Advanced Materials, 2018, 30, e1705916.	21.0	75
39	Ultrafast Charge Transfer in Perovskite Nanowire/2D Transition Metal Dichalcogenide Heterostructures. Journal of Physical Chemistry Letters, 2018, 9, 1655-1662.	4.6	7 5
40	Thickness Tunable Wedding-Cake-like MoS ₂ Flakes for High-Performance Optoelectronics. ACS Nano, 2019, 13, 3649-3658.	14.6	75
41	Water-Soluble Polypeptides with Elongated, Charged Side Chains Adopt Ultrastable Helical Conformations. Macromolecules, 2011, 44, 6641-6644.	4.8	73
42	Application of chemical vapor–deposited monolayer ReSe2 in the electrocatalytic hydrogen evolution reaction. Nano Research, 2018, 11, 1787-1797.	10.4	71
43	Synthesis and supramolecular self-assembly of stimuli-responsive water-soluble Janus-type heteroarm star copolymers. Soft Matter, 2009, 5, 3932.	2.7	69
44	Heterostructured graphene quantum dot/WSe2/Si photodetector with suppressed dark current and improved detectivity. Nano Research, 2018, 11, 3233-3243.	10.4	67
45	A Library of Atomically Thin 2D Materials Featuring the Conductiveâ€Point Resistive Switching Phenomenon. Advanced Materials, 2021, 33, e2007792.	21.0	67
46	Synthesis and Aggregation Behavior of Multiâ€Responsive Double Hydrophilic ABC Miktoarm Star Terpolymer. Macromolecular Rapid Communications, 2009, 30, 941-947.	3.9	65
47	Chemical Vapor Deposition Grown Waferâ€Scale 2D Tantalum Diselenide with Robust Chargeâ€Densityâ€Wave Order. Advanced Materials, 2018, 30, e1804616.	21.0	63
48	Oneâ€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.	2.3	62
49	Monolayer MoS ₂ Dendrites on a Symmetryâ€Disparate SrTiO ₃ (001) Substrate: Formation Mechanism and Interface Interaction. Advanced Functional Materials, 2016, 26, 3299-3305.	14.9	62
50	Two-Dimensional Metallic NiTe ₂ with Ultrahigh Environmental Stability, Conductivity, and Electrocatalytic Activity. ACS Nano, 2020, 14, 9011-9020.	14.6	60
51	Micelles possessing mixed cores and thermoresponsive shells fabricated from wellâ€defined amphiphilic ABC miktoarm star terpolymers. Journal of Polymer Science Part A, 2009, 47, 1636-1650.	2.3	59
52	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.	10.4	59
53	Trigger Chemistries for Better Industrial Formulations. ACS Applied Materials & Samp; Interfaces, 2015, 7, 6369-6382.	8.0	58
54	Direct synthesis and in situ characterization of monolayer parallelogrammic rhenium diselenide on gold foil. Communications Chemistry, 2018, 1 , .	4.5	58

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55	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.	12.8	58
56	Synthesis of Water-Soluble Poly(α-hydroxy acids) from Living Ring-Opening Polymerization of <i>O</i> -Benzyl- <scp>I</scp> -serine Carboxyanhydrides. ACS Macro Letters, 2012, 1, 441-444.	4.8	57
57	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.	13.7	56
58	All-Inorganic Perovskite Nanowires–InGaZnO Heterojunction for High-Performance Ultraviolet–Visible Photodetectors. ACS Applied Materials & Diterfaces, 2018, 10, 7231-7238.	8.0	53
59	Nucleation-Controlled Polymerization of Nanoparticles into Supramolecular Structures. Journal of the American Chemical Society, 2013, 135, 11417-11420.	13.7	52
60	Non-invasive, real-time reporting drug release in vitro and in vivo. Chemical Communications, 2015, 51, 6948-6951.	4.1	51
61	Novel Transfer Behaviors in 2D MoS ₂ /WSe ₂ Heterotransistor and Its Applications in Visibleâ€Near Infrared Photodetection. Advanced Electronic Materials, 2017, 3, 1600502.	5.1	51
62	Anisotropic Growth and Scanning Tunneling Microscopy Identification of Ultrathin Even‣ayered PdSe ₂ Ribbons. Small, 2019, 15, e1902789.	10.0	50
63	Two-Dimensional Metallic Vanadium Ditelluride as a High-Performance Electrode Material. ACS Nano, 2021, 15, 1858-1868.	14.6	49
64	Unique Thermo-Induced Sequential Gelâ^'Solâ^'Gel Transition of Responsive Multiblock Copolymer-Based Hydrogels. Macromolecules, 2010, 43, 5184-5187.	4.8	48
65	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.	10.3	47
66	Tunable and Processable Shape-Memory Materials Based on Solvent-Free, Catalyst-Free Polycondensation between Formaldehyde and Diamine at Room Temperature. ACS Macro Letters, 2019, 8, 582-587.	4.8	45
67	Trigger-responsive chain-shattering polymers. Polymer Chemistry, 2013, 4, 224-228.	3.9	44
68	Trigger-Responsive Poly(β-amino ester) Hydrogels. ACS Macro Letters, 2014, 3, 693-697.	4.8	44
69	High-Temperature Continuous-Wave Pumped Lasing from Large-Area Monolayer Semiconductors Grown by Chemical Vapor Deposition. ACS Nano, 2018, 12, 9390-9396.	14.6	44
70	Micellization Kinetics of a Novel Multiâ€Responsive Double Hydrophilic Diblock Copolymer Studied by Stoppedâ€Flow pH and Temperature Jump. Macromolecular Chemistry and Physics, 2007, 208, 2492-2501.	2,2	43
71	Recent Advances in Controlling Syntheses and Energy Related Applications of MX ₂ and MX ₂ /Graphene Heterostructures. Advanced Energy Materials, 2016, 6, 1600459.	19.5	43
72	Magnetic Moments Induced by Atomic Vacancies in Transition Metal Dichalcogenide Flakes. Advanced Materials, 2021, 33, e2005465.	21.0	40

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73	Periodic Modulation of the Doping Level in Striped MoS ₂ Superstructures. ACS Nano, 2016, 10, 3461-3468.	14.6	37
74	H-Bonding Supramolecular Hydrogels with Promising Mechanical Strength and Shape Memory Properties for Postoperative Antiadhesion Application. ACS Applied Materials & Interfaces, 2020, 12, 34161-34169.	8.0	36
75	Functional polyesters derived from alternating copolymerization of norbornene anhydride and epoxides. Polymer Chemistry, 2015, 6, 3586-3590.	3.9	35
76	Selfâ€Powered MoS ₂ –PDPP3T Heterotransistorâ€Based Broadband Photodetectors. Advanced Electronic Materials, 2019, 5, 1800580.	5.1	35
77	Redox-responsive self-assembled chain-shattering polymeric therapeutics. Biomaterials Science, 2015, 3, 1061-1065.	5.4	34
78	Interrupted Helical Structure of Grafted Polypeptides in Brush-Like Macromolecules. Macromolecules, 2011, 44, 8699-8708.	4.8	33
79	Reconfigurable Poly(ureaâ€urethane) Thermoset Based on Hindered Urea Bonds with Tripleâ€6hapeâ€Memory Performance. Macromolecular Chemistry and Physics, 2019, 220, 1900148.	2.2	33
80	Microscopic insights into the catalytic mechanisms of monolayer MoS2 and its heterostructures in hydrogen evolution reaction. Nano Research, 2019, 12, 2140-2149.	10.4	33
81	Moltenâ€Saltâ€Assisted Chemical Vapor Deposition Process for Substitutional Doping of Monolayer MoS 2 and Effectively Altering the Electronic Structure and Phononic Properties. Advanced Science, 2020, 7, 2001080.	11.2	32
82	Facile fabrication of hybrid nanoparticles surface grafted with multiâ€responsive polymer brushes via block copolymer micellization and selfâ€catalyzed core gelation. Journal of Polymer Science Part A, 2008, 46, 2379-2389.	2.3	31
83	PEG-Polypeptide Dual Brush Block Copolymers: Synthesis and Application in Nanoparticle Surface PEGylation. ACS Macro Letters, 2013, 2, 809-813.	4.8	31
84	Cationic, helical polypeptide-based gene delivery for IMR-90 fibroblasts and human embryonic stem cells. Biomaterials Science, 2013, 1, 719.	5.4	30
85	Narrowâ€Gap Quantum Wires Arising from the Edges of Monolayer MoS ₂ Synthesized on Graphene. Advanced Materials Interfaces, 2016, 3, 1600332.	3.7	30
86	Tunable Valley Polarized Plasmon-Exciton Polaritons in Two-Dimensional Semiconductors. ACS Nano, 2019, 13, 1333-1341.	14.6	29
87	Roles of salts in the chemical vapor deposition synthesis of two-dimensional transition metal chalcogenides. Dalton Transactions, 2020, 49, 10319-10327.	3.3	29
88	Optogeneticsâ€Inspired Neuromorphic Optoelectronic Synaptic Transistors with Optically Modulated Plasticity. Advanced Optical Materials, 2021, 9, 2002232.	7.3	28
89	Fabrication of Fullereneâ€Containing Hybrid Vesicles via Supramolecular Selfâ€Assembly of a Wellâ€Defined Amphiphilic Block Copolymer Incorporated with a Single C ₆₀ Moiety at the Diblock Junction Point. Macromolecular Rapid Communications, 2008, 29, 340-346.	3.9	26
90	Chainâ€Shattering Polymeric Therapeutics with Onâ€Demand Drugâ€Release Capability. Angewandte Chemie, 2013, 125, 6563-6567.	2.0	26

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91	Vanadium Diselenide Single Crystals: Van der Waals Epitaxial Growth of 2D Metallic Vanadium Diselenide Single Crystals and their Extraâ∈High Electrical Conductivity (Adv. Mater. 37/2017). Advanced Materials, 2017, 29, .	21.0	26
92	Isometric Thionated Naphthalene Diimides As Organic Cathodes for High Capacity Lithium Batteries. Chemistry of Materials, 2020, 32, 10575-10583.	6.7	26
93	Cationic Chalcogenoviologen Derivatives for Photodynamic Antimicrobial Therapy and Skin Regeneration. Chemistry - A European Journal, 2019, 25, 13472-13478.	3.3	24
94	Scalable salt-templated directed synthesis of high-quality MoS2 nanosheets powders towards energetic and environmental applications. Nano Research, 2020, 13, 3098-3104.	10.4	24
95	Mn atomic layers under inert covers of graphene and hexagonal boron nitride prepared on Rh(111). Nano Research, 2013, 6, 887-896.	10.4	22
96	Space-confined growth of monolayer ReSe2 under a graphene layer on Au foils. Nano Research, 2019, 12, 149-157.	10.4	22
97	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.	13.7	21
98	Out-of-Plane Deformations Determined Mechanics of Vanadium Disulfide (VS ₂) Sheets. ACS Applied Materials & Determined Mechanics of Vanadium Disulfide (VS ₂) Sheets.	8.0	21
99	Bandgap control in two-dimensional semiconductors via coherent doping of plasmonic hot electrons. Nature Communications, 2021, 12, 4332.	12.8	20
100	Boosting the electrocatalytic activity of amorphous molybdenum sulfide nanoflakes <i>via</i> nickel sulfide decoration. Nanoscale, 2019, 11, 22971-22979.	5.6	19
101	Salt-assisted growth and ultrafast photocarrier dynamics of large-sized monolayer ReSe2. Nano Research, 2020, 13, 667-675.	10.4	19
102	Giant Thicknessâ€Tunable Bandgap and Robust Air Stability of 2D Palladium Diselenide. Small, 2020, 16, e2000754.	10.0	19
103	Decoupling the Interaction between Wetâ€Transferred MoS ₂ and Graphite Substrate by an Interfacial Water Layer. Advanced Materials Interfaces, 2018, 5, 1800641.	3.7	18
104	Low Threshold Fabry–Pérot Mode Lasing from Lead Iodide Trapezoidal Nanoplatelets. Small, 2018, 14, e1801938.	10.0	17
105	Identifying the Intermediate Free-Carrier Dynamics Across the Charge Separation in Monolayer MoS ₂ /ReSe ₂ Heterostructures. ACS Nano, 2021, 15, 16760-16768.	14.6	17
106	UV-responsive degradable polymers derived from 1-(4-aminophenyl) ethane-1,2-diol. Journal of Polymer Science Part A, 2015, 53, 1161-1168.	2.3	16
107	Surface State Mediated Interlayer Excitons in a 2D Nonlayered–Layered Semiconductor Heterojunction. Advanced Electronic Materials, 2017, 3, 1700373.	5.1	15
108	The Marriage of Carborane with Chalcogen Atoms: Nonconjugation, Ïfâ^Ï€ Conjugation, and Intramolecular Charge Transfer. Organic Letters, 2019, 21, 8285-8289.	4.6	14

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109	Transformation of monolayer MoS2 into multiphasic MoTe2: Chalcogen atom-exchange synthesis route. Nano Research, 2017, 10, 2761-2771.	10.4	13
110	Quasi-freestanding, striped WS2 monolayer with an invariable band gap on Au(001). Nano Research, 2017, 10, 3875-3884.	10.4	13
111	2D Metallic Transitional Metal Dichalcogenides for Electrochemical Hydrogen Evolution. Energy Technology, 2019, 7, 1801025.	3.8	10
112	Effect of substrate symmetry on the orientations of MoS ₂ monolayers. Nanotechnology, 2021, 32, 095601.	2.6	9
113	Intercalation-Mediated Synthesis and Interfacial Coupling Effect Exploration of Unconventional Graphene/PtSe ₂ Vertical Heterostructures. ACS Applied Materials & Samp; Interfaces, 2019, 11, 48221-48229.	8.0	7
114	Catalystâ€Free Oneâ€Step Preparation of Selfâ€Crosslinked pHâ€Responsive Vesicles. Macromolecular Rapid Communications, 2019, 40, 1900149.	3.9	6
115	Progress in Controllable Construction and Energyâ€Related Applications of MX ₂ /Graphene and MX ₂ /MX ₂ Heterostructures. ChemNanoMat, 2017, 3, 340-351.	2.8	5
116	Folding Cooperativity of Synthetic Polypeptides with or without "Tertiary―Interactions. ACS Macro Letters, 2017, 6, 733-737.	4.8	5
117	An Enzymeâ€Responsive "Turnâ€on―Fluorescence Polymeric Superamphiphile as a Potential Visualizable Phosphate Prodrug Delivery Vehicle. Macromolecular Bioscience, 2018, 18, e1800045.	4.1	5
118	A Case of Metastatic Uterine Tumor Originating from Small-Cell Lung Cancer (SCLC) Mimicking Uterine Sarcoma. Case Reports in Obstetrics and Gynecology, 2021, 2021, 1-4.	0.3	3
119	A polymeric prodrug for non-invasive, real-time reporting drug release based on "turn-on― fluorescent probes. Reactive and Functional Polymers, 2020, 154, 104649.	4.1	2
120	Graphene Heterostructures: Recent Advances in Controlling Syntheses and Energy Related Applications of MX2and MX2/Graphene Heterostructures (Adv. Energy Mater. 17/2016). Advanced Energy Materials, 2016, 6, .	19.5	0
121	2D Palladium Diselenide: Giant Thickness†unable Bandgap and Robust Air Stability of 2D Palladium Diselenide (Small 19/2020). Small, 2020, 16, 2070106.	10.0	0
122	Isospecific Polymerization of Halide- and Amino-Substituted Styrenes Using a Bis(phenolate) Titanium Catalyst. Catalysts, 2022, 12, 439.	3.5	0