Zhengzhong Shao

List of Publications by Year in descending order

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321 papers

22,891 citations

81 h-index 136 g-index

331 all docs

331 docs citations

times ranked

331

23496 citing authors

#	Article	IF	CITATIONS
1	Surprising strength of silkworm silk. Nature, 2002, 418, 741-741.	13.7	855
2	Reduced Mesoporous Co ₃ O ₄ Nanowires as Efficient Water Oxidation Electrocatalysts and Supercapacitor Electrodes. Advanced Energy Materials, 2014, 4, 1400696.	10.2	852
3	Enhanced Nitrate-to-Ammonia Activity on Copper–Nickel Alloys via Tuning of Intermediate Adsorption. Journal of the American Chemical Society, 2020, 142, 5702-5708.	6.6	638
4	Cu, Coâ€Embedded Nâ€Enriched Mesoporous Carbon for Efficient Oxygen Reduction and Hydrogen Evolution Reactions. Advanced Energy Materials, 2017, 7, 1700193.	10.2	487
5	Single-Atomic Cu with Multiple Oxygen Vacancies on Ceria for Electrocatalytic CO ₂ Reduction to CH ₄ . ACS Catalysis, 2018, 8, 7113-7119.	5.5	486
6	From Water Oxidation to Reduction: Homologous Ni–Co Based Nanowires as Complementary Water Splitting Electrocatalysts. Advanced Energy Materials, 2015, 5, 1402031.	10.2	448
7	Boosting CO ₂ Electroreduction to CH ₄ via Tuning Neighboring Single-Copper Sites. ACS Energy Letters, 2020, 5, 1044-1053.	8.8	326
8	Doping strain induced bi-Ti3+ pairs for efficient N2 activation and electrocatalytic fixation. Nature Communications, 2019, 10, 2877.	5 . 8	279
9	Conformation transition kinetics of regenerated Bombyx mori silk fibroin membrane monitored by time-resolved FTIR spectroscopy. Biophysical Chemistry, 2001, 89, 25-34.	1.5	277
10	Relationships between supercontraction and mechanical properties of spider silk. Nature Materials, 2005, 4, 901-905.	13.3	270
11	Synthesis of 2Dâ€Mesoporousâ€Carbon/MoS ₂ Heterostructures with Wellâ€Defined Interfaces for Highâ€Performance Lithiumâ€Ion Batteries. Advanced Materials, 2016, 28, 9385-9390.	11.1	253
12	CuCo Hybrid Oxides as Bifunctional Electrocatalyst for Efficient Water Splitting. Advanced Functional Materials, 2016, 26, 8555-8561.	7.8	251
13	The effect of spinning conditions on the mechanics of a spider's dragline silk. Proceedings of the Royal Society B: Biological Sciences, 2001, 268, 2339-2346.	1.2	248
14	Synchrotron FTIR Microspectroscopy of Single Natural Silk Fibers. Biomacromolecules, 2011, 12, 3344-3349.	2.6	243
15	Interlaced NiS ₂ –MoS ₂ nanoflake-nanowires as efficient hydrogen evolution electrocatalysts in basic solutions. Journal of Materials Chemistry A, 2016, 4, 13439-13443.	5. 2	241
16	Co–Niâ€Based Nanotubes/Nanosheets as Efficient Water Splitting Electrocatalysts. Advanced Energy Materials, 2016, 6, 1501661.	10.2	232
17	Enhancing Perovskite Solar Cell Performance by Interface Engineering Using $CH < Sub > 3 < Sub > NH < Sub > 2 < Sub > PbBr < Sub > 0.9 < Sub > 1 < Sub > 2.1 < Sub > Quantum Dots. Journal of the American Chemical Society, 2016, 138, 8581-8587.$	6.6	232
18	Superb Alkaline Hydrogen Evolution and Simultaneous Electricity Generation by Ptâ€Decorated Ni ₃ N Nanosheets. Advanced Energy Materials, 2017, 7, 1601390.	10.2	225

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19	Doxorubicinâ€Loaded Magnetic Silk Fibroin Nanoparticles for Targeted Therapy of Multidrugâ€Resistant Cancer. Advanced Materials, 2014, 26, 7393-7398.	11.1	221
20	Aqueous electrocatalytic N2 reduction under ambient conditions. Nano Research, 2018, 11, 2992-3008.	5.8	221
21	Animal silks: their structures, properties and artificial production. Chemical Communications, 2009, , 6515.	2.2	216
22	Frequency Domain Detection of Biomolecules Using Silicon Nanowire Biosensors. Nano Letters, 2010, 10, 3179-3183.	4.5	203
23	Selective Etching of Nitrogenâ€Doped Carbon by Steam for Enhanced Electrochemical CO ₂ Reduction. Advanced Energy Materials, 2017, 7, 1701456.	10.2	203
24	Carbon-Coated Co ³⁺ -Rich Cobalt Selenide Derived from ZIF-67 for Efficient Electrochemical Water Oxidation. ACS Applied Materials & Interfaces, 2016, 8, 20534-20539.	4.0	198
25	Enhancing Mechanical Properties of Silk Fibroin Hydrogel through Restricting the Growth of \hat{l}^2 -Sheet Domains. ACS Applied Materials & Samp; Interfaces, 2017, 9, 17489-17498.	4.0	190
26	Tuning of CO ₂ Reduction Selectivity on Metal Electrocatalysts. Small, 2017, 13, 1701809.	5.2	182
27	Physically Crosslinked Biocompatible Silkâ€Fibroinâ€Based Hydrogels with High Mechanical Performance. Advanced Functional Materials, 2016, 26, 872-880.	7.8	181
28	Topotactic Engineering of Ultrathin 2D Nonlayered Nickel Selenides for Full Water Electrolysis. Advanced Energy Materials, 2018, 8, 1702704.	10.2	181
29	Silk Fibers Extruded Artificially from Aqueous Solutions of Regenerated <i>Bombyx mori</i> Silk Fibroin are Tougher than their Natural Counterparts. Advanced Materials, 2009, 21, 366-370.	11.1	179
30	Eggâ€Derived Mesoporous Carbon Microspheres as Bifunctional Oxygen Evolution and Oxygen Reduction Electrocatalysts. Advanced Energy Materials, 2016, 6, 1600794.	10.2	177
31	Regenerated Bombyx silk solutions studied with rheometry and FTIR. Polymer, 2001, 42, 09969-09974.	1.8	176
32	Conformation transition kinetics of Bombyx mori silk protein. Proteins: Structure, Function and Bioinformatics, 2007, 68, 223-231.	1.5	174
33	Surface-Modified Silicon Nanoparticles with Ultrabright Photoluminescence and Single-Exponential Decay for Nanoscale Fluorescence Lifetime Imaging of Temperature. Journal of the American Chemical Society, 2013, 135, 14924-14927.	6.6	174
34	Nanostructured Bifunctional Redox Electrocatalysts. Small, 2016, 12, 5656-5675.	5.2	174
35	Branched Co3O4/Fe2O3 nanowires as high capacity lithium-ion battery anodes. Nano Research, 2013, 6, 167-173.	5.8	169
36	Soy protein-based polyethylenimine hydrogel and its high selectivity for copper ion removal in wastewater treatment. Journal of Materials Chemistry A, 2017, 5, 4163-4171.	5.2	162

#	Article	IF	CITATIONS
37	Double sulfur vacancies by lithium tuning enhance CO2 electroreduction to n-propanol. Nature Communications, 2021, 12, 1580.	5.8	162
38	The preparation of regenerated silk fibroin microspheres. Soft Matter, 2007, 3, 910.	1.2	158
39	Nitrogenâ€Doped Coreâ€Sheath Carbon Nanotube Array for Highly Stretchable Supercapacitor. Advanced Energy Materials, 2017, 7, 1601814.	10.2	155
40	Silicon Nanoparticles with Surface Nitrogen: 90% Quantum Yield with Narrow Luminescence Bandwidth and the Ligand Structure Based Energy Law. ACS Nano, 2016, 10, 8385-8393.	7.3	154
41	Incorporation of well-dispersed sub-5-nm graphitic pencil nanodots into ordered mesoporous frameworks. Nature Chemistry, 2016, 8, 171-178.	6.6	153
42	A Mono-cuboctahedral Series of Gold Nanoclusters: Photoluminescence Origin, Large Enhancement, Wide Tunability, and Structure–Property Correlation. Journal of the American Chemical Society, 2019, 141, 5314-5325.	6.6	149
43	Effect of Metallic Ions on Silk Formation in the Mulberry Silkworm, Bombyx mori. Journal of Physical Chemistry B, 2005, 109, 16937-16945.	1.2	148
44	Oxygen Vacancy Tuning toward Efficient Electrocatalytic CO ₂ Reduction to C ₂ H ₄ . Small Methods, 2019, 3, 1800449.	4.6	146
45	Designing Copperâ€Based Catalysts for Efficient Carbon Dioxide Electroreduction. Advanced Materials, 2021, 33, e2005798.	11.1	145
46	The effect of solvents on the contraction and mechanical properties of spider silk. Polymer, 1999, 40, 1799-1806.	1.8	143
47	Sensitive enzymatic glucose detection by TiO ₂ nanowire photoelectrochemical biosensors. Journal of Materials Chemistry A, 2014, 2, 6153-6157.	5.2	139
48	Nanostructured Copperâ€Based Electrocatalysts for CO ₂ Reduction. Small Methods, 2018, 2, 1800121.	4.6	139
49	Polarization Engineering of Covalent Triazine Frameworks for Highly Efficient Photosynthesis of Hydrogen Peroxide from Molecular Oxygen and Water. Advanced Materials, 2022, 34, e2110266.	11.1	136
50	Myriophyllum-like hierarchical TiN@Ni ₃ N nanowire arrays for bifunctional water splitting catalysts. Journal of Materials Chemistry A, 2016, 4, 5713-5718.	5.2	134
51	A fiber-shaped aqueous lithium ion battery with high power density. Journal of Materials Chemistry A, 2016, 4, 9002-9008.	5. 2	132
52	Directed Growth of Silk Nanofibrils on Graphene and Their Hybrid Nanocomposites. ACS Macro Letters, 2014, 3, 146-152.	2.3	131
53	Wet-Spinning of Regenerated Silk Fiber from Aqueous Silk Fibroin Solution: Discussion of Spinning Parameters. Biomacromolecules, 2010, 11, 1-5.	2.6	126
54	High-Performance Perovskite Photoanode Enabled by Ni Passivation and Catalysis. Nano Letters, 2015, 15, 3452-3457.	4.5	122

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55	Effect of Various Dissolution Systems on the Molecular Weight of Regenerated Silk Fibroin. Biomacromolecules, 2013, 14, 285-289.	2.6	120
56	Oxygen vacancies enhanced cooperative electrocatalytic reduction of carbon dioxide and nitrite ions to urea. Journal of Colloid and Interface Science, 2020, 577, 109-114.	5.0	120
57	Modulating Materials by Orthogonally Oriented βâ€Strands: Composites of Amyloid and Silk Fibroin Fibrils. Advanced Materials, 2014, 26, 4569-4574.	11.1	119
58	Selective CO-to-acetate electroreduction via intermediate adsorption tuning on ordered Cu–Pd sites. Nature Catalysis, 2022, 5, 251-258.	16.1	118
59	Electronâ€Deficient Cu Sites on Cu ₃ Ag ₁ Catalyst Promoting CO ₂ Electroreduction to Alcohols. Advanced Energy Materials, 2020, 10, 2001987.	10.2	117
60	The natural silk spinning process. FEBS Journal, 2001, 268, 6600-6606.	0.2	116
61	Enhancing the Gelation and Bioactivity of Injectable Silk Fibroin Hydrogel with Laponite Nanoplatelets. ACS Applied Materials & Samp; Interfaces, 2016, 8, 9619-9628.	4.0	114
62	Understanding the Mechanical Properties of <i>Antheraea Pernyi</i> Silkâ€"From Primary Structure to Condensed Structure of the Protein. Advanced Functional Materials, 2011, 21, 729-737.	7.8	111
63	NbO ₂ Electrocatalyst Toward 32% Faradaic Efficiency for N ₂ Fixation. Small Methods, 2019, 3, 1800386.	4.6	111
64	Optical Spectroscopy To Investigate the Structure of RegeneratedBombyx moriSilk Fibroin in Solution. Biomacromolecules, 2004, 5, 773-779.	2.6	109
65	CuCoO _{<i>x</i>} /FeOOH Core–Shell Nanowires as an Efficient Bifunctional Oxygen Evolution and Reduction Catalyst. ACS Energy Letters, 2017, 2, 2498-2505.	8.8	109
66	Aligned NiO nanoflake arrays grown on copper as high capacity lithium-ion battery anodes. Journal of Materials Chemistry, 2012, 22, 19821.	6.7	106
67	Photoelectrochemical Conversion from Graphitic C ₃ N ₄ Quantum Dot Decorated Semiconductor Nanowires. ACS Applied Materials & Decorated Semiconductor Nanowires.	4.0	103
68	A flexible ligand-based wavy layered metal–organic framework for lithium-ion storage. Journal of Colloid and Interface Science, 2015, 445, 320-325.	5.0	102
69	Enhanced N-doping in mesoporous carbon for efficient electrocatalytic CO2 conversion. Nano Research, 2019, 12, 2324-2329.	5.8	101
70	Structure and Behavior of Regenerated Spider Silk. Macromolecules, 2003, 36, 1157-1161.	2.2	97
71	Efficient solar-driven electrocatalytic CO2 reduction in a redox-medium-assisted system. Nature Communications, 2018, 9, 5003.	5.8	97
72	Conformation Transition in Silk Protein Films Monitored by Time-Resolved Fourier Transform Infrared Spectroscopy: Effect of Potassium Ions onNephilaSpidroin Filmsâ€. Biochemistry, 2002, 41, 14944-14950.	1.2	91

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73	Multi-layered mesoporous TiO ₂ thin films with large pores and highly crystalline frameworks for efficient photoelectrochemical conversion. Journal of Materials Chemistry A, 2013, 1, 1591-1599.	5.2	91
74	Bifunctional CoP and CoN porous nanocatalysts derived from ZIF-67 in situ grown on nanowire photoelectrodes for efficient photoelectrochemical water splitting and CO ₂ reduction. Journal of Materials Chemistry A, 2016, 4, 15353-15360.	5.2	90
75	Two distinct \hat{l}^2 -sheet fibrils from silk protein. Chemical Communications, 2009, , 7506.	2.2	89
76	Nanowire arrays restore vision in blind mice. Nature Communications, 2018, 9, 786.	5.8	89
77	Electrospinning of reconstituted silk fiber from aqueous silk fibroin solution. Materials Science and Engineering C, 2009, 29, 2270-2274.	3.8	88
78	Moisture Effects on <i>Antheraea pernyi</i> Silk's Mechanical Property. Macromolecules, 2009, 42, 7877-7880.	2.2	87
79	Hydrogel Assembly with Hierarchical Alignment by Balancing Electrostatic Forces. Advanced Materials Interfaces, 2016, 3, 1500687.	1.9	87
80	Electronic Tuning of Co, Niâ€Based Nanostructured (Hydr)oxides for Aqueous Electrocatalysis. Advanced Functional Materials, 2018, 28, 1804886.	7.8	87
81	Strong Collagen Hydrogels by Oxidized Dextran Modification. ACS Sustainable Chemistry and Engineering, 2014, 2, 1318-1324.	3.2	86
82	The effect of solvents on spider silk studied by mechanical testing and single-fibre Raman spectroscopy. International Journal of Biological Macromolecules, 1999, 24, 295-300.	3.6	82
83	Poly(vinyl alcohol) Hydrogels with Integrated Toughness, Conductivity, and Freezing Tolerance Based on Ionic Liquid/Water Binary Solvent Systems. ACS Applied Materials & Samp; Interfaces, 2021, 13, 29008-29020.	4.0	82
84	Dramatic Enhancement of Graphene Oxide/Silk Nanocomposite Membranes: Increasing Toughness, Strength, and Young's modulus via Annealing of Interfacial Structures. ACS Applied Materials & amp; Interfaces, 2016, 8, 24962-24973.	4.0	81
85	Investigation of Rheological Properties and Conformation of Silk Fibroin in the Solution of AmimCl. Biomacromolecules, 2012, 13, 1875-1881.	2.6	80
86	Hierarchical SnO2–Fe2O3 heterostructures as lithium-ion battery anodes. Journal of Materials Chemistry, 2012, 22, 21923.	6.7	79
87	Insight into the Structure of Single Antheraea pernyi Silkworm Fibers Using Synchrotron FTIR Microspectroscopy. Biomacromolecules, 2013, 14, 1885-1892.	2.6	78
88	Homologous metal-free electrocatalysts grown on three-dimensional carbon networks for overall water splitting in acidic and alkaline media. Journal of Materials Chemistry A, 2016, 4, 12878-12883.	5.2	75
89	Mesoporous TiO ₂ Mesocrystals: Remarkable Defects-Induced Crystallite-Interface Reactivity and Their in Situ Conversion to Single Crystals. ACS Central Science, 2015, 1, 400-408.	5.3	74
90	Preparation and characterization of HY zeolite-filled chitosan membranes for pervaporation separation. Journal of Applied Polymer Science, 2001, 79, 1144-1149.	1.3	73

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91	Physically Cross-Linked Silk Fibroin-Based Tough Hydrogel Electrolyte with Exceptional Water Retention and Freezing Tolerance. ACS Applied Materials & Interfaces, 2020, 12, 25353-25362.	4.0	73
92	Sub-5Ânm SnO ₂ chemically coupled hollow carbon spheres for efficient electrocatalytic CO ₂ reduction. Journal of Materials Chemistry A, 2018, 6, 20121-20127.	5.2	72
93	Epitaxial Growth of Latticeâ€Mismatched Core–Shell TiO ₂ @MoS ₂ for Enhanced Lithiumâ€lon Storage. Small, 2016, 12, 2792-2799.	5.2	71
94	Robust Protein Hydrogels from Silkworm Silk. ACS Sustainable Chemistry and Engineering, 2016, 4, 1500-1506.	3.2	71
95	One-dimensional nanostructures for flexible supercapacitors. Journal of Materials Chemistry A, 2015, 3, 16382-16392.	5.2	70
96	Integrating tough Antheraea pernyi silk and strong carbon fibres for impact-critical structural composites. Nature Communications, 2019, 10, 3786.	5.8	70
97	Paclitaxelâ€loaded silk fibroin nanospheres. Journal of Biomedical Materials Research - Part A, 2012, 100A, 203-210.	2.1	69
98	The spinning processes for spider silk. Soft Matter, 2006, 2, 448.	1.2	68
99	Multi-scale magnetic coupling of Fe@SiO ₂ @C–Ni yolk@triple-shell microspheres for broadband microwave absorption. Nanoscale, 2019, 11, 17270-17276.	2.8	68
100	Chemical Vapor Deposition Growth of Well-Aligned Carbon Nanotube Patterns on Cubic Mesoporous Silica Films by Soft Lithography. Chemistry of Materials, 2001, 13, 2240-2242.	3.2	67
101	Macroporous chitosan/carboxymethylcellulose blend membranes and their application for lysozyme adsorption. Journal of Applied Polymer Science, 2005, 96, 1267-1274.	1.3	66
102	Colloidal Stability of Silk Fibroin Nanoparticles Coated with Cationic Polymer for Effective Drug Delivery. ACS Applied Materials & Samp; Interfaces, 2015, 7, 21254-21262.	4.0	66
103	Defective graphene for electrocatalytic CO2 reduction. Journal of Colloid and Interface Science, 2019, 534, 332-337.	5.0	66
104	Electrocatalytic Reactions for Converting CO ₂ to Valueâ€Added Products. Small Science, 2021, 1, 2100043.	5.8	66
105	Electron Localization and Lattice Strain Induced by Surface Lithium Doping Enable Ampereâ€Level Electrosynthesis of Formate from CO ₂ . Angewandte Chemie - International Edition, 2021, 60, 25741-25745.	7.2	66
106	Dual-Atomic Cu Sites for Electrocatalytic CO Reduction to C ₂₊ Products., 2021, 3, 1729-1737.		66
107	Elasticity of Spider Silks. Biomacromolecules, 2008, 9, 1782-1786.	2.6	65
108	Î ² -turn formation during the conformation transition in silk fibroin. Soft Matter, 2009, 5, 2777.	1.2	65

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109	Plant Protein-Directed Synthesis of Luminescent Gold Nanocluster Hybrids for Tumor Imaging. ACS Applied Materials & Director (1988) 10, 83-90.	4.0	64
110	FTIR imaging, a useful method for studying the compatibility of silk fibroin-based polymer blends. Polymer Chemistry, 2013, 4, 5401.	1.9	63
111	Exploration of the tight structural–mechanical relationship in mulberry and non-mulberry silkworm silks. Journal of Materials Chemistry B, 2016, 4, 4337-4347.	2.9	62
112	Mesoporous Fe ₂ O ₃ –CdS Heterostructures for Real-Time Photoelectrochemical Dynamic Probing of Cu ²⁺ . Analytical Chemistry, 2015, 87, 6703-6708.	3.2	61
113	Insights into Silk Formation Process: Correlation of Mechanical Properties and Structural Evolution during Artificial Spinning of Silk Fibers. ACS Biomaterials Science and Engineering, 2016, 2, 1992-2000.	2.6	61
114	Thixotropic silk nanofibril-based hydrogel with extracellular matrix-like structure. Biomaterials Science, 2014, 2, 1338-1342.	2.6	59
115	Tough protein–carbon nanotube hybrid fibers comparable to natural spider silks. Journal of Materials Chemistry B, 2015, 3, 3940-3947.	2.9	59
116	Copper in the silk formation process of Bombyx morisilkworm. FEBS Letters, 2003, 554, 337-341.	1.3	57
117	The effect of water on the conformation transition of Bombyx mori silk fibroin. Vibrational Spectroscopy, 2009, 51, 105-109.	1.2	57
118	An antimicrobial film by embedding in situ synthesized silver nanoparticles in soy protein isolate. Materials Letters, 2013, 95, 142-144.	1.3	57
119	The Robust Hydrogel Hierarchically Assembled from a pH Sensitive Peptide Amphiphile Based on Silk Fibroin. Biomacromolecules, 2013, 14, 2733-2738.	2.6	53
120	Selective carbon dioxide electroreduction to ethylene and ethanol by core-shell copper/cuprous oxide. Journal of Colloid and Interface Science, 2019, 552, 426-431.	5.0	53
121	Achieving High Aqueous Energy Storage via Hydrogenâ€Generation Passivation. Advanced Materials, 2016, 28, 7626-7632.	11.1	51
122	Injectable thixotropic hydrogel comprising regenerated silk fibroin and hydroxypropylcellulose. Soft Matter, 2012, 8, 2875.	1.2	50
123	Preparation and characterization of chitosan/Cu(II) affinity membrane for urea adsorption. Journal of Applied Polymer Science, 2003, 90, 1108-1112.	1.3	49
124	2D Assembly of Confined Space toward Enhanced CO ₂ Electroreduction. Advanced Energy Materials, 2018, 8, 1801230.	10.2	49
125	Natural Electroactive Hydrogel from Soy Protein Isolation. Biomacromolecules, 2010, 11, 3638-3643.	2.6	48
126	Robust soy protein films obtained by slight chemical modification of polypeptide chains. Polymer Chemistry, 2013, 4, 5425.	1.9	48

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127	Ordered Macroâ€/Mesoporous Anatase Films with High Thermal Stability and Crystallinity for Photoelectrocatalytic Waterâ€Splitting. Advanced Energy Materials, 2014, 4, 1301725.	10.2	48
128	Nitrogen Reduction Reaction. Small Methods, 2019, 3, 1900070.	4.6	48
129	Lithiationâ€Enabled Highâ€Density Nitrogen Vacancies Electrocatalyze CO ₂ to C ₂ Products. Advanced Materials, 2021, 33, e2103150.	11.1	48
130	Freestanding 3D graphene/cobalt sulfide composites for supercapacitors and hydrogen evolution reaction. RSC Advances, 2015, 5, 6886-6891.	1.7	47
131	Intelligent Janus nanoparticles for intracellular real-time monitoring of dual drug release. Nanoscale, 2016, 8, 6754-6760.	2.8	47
132	Single-Molecule Force Spectroscopy onBombyx moriSilk Fibroin by Atomic Force Microscopy. Langmuir, 2000, 16, 4305-4308.	1.6	46
133	Zn ₄ Sb ₃ Nanotubes as Lithium Ion Battery Anodes with High Capacity and Cycling Stability. Advanced Energy Materials, 2013, 3, 286-289.	10.2	46
134	Electron distribution tuning of fluorine-doped carbon for ammonia electrosynthesis. Journal of Materials Chemistry A, 2019, 7, 16979-16983.	5.2	46
135	Growth of Singleâ€Layered Twoâ€Dimensional Mesoporous Polymer/Carbon Films by Selfâ€Assembly of Monomicelles at the Interfaces of Various Substrates. Angewandte Chemie - International Edition, 2015, 54, 8425-8429.	7.2	45
136	Intelligent Silk Fibroin Ionotronic Skin for Temperature Sensing. Advanced Materials Technologies, 2020, 5, 2000430.	3.0	45
137	Ru-doped, oxygen-vacancy-containing CeO ₂ nanorods toward N ₂ electroreduction. Journal of Materials Chemistry A, 2020, 8, 7229-7234.	5.2	45
138	Extended wet-spinning can modify spider silk properties. Chemical Communications, 2005, , 2489.	2.2	44
139	Self-assembly of a peptide amphiphile based on hydrolysed Bombyx mori silk fibroin. Chemical Communications, 2011, 47, 10296.	2.2	44
140	Ultrafast and reversible thermochromism of a conjugated polymer material based on the assembly of peptide amphiphiles. Chemical Science, 2014, 5, 4189-4195.	3.7	44
141	Stability and rheological behaviors of different oil/water emulsions stabilized by natural silk fibroin. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 475, 84-93.	2.3	44
142	Glass transitions in native silk fibres studied by dynamic mechanical thermal analysis. Soft Matter, 2016, 12, 5926-5936.	1.2	44
143	Bandgap Engineered Polypyrrole–Polydopamine Hybrid with Intrinsic Raman and Photoacoustic Imaging Contrasts. Nano Letters, 2018, 18, 7485-7493.	4.5	44
144	Mesoporous tin oxide for electrocatalytic CO2 reduction. Journal of Colloid and Interface Science, 2018, 531, 564-569.	5.0	44

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145	Fabrication of Air-Stable and Conductive Silk Fibroin Gels. ACS Applied Materials & Samp; Interfaces, 2018, 10, 38466-38475.	4.0	43
146	Electrocatalytic Methane Oxidation Greatly Promoted by Chlorine Intermediates. Angewandte Chemie - International Edition, 2021, 60, 17398-17403.	7.2	43
147	Solarâ€Energyâ€Driven Photoelectrochemical Biosensing Using TiO ₂ Nanowires. Chemistry - A European Journal, 2015, 21, 11288-11299.	1.7	42
148	In-situ regrowth constructed magnetic coupling 1D/2D Fe assembly as broadband and high-efficient microwave absorber. Chemical Engineering Journal, 2021, 415, 128951.	6.6	42
149	Direct growth of mesoporous Sn-doped TiO2 thin films on conducting substrates for lithium-ion battery anodes. Journal of Materials Chemistry A, 2013, 1, 13222.	5.2	41
150	Electrolyte Driven Highly Selective CO ₂ Electroreduction at Low Overpotentials. ACS Catalysis, 2019, 9, 10440-10447.	5.5	41
151	Fluorous-Core Nanoparticle-Embedded Hydrogel Synthesized via Tandem Photo-Controlled Radical Polymerization: Facilitating the Separation of Perfluorinated Alkyl Substances from Water. ACS Applied Materials & Interfaces, 2020, 12, 24319-24327.	4.0	41
152	Artificial ligament made from silk protein/Laponite hybrid fibers. Acta Biomaterialia, 2020, 106, 102-113.	4.1	41
153	Flexible and stretchable chromatic fibers with high sensing reversibility. Chemical Science, 2016, 7, 5113-5117.	3.7	40
154	Formation kinetics and fractal characteristics of regenerated silk fibroin alcogel developed from nanofibrillar network. Soft Matter, 2010, 6, 1217.	1.2	39
155	Tailoring interface of lead-halide perovskite solar cells. Nano Research, 2017, 10, 1471-1497.	5.8	39
156	Water-Resistant Zein-Based Adhesives. ACS Sustainable Chemistry and Engineering, 2020, 8, 7668-7679.	3.2	39
157	Efficient CO ₂ Electroreduction to Ethanol by Cu ₃ Sn Catalyst. Small Methods, 2022, 6, e2101334.	4.6	39
158	Synergistic interactions during thermosensitive chitosan- \hat{l}^2 -glycerophosphate hydrogel formation. RSC Advances, 2011, 1, 282.	1.7	38
159	The Intrinsic Ability of Silk Fibroin to Direct the Formation of Diverse Aragonite Aggregates. Advanced Functional Materials, 2012, 22, 435-441.	7.8	38
160	A highly stretchable and anti-freezing silk-based conductive hydrogel for application as a self-adhesive and transparent ionotronic skin. Journal of Materials Chemistry C, 0, , .	2.7	38
161	Understanding Secondary Structures of Silk Materials via Micro- and Nano-Infrared Spectroscopies. ACS Biomaterials Science and Engineering, 2019, 5, 3161-3183.	2.6	37
162	Silk-based pressure/temperature sensing bimodal ionotronic skin with stimulus discriminability and low temperature workability. Chemical Engineering Journal, 2021, 422, 130091.	6.6	36

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163	Nanowire Biosensors for Label-Free, Real-Time, Ultrasensitive Protein Detection. Methods in Molecular Biology, 2011, 790, 223-237.	0.4	35
164	Behavior of silk protein at the air–water interface. Soft Matter, 2012, 8, 9705.	1.2	35
165	Floxuridine-loaded silk fibroin nanospheres. RSC Advances, 2014, 4, 18171-18177.	1.7	35
166	X-ray photoelectron spectroscopic and Raman analysis of silk fibroin–Cu(II) films. Biopolymers, 2006, 82, 144-151.	1.2	33
167	Control over Different Crystallization Stages of CaCO ₃ -Mediated by Silk Fibroin. Crystal Growth and Design, 2011, 11, 2164-2171.	1.4	33
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