Di Zhang

List of Publications by Year
in descending order

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612 papers	31,019 citations	3933 88 h-index	11052 137 g-index
621 all docs	621 docs citations	621 times ranked	25711 citing authors

#	Article	IF	Citations
1	Fluorineâ€Free Synthesis of Highâ€Purity Ti₃C₂T_x (T=OH, O) via Alkali Treatment. Angewandte Chemie - International Edition, 2018, 57, 6115-6119.	13.8	809
2	Reinforcement with graphene nanosheets in aluminum matrix composites. Scripta Materialia, 2012, 66, 594-597.	5.2	738
3	Bioâ€Inspired Evaporation Through Plasmonic Film of Nanoparticles at the Airâ€“Water Interface. Small, 2014, 10, 3234-3239.	10.0	418
4	Enhanced Mechanical Properties of Graphene (Reduced Graphene Oxide)/Aluminum Composites with a Bioinspired Nanolaminated Structure. Nano Letters, 2015, 15, 8077-8083.	9.1	366
5	The use of flake powder metallurgy to produce carbon nanotube (CNT)/aluminum composites with a homogenous CNT distribution. Carbon, 2012, 50, 1993-1998.	10.3	343
6	Biomorphic mineralization: From biology to materials. Progress in Materials Science, 2009, 54, 542-659.	32.8	313
7	â€œEgg-Boxâ€•Assisted Fabrication of Porous Carbon with Small Mesopores for High-Rate Electric Double Layer Capacitors. ACS Nano, 2015, 9, 11225-11233.	14.6	291
8	Electromagnetic wave absorption properties of porous carbon/Co nanocomposites. Applied Physics Letters, 2008, 93, .	3.3	271
9	Synthesis and properties of magnetic Fe3O4-activated carbon nanocomposite particles for dye removal. Materials Letters, 2008, 62, 645-647.	2.6	268
10	MXenes as emerging nanomaterials in water purification and environmental remediation. Science of the Total Environment, 2022, 811, 152280.	8.0	255
11	Artificial Inorganic Leafs for Efficient Photochemical Hydrogen Production Inspired by Natural Photosynthesis. Advanced Materials, 2010, 22, 951-956.	21.0	244
12	Adsorption of copper ions from aqueous solution by citric acid modified soybean straw. Journal of Hazardous Materials, 2008, 153, 300-308.	12.4	238
13	Effects of degree of deformation on the microstructure, mechanical properties and texture of hybrid-reinforced titanium matrix composites. Acta Materialia, 2012, 60, 2656-2667.	7.9	230
14	Graphene-and-Copper Artificial Nacre Fabricated by a Preform Impregnation Process: Bioinspired Strategy for Strengthening-Toughening of Metal Matrix Composite. ACS Nano, 2015, 9, 6934-6943.	14.6	230
15	Aligning graphene in bulk copper: Nacre-inspired nanolaminated architecture coupled with in-situ processing for enhanced mechanical properties and high electrical conductivity. Carbon, 2017, 117, 65-74.	10.3	230
16	Bioinspired Engineering of Thermal Materials. Advanced Materials, 2015, 27, 428-463.	21.0	225
17	Bioinspired Multifunctional Paper-Based rGO Composites for Solar-Driven Clean Water Generation. ACS Applied Materials & Interfaces, 2016, 8, 14628-14636.	8.0	223
18	Bioinspired Hierarchical Surface Structures with Tunable Wettability for Regulating Bacteria Adhesion. ACS Nano, 2015, 9, 10664-10672.	14.6	219

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19	Sonochemical synthesis of TiO2 nanoparticles on graphene for use as photocatalyst. Ultrasonics Sonochemistry, 2011, 18, 1082-1090.	8.2	218
20	Generalized 3D Printing of Graphene-Based Mixed-Dimensional Hybrid Aerogels. ACS Nano, 2018, 12, 3502-3511.	14.6	214
21	In situ technique for synthesizing (TiB+TiC)/Ti composites. Scripta Materialia, 1999, 41, 39-46.	5.2	211
22	Novel Photoanode Structure Templated from Butterfly Wing Scales. Chemistry of Materials, 2009, 21, 33-40.	6.7	211
23	Simultaneously enhancing the strength, ductility and conductivity of copper matrix composites with graphene nanoribbons. Carbon, 2017, 118, 250-260.	10.3	211
24	Synthesis of WO₃@Graphene composite for enhanced photocatalytic oxygen evolution from water. RSC Advances, 2012, 2, 1356-1363.	3.6	205
25	Hierarchical Porous Carbonized Lotus Seedpods for Highly Efficient Solar Steam Generation. Chemistry of Materials, 2018, 30, 6217-6221.	6.7	204
26	Control of Threeâ€Dimensional Cell Adhesion by the Chirality of Nanofibers in Hydrogels. Angewandte Chemie - International Edition, 2014, 53, 7789-7793.	13.8	203
27	Enhanced Lightâ€Harvesting and Photocatalytic Properties in Morphâ€TiO₂ from Greenâ€Leaf Biotemplates. Advanced Functional Materials, 2009, 19, 45-56.	14.9	200
28	Grafting of thermo-responsive polymer inside mesoporous silica with large pore size using ATRP and investigation of its use in drug release. Journal of Materials Chemistry, 2007, 17, 2428.	6.7	193
29	Balanced strength and ductility in CNT/Al composites achieved by flake powder metallurgy via shift-speed ball milling. Composites Part A: Applied Science and Manufacturing, 2017, 96, 57-66.	7.6	192
30	N-doped porous carbon with magnetic particles formed in situ for enhanced Cr(VI) removal. Water Research, 2013, 47, 4188-4197.	11.3	188
31	Extreme rejuvenation and softening in a bulk metallic glass. Nature Communications, 2018, 9, 560.	12.8	186
32	A high-performance Bi₂WO₆â€“graphene photocatalyst for visible light-induced H₂and O₂generation. Nanoscale, 2014, 6, 2186-2193.	5.6	179
33	3D-Structured Carbonized Sunflower Heads for Improved Energy Efficiency in Solar Steam Generation. ACS Applied Materials & Interfaces, 2020, 12, 2171-2179.	8.0	178
34	Hierarchically porous ZnO with high sensitivity and selectivity to H2S derived from biotemplates. Sensors and Actuators B: Chemical, 2009, 136, 499-509.	7.8	175
35	An approach to the uniform dispersion of a high volume fraction of carbon nanotubes in aluminum powder. Carbon, 2011, 49, 1965-1971.	10.3	173
36	Biomimetic optical materials: Integration of natureâ€™s design for manipulation of light. Progress in Materials Science, 2013, 58, 825-873.	32.8	172

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37	Leaf-architectured 3D Hierarchical Artificial Photosynthetic System of Perovskite Titanates Towards CO2 Photoreduction Into Hydrocarbon Fuels. Scientific Reports, 2013, 3, 1667.	3.3	159
38	Microstructure evolution and superelastic behavior in Ti-35Nb-2Ta-3Zr alloy processed by friction stir processing. Acta Materialia, 2017, 131, 499-510.	7.9	158
39	Biotemplated Materials for Sustainable Energy and Environment: Current Status and Challenges. ChemSusChem, 2011, 4, 1344-1387.	6.8	157
40	Strengthening and toughening mechanisms in graphene-Al nanolaminated composite micro-pillars. Acta Materialia, 2017, 125, 98-108.	7.9	156
41	Synergistic strengthening effect of graphene-carbon nanotube hybrid structure in aluminum matrix composites. Carbon, 2015, 95, 419-427.	10.3	154
42	Simultaneously achieving thermal insulation and rapid water transport in sugarcane stems for efficient solar steam generation. Journal of Materials Chemistry A, 2019, 7, 9034-9039.	10.3	151
43	Sonochemical fabrication of Fe3O4 nanoparticles on reduced graphene oxide for biosensors. Ultrasonics Sonochemistry, 2013, 20, 872-880.	8.2	148
44	Hydrothermal synthesis of ZnO hollow spheres using spherobacterium as biotemplates. Microporous and Mesoporous Materials, 2007, 100, 322-327.	4.4	147
45	Ag/diatomite for highly efficient solar vapor generation under one-sun irradiation. Journal of Materials Chemistry A, 2017, 5, 17817-17821.	10.3	144
46	One step fabrication of C-doped BiVO4 with hierarchical structures for a high-performance photocatalyst under visible light irradiation. Journal of Materials Chemistry A, 2013, 1, 8367.	10.3	142
47	Uniform dispersion of graphene oxide in aluminum powder by direct electrostatic adsorption for fabrication of graphene/aluminum composites. Nanotechnology, 2014, 25, 325601.	2.6	141
48	Novel Bacteria-Templated Sonochemical Route for the in Situ One-Step Synthesis of ZnS Hollow Nanostructures. Chemistry of Materials, 2007, 19, 2144-2146.	6.7	131
49	Simple fabrication of a Fe2O3/carbon composite for use in a high-performance lithium ion battery. Carbon, 2013, 52, 565-573.	10.3	131
50	Composite structure modeling and mechanical behavior of particle reinforced metal matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 597, 359-369.	5.6	131
51	Carbon-coated SnO₂@C with hierarchically porous structures and graphite layers inside for a high-performance lithium-ion battery. Journal of Materials Chemistry, 2012, 22, 2766-2773.	6.7	129
52	Strong and ductile carbon nanotube/aluminum bulk nanolaminated composites with two-dimensional alignment of carbon nanotubes. Scripta Materialia, 2012, 66, 331-334.	5.2	129
53	Enhanced interfacial bonding and mechanical properties in CNT/Al composites fabricated by flake powder metallurgy. Carbon, 2018, 130, 333-339.	10.3	129
54	Tailoring the structure and mechanical properties of graphene nanosheet/aluminum composites by flake powder metallurgy via shift-speed ball milling. Composites Part A: Applied Science and Manufacturing, 2018, 111, 73-82.	7.6	128

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55	Enhanced thermal conductivity in diamond/aluminum composites with a tungsten interface nanolayer. Materials & Design, 2013, 47, 160-166.	5.1	127
56	Ultrahigh Electrical Conductivity of Graphene Embedded in Metals. Advanced Functional Materials, 2019, 29, 1806792.	14.9	126
57	Tailoring the Morphology of gâ€C₃N₄ by Selfâ€Assembly towards High Photocatalytic Performance. ChemCatChem, 2014, 6, 3419-3425.	3.7	124
58	Microstructural characterization of TiB in in situ synthesized titanium matrix composites prepared by common casting technique. Journal of Alloys and Compounds, 2001, 327, 240-247.	5.5	119
59	HREM study of TiB/Ti interfaces in a TiB-TiC in situ composite. Scripta Materialia, 2001, 44, 1069-1075.	5.2	118
60	Highly porous graphitic materials prepared by catalytic graphitization. Carbon, 2013, 64, 132-140.	10.3	118
61	Bioâ€Inspired Photonic Materials: Prototypes and Structural Effect Designs for Applications in Solar Energy Manipulation. Advanced Functional Materials, 2018, 28, 1705309.	14.9	117
62	Metal-graphene interfaces in epitaxial and bulk systems: A review. Progress in Materials Science, 2020, 110, 100652.	32.8	114
63	Versatile Fabrication of Intact Threeâ€Dimensional Metallic Butterfly Wing Scales with Hierarchical Subâ€micrometer Structures. Angewandte Chemie - International Edition, 2011, 50, 8307-8311.	13.8	113
64	Lateral size effect of graphene on mechanical properties of aluminum matrix nanolaminated composites. Scripta Materialia, 2017, 139, 44-48.	5.2	113
65	Interface-induced strain hardening of graphene nanosheet/aluminum composites. Carbon, 2019, 146, 17-27.	10.3	113
66	Biogenic N-I-codoped TiO₂photocatalyst derived from kelp for efficient dye degradation. Energy and Environmental Science, 2011, 4, 172-180.	30.8	112
67	Semiconductor photocatalysts for water oxidation: current status and challenges. Physical Chemistry Chemical Physics, 2014, 16, 6810.	2.8	112
68	Microstructure and mechanical properties of cold-rolled TiNbTaZr biomedical Î² titanium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 490, 421-426.	5.6	111
69	3D Microstructure-based finite element modeling of deformation and fracture of SiCp/Al composites. Composites Science and Technology, 2016, 123, 1-9.	7.8	111
70	A flake powder metallurgy approach to Al2O3/Al biomimetic nanolaminated composites with enhanced ductility. Scripta Materialia, 2011, 65, 412-415.	5.2	110
71	Quantum Dots of 1T Phase Transitional Metal Dichalcogenides Generated via Electrochemical Li Intercalation. ACS Nano, 2018, 12, 308-316.	14.6	110
72	Highâ€Density Hotspots Engineered by Naturally Piledâ€Up Subwavelength Structures in Threeâ€Dimensional Copper Butterfly Wing Scales for Surfaceâ€Enhanced Raman Scattering Detection. Advanced Functional Materials, 2012, 22, 1578-1585.	14.9	109

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73	Towards strong and stiff carbon nanotube-reinforced high-strength aluminum alloy composites through a microlaminated architecture design. Scripta Materialia, 2014, 75, 30-33.	5.2	104
74	Bioinspired Fabrication of Hierarchically Structured, pH-Tunable Photonic Crystals with Unique Transition. ACS Nano, 2013, 7, 4911-4918.	14.6	102
75	Patterned Carbon Nitrideâ€“Based Hybrid Aerogel Membranes via 3D Printing for Broadband Solar Wastewater Remediation. Advanced Functional Materials, 2018, 28, 1801121.	14.9	101
76	Highly sensitive and rapidly responding room-temperature NO2 gas sensors based on WO3 nanorods/sulfonated graphene nanocomposites. Nano Research, 2018, 11, 791-803.	10.4	98
77	The synthesis of hierarchical porous iron oxide with wood templates. Microporous and Mesoporous Materials, 2005, 85, 82-88.	4.4	97
78	Butterflies: inspiration for solar cells and sunlight water-splitting catalysts. Energy and Environmental Science, 2012, 5, 9195.	30.8	97
79	Microstructure and mechanical properties of investment casted titanium matrix composites with B4C additions. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 628, 366-373.	5.6	97
80	Biomimetic polymeric semiconductor based hybrid nanosystems for artificial photosynthesis towards solar fuels generation via CO2 reduction. Nano Energy, 2016, 25, 128-135.	16.0	97
81	Carbon Materials Reinforced Aluminum Composites: A Review. Acta Metallurgica Sinica (English) Tj ETQq1 1 0.784314 rgBT /Overlock	2.9	96
82	Construction of Selfâ€Reporting Specific Chemical Sensors with High Sensitivity. Advanced Materials, 2007, 19, 4327-4332.	21.0	95
83	Strain-rate dependent deformation mechanism of graphene-Al nanolaminated composites studied using micro-pillar compression. International Journal of Plasticity, 2018, 105, 128-140.	8.8	95
84	In Situ Depositing Silver Nanoclusters on Silk Fibroin Fibers Supports by a Novel Biotemplate Redox Technique at Room Temperature. Journal of Physical Chemistry B, 2005, 109, 17429-17434.	2.6	94
85	Fabrication of ZnO microtubes with adjustable nanopores on the walls by the templating of butterfly wing scales. Nanotechnology, 2006, 17, 840-844.	2.6	93
86	Super black and ultrathin amorphous carbon film inspired by anti-reflection architecture in butterfly wing. Carbon, 2011, 49, 877-883.	10.3	92
87	The interfacial characterization of oxidized SiC(p)/2014 Al composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 303, 46-53.	5.6	91
88	3D Network Magnetophotonic Crystals Fabricated on Morpho Butterfly Wing Templates. Advanced Functional Materials, 2012, 22, 2072-2080.	14.9	91
89	Infrared Detection Based on Localized Modification of Morpho Butterfly Wings. Advanced Materials, 2015, 27, 1077-1082.	21.0	90
90	Butterfly wing architecture assisted CdS/Au/TiO2 Z-scheme type photocatalytic water splitting. International Journal of Hydrogen Energy, 2013, 38, 8244-8253.	7.1	89

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91	Particle size effect on the interfacial properties of SiC particle-reinforced Al-Cu-Mg composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 711, 643-649.	5.6	89
92	Fabrication of diamond/aluminum composites by vacuum hot pressing: Process optimization and thermal properties. Composites Part B: Engineering, 2013, 47, 173-180.	12.0	87
93	Bioinspired Hierarchical Tin Oxide Scaffolds for Enhanced Gas Sensing Properties. Journal of Physical Chemistry C, 2012, 116, 10274-10281.	3.1	84
94	A NiCo2S4 /hierarchical porous carbon for high performance asymmetrical supercapacitor. Journal of Power Sources, 2019, 427, 138-144.	7.8	83
95	Achieving Rich and Active Alkaline Hydrogen Evolution Heterostructures via Interface Engineering on 2D 1Tâ€MoS₂ Quantum Sheets. Advanced Functional Materials, 2020, 30, 2000551.	14.9	83
96	Synthesis of Cu-doped WO3 materials with photonic structures for high performance sensors. Journal of Materials Chemistry, 2010, 20, 9126.	6.7	82
97	Strong and ductile particulate reinforced ultrafine-grained metallic composites fabricated by flake powder metallurgy. Scripta Materialia, 2013, 68, 555-558.	5.2	82
98	Graphite film/aluminum laminate composites with ultrahigh thermal conductivity for thermal management applications. Materials and Design, 2016, 90, 508-515.	7.0	82
99	Enhanced strengthening and hardening via self-stabilized dislocation network in additively manufactured metals. Materials Today, 2021, 50, 79-88.	14.2	82
100	Cellulose Nanocrystals/Polyacrylamide Composites of High Sensitivity and Cycling Performance To Gauge Humidity. ACS Applied Materials & Interfaces, 2017, 9, 18231-18237.	8.0	81
101	Design of an efficient flake powder metallurgy route to fabricate CNT/6061Al composites. Materials and Design, 2018, 142, 288-296.	7.0	81
102	Leaf-inspired hierarchical porous CdS/Au/N-TiO2 heterostructures for visible light photocatalytic hydrogen evolution. Applied Catalysis B: Environmental, 2014, 147, 221-228.	20.2	80
103	A predictive model for interfacial thermal conductance in surface metallized diamond aluminum matrix composites. Materials & Design, 2014, 55, 257-262.	5.1	78
104	High permittivity and microwave absorption of porous graphitic carbons encapsulating Fe nanoparticles. Composites Science and Technology, 2012, 72, 1632-1636.	7.8	77
105	Morphology Genetic Materials Templated from Natural Species. Advanced Materials, 2015, 27, 464-478.	21.0	77
106	Synthesis of Biomorphous Nickel Oxide from a Pinewood Template and Investigation on a Hierarchical Porous Structure. Journal of the American Ceramic Society, 2006, 89, 662-665.	3.8	76
107	Poly(N,N-dimethylaminoethyl methacrylate) modification of activated carbon for copper ions removal. Materials Chemistry and Physics, 2009, 113, 784-789.	4.0	76
108	Two-Dimensional Nanosheets by Rapid and Efficient Microwave Exfoliation of Layered Materials. Chemistry of Materials, 2018, 30, 5932-5940.	6.7	76

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109	Fluorine-free Ti₃C₂T_x (T = O, OH) nanosheets (â¼450â€“100 nm) for nitrogen fixation under ambient conditions. Journal of Materials Chemistry A, 2019, 7, 14462-14465.	10.3	76
110	Synthesis of biomorphic ZnO interwoven microfibers using eggshell membrane as the biotemplate. Materials Letters, 2007, 61, 2714-2717.	2.6	75
111	Carbon nitride nanosheets as visible light photocatalytic initiators and crosslinkers for hydrogels with thermoresponsive turbidity. Journal of Materials Chemistry A, 2017, 5, 8933-8938.	10.3	75
112	Creep rupture life of in situ synthesized (TiB+TiC)/Ti matrix composites. Scripta Materialia, 2001, 44, 2449-2455.	5.2	74
113	Inspiration from butterfly and moth wing scales: Characterization, modeling, and fabrication. Progress in Materials Science, 2015, 68, 67-96.	32.8	74
114	Back stress in strain hardening of carbon nanotube/aluminum composites. Materials Research Letters, 2018, 6, 113-120.	8.7	74
115	Regain Strain-Hardening in High-Strength Metals by Nanofiller Incorporation at Grain Boundaries. Nano Letters, 2018, 18, 6255-6264.	9.1	74
116	Microstructure evolution and superelasticity of layer-like NiTiNb porous metal prepared by eutectic reaction. Acta Materialia, 2018, 143, 214-226.	7.9	73
117	A Scalable Nickelâ€“Cellulose Hybrid Metamaterial with Broadband Light Absorption for Efficient Solar Distillation. Advanced Materials, 2020, 32, e1907975.	21.0	73
118	Ultralight, flexible carbon hybrid aerogels from bacterial cellulose for strong microwave absorption. Carbon, 2020, 162, 283-291.	10.3	71
119	Controlled fabrication of Si nanoparticles on graphene sheets for Li-ion batteries. RSC Advances, 2013, 3, 6141.	3.6	69
120	Enhanced load transfer by designing mechanical interfacial bonding in carbon nanotube reinforced aluminum composites. Carbon, 2019, 146, 155-161.	10.3	69
121	Thermal properties of in situ grown graphene reinforced copper matrix laminated composites. Journal of Alloys and Compounds, 2019, 771, 228-237.	5.5	69
122	Biomimetic zinc oxide replica with structural color using butterfly (Ideopsis similis) wings as templates. Bioinspiration and Biomimetics, 2006, 1, 89-95.	2.9	68
123	Controllable synthesis and gas response of biomorphic SnO2 with architecture hierarchy of butterfly wings. Sensors and Actuators B: Chemical, 2010, 145, 39-45.	7.8	68
124	Biomorphic porous graphitic carbon for electromagnetic interference shielding. Journal of Materials Chemistry, 2012, 22, 21183.	6.7	68
125	Enhanced dislocation obstruction in nanolaminated graphene/Cu composite as revealed by stress relaxation experiments. Scripta Materialia, 2017, 131, 67-71.	5.2	68
126	Strengthening and deformation mechanisms in nanolaminated graphene-Al composite micro-pillars affected by graphene in-plane sizes. International Journal of Plasticity, 2019, 116, 265-279.	8.8	68

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127	Biomorphic Al2O3 fibers synthesized using cotton as bio-templates. Scripta Materialia, 2005, 53, 893-897.	5.2	67
128	Morphosynthesis of hierarchical ZnO replica using butterfly wing scales as templates. Microporous and Mesoporous Materials, 2006, 92, 227-233.	4.4	67
129	Effect of volume fraction of reinforcement on room temperature tensile property of in situ (TiB+TiC)/Ti matrix composites. Materials & Design, 2006, 27, 494-498.	5.1	67
130	Optical Functional Materials Inspired by Biology. Advanced Optical Materials, 2016, 4, 195-224.	7.3	67
131	Hierarchical anti-reflective laser-induced periodic surface structures (LIPSSs) on amorphous Si films for sensing applications. Nanoscale, 2020, 12, 13431-13441.	5.6	67
132	The synthesis and microstructure of morph-genetic TiC/C ceramics. Carbon, 2004, 42, 177-182.	10.3	66
133	Enhanced mechanical behavior and fabrication of silicon carbide particles covered by in-situ carbon nanotube reinforced 6061 aluminum matrix composites. Materials and Design, 2016, 107, 130-138.	7.0	66
134	3D Printing of Artificial Leaf with Tunable Hierarchical Porosity for CO₂ Photoreduction. Chemistry of Materials, 2018, 30, 799-806.	6.7	66
135	An Insight into Artificial Leaves for Sustainable Energy Inspired by Natural Photosynthesis. ChemCatChem, 2011, 3, 513-528.	3.7	65
136	Full-color CO2 gas sensing by an inverse opal photonic hydrogel. Chemical Communications, 2013, 49, 8229.	4.1	65
137	Highly sensitive, reproducible and uniform SERS substrates with a high density of three-dimensionally distributed hotspots: gyroid-structured Au periodic metallic materials. NPG Asia Materials, 2018, 10, e462-e462.	7.9	65
138	Reaction-free interface promoting strength-ductility balance in graphene nanosheet/Al composites. Carbon, 2020, 158, 449-455.	10.3	65
139	Tunable Photonic Polyelectrolyte Colorimetric Sensing for Anions, Cations and Zwitterions. Advanced Materials, 2010, 22, 5043-5047.	21.0	64
140	C2-symmetric benzene-based hydrogels with unique layered structures for controllable organic dye adsorption. Soft Matter, 2012, 8, 3231.	2.7	64
141	Challenges and Perspectives in Designing Artificial Photosynthetic Systems. Chemistry - A European Journal, 2016, 22, 9870-9885.	3.3	64
142	Facile Self-Cross-Linking Synthesis of 3D Nanoporous Co₃O₄/Carbon Hybrid Electrode Materials for Supercapacitors. ACS Applied Materials & Interfaces, 2016, 8, 16035-16044.	8.0	64
143	High-Efficiency g-C3N4 Based Photocatalysts for CO2 Reduction: Modification Methods. Advanced Fiber Materials, 2022, 4, 342-360.	16.1	64
144	Biomass-derived hierarchical porous CdS/M/TiO 2 (MÂ=ÂAu, Ag, pt, pd) ternary heterojunctions for photocatalytic hydrogen evolution. International Journal of Hydrogen Energy, 2014, 39, 16293-16301.	7.1	63

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145	Leaf-like carbon nanotube-graphene nanoribbon hybrid reinforcements for enhanced load transfer in copper matrix composites. Scripta Materialia, 2017, 138, 17-21.	5.2	63
146	Control of Drug Release through the In Situ Assembly of Stimuliâ€Responsive Ordered Mesoporous Silica with Magnetic Particles. ChemPhysChem, 2007, 8, 2478-2483.	2.1	62
147	3D hierarchical porous SnO₂derived from self-assembled biological systems for superior gas sensing application,. Journal of Materials Chemistry, 2012, 22, 1121-1126.	6.7	62
148	The influences of trace TiB and TiC on microstructure refinement and mechanical properties of in situ synthesized Ti matrix composite. Composites Part B: Engineering, 2012, 43, 3334-3337.	12.0	62
149	Microstructure evolution and mechanical properties of a Tiâ€“35Nbâ€“3Zrâ€“2Ta biomedical alloy processed by equal channel angular pressing (ECAP). Materials Science and Engineering C, 2013, 33, 4551-4561.	7.3	62
150	Fabrication of BiVO4 nanoplates with active facets on graphene sheets for visible-light photocatalyst. Carbon, 2015, 94, 599-606.	10.3	62
151	Interfacial strength and deformation mechanism of SiCâ€“Al composite micro-pillars. Scripta Materialia, 2016, 114, 56-59.	5.2	62
152	Microstructural characterization of TiC in in situ synthesized titanium matrix composites prepared by common casting technique. Journal of Alloys and Compounds, 2001, 327, 248-252.	5.5	61
153	Amorphous carbon-matrix composites with interconnected carbon nano-ribbon networks for electromagnetic interference shielding. Carbon, 2008, 46, 461-465.	10.3	61
154	Spontaneous Cross-linking for Fabrication of Nanohybrids Embedded with Size-Controllable Particles. ACS Nano, 2016, 10, 889-898.	14.6	61
155	Effect of reinforcements on high temperature mechanical properties of in situ synthesized titanium matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 491, 192-198.	5.6	60
156	Fabrication and good ethanol sensing of biomorphic SnO2with architecture hierarchy of butterfly wings. Nanotechnology, 2009, 20, 495502.	2.6	60
157	Biotemplate fabrication of SnO2 nanotubular materials by a sonochemical method for gas sensors. Journal of Nanoparticle Research, 2010, 12, 1389-1400.	1.9	60
158	Highly sensitive colorimetric sensing for heavy metal ions by strong polyelectrolyte photonic hydrogels. Journal of Materials Chemistry, 2011, 21, 17193.	6.7	60
159	Influence of interfaces on the mechanical behavior of SiC particulate-reinforced Alâ€“Znâ€“Mgâ€“Cu composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 644, 79-84.	5.6	60
160	Influence of cold deformation on martensite transformation and mechanical properties of Tiâ€“Nbâ€“Taâ€“Zr alloy. Journal of Alloys and Compounds, 2009, 469, 512-518.	5.5	59
161	Effect of Î² heat treatment temperature on microstructure and mechanical properties of in situ titanium matrix composites. Materials & Design, 2010, 31, 4269-4273.	5.1	59
162	Bioinspired Auâ€“CuS coupled photothermal materials: enhanced infrared absorption and photothermal conversion from butterfly wings. Nano Energy, 2015, 17, 52-62.	16.0	59

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163	Artificial photosynthesis on tree trunk derived alkaline tantalates with hierarchical anatomy: towards CO₂ photo-fixation into CO and CH₄. Nanoscale, 2015, 7, 113-120.	5.6	59
164	Nucleation and growth mechanisms of interfacial carbide in graphene nanosheet/Al composites. Carbon, 2020, 161, 17-24.	10.3	59
165	Fabrication of graphite film/aluminum composites by vacuum hot pressing: Process optimization and thermal conductivity. Composites Part B: Engineering, 2016, 107, 43-50.	12.0	58
166	High-strength CNT/Al-Zn-Mg-Cu composites with improved ductility achieved by flake powder metallurgy via elemental alloying. Composites Part A: Applied Science and Manufacturing, 2018, 111, 1-11.	7.6	58
167	Enhanced corrosion resistance in metal matrix composites assembled from graphene encapsulated copper nanoflakes. Carbon, 2019, 142, 482-490.	10.3	58
168	Fabrication and gas sensitivity of SnO2hierarchical films with interwoven tubular conformation by a biotemplate-directed solâ€“gel technique. Nanotechnology, 2006, 17, 3968-3972.	2.6	57
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