Junhui He

List of Publications by Year
in descending order

118	5,236	87888 38	95266 68
papers	citations	h-index	g-index

120	120	120	6703
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recent progress in antireflection and self-cleaning technology â€“ From surface engineering to functional surfaces. Progress in Materials Science, 2014, 61, 94-143.	32.8	350
2	Facile Synthesis of Monodisperse Manganese Oxide Nanostructures and Their Application in Water Treatment. Journal of Physical Chemistry C, 2008, 112, 17540-17545.	3.1	221
3	Spherical silica micro/nanomaterials with hierarchical structures: Synthesis and applications. Nanoscale, 2011, 3, 3984.	5.6	174
4	Self-Cleaning Antireflective Coatings Assembled from Peculiar Mesoporous Silica Nanoparticles. Langmuir, 2010, 26, 13528-13534.	3.5	166
5	Fabrication of Highly Transparent Superhydrophobic Coatings from Hollow Silica Nanoparticles. Langmuir, 2012, 28, 7512-7518.	3.5	165
6	Facile Controlled Synthesis of Pt/MnO‹sub›2‹/sub› Nanostructured Catalysts and Their Catalytic Performance for Oxidative Decomposition of Formaldehyde. Journal of Physical Chemistry C, 2012, 116, 851-860.	3.1	146
7	Facile Fabrication of Raspberry-like Composite Nanoparticles and Their Application as Building Blocks for Constructing Superhydrophilic Coatings. Journal of Physical Chemistry C, 2009, 113, 9063-9070.	3.1	135
8	Facile Deposition of Pd Nanoparticles on Carbon Nanotube Microparticles and Their Catalytic Activity for Suzuki Coupling Reactions. Journal of Physical Chemistry C, 2008, 112, 8172-8176.	3.1	127
9	Grapheneâ€“MnO‹sub›2‹/sub› Hybrid Nanostructure as a New Catalyst for Formaldehyde Oxidation. Journal of Physical Chemistry C, 2016, 120, 23660-23668.	3.1	124
10	Porous Silica Nanocapsules and Nanospheres: Dynamic Self-Assembly Synthesis and Application in Controlled Release. Chemistry of Materials, 2008, 20, 5894-5900.	6.7	119
11	Amino-functionalized silicananoparticles with center-radially hierarchical mesopores as ideal catalyst carriers. Nanoscale, 2012, 4, 852-859.	5.6	116
12	Facile sizeâ€controllable syntheses of highly monodisperse polystyrene nanoâ€•and microspheres by polyvinylpyrrolidoneâ€mediated emulsifierâ€free emulsion polymerization. Journal of Applied Polymer Science, 2008, 108, 1755-1760.	2.6	110
13	Ultraâ€Broadband Photodetector for the Visible to Terahertz Range by Selfâ€Assembling Reduced Graphene Oxideâ€Silicon Nanowire Array Heterojunctions. Small, 2014, 10, 2345-2351.	10.0	109
14	Superhydrophilic and Antireflective Properties of Silica Nanoparticle Coatings Fabricated via Layer-by-Layer Assembly and Postcalcination. Journal of Physical Chemistry C, 2009, 113, 148-152.	3.1	104
15	Mechanically Robust, Thermally Stable, Broadband Antireflective, and Superhydrophobic Thin Films on Glass Substrates. ACS Applied Materials & Interfaces, 2014, 6, 9029-9035.	8.0	103
16	Facile Fabrication of Hierarchically Structured Silica Coatings from Hierarchically Mesoporous Silica Nanoparticles and Their Excellent Superhydrophilicity and Superhydrophobicity. ACS Applied Materials & Interfaces, 2010, 2, 2365-2372.	8.0	102
17	In situ Assembly of Raspberry- and Mulberry-like Silica Nanospheres toward Antireflective and Antifogging Coatings. ACS Applied Materials & Interfaces, 2012, 4, 2204-2211.	8.0	99
18	CuO Nanoparticles-Containing Highly Transparent and Superhydrophobic Coatings with Extremely Low Bacterial Adhesion and Excellent Bactericidal Property. ACS Applied Materials & Interfaces, 2018, 10, 25717-25725.	8.0	99

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19	Substrate-Versatile Approach to Robust Antireflective and Superhydrophobic Coatings with Excellent Self-Cleaning Property in Varied Environments. ACS Applied Materials & Interfaces, 2017, 9, 34367-34376.	8.0	91
20	Antifogging and Antireflection Coatings Fabricated by Integrating Solid and Mesoporous Silica Nanoparticles without Any Post-Treatments. ACS Applied Materials & Interfaces, 2012, 4, 3293-3299.	8.0	89
21	An effective method to significantly enhance the robustness and adhesion-to-substrate of high transmittance superamphiphobic silica thin films. Journal of Materials Chemistry A, 2014, 2, 16601-16607.	10.3	82
22	Hydrogen-Bonding-Supported Self-Healing Antifogging Thin Films. Scientific Reports, 2015, 5, 9227.	3.3	80
23	Highly selective phosphorescent nanoprobes for sensing and bioimaging of homocysteine and cysteine. Journal of Materials Chemistry, 2012, 22, 7894.	6.7	79
24	Cellulose as a Scaffold for Self-Assembly: From Basic Research to Real Applications. Langmuir, 2016, 32, 12269-12282.	3.5	67
25	Broadband anti-reflective and water-repellent coatings on glass substrates for self-cleaning photovoltaic cells. Materials Research Bulletin, 2013, 48, 2522-2528.	5.2	64
26	Graphene oxide as quartz crystal microbalance sensing layers for detection of formaldehyde. Sensors and Actuators B: Chemical, 2016, 228, 486-490.	7.8	63
27	Enhanced formaldehyde oxidation on Pt/MnO2 catalysts modified with alkali metal salts. Journal of Colloid and Interface Science, 2014, 428, 1-7.	9.4	61
28	Threeâ€Dimensional Macroassembly of Sandwichâ€Like, Hierarchical, Porous Carbon/Graphene Nanosheets towards Ultralight, Superhigh Surface Area, Multifunctional Aerogels. Chemistry - A European Journal, 2016, 22, 2515-2524.	3.3	59
29	Threeâ€Layered Hollow Nanospheres Based Coatings with Ultrahighâ€Performance of Energyâ€Saving, Antireflection, and Selfâ€Cleaning for Smart Windows. Small, 2018, 14, e1801661.	10.0	59
30	Highly conductive free-standing reduced graphene oxide thin films for fast photoelectric devices. Carbon, 2017, 115, 561-570.	10.3	56
31	Unprecedented Selectivity and Rapid Uptake of CuS Nanostructures toward Hg(II) Ions. ACS Applied Materials & Interfaces, 2019, 11, 19200-19206.	8.0	51
32	Wettability behavior of special microscale ZnO nail-coated mesh films for oilâ€“water separation. Journal of Colloid and Interface Science, 2015, 458, 79-86.	9.4	48
33	Efficient fabrication of transparent antimicrobial poly(vinyl alcohol) thin films. Journal of Nanoparticle Research, 2009, 11, 553-560.	1.9	47
34	Fabrication of mechanically robust, self-cleaning and optically high-performance hybrid thin films by SiO₂&TiO₂double-shelled hollow nanospheres. Nanoscale, 2015, 7, 13125-13134.	5.6	45
35	Fabrication of visible/near-IR antireflective and superhydrophobic coatings from hydrophobically modified hollow silica nanoparticles and poly(methyl methacrylate). RSC Advances, 2012, 2, 12764.	3.6	44
36	Facile dip-coating approach to fabrication of mechanically robust hybrid thin films with high transmittance and durable superhydrophilicity. Journal of Materials Chemistry A, 2014, 2, 6994.	10.3	43

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37	Rational Design and Construction of Well-Organized Macro-Mesoporous SiO₂/TiO₂ Nanostructure toward Robust High-Performance Self-Cleaning Antireflective Thin Films. ACS Applied Materials & Interfaces, 2017, 9, 17466-17475.	8.0	40
38	Inkjet Printing Enabled Controllable Paper Superhydrophobization and Its Applications. ACS Applied Materials & Interfaces, 2018, 10, 11343-11349.	8.0	40
39	Facile fabrication of transparent, broadband photoresponse, self-cleaning multifunctional grapheneâ€“TiO2 hybrid films. Journal of Colloid and Interface Science, 2014, 420, 119-126.	9.4	39
40	Facile Preparation of F and N Codoped Pinecone-Like Titania Hollow Microparticles with Visible Light Photocatalytic Activity. Journal of Physical Chemistry C, 2009, 113, 14151-14158.	3.1	38
41	Structurally colored surfaces with antireflective, self-cleaning, and antifogging properties. Journal of Colloid and Interface Science, 2012, 381, 189-197.	9.4	38
42	A versatile route to polymer-reinforced, broadband antireflective and superhydrophobic thin films without high-temperature treatment. Journal of Colloid and Interface Science, 2017, 486, 1-7.	9.4	38
43	A novel precursor-derived one-step growth approach to fabrication of highly antireflective, mechanically robust and self-healing nanoporous silica thin films. Journal of Materials Chemistry C, 2013, 1, 4655.	5.5	37
44	Rational design and elaborate construction of surface nano-structures toward highly antireflective superamphiphobic coatings. Journal of Materials Chemistry A, 2013, 1, 8721.	10.3	37
45	Robust yet self-healing antifogging/antibacterial dual-functional composite films by a simple one-pot strategy. Journal of Colloid and Interface Science, 2019, 540, 107-114.	9.4	37
46	Fully Suspended Reduced Graphene Oxide Photodetector with Annealing Temperature-Dependent Broad Spectral Binary Photoresponses. ACS Photonics, 2017, 4, 2797-2806.	6.6	36
47	One-Pot Fabrication of Antireflective/Antibacterial Dual-Function Ag NP-Containing Mesoporous Silica Thin Films. ACS Applied Materials & Interfaces, 2018, 10, 11189-11196.	8.0	35
48	Portable Hg²⁺ Nanosensor with ppt Level Sensitivity Using Nanozyme as the Recognition Unit, Enrichment Carrier, and Signal Amplifier. ACS Applied Materials & Interfaces, 2020, 12, 11761-11768.	8.0	34
49	Adsorptive performance and catalytic activity of superparamagnetic Fe3O4@nSiO2@mSiO2 coreâ€“shell microspheres towards DDT. Journal of Colloid and Interface Science, 2014, 419, 68-72.	9.4	33
50	Integration of CuS nanoparticles and cellulose fibers towards fast, selective and efficient capture and separation of mercury ions. Chemical Engineering Journal, 2021, 408, 127336.	12.7	33
51	Superhydrophobic self-cleaning antireflective coatings on Fresnel lenses by integrating hydrophilic solid and hydrophobic hollow silica nanoparticles. RSC Advances, 2013, 3, 21789.	3.6	32
52	Fabrication of mechanically robust films with high transmittance and durable superhydrophilicity by precursor-derived one-step growth and post-treatment. Journal of Materials Chemistry A, 2014, 2, 402-409.	10.3	32
53	Robust antifogging antireflective coatings on polymer substrates by hydrochloric acid vapor treatment. Journal of Colloid and Interface Science, 2015, 444, 67-73.	9.4	32
54	Broadband antireflective superhydrophobic self-cleaning coatings based on novel dendritic porous particles. RSC Advances, 2016, 6, 7864-7871.	3.6	31

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55	Plasma-Induced, Self-Masking, One-Step Approach to an Ultrabroadband Antireflective and Superhydrophilic Subwavelength Nanostructured Fused Silica Surface. ACS Applied Materials & Interfaces, 2018, 10, 13851-13859.	8.0	31
56	Multifunctional Surfaces with Outstanding Mechanical Stability on Glass Substrates by Simple H₂SiF₆-Based Vapor Etching. Langmuir, 2013, 29, 3089-3096.	3.5	29
57	Antifogging antireflective coatings on Fresnel lenses by integrating solid and mesoporous silica nanoparticles. Microporous and Mesoporous Materials, 2013, 176, 41-47.	4.4	28
58	Long-Lived Multilayer Coatings for Smart Windows: Integration of Energy-Saving, Antifogging, and Self-Healing Functions. ACS Applied Energy Materials, 2019, 2, 7467-7473.	5.1	27
59	Antifogging antireflective thin films: does the antifogging layer have to be the outmost layer?. Chemical Communications, 2015, 51, 12661-12664.	4.1	26
60	A facile hybrid approach to high-performance broadband antireflective thin films with humidity resistance as well as mechanical robustness. Journal of Materials Chemistry C, 2016, 4, 5342-5348.	5.5	26
61	A copperâ€“manganese composite oxide as QCM sensing layers for detection of formaldehyde gas. RSC Advances, 2018, 8, 22-27.	3.6	26
62	Bifunctional Template-Induced VO₂@SiO₂ Dual-Shelled Hollow Nanosphere-Based Coatings for Smart Windows. ACS Applied Materials & Interfaces, 2019, 11, 15960-15968.	8.0	26
63	A selectivity-controlled adsorbent of molybdenum disulfide nanosheets armed with superparamagnetism for rapid capture of mercury ions. Journal of Colloid and Interface Science, 2019, 551, 251-260.	9.4	25
64	Nearly Monodisperse Copper Selenide Nanoparticles for Recognition, Enrichment, and Sensing of Mercury Ions. ACS Applied Materials & Interfaces, 2020, 12, 39118-39126.	8.0	25
65	Lotus Seedpod Inspired SERS Substrates: A Novel Platform Consisting of 3D Subâ€10 nm Annular Hot Spots for Ultrasensitive SERS Detection. Advanced Optical Materials, 2018, 6, 1800056.	7.3	24
66	Self-Templated Fabrication of Robust Moth-Eye-Like Nanostructures with Broadband and Quasi-Omnidirectional Antireflection Properties. ACS Photonics, 2017, 4, 188-196.	6.6	23
67	Are ceramic nanofilms a soft matter?. Soft Matter, 2006, 2, 119-125.	2.7	22
68	Formation of Silver Nanoparticles and Nanocraters on Silicon Wafers. Langmuir, 2006, 22, 7881-7884.	3.5	22
69	Hydrogel-Encapsulated Enzyme Facilitates Colorimetric Acute Toxicity Assessment of Heavy Metal Ions. ACS Applied Materials & Interfaces, 2018, 10, 26705-26712.	8.0	22
70	Fabrication of ultra-smooth hybrid thin coatings towards robust, highly transparent, liquid-repellent and antismudge coatings. Journal of Colloid and Interface Science, 2021, 594, 781-790.	9.4	21
71	Enhanced broadband photoresponse of substrate-free reduced graphene oxide photodetectors. RSC Advances, 2017, 7, 46536-46544.	3.6	20
72	Facile Fabrication of Porous Titania Microtube Arrays by Replication of Human Hair. Journal of the American Ceramic Society, 2005, 88, 3513-3514.	3.8	19

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73	Multifunctional Fe3O4@nSiO2@mSiO2â€“Fe coreâ€“shell microspheres for highly efficient removal of 1,1,1-trichloro-2,2-bis(4-chlorophenyl)ethane (DDT) from aqueous media. Journal of Colloid and Interface Science, 2014, 431, 90-96.	9.4	19
74	Synthesis of copper oxide nanoparticles and their sensing property to hydrogen cyanide under varied humidity conditions. Sensors and Actuators B: Chemical, 2015, 213, 59-64.	7.8	19
75	Paperâ€Based Hydrophobic/Lipophobic Surface for Sensing Applications Involving Aggressive Liquids. Advanced Materials Interfaces, 2016, 3, 1600672.	3.7	19
76	L-Cysteine functionalized graphene oxide nanoarchitectonics: A metal-free Hg2+ nanosensor with peroxidase-like activity boosted by competitive adsorption. Talanta, 2022, 242, 123320.	5.5	19
77	Tailoring the structure of metal oxide nanostructures towards enhanced sensing properties for environmental applications. Journal of Colloid and Interface Science, 2012, 368, 41-48.	9.4	18
78	Facile preparation of Fe nanochains and their electromagnetic properties. RSC Advances, 2013, 3, 15966.	3.6	18
79	Novel template-assisted microwave conversion of graphene oxide to graphene patterns: A reduction transfer mechanism. Carbon, 2019, 148, 159-163.	10.3	18
80	A sulfur, nitrogen dual-doped porous graphene nanohybrid for ultraselective Hg(<scp>ii</scp>) separation over Pb(<scp>ii</scp>) and Cu(<scp>ii</scp>). Nanoscale, 2020, 12, 16543-16555.	5.6	18
81	Auâ€“Pt bimetallic nanoparticles supported on nest-like MnO2: synthesis and application in HCHO decomposition. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	17
82	Broadband Antireflective Superhydrophilic Thin Films with Outstanding Mechanical Stability on Glass Substrates. Chinese Journal of Chemistry, 2014, 32, 507-512.	4.9	17
83	Fabrication of Antireflective Nanostructures on a Transmission Grating Surface Using a One-Step Self-Masking Method. Nanomaterials, 2019, 9, 180.	4.1	17
84	Superamphiphobic Coatings with High Transmittance: Structure, Fabrication, and Perspective. Advanced Materials Interfaces, 2015, 2, 1500196.	3.7	16
85	Fabrication of robust high-transmittance superamphiphobic coatings through dip-coating followed by spray-coating. RSC Advances, 2015, 5, 89262-89268.	3.6	15
86	Rational design of HSNs/VO2 bilayer coatings with optimized optical performances and mechanical robustness for smart windows. Solar Energy Materials and Solar Cells, 2019, 200, 109920.	6.2	14
87	Superhydrophobic VO₂ Nanoparticle/PDMS Composite Films as Thermochromic, Anti-icing, and Self-Cleaning Coatings. ACS Applied Nano Materials, 2022, 5, 5599-5608.	5.0	14
88	Preparation of Au0.5Pt0.5/MnO2/cotton catalysts for decomposition of formaldehyde. Journal of Nanoparticle Research, 2013, 15, 1.	1.9	13
89	Tunable near-infrared photovoltaic and photoconductive properties of reduced graphene oxide thin films by controlling the number of reduced graphene oxide bilayers. Carbon, 2014, 77, 1111-1122.	10.3	13
90	Pd-loaded magnetic mesoporous nanocomposites: A magnetically recoverable catalyst with effective enrichment and high activity for DDT and DDE removal under mild conditions. Journal of Colloid and Interface Science, 2015, 457, 195-202.	9.4	13

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91	Novel SiO₂/H₂Ti₂O₅Â·H₂O-Nanochain Composite with High UVâ€“Visible Photocatalytic Activity for Supertransparent Multifunctional Thin Films. Langmuir, 2016, 32, 13611-13619.	3.5	13
92	Straightforward Approach to Antifogging, Antireflective, Dual-Function, Nanostructured Coatings. Langmuir, 2019, 35, 11351-11357.	3.5	12
93	Acute heavy metal toxicity test based on bacteria-hydrogel. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 563, 318-323.	4.7	12
94	Controllable Design of Bifunctional VO₂ Coatings with Superhydrophobic and Thermochromic Performances. ACS Applied Materials & Interfaces, 2021, 13, 13751-13759.	8.0	11
95	Hydrothermal synthesis of nanostructured flower-like Ni(OH)₂particles and their excellent sensing performance towards low concentration HCN gas. RSC Advances, 2015, 5, 26823-26831.	3.6	10
96	Superfast microwave synthesis of hierarchically porous rGO by graphite ignited reduction propagation. Carbon, 2021, 178, 734-742.	10.3	10
97	Self-assembly of mercury-ion recognizing CuS nanocrystals into 3D sponge-like aerogel towards superior mercury capturer with outstanding selectivity and efficiency. Chemical Engineering Journal, 2021, 426, 130868.	12.7	10
98	Selective elimination of the free fatty acid fraction from esterified fatty acids in rat plasma through chemical derivatization and immobilization on amino functionalized silica nano-particles. Journal of Chromatography A, 2016, 1431, 197-204.	3.7	8
99	Hydrophobic/lipophobic barrier capable of confining aggressive liquids for paper-based assay. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 520, 544-549.	4.7	8
100	Smart Design of Small Pd Nanoparticles Confined in Hollow Carbon Nanospheres with Large Center-Radial Mesopores. European Journal of Inorganic Chemistry, 2017, 2017, 2517-2524.	2.0	8
101	In Situ Nanopressing: A General Approach to Robust Nanoparticles-Polymer Surface Structures. Scientific Reports, 2016, 6, 33494.	3.3	6
102	Few-Atomic-Layers Iron for Hydrogen Evolution from Water by Photoelectrocatalysis. IScience, 2020, 23, 101613.	4.1	6
103	Precise recognition of Zn(II) ions by a finely designed pair of Î±-NiS and Î²-NiS nanostructures: A sandwich mode recognition approach. Journal of Environmental Chemical Engineering, 2021, 9, 106837.	6.7	6
104	Rapid assessment of DNA damage induced by polystyrene nanosphere suspension using a photoelectrochemical DNA sensor. Science China Chemistry, 2011, 54, 1260-1265.	8.2	5
105	In situ formation of artificial moth-eye structure by spontaneous nano-phase separation. Scientific Reports, 2018, 8, 1082.	3.3	5
106	Coâ€“Fe Prussian Blue Coordination Polymer Modified Silicon Nanowires Array for Efficient Photoelectrochemical Water Oxidation. Journal of Nanoscience and Nanotechnology, 2018, 18, 5674-5678.	0.9	5
107	Easy, Fast, Selective, and Simultaneous Separation of Hg(II) and Oil via Loofah-Sponge-Inspired Hierarchically Porous Membranes. ACS Applied Materials & Interfaces, 2022, 14, 27063-27073.	8.0	5
108	Superhydrophilic coatings with enhanced transmittance fabricated from solid and mesoporous silica nanoparticles. Journal of Adhesion Science and Technology, 2014, 28, 815-822.	2.6	4

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109	Hierarchically porous rGO synthesized by microwave reduction propagation for highly efficient adsorption and enrichment of lindane. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 626, 127017.	4.7	3
110	Fabrication of Graphene-Based Nanostructured Thin Films with Mid-Infrared Photoresponse Properties. International Journal of Nanoscience, 2014, 13, 1460008.	0.7	2
111	High efficiency enrichment of organochlorine pesticides from water by nitrogenous porous carbon materials towards their extremely low concentration detection. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 631, 127728.	4.7	2
112	In Situ Fabrication of Metal Nanoparticles in Solid Matrices. , 2006, , 91-117.		1
113	Inorganic replication of human hair and in situ synthesis of gold nanoparticles. Frontiers of Materials Science in China, 2007, 1, 263-267.	0.5	1
114	EFFICIENT CONTROL OVER THE PORE STRUCTURE OF Fe3O4â€“nSiO2â€“mSiO2 COREâ€“SHELL NANOPARTICLES. International Journal of Nanoscience, 2012, 11, 1240031.	0.7	1
115	Facile Passivation of Silicon Nanowires Array as Stable Photoanode in Aqueous Electrolytes. Journal of Nanoscience and Nanotechnology, 2018, 18, 2844-2849.	0.9	1
116	Exceedingly Rapid Enrichment of Organochlorine Pollutants in Complex Samples Using Amino-Functionalized Carbon Nanotubes. ACS ES&T Water, 2021, 1, 919-927.	4.6	1
117	Hollow SnS nanosensor for portable recognition, enrichment and detection of copper ions: A precision design based on the solubility product principle. Chemical Engineering Journal, 2022, 445, 136758.	12.7	1
118	Smart Design of Small Pd Nanoparticles Confined in Hollow Carbon Nanospheres with Large Center-Radial Mesopores. European Journal of Inorganic Chemistry, 2017, 2017, 2516-2516.	2.0	0