Yue-kun Lai

List of Publications by Year
in descending order

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203	20,736	5896	10734
papers	citations	81 h-index	138 g-index

213	213	213	20390
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A review of one-dimensional TiO₂nanostructured materials for environmental and energy applications. Journal of Materials Chemistry A, 2016, 4, 6772-6801.	10.3	793
2	High-Efficiency Photoelectrocatalytic Hydrogen Generation Enabled by Palladium Quantum Dots-Sensitized TiO₂ Nanotube Arrays. Journal of the American Chemical Society, 2012, 134, 15720-15723.	13.7	571
3	A review on special wettability textiles: theoretical models, fabrication technologies and multifunctional applications. Journal of Materials Chemistry A, 2017, 5, 31-55.	10.3	515
4	Robust superhydrophobic TiO₂@fabrics for UV shielding, self-cleaning and oilâ€“water separation. Journal of Materials Chemistry A, 2015, 3, 2825-2832.	10.3	474
5	Transparent superhydrophobic/superhydrophilic TiO2-based coatings for self-cleaning and anti-fogging. Journal of Materials Chemistry, 2012, 22, 7420.	6.7	441
6	Designing Superhydrophobic Porous Nanostructures with Tunable Water Adhesion. Advanced Materials, 2009, 21, 3799-3803.	21.0	439
7	Graphene aerogels for efficient energy storage and conversion. Energy and Environmental Science, 2018, 11, 772-799.	30.8	435
8	Robust fluorine-free superhydrophobic PDMSâ€“ormosil@fabrics for highly effective self-cleaning and efficient oilâ€“water separation. Journal of Materials Chemistry A, 2016, 4, 12179-12187.	10.3	432
9	Oneâ€dimensional TiO₂ Nanotube Photocatalysts for Solar Water Splitting. Advanced Science, 2017, 4, 1600152.	11.2	405
10	A review of TiO 2 nanostructured catalysts for sustainable H 2 generation. International Journal of Hydrogen Energy, 2017, 42, 8418-8449.	7.1	309
11	Recent Advances in TiO₂â€Based Nanostructured Surfaces with Controllable Wettability and Adhesion. Small, 2016, 12, 2203-2224.	10.0	278
12	Some Critical Structure Factors of Titanium Oxide Nanotube Array in Its Photocatalytic Activity. Environmental Science & Technology, 2007, 41, 4735-4740.	10.0	274
13	A transparent superhydrophobic coating with mechanochemical robustness for anti-icing, photocatalysis and self-cleaning. Chemical Engineering Journal, 2020, 399, 125746.	12.7	264
14	Hierarchical TiO₂ Nanoflakes and Nanoparticles Hybrid Structure for Improved Photocatalytic Activity. Journal of Physical Chemistry C, 2012, 116, 2772-2780.	3.1	262
15	Rational design of materials interface at nanoscale towards intelligent oilâ€“water separation. Nanoscale Horizons, 2018, 3, 235-260.	8.0	262
16	Bioinspired Special Wettability Surfaces: From Fundamental Research to Water Harvesting Applications. Small, 2017, 13, 1602992.	10.0	259
17	Icephobic materials: Fundamentals, performance evaluation, and applications. Progress in Materials Science, 2019, 103, 509-557.	32.8	258
18	In Situ Surfaceâ€Modificationâ€Induced Superhydrophobic Patterns with Reversible Wettability and Adhesion. Advanced Materials, 2013, 25, 1682-1686.	21.0	249

#	Article	IF	Citations
19	Titanate and titania nanostructured materials for environmental and energy applications: a review. RSC Advances, 2015, 5, 79479-79510.	3.6	247
20	In situ plasmonic Ag nanoparticle anchored TiO₂ nanotube arrays as visible-light-driven photocatalysts for enhanced water splitting. Nanoscale, 2016, 8, 5226-5234.	5.6	243
21	Nitrogen-doped TiO2 nanotube array films with enhanced photocatalytic activity under various light sources. Journal of Hazardous Materials, 2010, 184, 855-863.	12.4	240
22	Crafting Musselâ€Inspired Metal Nanoparticleâ€Decorated Ultrathin Graphitic Carbon Nitride for the Degradation of Chemical Pollutants and Production of Chemical Resources. Advanced Materials, 2019, 31, e1806314.	21.0	239
23	Robust translucent superhydrophobic PDMS/PMMA film by facile one-step spray for self-cleaning and efficient emulsion separation. Chemical Engineering Journal, 2017, 330, 26-35.	12.7	228
24	Ultrasound aided photochemical synthesis of Ag loaded TiO2 nanotube arrays to enhance photocatalytic activity. Journal of Hazardous Materials, 2009, 171, 1045-1050.	12.4	223
25	Bioinspired Surfaces with Superwettability for Antiâ€Icing and Iceâ€Phobic Application: Concept, Mechanism, and Design. Small, 2017, 13, 1701867.	10.0	223
26	Recent Progress of Polysaccharideâ€Based Hydrogel Interfaces for Wound Healing and Tissue Engineering. Advanced Materials Interfaces, 2019, 6, 1900761.	3.7	222
27	Rational construction of highly transparent superhydrophobic coatings based on a non-particle, fluorine-free and water-rich system for versatile oil-water separation. Chemical Engineering Journal, 2018, 333, 621-629.	12.7	207
28	Constructing multifunctional MOF@rGO hydro-/aerogels by the self-assembly process for customized water remediation. Journal of Materials Chemistry A, 2017, 5, 11873-11881.	10.3	206
29	Bioinspired Surfaces with Superamphiphobic Properties: Concepts, Synthesis, and Applications. Advanced Functional Materials, 2018, 28, 1707415.	14.9	206
30	A self-roughened and biodegradable superhydrophobic coating with UV shielding, solar-induced self-healing and versatile oilâ€“water separation ability. Journal of Materials Chemistry A, 2019, 7, 2122-2128.	10.3	205
31	Effects of the Structure of TiO[sub 2] Nanotube Array on Ti Substrate on Its Photocatalytic Activity. Journal of the Electrochemical Society, 2006, 153, D123.	2.9	200
32	A â€œPDMS-in-waterâ€•emulsion enables mechanochemically robust superhydrophobic surfaces with self-healing nature. Nanoscale Horizons, 2020, 5, 65-73.	8.0	193
33	4D printing and stimuli-responsive materials in biomedical aspects. Acta Biomaterialia, 2019, 92, 19-36.	8.3	191
34	Advanced Materials with Special Wettability toward Intelligent Oily Wastewater Remediation. ACS Applied Materials & Interfaces, 2021, 13, 67-87.	8.0	190
35	A novel strategy for fabricating robust superhydrophobic fabrics by environmentally-friendly enzyme etching. Chemical Engineering Journal, 2019, 355, 290-298.	12.7	183
36	Markedly Controllable Adhesion of Superhydrophobic Spongelike Nanostructure TiO₂ Films. Langmuir, 2008, 24, 3867-3873.	3.5	182

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37	In situ formation of large-scale Ag/AgCl nanoparticles on layered titanate honeycomb by gas phase reaction for visible light degradation of phenol solution. Applied Catalysis B: Environmental, 2011, 106, 577-585.	20.2	182
38	Fabrication of uniform Ag/TiO2 nanotube array structures with enhanced photoelectrochemical performance. New Journal of Chemistry, 2010, 34, 1335.	2.8	181
39	Conductive Inks Based on a Lithium Titanate Nanotube Gel for Highâ€Rate Lithiumâ€Ion Batteries with Customized Configuration. Advanced Materials, 2016, 28, 1567-1576.	21.0	178
40	Photoelectrocatalytic properties of Ag nanoparticles loaded TiO2 nanotube arrays prepared by pulse current deposition. Electrochimica Acta, 2010, 55, 7211-7218.	5.2	175
41	Robust Flowerâ€Like TiO₂@Cotton Fabrics with Special Wettability for Effective Selfâ€Cleaning and Versatile Oil/Water Separation. Advanced Materials Interfaces, 2015, 2, 1500220.	3.7	175
42	Metalâ€“organic frameworks and their derivatives with graphene composites: preparation and applications in electrocatalysis and photocatalysis. Journal of Materials Chemistry A, 2020, 8, 2934-2961.	10.3	170
43	Recent Advances in Siliconâ€Based Electrodes: From Fundamental Research toward Practical Applications. Advanced Materials, 2021, 33, e2004577.	21.0	168
44	Rational design of multi-layered superhydrophobic coating on cotton fabrics for UV shielding, self-cleaning and oil-water separation. Materials and Design, 2017, 134, 342-351.	7.0	164
45	Liquid mobility on superwettable surfaces for applications in energy and the environment. Journal of Materials Chemistry A, 2019, 7, 38-63.	10.3	161
46	Optimized porous rutile TiO2 nanorod arrays for enhancing the efficiency of dye-sensitized solar cells. Energy and Environmental Science, 2013, 6, 1615.	30.8	160
47	Bioinspired Patterning with Extreme Wettability Contrast on TiO₂ Nanotube Array Surface: A Versatile Platform for Biomedical Applications. Small, 2013, 9, 2945-2953.	10.0	159
48	3D Au-decorated BiMoO₆ nanosheet/TiO₂ nanotube array heterostructure with enhanced UV and visible-light photocatalytic activity. Journal of Materials Chemistry A, 2017, 5, 16412-16421.	10.3	150
49	Superhydrophilicâ€“superhydrophobic micropattern on TiO2 nanotube films by photocatalytic lithography. Electrochemistry Communications, 2008, 10, 387-391.	4.7	147
50	Progress on particulate matter filtration technology: basic concepts, advanced materials, and performances. Nanoscale, 2020, 12, 437-453.	5.6	145
51	Electrochemically multi-anodized TiO2 nanotube arrays for enhancing hydrogen generation by photoelectrocatalytic water splitting. Electrochimica Acta, 2010, 55, 4776-4782.	5.2	132
52	A semi-interpenetrating network ionic hydrogel for strain sensing with high sensitivity, large strain range, and stable cycle performance. Chemical Engineering Journal, 2020, 385, 123912.	12.7	128
53	Immobilization of Pt Nanoparticles via Rapid and Reusable Electropolymerization of Dopamine on TiO₂ Nanotube Arrays for Reversible SERS Substrates and Nonenzymatic Glucose Sensors. Small, 2017, 13, 1604240.	10.0	125
54	A highly efficient ZnS/CdS@TiO2 photoelectrode for photogenerated cathodic protection of metals. Electrochimica Acta, 2010, 55, 8717-8723.	5.2	122

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55	Understanding the Role of Nanostructures for Efficient Hydrogen Generation on Immobilized Photocatalysts. Advanced Energy Materials, 2013, 3, 1368-1380.	19.5	122
56	Progress in TiO₂ nanotube coatings for biomedical applications: a review. Journal of Materials Chemistry B, 2018, 6, 1862-1886.	5.8	121
57	Mechanically Resistant and Sustainable Cellulose-Based Composite Aerogels with Excellent Flame Retardant, Sound-Absorption, and Superantiwetting Ability for Advanced Engineering Materials. ACS Sustainable Chemistry and Engineering, 2018, 6, 927-936.	6.7	120
58	Advanced colloidal lithography: From patterning to applications. Nano Today, 2018, 22, 36-61.	11.9	120
59	Synthesis, modification, and photo/photoelectrocatalytic degradation applications of TiO2 nanotube arrays: a review. Nanotechnology Reviews, 2016, 5, .	5.8	118
60	Lightâ€Driven Sustainable Hydrogen Production Utilizing TiO₂ Nanostructures: A Review. Small Methods, 2019, 3, 1800184.	8.6	118
61	Enhanced photocatalytic performances of n-TiO₂ nanotubes by uniform creation of pâ€“n heterojunctions with p-Bi₂O₃ quantum dots. Nanoscale, 2015, 7, 11552-11560.	5.6	117
62	Multifunctional Superamphiphobic TiO₂ Nanostructure Surfaces with Facile Wettability and Adhesion Engineering. Small, 2014, 10, 4865-4873.	10.0	113
63	TiO₂ nanotube platforms for smart drug delivery: a review. International Journal of Nanomedicine, 2016, Volume 11, 4819-4834.	6.7	113
64	Photothermal and Joule heating-assisted thermal management sponge for efficient cleanup of highly viscous crude oil. Journal of Hazardous Materials, 2021, 403, 124090.	12.4	109
65	Topographic effect on human induced pluripotent stem cells differentiation towards neuronal lineage. Biomaterials, 2013, 34, 8131-8139.	11.4	108
66	Facile construction of robust fluorine-free superhydrophobic TiO 2 @fabrics with excellent anti-fouling, water-oil separation and UV-protective properties. Materials and Design, 2017, 128, 1-8.	7.0	107
67	A novel electrochemical strategy for improving blood compatibility of titanium-based biomaterials. Colloids and Surfaces B: Biointerfaces, 2010, 79, 309-313.	5.0	106
68	Magnetic responsive and flexible composite superhydrophobic photothermal film for passive anti-icing/active deicing. Chemical Engineering Journal, 2022, 427, 130922.	12.7	105
69	Understanding the Role of Dynamic Wettability for Condensate Microdrop Selfâ€Propelling Based on Designed Superhydrophobic TiO₂ Nanostructures. Small, 2017, 13, 1600687.	10.0	101
70	Uniform carbon dots@TiO₂ nanotube arrays with full spectrum wavelength light activation for efficient dye degradation and overall water splitting. Nanoscale, 2017, 9, 16046-16058.	5.6	100
71	Transparent Antibacterial Nanofiber Air Filters with Highly Efficient Moisture Resistance for Sustainable Particulate Matter Capture. IScience, 2019, 19, 214-223.	4.1	100
72	Silk fibroin-derived nitrogen-doped carbon quantum dots anchored on TiO2 nanotube arrays for heterogeneous photocatalytic degradation and water splitting. Nano Energy, 2020, 78, 105313.	16.0	100

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73	Recent Progress in Fabrication and Applications of Superhydrophobic Coating on Cellulose-Based Substrates. Materials, 2016, 9, 124.	2.9	99
74	Efficiently texturing hierarchical superhydrophobic fluoride-free translucent films by AACVD with excellent durability and self-cleaning ability. Journal of Materials Chemistry A, 2018, 6, 17633-17641.	10.3	99
75	Recent advances on smart TiO₂ nanotube platforms for sustainable drug delivery applications. International Journal of Nanomedicine, 2017, Volume 12, 151-165.	6.7	97
76	Recent advances in fabricating durable superhydrophobic surfaces: a review in the aspects of structures and materials. Materials Chemistry Frontiers, 2021, 5, 1655-1682.	5.9	94
77	Vertically-aligned Pt-decorated MoS2 nanosheets coated on TiO2 nanotube arrays enable high-efficiency solar-light energy utilization for photocatalysis and self-cleaning SERS devices. Nano Energy, 2020, 71, 104579.	16.0	92
78	Namib desert beetle inspired special patterned fabric with programmable and gradient wettability for efficient fog harvesting. Journal of Materials Science and Technology, 2021, 61, 85-92.	10.7	92
79	Durable antibacterial and UV-protective Ag/TiO₂@fabrics for sustainable biomedical application. International Journal of Nanomedicine, 2017, Volume 12, 2593-2606.	6.7	90
80	CdSe/CdS quantum dots co-sensitized TiO2 nanotube array photoelectrode for highly efficient solar cells. Electrochimica Acta, 2012, 79, 175-181.	5.2	87
81	TiO₂ nanotube arrays loaded with reduced graphene oxide films: facile hybridization and promising photocatalytic application. Journal of Materials Chemistry A, 2015, 3, 3491-3499.	10.3	87
82	Controllable wettability and adhesion on bioinspired multifunctional TiO₂ nanostructure surfaces for liquid manipulation. Journal of Materials Chemistry A, 2014, 2, 18531-18538.	10.3	84
83	In-situ formation of unsaturated defect sites on converted CoNi alloy/Co-Ni LDH to activate MoS2 nanosheets for pH-universal hydrogen evolution reaction. Chemical Engineering Journal, 2021, 412, 128556.	12.7	80
84	Photogenerated cathodic protection of flower-like, nanostructured, N-doped TiO2 film on stainless steel. Surface and Coatings Technology, 2010, 205, 557-564.	4.8	79
85	Constructing Mechanochemical Durable and Self-Healing Superhydrophobic Surfaces. ACS Omega, 2020, 5, 986-994.	3.5	79
86	Self-organized TiO2 nanotube arrays with uniform platinum nanoparticles for highly efficient water splitting. International Journal of Hydrogen Energy, 2012, 37, 6438-6446.	7.1	78
87	Synthesis of Nanostructured Silver/Silver Halides on Titanate Surfaces and Their Visible-Light Photocatalytic Performance. ACS Applied Materials & Interfaces, 2012, 4, 438-446.	8.0	77
88	MoS₂ Quantum Dots@TiO₂ Nanotube Arrays: An Extended-Spectrum-Driven Photocatalyst for Solar Hydrogen Evolution. ChemSusChem, 2018, 11, 1708-1721.	6.8	77
89	Defective black Ti3+ self-doped TiO2 and reduced graphene oxide composite nanoparticles for boosting visible-light driven photocatalytic and photoelectrochemical activity. Applied Surface Science, 2019, 467-468, 45-55.	6.1	77
90	Self-organized TiO2 nanotubes in mixed organicâ€“inorganic electrolytes and their photoelectrochemical performance. Electrochimica Acta, 2009, 54, 6536-6542.	5.2	76

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91	Optical and electrical characterization of TiO2 nanotube arrays on titanium substrate. Applied Surface Science, 2005, 252, 1101-1106.	6.1	75
92	Hydrogel materials for sustainable water resources harvesting & treatment: Synthesis, mechanism and applications. Chemical Engineering Journal, 2022, 439, 135756.	12.7	75
93	Bioinspired Sootâ€Deposited Janus Fabrics for Sustainable Solar Steam Generation with Saltâ€Rejection. Global Challenges, 2019, 3, 1800117.	3.6	73
94	Multifunctional wettability patterns prepared by laser processing on superhydrophobic TiO₂nanostructured surfaces. Journal of Materials Chemistry B, 2015, 3, 342-347.	5.8	72
95	Molybdenum sulfide cocatalyst activation upon photodeposition of cobalt for improved photocatalytic hydrogen production activity of ZnCdS. Chemical Engineering Journal, 2021, 425, 131478.	12.7	72
96	Sonoelectrochemical synthesis of highly photoelectrochemically active TiO₂nanotubes by incorporating CdS nanoparticles. Nanotechnology, 2009, 20, 295601.	2.6	71
97	Visible-light plasmonic photocatalyst anchored on titanate nanotubes: a novel nanohybrid with synergistic effects of adsorption and degradation. RSC Advances, 2012, 2, 9406.	3.6	70
98	Controlled grafting superhydrophobic cellulose surface with environmentally-friendly short fluoroalkyl chains by ATRP. Materials and Design, 2015, 85, 815-822.	7.0	66
99	Sub-micron silk fibroin film with high humidity sensibility through color changing. RSC Advances, 2017, 7, 17889-17897.	3.6	66
100	A superhydrophobic TPU/CNTs@SiO2 coating with excellent mechanical durability and chemical stability for sustainable anti-fouling and anti-corrosion. Chemical Engineering Journal, 2022, 434, 134605.	12.7	66
101	Bioinspired TiO2 Nanostructure Films with Special Wettability and Adhesion for Droplets Manipulation and Patterning. Scientific Reports, 2013, 3, 3009.	3.3	64
102	Highly Flexible and Porous Nanoparticle-Loaded Films for Dye Removal by Graphene Oxideâ€“Fungus Interaction. ACS Applied Materials & Interfaces, 2016, 8, 34638-34647.	8.0	63
103	Underwater, Multifunctional Superhydrophobic Sensor for Human Motion Detection. ACS Applied Materials & Interfaces, 2021, 13, 4740-4749.	8.0	63
104	Fog Harvesting Devices Inspired from Single to Multiple Creatures: Current Progress and Future Perspective. Advanced Functional Materials, 2022, 32, .	14.9	62
105	Particulate Matter Capturing via Naturally Dried ZIF-8/Graphene Aerogels under Harsh Conditions. IScience, 2019, 16, 133-144.	4.1	60
106	A facile method for synthesis of Ag/TiO2 nanostructures. Materials Letters, 2008, 62, 3688-3690.	2.6	59
107	Multifunctional superhydrophobic composite materials with remarkable mechanochemical robustness, stain repellency, oil-water separation and sound-absorption properties. Chemical Engineering Journal, 2019, 358, 1610-1619.	12.7	59
108	Silver decorated titanate/titania nanostructures for efficient solar driven photocatalysis. Journal of Solid State Chemistry, 2012, 189, 117-122.	2.9	58

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109	Hierarchical SiO₂@Bi₂O₃ core/shell electrospun fibers for infrared stealth camouflage. Journal of Materials Chemistry C, 2015, 3, 345-351.	5.5	54
110	Charged graphene aerogel filter enabled superior particulate matter removal efficiency in harsh environment. Chemical Engineering Journal, 2020, 395, 125086.	12.7	53
111	Selective formation of ordered arrays of octacalcium phosphate ribbons on TiO2 nanotube surface by template-assisted electrodeposition. Colloids and Surfaces B: Biointerfaces, 2010, 76, 117-122.	5.0	51
112	Robust Superhydrophobic rGO/PPy/PDMS Coatings on a Polyurethane Sponge for Underwater Pressure and Temperature Sensing. ACS Applied Materials & Interfaces, 2021, 13, 53271-53281.	8.0	51
113	In Situ Mechanistic Investigation at the Liquid/Solid Interface by Attenuated Total Reflectance FTIR: Ethanol Photo-Oxidation over Pristine and Platinized TiO₂(P25). ACS Catalysis, 2011, 1, 864-871.	11.2	49
114	Bioinspired Porous Octacalcium Phosphate/Silk Fibroin Composite Coating Materials Prepared by Electrochemical Deposition. ACS Applied Materials & Interfaces, 2015, 7, 5634-5642.	8.0	49
115	Recent Progress on the Superhydrophobic Surfaces with Special Adhesion: From Natural to Biomimetic to Functional. Journal of Nanoengineering and Nanomanufacturing, 2011, 1, 18-34.	0.3	49
116	Hierarchical layered titanate microspherulite: formation by electrochemical spark discharge spallation and application in aqueous pollutant treatment. Journal of Materials Chemistry, 2010, 20, 10169.	6.7	48
117	Flame retardance and thermal stability of wool fabric treated by boron containing silica sols. Materials and Design, 2015, 85, 796-799.	7.0	48
118	A multifunctional and environmentally-friendly method to fabricate superhydrophilic and self-healing coatings for sustainable antifogging. Chemical Engineering Journal, 2021, 409, 128228.	12.7	48
119	Synthesis of silver nanorods and nanowires by tartrate-reduced route in aqueous solutions. Materials Chemistry and Physics, 2006, 96, 217-222.	4.0	47
120	Multifunctional superamphiphobic fabrics with asymmetric wettability for one-way fluid transport and templated patterning. Cellulose, 2017, 24, 1129-1141.	4.9	46
121	Green Synthesis of Robust Superhydrophobic Antibacterial and UVâ€Blocking Cotton Fabrics by a Dualâ€Stage Silanization Approach. Advanced Materials Interfaces, 2019, 6, 1900032.	3.7	46
122	Controllable construction of ZnO/TiO2patterningnanostructures by superhydrophilic/superhydrophobic templates. New Journal of Chemistry, 2010, 34, 44-51.	2.8	44
123	Co-solvent induced self-roughness superhydrophobic coatings with self-healing property for versatile oil-water separation. Applied Surface Science, 2018, 459, 512-519.	6.1	44
124	An effective and low-consumption foam finishing strategy for robust functional fabrics with on-demand special wettability. Chemical Engineering Journal, 2021, 426, 131245.	12.7	44
125	Ultrafast Synthesis of Layered Titanate Microspherulite Particles by Electrochemical Spark Discharge Spallation. Chemistry - A European Journal, 2010, 16, 7704-7708.	3.3	43
126	SERS study of Ag nanoparticles electrodeposited on patterned TiO₂ nanotube films. Journal of Raman Spectroscopy, 2011, 42, 986-991.	2.5	42

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127	Bioinspired structural and functional designs towards interfacial solar steam generation for clean water production. Materials Chemistry Frontiers, 2021, 5, 1510-1524.	5.9	42
128	Fibrous and flexible supercapacitors comprising hierarchical nanostructures with carbon spheres and graphene oxide nanosheets. Journal of Materials Chemistry A, 2015, 3, 12761-12768.	10.3	41
129	Polydopamine-Inspired Design and Synthesis of Visible-Light-Driven Ag NPs@C@elongated TiO₂ NTs Coreâ€“Shell Nanocomposites for Sustainable Hydrogen Generation. ACS Sustainable Chemistry and Engineering, 2019, 7, 558-568.	6.7	41
130	Mechanically Reinforced Localized Structure Design to Stabilize Solidâ€“Electrolyte Interface of the Composited Electrode of Si Nanoparticles and TiO₂ Nanotubes. Small, 2020, 16, e2002094.	10.0	41
131	Ion regulation of hollow nickel cobalt layered double hydroxide nanocages derived from ZIF-67 for High-Performance supercapacitors. Applied Surface Science, 2022, 596, 153582.	6.1	41
132	Electrophoretic deposition of titanate nanotube films with extremely large wetting contrast. Electrochemistry Communications, 2009, 11, 2268-2271.	4.7	39
133	Durable easy-cleaning and antibacterial cotton fabrics using fluorine-free silane coupling agents and CuO nanoparticles. Nano Materials Science, 2020, 2, 281-291.	8.8	39
134	Hydroxyapatite-modified micro/nanostructured titania surfaces with different crystalline phases for osteoblast regulation. Bioactive Materials, 2021, 6, 1118-1129.	15.6	38
135	Enhanced photoelectrochemical activities of a nanocomposite film with a bamboo leaf-like structured TiO₂layer on TiO₂nanotube arrays. Chemical Communications, 2011, 47, 2598-2600.	4.1	37
136	Advances in particulate matter filtration: Materials, performance, and application. Green Energy and Environment, 2023, 8, 673-697.	8.7	37
137	Fabrication, Modification, and Emerging Applications of TiO2Nanotube Arrays by Electrochemical Synthesis: A Review. International Journal of Photoenergy, 2013, 2013, 1-19.	2.5	36
138	Interfacial reinforcement structure design towards ultrastable lithium storage in MoS2-based composited electrode. Chemical Engineering Journal, 2021, 416, 129094.	12.7	36
139	Noble-metal-free metallic MoC combined with CdS for enhanced visible-light-driven photocatalytic hydrogen evolution. Journal of Cleaner Production, 2021, 322, 129018.	9.3	36
140	In vivo and in vitro efficient textile wastewater remediation by Aspergillus niger biosorbent. Nanoscale Advances, 2019, 1, 168-176.	4.6	35
141	One-pot loading of cadmium sulfide onto tungsten carbide for efficient photocatalytic H2 evolution under visible light irradiation. Chemical Engineering Journal, 2022, 434, 134689.	12.7	35
142	Reducing Oxygen Evolution Reaction Overpotential in Cobaltâ€Based Electrocatalysts via Optimizing the â€œMicroparticlesâ€inâ€Spider Webâ€•Electrode Configurations. Small, 2020, 16, e1907029.	10.0	34
143	Rational designed structured superhydrophobic iron oxide surface towards sustainable anti-corrosion and self-cleaning. Chemical Engineering Journal, 2021, 416, 127768.	12.7	34
144	Superhydrophilicâ€“Superhydrophobic Template: A Simple Approach to Micro- and Nanostructure Patterning of TiO[sub 2] Films. Journal of the Electrochemical Society, 2009, 156, D480.	2.9	33

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145	Boosting heterojunction interaction in electrochemical construction of MoS2 quantum dots@TiO2 nanotube arrays for highly effective photoelectrochemical performance and electrocatalytic hydrogen evolution. Electrochemistry Communications, 2018, 93, 152-157.	4.7	33
146	Experimental investigation of the anti-soiling performances of different wettability of transparent coatings: Superhydrophilic, hydrophilic, hydrophobic and superhydrophobic coatings. Solar Energy Materials and Solar Cells, 2021, 225, 111053.	6.2	33
147	Smart surfaces with reversibly switchable wettability: Concepts, synthesis and applications. Advances in Colloid and Interface Science, 2022, 300, 102584.	14.7	33
148	TiO2 nanotube arrays decorated with Au and Bi2S3 nanoparticles for efficient Fe3+ ions detection and dye photocatalytic degradation. Journal of Materials Science and Technology, 2020, 39, 28-38.	10.7	32
149	In-situ synthesis of monodispersed Cu O heterostructure on porous carbon monolith for exceptional removal of gaseous Hg0. Applied Catalysis B: Environmental, 2020, 265, 118556.	20.2	32
150	Fog catcher brushes with environmental friendly slippery alumina micro-needle structured surface for efficient fog-harvesting. Journal of Cleaner Production, 2021, 315, 127862.	9.3	32
151	Micropatterning Extracellular Matrix Proteins on Electrospun Fibrous Substrate Promote Human Mesenchymal Stem Cell Differentiation Toward Neurogenic Lineage. ACS Applied Materials & Interfaces, 2016, 8, 563-573.	8.0	31
152	Oxygen-deficient bismuth tungstate and bismuth oxide composite photoanode with improved photostability. Science Bulletin, 2018, 63, 990-996.	9.0	29
153	Solar-assisted isotropically thermoconductive sponge for highly viscous crude oil spill remediation. IScience, 2021, 24, 102665.	4.1	29
154	Fabrication of patterned CdS/TiO2 heterojunction by wettability template-assisted electrodeposition. Materials Letters, 2010, 64, 1309-1312.	2.6	28
155	Multi-functional hybrid protonated titanate nanobelts with tunable wettability. Soft Matter, 2011, 7, 6313.	2.7	28
156	Controllable Superhydrophobic Coating on Cotton Fabric by UV Induced Thiolâ€ene Reaction for Wettability Patterning and Device Metallization. Advanced Materials Interfaces, 2017, 4, 1700268.	3.7	27
157	An ultrahighly sensitive and repeatable flexible pressure sensor based on PVDF/PU/MWCNT hierarchical framework-structured aerogels for monitoring human activities. Journal of Materials Chemistry C, 2018, 6, 12575-12583.	5.5	27
158	Rational design of electrospun nanofibers for gas purification: Principles, opportunities, and challenges. Chemical Engineering Journal, 2022, 446, 137099.	12.7	27
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