

# Jia-Biao Lian

## List of Publications by Year in descending order

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109  
papers

5,465  
citations

71061

41  
h-index

88593

70  
g-index

111  
all docs

111  
docs citations

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times ranked

7385  
citing authors

#	ARTICLE	IF	CITATIONS
1	Embedding partial sulfurization of iron-cobalt oxide nanoparticles into carbon nanofibers as an efficient electrode for the advanced asymmetric supercapacitor. <i>Tungsten</i> , 2023, 5, 118-129.	2.0	28
2	Mesoporous silica anchored on reduced graphene oxide nanocomposite as anode for superior lithium-ion capacitor. <i>Rare Metals</i> , 2022, 41, 368-377.	3.6	32
3	Electrospun CoSe@NC nanofiber membrane as an effective polysulfides adsorption-catalysis interlayer for Li-S batteries. <i>Chemical Engineering Journal</i> , 2022, 430, 131911.	6.6	43
4	Insights into the efficient charge separation over Nb <sub>2</sub> O <sub>5</sub> /2D-C <sub>3</sub> N <sub>4</sub> heterostructure for exceptional visible-light driven H <sub>2</sub> evolution. <i>Journal of Energy Chemistry</i> , 2022, 65, 548-555.	7.1	31
5	Heterogeneous cobalt polysulfide leaf-like array/carbon nanofiber composites derived from zeolite imidazole framework for advanced asymmetric supercapacitors. <i>Journal of Colloid and Interface Science</i> , 2022, 606, 728-735.	5.0	19
6	Optimizing the microstructure of carbon nano-honeycombs for high-energy sodium-ion capacitor. <i>Electrochimica Acta</i> , 2022, 403, 139675.	2.6	11
7	Interfacial engineering for metal oxide/nitride nano-heterojunctions towards high-rate lithium-ion storage. <i>Journal of Materials Chemistry A</i> , 2022, 10, 7391-7398.	5.2	18
8	Sawdust-Derived Activated Carbon with Hierarchical Pores for High-Performance Symmetric Supercapacitors. <i>Nanomaterials</i> , 2022, 12, 810.	1.9	17
9	Gradually Anchoring N and Fe, Zn Atoms on Monodispersed Carbon Nanospheres: Their Contribution to the Oxygen Reduction Reaction under Analogous Structure. <i>Industrial &amp; Engineering Chemistry Research</i> , 2022, 61, 7513-7522.	1.8	2
10	Nitrogen-doped porous carbon nanofoams with enhanced electrochemical kinetics for superior sodium-ion capacitor. <i>Rare Metals</i> , 2022, 41, 2481-2490.	3.6	15
11	Large-scale production of ultrathin carbon nitride-based photocatalysts for high-yield hydrogen evolution. <i>Applied Catalysis B: Environmental</i> , 2021, 281, 119475.	10.8	84
12	Amorphous MoS nanoparticles grown on cobalt-iron-based needle-like array for high-performance flexible asymmetric supercapacitor. <i>Chemical Engineering Journal</i> , 2021, 417, 127927.	6.6	26
13	In situ XRD and electrochemical investigation on a new intercalation-type anode for high-rate lithium ion capacitor. <i>Journal of Energy Chemistry</i> , 2021, 57, 109-117.	7.1	25
14	Operando mechanistic and dynamic studies of N/P co-doped hard carbon nanofibers for efficient sodium storage. <i>Chemical Communications</i> , 2021, 57, 9610-9613.	2.2	24
15	Oxygen vacancies boosted the electrochemical kinetics of Nb <sub>2</sub> O <sub>5</sub> for superior lithium storage. <i>Chemical Communications</i> , 2021, 57, 8182-8185.	2.2	14
16	Zinc-iron bimetallic-nitrogen doped porous carbon microspheres as efficient oxygen reduction electrocatalyst for zinc-air batteries. <i>Applied Surface Science</i> , 2021, 546, 148934.	3.1	15
17	Amorphous Bimetallic Phosphate-Carbon Precatalyst with Deep Self-Reconstruction toward Efficient Oxygen Evolution Reaction and Zn-Air Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 5345-5355.	3.2	22
18	Rational Design of the CoS/Co <sub>9</sub> S <sub>8</sub> @NC Composite Enabling High-Rate Sodium-Ion Storage. <i>ACS Applied Energy Materials</i> , 2021, 4, 5574-5582.	2.5	27

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19	A general strategy towards transition metal nitrides (TMNs)/rGO nanocomposites for superior lithium ion storage. <i>Journal of Alloys and Compounds</i> , 2021, 865, 158968.	2.8	9
20	Design of Nb <sub>2</sub> O <sub>5</sub> @rGO composites to optimize the lithium-ion storage performance. <i>Journal of Alloys and Compounds</i> , 2021, 865, 158824.	2.8	23
21	Development of porous carbon nanosheets from polyvinyl alcohol for sodium-ion capacitors. <i>Chemical Engineering Journal</i> , 2021, 415, 129012.	6.6	28
22	Facile Synthesis of Uniform Mesoporous Nb <sub>2</sub> O <sub>5</sub> Micro-Flowers for Enhancing Photodegradation of Methyl Orange. <i>Materials</i> , 2021, 14, 3783.	1.3	1
23	Boosting the energy density of iron-cobalt oxide based hybrid supercapacitors by redox-additive electrolytes. <i>Journal of Alloys and Compounds</i> , 2021, 885, 160886.	2.8	15
24	Fe <sub>2</sub> TiO <sub>5</sub> nanochains as anode for high-performance lithium-ion capacitor. <i>Rare Metals</i> , 2021, 40, 2424-2431.	3.6	41
25	Porous $\gamma$ -Fe <sub>2</sub> O <sub>3</sub> nanoparticles encapsulated within reduced graphene oxide as superior anode for lithium-ion battery. <i>Nanotechnology</i> , 2020, 31, 145404.	1.3	21
26	A microporous carbon derived from metal-organic frameworks for long-life lithium sulfur batteries. <i>International Journal of Energy Research</i> , 2020, 44, 2126-2136.	2.2	11
27	Roselle-like Zn <sub>2</sub> Ti <sub>3</sub> O <sub>8</sub> /rGO nanocomposite as anode for lithium ion capacitor. <i>Chemical Engineering Journal</i> , 2020, 385, 123881.	6.6	31
28	Graphene Oxide-Loaded SnO <sub>2</sub> Quantum Wires with Sub-4 Nanometer Diameters for Low-Temperature H <sub>2</sub> S Gas Sensing. <i>ACS Applied Nano Materials</i> , 2020, 3, 6385-6393.	2.4	25
29	Oxygen-Defective TiNb <sub>2</sub> O <sub>7</sub> Nanochains with Enlarged Lattice Spacing for High-Rate Lithium Ion Capacitor. <i>Advanced Materials Interfaces</i> , 2020, 7, 2000705.	1.9	25
30	Molten salt $\alpha$ -boiling-synthesis of surface decorated bimetallic-nitrogen doped carbon hollow nanospheres: An oxygen reduction catalyst with dense active sites and high stability. <i>Chemical Engineering Journal</i> , 2020, 395, 125064.	6.6	24
31	Smart in situ construction of NiS/MoS <sub>2</sub> composite nanosheets with ultrahigh specific capacity for high-performance asymmetric supercapacitor. <i>Journal of Alloys and Compounds</i> , 2019, 811, 151915.	2.8	39
32	MnCo <sub>2</sub> S <sub>4</sub> /FeCo <sub>2</sub> S <sub>4</sub> ellipsoid arrays on a hollow N-doped carbon skeleton as flexible electrodes for hybrid supercapacitors. <i>Journal of Materials Chemistry A</i> , 2019, 7, 20778-20789.	5.2	63
33	Multiple Active Sites of Carbon for High-Rate Surface-Capacitive Sodium-Ion Storage. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 13584-13589.	7.2	98
34	Multiple Active Sites of Carbon for High-Rate Surface-Capacitive Sodium-Ion Storage. <i>Angewandte Chemie</i> , 2019, 131, 13718-13723.	1.6	28
35	Advanced asymmetric supercapacitor based on molybdenum trioxide decorated nickel cobalt oxide nanosheets and three-dimensional $\gamma$ -FeOOH/rGO. <i>Electrochimica Acta</i> , 2019, 320, 134580.	2.6	28
36	Controllable synthesis of uniform mesoporous H-Nb <sub>2</sub> O <sub>5</sub> /rGO nanocomposites for advanced lithium ion hybrid supercapacitors. <i>Journal of Materials Chemistry A</i> , 2019, 7, 693-703.	5.2	86

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37	Construction of cobaltous oxide/nickel-iron oxide electrodes with great cycle stability and high energy density for advanced asymmetry supercapacitor. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 21219-21228.	1.1	7
38	Crafting nanosheet-built MnCo <sub>2</sub> S <sub>4</sub> disks on robust N-doped carbon matrix for hybrid supercapacitors. <i>Electrochimica Acta</i> , 2019, 323, 134770.	2.6	23
39	Porous Nb <sub>4</sub> N <sub>5</sub> /rGO Nanocomposite for Ultrahigh-Energy-Density Lithium-Ion Hybrid Capacitor. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 24114-24121.	4.0	31
40	Metallic cobalt nanoparticles embedded in sulfur and nitrogen co-doped rambutan-like nanocarbons for the oxygen reduction reaction under both acidic and alkaline conditions. <i>Journal of Materials Chemistry A</i> , 2019, 7, 14291-14301.	5.2	37
41	Sonochemical assisted fabrication of 3D hierarchical porous carbon for high-performance symmetric supercapacitor. <i>Ultrasonics Sonochemistry</i> , 2019, 58, 104617.	3.8	24
42	Preparation of mesoporous ZnAl <sub>2</sub> O <sub>4</sub> nanoflakes by ion exchange from a Na-dawsonite parent material in the presence of an ionic liquid. <i>RSC Advances</i> , 2019, 9, 11894-11900.	1.7	4
43	Integrating the merits of two-dimensional structure and heteroatom modification into semiconductor photocatalyst to boost NO removal. <i>Chemical Engineering Journal</i> , 2019, 370, 944-951.	6.6	54
44	Superior carbon belts from Spirogyra for efficient extracellular electron transfer and sustainable microbial energy harvesting. <i>Journal of Materials Chemistry A</i> , 2019, 7, 6930-6938.	5.2	33
45	Rambutan-Inspired Yolk-Shell Silica@Carbon Frameworks from Biomass for Long-Life Anode Materials. <i>ChemistrySelect</i> , 2019, 4, 14075-14081.	0.7	5
46	Construction of MnO <sub>2</sub> /Monolayer g-C <sub>3</sub> N <sub>4</sub> with Mn vacancies for Z-scheme overall water splitting. <i>Applied Catalysis B: Environmental</i> , 2019, 241, 452-460.	10.8	252
47	Lawn-like FeCo <sub>2</sub> S <sub>4</sub> hollow nanoneedle arrays on flexible carbon nanofiber film as binder-free electrodes for high-performance asymmetric pseudocapacitors. <i>Journal of Alloys and Compounds</i> , 2019, 772, 337-347.	2.8	52
48	Highly Efficient Adsorption of Oils and Pollutants by Porous Ultrathin Oxygen-Modified BCN Nanosheets. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 3234-3242.	3.2	14
49	Pseudocapacitive performance of binder-free nanostructured TT-Nb <sub>2</sub> O <sub>5</sub> /FTO electrode in aqueous electrolyte. <i>Nanotechnology</i> , 2019, 30, 025401.	1.3	7
50	NiMoO <sub>4</sub> nanorod deposited carbon sponges with ant-nest-like interior channels for high-performance pseudocapacitors. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 1594-1601.	3.0	31
51	Controlled growth of ultrathin NiMoO <sub>4</sub> nanosheets on carbon nanofiber membrane as advanced electrodes for asymmetric supercapacitors. <i>Journal of Alloys and Compounds</i> , 2018, 753, 176-185.	2.8	40
52	Hexamethylenetetramine-assisted hydrothermal synthesis of octahedral nickel ferrite oxide nanocrystallines with excellent supercapacitive performance. <i>Journal of Materials Science</i> , 2018, 53, 7621-7636.	1.7	63
53	3D hierarchical CMF/MoSe <sub>2</sub> composite foam as highly efficient electrocatalyst for hydrogen evolution. <i>Electrochimica Acta</i> , 2018, 263, 94-101.	2.6	30
54	Defect-rich N-doped porous carbon derived from soybean for high rate lithium-ion batteries. <i>Applied Surface Science</i> , 2018, 451, 298-305.	3.1	60

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55	Rational construction of a 3D hierarchical NiCo <sub>2</sub> O <sub>4</sub> /PANI/MF composite foam as a high-performance electrode for asymmetric supercapacitors. <i>Chemical Communications</i> , 2018, 54, 4160-4163.	2.2	56
56	Facile preparation of monolayer NiO thin film for high performance THF sensor. <i>Journal of the Chinese Advanced Materials Society</i> , 2018, 6, 1-7.	0.7	1
57	Construction of molybdenum dioxide nanosheets coated on the surface of nickel ferrite nanocrystals with ultrahigh specific capacity for hybrid supercapacitor. <i>Electrochimica Acta</i> , 2018, 260, 439-448.	2.6	27
58	Size controllable preparation of sphere-based monolayer CdS thin films for white-light photodetectors. <i>Ceramics International</i> , 2018, 44, 2407-2412.	2.3	20
59	Tip-welded ferric-cobalt sulfide hollow nanoneedles on highly conductive carbon fibers for advanced asymmetric supercapacitors. <i>Electrochimica Acta</i> , 2018, 292, 157-167.	2.6	10
60	Hierarchical FeCo <sub>2</sub> S <sub>4</sub> Nanotube Arrays Deposited on 3D Carbon Foam as Binder-free Electrodes for High-performance Asymmetric Pseudocapacitors. <i>Chemistry - an Asian Journal</i> , 2018, 13, 3212-3221.	1.7	24
61	Fully Stretchable and Humidity-Resistant Quantum Dot Gas Sensors. <i>ACS Sensors</i> , 2018, 3, 1048-1055.	4.0	63
62	Interfacial self-assembly of monolayer Mg-doped NiO honeycomb structured thin film with enhanced performance for gas sensing. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 11498-11508.	1.1	18
63	Non-metal photocatalyst nitrogen-doped carbon nanotubes modified mpg-C3N4: facile synthesis and the enhanced visible-light photocatalytic activity. <i>Journal of Colloid and Interface Science</i> , 2017, 494, 38-46.	5.0	74
64	Facile preparation of TiO <sub>2</sub> /C3N4 hybrid materials with enhanced capacitive properties for high performance supercapacitors. <i>Journal of Alloys and Compounds</i> , 2017, 702, 178-185.	2.8	66
65	Graphene quantum dots modified mesoporous graphite carbon nitride with significant enhancement of photocatalytic activity. <i>Applied Catalysis B: Environmental</i> , 2017, 207, 429-437.	10.8	238
66	Morphology controlled preparation of ZnCo <sub>2</sub> O <sub>4</sub> nanostructures for asymmetric supercapacitor with ultrahigh energy density. <i>Energy</i> , 2017, 123, 296-304.	4.5	177
67	Design of 3D WO <sub>3</sub> /h-BN nanocomposites for efficient visible-light-driven photocatalysis. <i>RSC Advances</i> , 2017, 7, 25160-25170.	1.7	31
68	Nickel-cobalt-layered double hydroxide nanosheet arrays on Ni foam as a bifunctional electrocatalyst for overall water splitting. <i>Dalton Transactions</i> , 2017, 46, 8372-8376.	1.6	120
69	Kinetics and mechanism of enhanced photocatalytic activity employing ZnS nanospheres/graphene-like C3N4. <i>Molecular Catalysis</i> , 2017, 438, 103-112.	1.0	18
70	Controllable Synthesis of Ultrathin NiCo <sub>2</sub> O <sub>4</sub> Nanosheets Incorporated onto Composite Nanotubes for Efficient Oxygen Reduction. <i>Chemistry - an Asian Journal</i> , 2017, 12, 2426-2433.	1.7	13
71	Facile preparation of NiFe <sub>2</sub> O <sub>4</sub> /MoS <sub>2</sub> composite material with synergistic effect for high performance supercapacitor. <i>Journal of Alloys and Compounds</i> , 2017, 726, 608-617.	2.8	83
72	Low-crystalline mesoporous CoFe <sub>2</sub> O <sub>4</sub> /C composite with oxygen vacancies for high energy density asymmetric supercapacitors. <i>RSC Advances</i> , 2017, 7, 55513-55522.	1.7	55

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73	Enhancing charge density and steering charge unidirectional flow in 2D non-metallic semiconductor-CNTs-metal coupled photocatalyst for solar energy conversion. Applied Catalysis B: Environmental, 2017, 202, 112-117.	10.8	71
74	Novel Synthesis Strategy of $\text{Fe}^{3+}$ -AlOOH Nanotubes: Coupling Reaction via Ionic Liquid-Assisted Hydrothermal Route. Crystal Growth and Design, 2016, 16, 6139-6143.	1.4	10
75	$\text{Fe}_3\text{N}_4/\text{TiO}_2$ Nanocomposites for Degradation of Ciprofloxacin under Visible Light Irradiation. ChemistrySelect, 2016, 1, 5679-5685.	0.7	50
76	High-performance flexible photodetectors based on single-crystalline $\text{Sb}_2\text{Se}_3$ nanowires. RSC Advances, 2016, 6, 11501-11506.	1.7	43
77	Facile synthesis of hematite nanoparticles and nanocubes and their shape-dependent optical properties. New Journal of Chemistry, 2014, 38, 46-49.	1.4	45
78	The art of using ionic liquids in the synthesis of inorganic nanomaterials. CrystEngComm, 2014, 16, 2550.	1.3	146
79	Magnetic Properties of Al-doped $\text{B}_4\text{C}$ and $\text{SiC}$ Ceramics. Journal of the American Ceramic Society, 2013, 96, 3494-3499.	1.9	3
80	Mesoporous $(\text{ZnO})_x(\text{MgO})_{1-x}$ nanoplates: template-free solvothermal synthesis, optical properties, and their applications in water treatment. Nanoscale, 2013, 5, 11672.	2.8	31
81	Spin-glass behavior in Al-doped $\text{B}_4\text{C}$ . Physica B: Condensed Matter, 2013, 429, 38-41.	1.3	1
82	Catalytic Activity of Biomorphic $\text{Fe-MoO}_3$ in the Degradation of Methyl Violet Dye. Environmental Engineering Science, 2012, 29, 860-865.	0.8	3
83	Template-Free Hydrothermal Synthesis of Mesoporous $\text{MgO}$ Nanostructures and Their Applications in Water Treatment. Chemistry - an Asian Journal, 2012, 7, 2650-2655.	1.7	15
84	$\text{NiO}$ nanomaterials: controlled fabrication, formation mechanism and the application in lithium-ion battery. CrystEngComm, 2012, 14, 453-459.	1.3	79
85	Porous platelike hematite mesocrystals: synthesis, catalytic and gas-sensing applications. Journal of Materials Chemistry, 2012, 22, 11694.	6.7	109
86	Template-free solvothermal synthesis of $\text{ZnO}$ nanoparticles with controllable size and their size-dependent optical properties. Materials Letters, 2012, 66, 318-320.	1.3	25
87	Ionothermal synthesis of aggregated $\text{Fe}_2\text{O}_3$ nanoplates and their magnetic properties. Nanoscale, 2011, 3, 4372.	2.8	45
88	Topochemical Preparation of $\text{WO}_3$ Nanoplates through Precursor $\text{H}_2\text{WO}_4$ and Their Gas-Sensing Performances. Journal of Physical Chemistry C, 2011, 115, 18157-18163.	1.5	137
89	Superior gas-sensing and lithium-storage performance $\text{SnO}_2$ nanocrystals synthesized by hydrothermal method. CrystEngComm, 2011, 13, 6077.	1.3	45
90	Growth of tellurium nanowire bundles from an ionic liquid precursor. CrystEngComm, 2011, 13, 2774.	1.3	17

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91	Bi <sub>2</sub> S <sub>3</sub> nanomaterials: morphology manipulation and related properties. Dalton Transactions, 2011, 40, 10100.	1.6	66
92	Ionic liquids-assisted synthesis and electrochemical properties of Bi <sub>2</sub> S <sub>3</sub> nanostructures. CrystEngComm, 2011, 13, 3072.	1.3	85
93	Template-free hydrothermal synthesis of hexagonal ZnO micro-cups and micro-rings assembled by nanoparticles. CrystEngComm, 2011, 13, 4820.	1.3	39
94	One-dimensional Sb <sub>2</sub> Se <sub>3</sub> nanostructures: solvothermal synthesis, growth mechanism, optical and electrochemical properties. CrystEngComm, 2011, 13, 2369.	1.3	69
95	Î±-Fe <sub>2</sub> O <sub>3</sub> : Hydrothermal Synthesis, Magnetic and Electrochemical Properties. Journal of Physical Chemistry C, 2010, 114, 10671-10676.	1.5	192
96	Ionic liquid-assisted hydrothermal synthesis of Î³-Al <sub>2</sub> O <sub>3</sub> hierarchical nanostructures. Crystal Research and Technology, 2010, 45, 767-770.	0.6	8
97	Sb <sub>2</sub> S <sub>3</sub> with Various Nanostructures: Controllable Synthesis, Formation Mechanism, and Electrochemical Performance toward Lithium Storage. Chemistry - A European Journal, 2010, 16, 13210-13217.	1.7	84
98	One-step ionothermal synthesis of Î³-Al <sub>2</sub> O <sub>3</sub> mesoporous nanoflakes at low temperature. Chemical Communications, 2010, 46, 2650.	2.2	78
99	Morphology Controllable Synthesis of Î³-Alumina Nanostructures via an Ionic Liquid-Assisted Hydrothermal Route. Crystal Growth and Design, 2010, 10, 2928-2933.	1.4	82
100	Ionothermal Synthesis of BiOCl Nanostructures via a Long-Chain Ionic Liquid Precursor Route. Crystal Growth and Design, 2010, 10, 2522-2527.	1.4	122
101	Ionic liquid-modulated synthesis of ferrimagnetic Fe <sub>3</sub> S <sub>4</sub> hierarchical superstructures. Chemical Communications, 2010, 46, 5006.	2.2	45
102	Ionothermal Synthesis of BiOCl Nanostructures via a Long-Chain Ionic Liquid Precursor Route. Crystal Growth and Design, 2010, 10, 4668-4668.	1.4	9
103	A novel surfactant-free route to MnCO <sub>3</sub> steep rhombohedra crystals and their large-scale assembly into regular elongated patterns in a mixed solvent. Chemical Communications, 2010, 46, 7133.	2.2	20
104	Shape-Controlled Synthesis of Metal Carbonate Nanostructure via Ionic Liquid-Assisted Hydrothermal Route: The Case of Manganese Carbonate. Crystal Growth and Design, 2010, 10, 4449-4455.	1.4	77
105	Inorganic and organic templates-assisted solvothermal synthesis of trigonal selenium microrods. Crystal Research and Technology, 2009, 44, 391-394.	0.6	3
106	Synthesis of Zinc Hydroxyfluoride Nanofibers through an Ionic Liquid Assisted Microwave Irradiation Method. European Journal of Inorganic Chemistry, 2009, 2009, 2897-2900.	1.0	46
107	Controlled Synthesis of One-Dimensional Sb <sub>2</sub> Se <sub>3</sub> Nanostructures and Their Electrochemical Properties. Journal of Physical Chemistry C, 2009, 113, 13588-13592.	1.5	120
108	Ionothermal Synthesis of Turbostratic Boron Nitride Nanoflakes at Low Temperature. Journal of Physical Chemistry C, 2009, 113, 9135-9140.	1.5	58

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109	Hematite ( $\text{Fe}_2\text{O}_3$ ) with Various Morphologies: Ionic Liquid-Assisted Synthesis, Formation Mechanism, and Properties. ACS Nano, 2009, 3, 3749-3761.	7.3	476