

# Xian Jian

## List of Publications by Year in descending order

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92  
papers

3,907  
citations

136885

32  
h-index

133188

59  
g-index

93  
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93  
docs citations

93  
times ranked

3906  
citing authors

#	ARTICLE	IF	CITATIONS
1	Polybenzimidazole functionalized electrolyte with Li <sup>+</sup> wetting and self-fluorination functionalities for practical Li metal batteries. <i>Informa<sup>®</sup>Materials</i> , 2022, 4, .	8.5	33
2	UV-radiation inducing strategy to tune fluorinated carbon bonds delivering the high-rate Li/CF <sub>x</sub> primary batteries. <i>Composites Part B: Engineering</i> , 2022, 230, 109494.	5.9	15
3	Symmetrical growth of carbon nanotube arrays on FeSiAl micro-flake for enhancement of lithium-ion battery capacity. <i>Carbon</i> , 2022, 189, 93-103.	5.4	22
4	Air plasma-induced carbon fluoride enabling active C F bonds for double-high energy/power densities of Li/CF <sub>x</sub> primary battery. <i>Journal of Alloys and Compounds</i> , 2022, 905, 164151.	2.8	20
5	Electrical discharge approach for large-scale and high-thermostability FeCoNi Kovar alloy microwave absorbers covering the low-frequency bands. <i>Journal of Alloys and Compounds</i> , 2022, 907, 164509.	2.8	14
6	Carbon nanocapsules stabilized Cu <sub>2</sub> O nanocubes as the high-performance electrode material for metal ion battery. <i>Journal of Alloys and Compounds</i> , 2022, 909, 164714.	2.8	3
7	Synthesis of monolayer carbon-coated TiO <sub>2</sub> as visible-light-responsive photocatalysts. <i>Applied Materials Today</i> , 2022, 27, 101498.	2.3	12
8	Constructing carbon-decorated CF <sub>x</sub> nanocapsule by atomic layer deposition and catalytic chemical vapor deposition for high-capacity lithium primary battery. <i>Applied Surface Science</i> , 2022, 596, 153570.	3.1	7
9	Flexible strain/pressure sensor with good sensitivity and broad detection range by coupling PDMS and carbon nanocapsules. <i>Journal of Alloys and Compounds</i> , 2022, 918, 165696.	2.8	11
10	2D semiconductor SnP <sub>2</sub> S <sub>6</sub> as a new dielectric material for 2D electronics. <i>Journal of Materials Chemistry C</i> , 2022, 10, 13753-13761.	2.7	5
11	Large-scale synthesis of fluorine-free carbonyl iron-organic silicon hydrophobic absorbers with long term corrosion protection property. <i>Nano Research</i> , 2022, 15, 9479-9491.	5.8	22
12	Achieving thermally stable and anti-hydrolytic Sr <sub>2</sub> Si <sub>5</sub> N <sub>8</sub> :Eu <sup>2+</sup> phosphor via a nanoscale carbon deposition strategy. <i>Ceramics International</i> , 2021, 47, 3244-3251.	2.3	22
13	Hybrid silica-carbon bilayers anchoring on FeSiAl surface with bifunctions of enhanced anti-corrosion and microwave absorption. <i>Carbon</i> , 2021, 173, 185-193.	5.4	114
14	Strain-regulated sensing properties of $\hat{\Gamma}$ -Fe <sub>2</sub> O <sub>3</sub> nano-cylinders with atomic carbon layers for ethanol detection. <i>Journal of Materials Science and Technology</i> , 2021, 68, 132-139.	5.6	14
15	A review of helical carbon materials structure, synthesis and applications. <i>Rare Metals</i> , 2021, 40, 3-19.	3.6	38
16	High antioxidant lamellar structure Cr <sub>2</sub> AlC: Dielectric and microwave absorption properties in X band. <i>Journal of Alloys and Compounds</i> , 2021, 860, 157896.	2.8	24
17	Fluorinated graphite nanosheets for ultrahigh-capacity lithium primary batteries. <i>Rare Metals</i> , 2021, 40, 1708-1718.	3.6	35
18	Graphene-Decorated Boron <sup>®</sup> Carbon <sup>®</sup> Nitride-Based Metal-Free Catalysts for an Enhanced Hydrogen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2021, 4, 3861-3868.	2.5	19

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19	Large-scale preparation of 2D VSe <sub>2</sub> through a defect-engineering approach for efficient hydrogen evolution reaction. <i>Chemical Engineering Journal</i> , 2021, 411, 128494.	6.6	30
20	Defect-Enhanced Electromagnetic Wave Absorption Property of Hierarchical Graphite Capsules@Helical Carbon Nanotube Hybrid Nanocomposites. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 28710-28720.	4.0	31
21	Structural self-deterioration mechanism for zirconium diboride in an inert environment. <i>Ceramics International</i> , 2021, 47, 18977-18983.	2.3	4
22	Atomic-Scale Layer-by-Layer Deposition of FeSiAl@ZnO@Al <sub>2</sub> O <sub>3</sub> Hybrid with Threshold Anti-Corrosion and Ultra-High Microwave Absorption Properties in Low-Frequency Bands. <i>Nano-Micro Letters</i> , 2021, 13, 161.	14.4	103
23	Inorganic/organic bilayer of silica/acrylic polyurethane decorating FeSiAl for enhanced anti-corrosive microwave absorption. <i>Applied Surface Science</i> , 2021, 567, 150829.	3.1	27
24	Achieving ultra-low frequency microwave absorbing properties based on anti-corrosive silica-pinned flake FeSiAl hybrid with full L band absorption. <i>Journal of Alloys and Compounds</i> , 2021, 888, 161574.	2.8	20
25	<i>In situ</i> regulation of microstructure and microwave-absorbing properties of FeSiAl through HNO <sub>3</sub> oxidation. <i>Nanotechnology Reviews</i> , 2021, 11, 147-157.	2.6	7
26	Heat-Resistant Trilayer Separators for High-Performance Lithium-Ion Batteries. <i>Physica Status Solidi - Rapid Research Letters</i> , 2020, 14, 1900504.	1.2	6
27	Plasma-induced FeSiAl@Al <sub>2</sub> O <sub>3</sub> @SiO <sub>2</sub> core-shell structure for exceptional microwave absorption and anti-oxidation at high temperature. <i>Chemical Engineering Journal</i> , 2020, 384, 123371.	6.6	161
28	Hydrophobic surface modification toward highly stable K <sub>2</sub> SiF <sub>6</sub> :Mn <sup>4+</sup> phosphor for white light-emitting diodes. <i>Ceramics International</i> , 2020, 46, 8811-8818.	2.3	37
29	A solid-electrolyte-reinforced separator through single-step electrophoretic assembly for safe high-capacity lithium ion batteries. <i>Journal of Power Sources</i> , 2020, 448, 227469.	4.0	23
30	Electrocatalytic hydrogen evolution under neutral pH conditions: current understandings, recent advances, and future prospects. <i>Energy and Environmental Science</i> , 2020, 13, 3185-3206.	15.6	225
31	Bifunctional water-electrolysis-catalysts meeting band-diagram analysis: case study of FeP electrodes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 20021-20029.	5.2	25
32	Nitrogen-Doped Oxygenated Molybdenum Phosphide as an Efficient Electrocatalyst for Hydrogen Evolution in Alkaline Media. <i>Frontiers in Chemistry</i> , 2020, 8, 733.	1.8	16
33	Raman and XPS depth profiling technique to investigate the corrosion behavior of FeSiAl alloy in salt spray environment. <i>Journal of Alloys and Compounds</i> , 2020, 834, 155075.	2.8	33
34	Porous quasi-graphitic carbon sheets for unprecedented sodium storage. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 2443-2450.	3.0	1
35	Application of ZrB <sub>2</sub> thin film as a low emissivity film at high temperature. <i>Applied Surface Science</i> , 2020, 527, 146763.	3.1	28
36	Pursuing low infrared emissivity materials with wider coverage band in ZrB <sub>2</sub> -CeO <sub>2</sub> compounds and their reaction mechanisms. <i>Ceramics International</i> , 2020, 46, 18234-18240.	2.3	9

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37	Bifunctional carbon-encapsulated FeSiAl hybrid flakes for enhanced microwave absorption properties and analysis of corrosion resistance. <i>Journal of Alloys and Compounds</i> , 2020, 828, 154079.	2.8	53
38	A review for modified Li composite anode: Principle, preparation and challenge. <i>Nanotechnology Reviews</i> , 2020, 9, 1610-1624.	2.6	15
39	Direct observation of Eu atoms in AlN lattice and the first-principles simulations. <i>Journal of the American Ceramic Society</i> , 2019, 102, 310-319.	1.9	20
40	Optical Analysis Using Effective Medium Theory and Finite Element Method to Study the Enhanced Light Absorption in Porous BaMgAl10O17:Eu2+ Phosphor. <i>Physics of the Solid State</i> , 2019, 61, 1450-1455.	0.2	1
41	Multi-layered porous hierarchical TiO2/g-C3N4 hybrid coating for enhanced visible light photocatalysis. <i>Applied Surface Science</i> , 2019, 495, 143435.	3.1	62
42	Carbon-decorated LiMn2O4 nanorods with enhanced performance for supercapacitors. <i>Journal of Alloys and Compounds</i> , 2019, 805, 624-630.	2.8	12
43	3D Hollow Quasi-Graphite Capsules/Polyaniline Hybrid with a High Performance for Room-Temperature Ammonia Gas Sensors. <i>ACS Sensors</i> , 2019, 4, 2343-2350.	4.0	64
44	Porous Eleocharis@MnPE Layered Hybrid for Synergistic Adsorption and Catalytic Biodegradation of Toxic Azo Dyes from Industrial Wastewater. <i>Environmental Science &amp; Technology</i> , 2019, 53, 2161-2170.	4.6	102
45	Self-tunable ultrathin carbon nanocups as the electrode material of sodium-ion batteries with unprecedented capacity and stability. <i>Chemical Engineering Journal</i> , 2019, 364, 578-588.	6.6	37
46	Cobalt Diselenide@Reduced graphene oxide based nanohybrid for supercapacitor applications. <i>Composites Part B: Engineering</i> , 2019, 174, 107001.	5.9	18
47	Unveiling Property of Hydrolysis-Derived DMAPbI3 for Perovskite Devices: Composition Engineering, Defect Mitigation, and Stability Optimization. <i>IScience</i> , 2019, 15, 165-172.	1.9	107
48	Evolution of microstructure and anti-oxidation ability of ZrB2 improved by a unique inert glass phase. <i>Ceramics International</i> , 2019, 45, 14291-14296.	2.3	12
49	High-Temperature Oxidation-Resistant ZrN <sub>0.4</sub> B <sub>0.6</sub> /SiC Nanohybrid for Enhanced Microwave Absorption. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 15869-15880.	4.0	150
50	Ultralow-permittivity glass /Al2O3 composite for LTCC applications. <i>Ceramics International</i> , 2019, 45, 13711-13718.	2.3	13
51	An Upgraded Lithium Ion Battery Based on a Polymeric Separator Incorporated with Anode Active Materials. <i>Advanced Energy Materials</i> , 2019, 9, 1803627.	10.2	53
52	A brief review for fluorinated carbon: synthesis, properties and applications. <i>Nanotechnology Reviews</i> , 2019, 8, 573-586.	2.6	67
53	<i>In Vivo</i> and <i>In Vitro</i> Monitoring of Amyloid Aggregation via BSA@FGQDs Multimodal Probe. <i>ACS Sensors</i> , 2019, 4, 200-210.	4.0	54
54	Investigation of electrical properties of pressureless sintered ZrB2-based ceramics. <i>Ceramics International</i> , 2019, 45, 7717-7722.	2.3	13

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55	Oxidation behaviour of plasma-sprayed ZrB <sub>2</sub> -SiC coatings. <i>Ceramics International</i> , 2019, 45, 2385-2392.	2.3	25
56	Preparation of low-permittivity K <sub>2</sub> O-B <sub>2</sub> O <sub>3</sub> -SiO <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> composites without the addition of glass. <i>Nanotechnology Reviews</i> , 2019, 8, 459-466.	2.6	4
57	Heterostructured Nanorings of Fe <sub>3</sub> O <sub>4</sub> @C Hybrid with Enhanced Microwave Absorption Performance. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 9369-9378.	4.0	244
58	Insight into the evolution mechanism of carbon film and Eu valence in carbon coated BaMgAl <sub>10</sub> O <sub>17</sub> : Eu <sup>2+</sup> phosphor annealed in air. <i>Ceramics International</i> , 2018, 44, 8898-8903.	2.3	14
59	High-performance infrared emissivity of micro-arc oxidation coatings formed on titanium alloy for aerospace applications. <i>International Journal of Applied Ceramic Technology</i> , 2018, 15, 579-591.	1.1	12
60	A novel strategy to motivate the luminescence efficiency of a phosphor: drilling nanoholes on the surface. <i>Chemical Communications</i> , 2018, 54, 3480-3483.	2.2	25
61	Ultra-small Co/CNTs nanohybrid from metal organic framework with highly efficient microwave absorption. <i>Composites Part B: Engineering</i> , 2018, 152, 316-323.	5.9	133
62	Non-isothermal oxidation kinetics of FeSiAl alloy powder for microwave absorption at high temperature. <i>Composites Part B: Engineering</i> , 2018, 155, 282-287.	5.9	41
63	Synthesis and growth mechanism of various SiO <sub>2</sub> nanostructures from straight to helical morphologies. <i>Composites Part B: Engineering</i> , 2018, 149, 92-98.	5.9	15
64	Pursuing enhanced oxidation resistance of ZrB <sub>2</sub> ceramics by SiC and WC co-doping. <i>Journal of the European Ceramic Society</i> , 2018, 38, 5311-5318.	2.8	24
65	Corrosion behavior of HA containing ceramic coated magnesium alloy in Hank's solution. <i>Journal of Alloys and Compounds</i> , 2017, 698, 643-653.	2.8	41
66	An Efficient Route to Polymeric Electrolyte Membranes with Interparticle Chain Microstructure Toward High-Temperature Lithium-Ion Batteries. <i>Advanced Materials Interfaces</i> , 2017, 4, 1601236.	1.9	22
67	Distinctive Supercapacitive Properties of Copper and Copper Oxide Nanocrystals Sharing a Similar Colloidal Synthetic Route. <i>Advanced Energy Materials</i> , 2017, 7, 1700105.	10.2	42
68	Facile Synthesis of Three-Dimensional Sandwiched MnO <sub>2</sub> @GCs@MnO <sub>2</sub> Hybrid Nanostructured Electrode for Electrochemical Capacitors. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 18872-18882.	4.0	52
69	Mechanistic study of graphitic carbon layer and nanosphere formation on the surface of T-ZnO. <i>Inorganic Chemistry Frontiers</i> , 2017, 4, 978-985.	3.0	12
70	A highly-efficient route to three-dimensional nanoporous copper leaves with high surface enhanced Raman scattering properties. <i>Chemical Engineering Journal</i> , 2017, 321, 394-400.	6.6	24
71	Synthesis and properties of hydroxyapatite-containing coating on AZ31 magnesium alloy by micro-arc oxidation. <i>Applied Surface Science</i> , 2017, 400, 391-404.	3.1	89
72	Luminescent properties and microstructure of SiC doped AlON: Eu <sup>2+</sup> phosphors. <i>Journal of Alloys and Compounds</i> , 2017, 725, 217-226.	2.8	10

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73	Insights into van der Waals interaction between nanotubes and planar surfaces. <i>Materials Today Physics</i> , 2017, 2, 35-39.	2.9	1
74	Insight the Luminescence Properties of AlON: Eu, Mg Phosphor under VUV Excitation. <i>Materials</i> , 2017, 10, 723.	1.3	9
75	Space matters: Li <sup>+</sup> conduction versus strain effect at FePO <sub>4</sub> /LiFePO <sub>4</sub> interface. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	18
76	Fe <sub>3</sub> C/helical carbon nanotube hybrid: Facile synthesis and spin-induced enhancement in microwave-absorbing properties. <i>Composites Part B: Engineering</i> , 2016, 107, 51-58.	5.9	76
77	Vapor-Induced Dissociation of Solid Growth of Three-Dimensional Graphite-like Capsules with Delicate Morphology and Atomic-level Thickness Control. <i>Crystal Growth and Design</i> , 2016, 16, 5040-5048.	1.4	27
78	Facile Synthesis of Fe <sub>3</sub> O <sub>4</sub> /GCs Composites and Their Enhanced Microwave Absorption Properties. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 6101-6109.	4.0	518
79	Enhanced Optical Performance of BaMgAl <sub>10</sub> O <sub>17</sub> :Eu <sup>2+</sup> Phosphor by a Novel Method of Carbon Coating. <i>Journal of Physical Chemistry C</i> , 2016, 120, 2355-2361.	1.5	51
80	Improved Blue-Emitting AlN:Eu <sup>2+</sup> Phosphors by Alloying with GaN. <i>Journal of the American Ceramic Society</i> , 2015, 98, 3897-3904.	1.9	12
81	Luminescent properties of a novel Al <sub>10</sub> O <sub>3</sub> N <sub>8</sub> :Eu <sup>2+</sup> phosphor by a mechanochemical activation route. <i>Optical Materials</i> , 2015, 42, 511-515.	1.7	13
82	Enhancement in photoluminescence performance of carbon-decorated T-ZnO. <i>Nanotechnology</i> , 2015, 26, 125705.	1.3	11
83	Synthesis of high-purity CuO nanoleaves and analysis of their ethanol gas sensing properties. <i>RSC Advances</i> , 2015, 5, 34788-34794.	1.7	39
84	Preparation and microwave-absorbing property of BaFe <sub>12</sub> O <sub>19</sub> nanoparticles and BaFe <sub>12</sub> O <sub>19</sub> /Fe <sub>3</sub> C/CNTs composites. <i>RSC Advances</i> , 2015, 5, 91665-91669.	1.7	42
85	Remarkable improvement in microwave absorption by cloaking a micro-scaled tetrapod hollow with helical carbon nanofibers. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 3024-3031.	1.3	54
86	High-purity Cu nanocrystal synthesis by a dynamic decomposition method. <i>Nanoscale Research Letters</i> , 2014, 9, 2499.	3.1	9
87	Controllable synthesis of carbon coils and growth mechanism for twinning double-helix catalyzed by Ni nanoparticle. <i>Composites Part B: Engineering</i> , 2014, 61, 350-357.	5.9	20
88	Length evolution of helical micro/nano-scale structures. <i>RSC Advances</i> , 2014, 4, 31308-31312.	1.7	2
89	Controllable preparation of Ni nanoparticles for catalysis of coiled carbon fibers growth. <i>Nanoscale Research Letters</i> , 2014, 9, 370.	3.1	10
90	Gas-Induced Formation of Cu Nanoparticle as Catalyst for High-Purity Straight and Helical Carbon Nanofibers. <i>ACS Nano</i> , 2012, 6, 8611-8619.	7.3	50

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91	Effect of volume ratio of acetonitrile to water on the morphology and property of polypyrrole prepared by chemical oxidation method. <i>Polymer Engineering and Science</i> , 2012, 52, 1600-1605.	1.5	7
92	Preparation of high purity helical carbon nanofibers by the catalytic decomposition of acetylene and their growth mechanism. <i>Carbon</i> , 2010, 48, 4535-4541.	5.4	40