Xiaodong Wang

List of Publications by Year
in descending order

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69 papers	1,939 citations	257450 24 h-index	276875 41 g-index
70 all docs	70 docs citations	70 times ranked	2040 citing authors

#	Article	IF	Citations
1	Metal oxide aerogels for high-temperature applications. Journal of Sol-Gel Science and Technology, 2023, 106, 360-380.	2.4	15
2	UV resistance of sol-gel hydrophobic silica antireflective coatings. Journal of Sol-Gel Science and Technology, 2023, 106, 381-392.	2.4	3
3	Aqueous-based, high-density nanoporous carbon xerogels with high specific surface area for supercapacitors. Journal of Porous Materials, 2022, 29, 87-95.	2.6	5
4	Embedding constructed refractive index graded antireflective coating with high abrasion resistance and environmental stability for polycarbonate glass. Journal of Colloid and Interface Science, 2022, 608, 13-21.	9.4	8
5	Hydrothermal self-assembled Fe3O4/CA core-shell composites for broadband microwave absorption. Journal of Magnetism and Magnetic Materials, 2022, 541, 168511.	2.3	9
6	Preparation protocol of urea cross-linked chitosan aerogels with improved mechanical properties using aqueous aluminum ion medium. Journal of Supercritical Fluids, 2022, 179, 105414.	3.2	9
7	A quasi-solid asymmetric supercapacitor based on MnO2-coated and N-doped pinecone porous carbon. Journal of Materials Science: Materials in Electronics, 2022, 33, 1899-1909.	2.2	3
8	Al3+ coordinated chitosan hydrogel with ultrahigh water absorbency and environmental response. Materials and Design, 2022, 214, 110390.	7.0	11
9	Organic/inorganic double-precursor cross-linked alumina aerogel with high specific surface area and high-temperature resistance. Ceramics International, 2022, 48, 17261-17269.	4.8	9
10	3D flame-retardant skeleton reinforced polymer electrolyte for solid-state dendrite-free lithium metal batteries. Journal of Energy Chemistry, 2022, 71, 174-181.	12.9	30
11	Silver Nanoparticle-Decorated Chitosan Aerogels as Three-Dimensional Porous Surface-Enhanced Raman Scattering Substrates for Ultrasensitive Detection. ACS Applied Nano Materials, 2022, 5, 5398-5406.	5.0	4
12	Cellulose-reinforced poly(cyclocarbonate-ether)-based composite polymer electrolyte and facile gel interfacial modification for solid-state lithium-ion batteries. Chemical Engineering Journal, 2022, 446, 137194.	12.7	27
13	MoS2 nanosheet loaded Fe2O3 @ carbon cloth flexible composite electrode material for quasi-solid asymmetric supercapacitors. Journal of Electroanalytical Chemistry, 2022, 919, 116556.	3.8	7
14	A Facile Method for Fabricating a Monolithic Mullite Fiber-Reinforced Alumina Aerogel with Excellent Mechanical and Thermal Properties. Gels, 2022, 8, 380.	4.5	5
15	Active biochar support nano zero-valent iron for efficient removal of U(VI) from sewage water. Journal of Alloys and Compounds, 2021, 852, 156993.	5.5	86
16	Research progress and application prospect of solid-state electrolytes in commercial lithium-ion power batteries. Energy Storage Materials, 2021, 35, 70-87.	18.0	126
17	Applying multi-scale silica-like three-dimensional networks in a PEO matrix via in situ crosslinking for high-performance solid composite electrolytes. Materials Chemistry Frontiers, 2021, 5, 7767-7777.	5.9	18
18	Fabrication of methyl acrylate modified silica aerogel for capture of Cu2+ from aqueous solutions. Journal of Sol-Gel Science and Technology, 2021, 98, 389-400.	2.4	10

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19	Moistureâ€Resistant and Mechanically Strong Polyimideâ€Polymethylsilsesquioxane Hybrid Aerogels with Tunable Microstructure. Macromolecular Materials and Engineering, 2021, 306, 2000612.	3.6	6
20	Properties improvement of linear polyimide aerogels via formation of doubly cross-linked polyimide-polyvinylpolymethylsiloxane network structure. Journal of Non-Crystalline Solids, 2021, 559, 120679.	3.1	8
21	Polyaniline-supported Al-doped MnO2@carbon cloth-based electrode material for quasi-solid-state flexible supercapacitor. Journal of Materials Science: Materials in Electronics, 2021, 32, 19820-19831.	2.2	5
22	Alumina-Doped Silica Aerogels for High-Temperature Thermal Insulation. Gels, 2021, 7, 122.	4.5	6
23	Multipath conduction and large capacity silicon-based anodes for high stabilizing lithium-ion batteries. Applied Surface Science, 2021, 557, 149860.	6.1	19
24	Novel electrode design of three-dimensional carbon foam modified with MnO2 nanosheet arrays for high-performance quasi-solid supercapacitor. Journal of Materials Science: Materials in Electronics, 2021, 32, 26555-26566.	2.2	6
25	Two-dimensional Mg-doped MnO2@ carbon cloth nanosheets for high performance typical flexible solid supercapacitor. Journal of Alloys and Compounds, 2021, 877, 160243.	5.5	34
26	Influence of diamine rigidity and dianhydride rigidity on the microstructure, thermal and mechanical properties of cross-linked polyimide aerogels. Journal of Porous Materials, 2021, 28, 717-725.	2.6	3
27	Two-stage no-wait hybrid flow-shop scheduling with sequence-dependent setup times. International Journal of Systems Science: Operations and Logistics, 2020, 7, 291-307.	3.0	7
28	An energy-efficient two-stage hybrid flow shop scheduling problem in a glass production. International Journal of Production Research, 2020, 58, 2283-2314.	7.5	73
29	Performance of high-temperature thermosetting polyimide composites modified with thermoplastic polyimide. Polymer Testing, 2020, 90, 106746.	4.8	30
30	3D porous MnO2@carbon nanosheet synthesized from rambutan peel for high-performing supercapacitor electrodes materials. Applied Surface Science, 2020, 530, 147230.	6.1	83
31	A high energy density flexible symmetric supercapacitor based on Al-doped MnO2 nanosheets @ carbon cloth electrode materials. Journal of Materials Science: Materials in Electronics, 2020, 31, 16027-16036.	2.2	9
32	Superhydrophobic highly flexible doubly cross-linked aerogel/carbon nanotube composites as strain/pressure sensors. Journal of Materials Chemistry B, 2020, 8, 4883-4889.	5.8	25
33	Promising High-Performance Supercapacitor Electrode Materials from MnO₂ Nanosheets@Bamboo Leaf Carbon. ACS Omega, 2020, 5, 16299-16306.	3.5	42
34	Anion-regulated selective growth ultrafine copper templates in carbon nanosheets network toward highly efficient gas capture. Journal of Colloid and Interface Science, 2020, 564, 296-302.	9.4	17
35	Superelastic Triple-Network Polyorganosiloxane-Based Aerogels as Transparent Thermal Superinsulators and Efficient Separators. Chemistry of Materials, 2020, 32, 1595-1604.	6.7	57
36	A flexible high-performance symmetric quasi-solid supercapacitor based on Ni-doped MnO2 nano-array @ carbon cloth. Electrochimica Acta, 2020, 348, 136209.	5.2	52

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37	Effect of different chemical liquid deposition methods on the microstructure and properties of polyimide-polyvinylpolymethylsiloxane composite aerogels. Journal of Supercritical Fluids, 2020, 160, 104811.	3.2	8
38	Metal Cationâ€Assisted Synthesis of Amorphous B, N Coâ€Doped Carbon Nanotubes for Superior Sodium Storage. Small, 2020, 16, e2001607.	10.0	35
39	Adsorption of cationic dyes from aqueous solution using hydrophilic silica aerogel via ambient pressure drying. Chinese Journal of Chemical Engineering, 2020, 28, 2467-2473.	3.5	22
40	Resilient, fire-retardant and mechanically strong polyimide-polyvinylpolymethylsiloxane composite aerogel prepared via stepwise chemical liquid deposition. Materials and Design, 2019, 183, 108096.	7.0	38
41	Porous alumina aerogel with tunable pore structure for facile, ultrasensitive, and reproducible SERS platform. Journal of Raman Spectroscopy, 2019, 50, 1429-1437.	2.5	13
42	Surface free energy and microstructure dependent environmental stability of solâ€“gel SiO2 antireflective coatings: Effect of combined vapor phase surface treatment. Journal of Colloid and Interface Science, 2019, 555, 124-131.	9.4	20
43	Low-Temperature Preparation of Mechanically Robust and Contamination-Resistant Antireflective Coatings for Flexible Polymeric Glasses via Embedding of Silica Nanoparticles and HMDS Modification. ACS Applied Materials & Interfaces, 2019, 11, 37084-37093.	8.0	18
44	Ambient Pressure-Dried Grapheneâ€“Composite Carbon Aerogel for Capacitive Deionization. Processes, 2019, 7, 29.	2.8	18
45	Durable silica antireflective coating prepared by combined treatment of ammonia and KH570 vapor. Journal of Coatings Technology Research, 2019, 16, 615-622.	2.5	10
46	Preparation of Carbon Aerogel Electrode for Electrosorption of Copper Ions in Aqueous Solution. Materials, 2019, 12, 1864.	2.9	24
47	Synthesis of highly cross-linked uniform polyurea aerogels. Journal of Supercritical Fluids, 2019, 151, 8-14.	3.2	5
48	Highly Porous Carbon Xerogels Doped with Cuprous Chloride for Effective CO Adsorption. ACS Omega, 2019, 4, 6138-6143.	3.5	11
49	A positive-negative alternate adsorption effect for capacitive deionization in nano-porous carbon aerogel electrodes to enhance desalination capacity. Desalination, 2019, 458, 45-53.	8.2	51
50	Opacifier embedded and fiber reinforced alumina-based aerogel composites for ultra-high temperature thermal insulation. Ceramics International, 2019, 45, 644-650.	4.8	70
51	A Bi-Objective Vehicle-Routing Problem with Soft Time Windows and Multiple Depots to Minimize the Total Energy Consumption and Customer Dissatisfaction. Sustainability, 2018, 10, 4257.	3.2	10
52	Silica Aerogel Monoliths Derived from Silica Hydrosol with Various Surfactants. Molecules, 2018, 23, 3192.	3.8	7
53	Cast-In-Situ, Large-Sized Monolithic Silica Xerogel Prepared in Aqueous System. Molecules, 2018, 23, 1178.	3.8	3
54	Solâ€“Gel Preparation of Laser Damage Resistant and Moisture-Proof Antireflective Coatings for KDP Crystals. Langmuir, 2018, 34, 10262-10269.	3.5	28

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55	Environmental Stable SiO₂Antireflective Coating Modified via NH₃/HTMS Vapor Phase Treatment. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2018, 33, 1219.	1.3	7
56	Homogeneous deposition of Ni(OH)2 onto cellulose-derived carbon aerogels for low-cost energy storage electrodes. RSC Advances, 2017, 7, 10583-10591.	3.6	12
57	Highly thermally stable alumina-based aerogels modified by partially hydrolyzed aluminum tri-sec-butoxide. Journal of Sol-Gel Science and Technology, 2017, 84, 507-514.	2.4	28
58	Preparation and stress evolution of solâ€“gel SiO2 antireflective coatings for small-size anisotropic lithium triborate crystals. AIP Advances, 2016, 6, .	1.3	8
59	Nanocellulose-derived highly porous carbon aerogels for supercapacitors. Carbon, 2016, 99, 203-211.	10.3	226
60	Valence Band Splitting in Wurtzite InGaAs Nanoneedles Studied by Photoluminescence Excitation Spectroscopy. ACS Nano, 2014, 8, 11440-11446.	14.6	10
61	Effect of crystal structure on optical properties of solâ€“gel derived zirconia thin films. Journal of Alloys and Compounds, 2013, 556, 182-187.	5.5	29
62	Thermal Annealing Effect on Optical Properties of Binary TiO2-SiO2 Sol-Gel Coatings. Materials, 2013, 6, 76-84.	2.9	44
63	Optical Constants of Crystallized TiO2 Coatings Prepared by Sol-Gel Process. Materials, 2013, 6, 2819-2830.	2.9	87
64	Study on Hexagonal Mesoporous Silica Film for Antireflective Coating. Key Engineering Materials, 2012, 509, 74-81.	0.4	0
65	Improvement on laser-induced damage threshold of sol-gel ZrO_2 coatings by crystal structure tuning. Optics Express, 2012, 20, 24482.	3.4	16
66	A review of contamination-resistant antireflective solâ€“gel coatings. Journal of Sol-Gel Science and Technology, 2012, 61, 206-212.	2.4	49
67	Raman spectroscopy of solâ€“gel derived titanium oxide thin films. Journal of Raman Spectroscopy, 2011, 42, 1578-1582.	2.5	68
68	Solâ€“gel derived durable antireflective coating for solar glass. Journal of Sol-Gel Science and Technology, 2010, 53, 322-327.	2.4	90
69	Fluoride removal performance of highly porous activated alumina. Journal of Sol-Gel Science and Technology, 0, , 1.	2.4	7