

# Chang-An Wang

## List of Publications by Citations

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#	Paper	IF	Citations
154	Ceramics with Special Porous Structures Fabricated by Freeze-Gelcasting: Using tert-Butyl Alcohol as a Template. <i>Journal of the American Ceramic Society</i> , <b>2007</b> , 90, 3478-3484	3.8	148
153	A review of fabrication strategies and applications of porous ceramics prepared by freeze-casting method. <i>Ceramics International</i> , <b>2016</b> , 42, 2907-2925	5.1	126
152	An intermediate temperature garnet-type solid electrolyte-based molten lithium battery for grid energy storage. <i>Nature Energy</i> , <b>2018</b> , 3, 732-738	62.3	126
151	Design and Preparation of MnO <sub>2</sub> /CeO <sub>2</sub> -MnO <sub>2</sub> Double-Shelled Binary Oxide Hollow Spheres and Their Application in CO Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 8670-7	9.5	114
150	Control of pore channel size during freeze casting of porous YSZ ceramics with unidirectionally aligned channels using different freezing temperatures. <i>Journal of the European Ceramic Society</i> , <b>2010</b> , 30, 3389-3396	6	114
149	High lithium ion conduction in garnet-type Li <sub>6</sub> La <sub>3</sub> ZrTaO <sub>12</sub> . <i>Electrochemistry Communications</i> , <b>2011</b> , 13, 1289-1292	5.1	110
148	Processing and Mechanical Properties of Zirconium Diboride-Based Ceramics Prepared by Spark Plasma Sintering. <i>Journal of the American Ceramic Society</i> , <b>2007</b> , 90, 1992-1997	3.8	107
147	A possible mechanism on synthesis of Ti <sub>3</sub> AlC <sub>2</sub> . <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2003</b> , 352, 333-339	5.3	96
146	Polyacrylamide-clay nacre-like nanocomposites prepared by electrophoretic deposition. <i>Composites Science and Technology</i> , <b>2007</b> , 67, 2770-2774	8.6	86
145	Effect of starch addition on microstructure and properties of highly porous alumina ceramics. <i>Ceramics International</i> , <b>2013</b> , 39, 8833-8839	5.1	84
144	Porous anorthite ceramics with ultra-low thermal conductivity. <i>Journal of the European Ceramic Society</i> , <b>2013</b> , 33, 2573-2578	6	83
143	A dopamine modified Li <sub>6.4</sub> La <sub>3</sub> Zr <sub>1.4</sub> Ta <sub>0.6</sub> O <sub>12</sub> /PEO solid-state electrolyte: enhanced thermal and electrochemical properties. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 16425-16436	13	82
142	Excess lithium salt functions more than compensating for lithium loss when synthesizing Li <sub>6.5</sub> La <sub>3</sub> Ta <sub>0.5</sub> Zr <sub>1.5</sub> O <sub>12</sub> in alumina crucible. <i>Journal of Power Sources</i> , <b>2014</b> , 260, 109-114	8.9	81
141	Porous yttria-stabilized zirconia ceramics with ultra-low thermal conductivity. <i>Journal of Materials Science</i> , <b>2010</b> , 45, 3242-3246	4.3	81
140	Effect of sintering temperature on compressive strength of porous yttria-stabilized zirconia ceramics. <i>Ceramics International</i> , <b>2010</b> , 36, 1697-1701	5.1	76
139	Synthesis and mechanical properties of Ti <sub>3</sub> AlC <sub>2</sub> by spark plasma sintering. <i>Journal of Materials Science</i> , <b>2003</b> , 38, 3111-3115	4.3	75
138	An efficient biomimetic process for fabrication of artificial nacre with ordered-nanostructure. <i>Materials Science and Engineering C</i> , <b>2008</b> , 28, 218-222	8.3	72

137	Ceramics With Ultra-Low Density Fabricated by Gelcasting: An Unconventional View. <i>Journal of the American Ceramic Society</i> , <b>2007</b> , 90, 3424-3429	3.8	70
136	Li-Ion Conduction and Stability of Perovskite $\text{Li}_3/8\text{Sr}_7/16\text{Hf}_1/4\text{Ta}_3/4\text{O}_3$ . <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 14552-7	9.5	69
135	Preparation of $\text{Ti}_3\text{AlC}_2$ and $\text{Ti}_2\text{AlC}$ by self-propagating high-temperature synthesis. <i>Journal of Materials Science Letters</i> , <b>2001</b> , 20, 1971-1973		65
134	The 2021 battery technology roadmap. <i>Journal Physics D: Applied Physics</i> , <b>2021</b> , 54, 183001	3	63
133	High-Energy-Density Solid-Electrolyte-Based Liquid Li-S and Li-Se Batteries. <i>Joule</i> , <b>2020</b> , 4, 262-274	27.8	62
132	A novel simple method to stably synthesize $\text{Ti}_3\text{AlC}_2$ powder with high purity. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2006</b> , 428, 54-58	5.3	61
131	A novel way to fabricate tubular porous mullite membrane supports by TBA-based freezing casting method. <i>Journal of the European Ceramic Society</i> , <b>2013</b> , 33, 3249-3256	6	59
130	A soft non-porous separator and its effectiveness in stabilizing Li metal anodes cycling at 10 mA $\text{cm}^{-2}$ observed in situ in a capillary cell. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 4300-4307	13	58
129	Nano-network $\text{MnO}_2$ /polyaniline composites with enhanced electrochemical properties for supercapacitors. <i>Materials and Design</i> , <b>2016</b> , 97, 512-518	8.1	58
128	Designing pinecone-like and hierarchical manganese cobalt sulfides for advanced supercapacitor electrodes. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 12782-12793	13	58
127	A novel way to fabricate highly porous fibrous YSZ ceramics with improved thermal and mechanical properties. <i>Journal of the European Ceramic Society</i> , <b>2012</b> , 32, 2213-2218	6	57
126	Hierarchically porous $\text{Co}_3\text{O}_4$ hollow spheres with tunable pore structure and enhanced catalytic activity. <i>Chemical Communications</i> , <b>2013</b> , 49, 7427-9	5.8	54
125	Effects of pore size and orientation on dielectric and piezoelectric properties of 1B type porous PZT ceramics. <i>Journal of the European Ceramic Society</i> , <b>2011</b> , 31, 605-609	6	54
124	Mullite whisker reinforced porous anorthite ceramics with low thermal conductivity and high strength. <i>Journal of the European Ceramic Society</i> , <b>2016</b> , 36, 761-765	6	52
123	Effects of mono-dispersed PMMA micro-balls as pore-forming agent on the properties of porous YSZ ceramics. <i>Journal of the European Ceramic Society</i> , <b>2013</b> , 33, 1859-1865	6	50
122	Control of Composition and Structure in Laminated Silicon Nitride/Boron Nitride Composites. <i>Journal of the American Ceramic Society</i> , <b>2002</b> , 85, 2457-2461	3.8	50
121	Impregnation of porous mullite with $\text{Na}_2\text{SO}_4$ phase change material for thermal energy storage. <i>Solar Energy Materials and Solar Cells</i> , <b>2015</b> , 134, 268-274	6.4	48
120	Quantitative phase analysis in the $\text{TiAlC}$ ternary system by X-ray diffraction. <i>Powder Diffraction</i> , <b>2005</b> , 20, 218-223	1.8	46

119	Effects of sintering behavior on microstructure and piezoelectric properties of porous PZT ceramics. <i>Ceramics International</i> , <b>2010</b> , 36, 549-554	5.1	45
118	Piezoelectric Properties of the 1B Type Porous Lead Zirconate Titanate Ceramics. <i>Journal of the American Ceramic Society</i> , <b>2011</b> , 94, 1794-1799	3.8	43
117	Control of pore size and wall thickness of 3-1 type porous PZT ceramics during freeze-casting process. <i>Materials and Design</i> , <b>2016</b> , 91, 242-247	8.1	37
116	Porous PZT Ceramics with High Hydrostatic Figure of Merit and Low Acoustic Impedance by TBA-Based Gel-Casting Process. <i>Journal of the American Ceramic Society</i> , <b>2010</b> , 93, 1427	3.8	36
115	Porous yttria-Stabilized Zirconia Ceramics Fabricated by Nonaqueous-Based Gelcasting Process with PMMA Microsphere as Pore-Forming Agent. <i>Journal of the American Ceramic Society</i> , <b>2013</b> , 96, 266-271	3.8	33
114	Special assembly of laminated nanocomposite that mimics nacre. <i>Materials Science and Engineering C</i> , <b>2008</b> , 28, 1031-1037	8.3	32
113	Garnet-type Li <sub>6.4</sub> La <sub>3</sub> Zr <sub>1.4</sub> Ta <sub>0.6</sub> O <sub>12</sub> thin sheet: Fabrication and application in lithium-hydrogen peroxide semi-fuel cell. <i>Electrochemistry Communications</i> , <b>2014</b> , 48, 147-150	5.1	30
112	Microstructure and Electrical Properties of Porous PZT Ceramics Fabricated by Different Methods. <i>Journal of the American Ceramic Society</i> , <b>2010</b> , 93, 1984	3.8	30
111	Enhanced piezoelectric property of porous lead zirconate titanate ceramics with one dimensional ordered pore structure. <i>Journal of Applied Physics</i> , <b>2010</b> , 108, 124112	2.5	30
110	Fabrication of porous alumina-zirconia ceramics by gel-casting and infiltration methods. <i>Materials &amp; Design</i> , <b>2014</b> , 63, 1-5		29
109	Piezoelectric Properties of a Pioneering 3-1 Type PZT/Epoxy Composites Based on Freeze-Casting Processing. <i>Journal of the American Ceramic Society</i> , <b>2014</b> , 97, 1511-1516	3.8	27
108	Effect of two-step sintering on micro-honeycomb BaTiO <sub>3</sub> ceramics prepared by freeze-casting process. <i>Journal of the European Ceramic Society</i> , <b>2016</b> , 36, 2647-2652	6	27
107	Extremely facile synthesis of manganese dioxide-polyaniline nano-reticulation with enhanced electrochemical properties. <i>Journal of Alloys and Compounds</i> , <b>2016</b> , 677, 281-287	5.7	27
106	Design and synthesis of hierarchically porous MnO <sub>2</sub> /carbon hybrids for high performance electrochemical capacitors. <i>Journal of Colloid and Interface Science</i> , <b>2015</b> , 438, 61-67	9.3	25
105	In situ preparation of a binder-free nano-cotton-like CuO/Cu integrated anode on a current collector by laser ablation oxidation for long cycle life Li-ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 19781-19789	13	24
104	Smart tuning of 3D ordered electrocatalysts for enhanced oxygen reduction reaction. <i>Applied Catalysis B: Environmental</i> , <b>2017</b> , 219, 640-644	21.8	23
103	Porous yttria-stabilized zirconia ceramics with ultra-low thermal conductivity. Part II: temperature dependence of thermophysical properties. <i>Journal of Materials Science</i> , <b>2011</b> , 46, 623-628	4.3	23
102	Poly(amic acid) layer nacrelike composites prepared by electrophoretic deposition. <i>Journal of Materials Research</i> , <b>2008</b> , 23, 1706-1712	2.5	23

101	Enhanced mechanical strength and ionic conductivity of LLZO solid electrolytes by oscillatory pressure sintering. <i>Ceramics International</i> , <b>2019</b> , 45, 18115-18118	5.1	22
100	Effect of Heating Rate on Spark Plasma Sintering of a Nanosized $\text{Bi}_3\text{N}_4$ -Based Powder. <i>Journal of the American Ceramic Society</i> , <b>2011</b> , 94, 1182-1190	3.8	22
99	Porous YSZ ceramics with unidirectionally aligned pore channel structure: Lowering thermal conductivity by silica aerogels impregnation. <i>Journal of the European Ceramic Society</i> , <b>2011</b> , 31, 2915-2922	6	21
98	Facile synthesis of tremella-like $\text{MnO}_2$ and its application as supercapacitor electrodes. <i>Frontiers of Materials Science</i> , <b>2015</b> , 9, 234-240	2.5	20
97	Sintering behavior of garnet-type $\text{Li}_{6.4}\text{La}_3\text{Zr}_{1.4}\text{Ta}_{0.6}\text{O}_{12}$ in $\text{Li}_2\text{CO}_3$ atmosphere and its electrochemical property. <i>International Journal of Applied Ceramic Technology</i> , <b>2017</b> , 14, 921-927	2	20
96	Preparation and characterization of $\text{ZrB}_2$ - $\text{SiC}$ ultra-high temperature ceramics by microwave sintering. <i>Frontiers of Materials Science in China</i> , <b>2010</b> , 4, 276-280		20
95	A high-performance potassium metal battery using safe ionic liquid electrolyte. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 27847-27853	11.5	20
94	Brownian-snowball-mechanism-induced hierarchical cobalt sulfide for supercapacitors. <i>Journal of Power Sources</i> , <b>2019</b> , 412, 321-330	8.9	20
93	Carbon-based flexible self-supporting cathode for lithium-sulfur batteries: Progress and perspective <b>2021</b> , 3, 271-302		20
92	$\text{Al}_2\text{O}_3$ -fiber-reinforced porous YSZ ceramics with high mechanical strength. <i>Ceramics International</i> , <b>2014</b> , 40, 10329-10335	5.1	19
91	Improved Heat Insulation and Mechanical Properties of Highly Porous YSZ Ceramics After Silica Aerogels Impregnation. <i>Journal of the American Ceramic Society</i> , <b>2013</b> , 96, 3223-3227	3.8	19
90	Influence of sintering additives on $\text{Li}^+$ conductivity and electrochemical property of perovskite-type $\text{Li}_{3/8}\text{Sr}_{7/16}\text{Hf}_{1/4}\text{Ta}_{3/4}\text{O}_3$ . <i>Electrochimica Acta</i> , <b>2017</b> , 234, 1-6	6.7	17
89	Fabrication and characterization of ceramic coatings with alumina-silica sol-incorporated alumina powder coated on woven quartz fiber fabrics. <i>Ceramics International</i> , <b>2013</b> , 39, 6041-6050	5.1	17
88	Synthesis of bamboo-like $\text{SiC}$ whiskers from waste silica fume. <i>Crystal Research and Technology</i> , <b>2014</b> , 49, 290-297	1.3	17
87	Influence of Conductive Nano-TiC on Microstructural Evolution of $\text{Si}_3\text{N}_4$ -Based Nanocomposites in Spark Plasma Sintering. <i>Journal of the American Ceramic Society</i> , <b>2011</b> , 94, 959-967	3.8	16
86	Enhanced Performance of $\text{LiLaZrTaO}$ Solid Electrolyte by the Regulation of Grain and Grain Boundary Phases. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 56118-56125	9.5	16
85	Preparation and characterization of monodispersed spherical $\text{Fe}_2\text{O}_3@ \text{SiO}_2$ reddish pigments with core-shell structure. <i>Journal of Advanced Ceramics</i> , <b>2019</b> , 8, 39-46	10.7	15
84	Improved Resistance to Damage of Silicon Carbide-Whisker-Reinforced Silicon Nitride-Matrix Composites by Whisker-Oriented Alignment. <i>Journal of the American Ceramic Society</i> , <b>2001</b> , 84, 161-164	3.8	15

83	Dual interface layers for solid-state Li metal battery with low interfacial resistance and small polarization based on garnet electrolyte. <i>Electrochimica Acta</i> , <b>2020</b> , 330, 135352	6.7	15
82	Flower-like Hollow MoSe Nanospheres as Efficient Earth-Abundant Electrocatalysts for Nitrogen Reduction Reaction under Ambient Conditions. <i>Inorganic Chemistry</i> , <b>2020</b> , 59, 12941-12946	5.1	15
81	Facile synthesis of well-dispersed CeO <sub>2</sub> /TiO <sub>2</sub> composite hollow spheres with superior catalytic activity for CO oxidation. <i>RSC Advances</i> , <b>2015</b> , 5, 95133-95139	3.7	14
80	Synthesis of TiO <sub>2</sub> hollow spheres with tunable pore structure and enhanced photocatalytic activity. <i>Ceramics International</i> , <b>2015</b> , 41, 14615-14620	5.1	14
79	YSZ fiber-reinforced porous YSZ ceramics with lowered thermal conductivity: Influence of the sintering temperature. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 600, 76-81	5.3	14
78	A study on the orientation relationship between Ti <sub>3</sub> SiC <sub>2</sub> and TiC grains. <i>Materials Letters</i> , <b>2002</b> , 57, 106-109	3.9	14
77	Simple synthesis of a double-shell hollow structured MnO <sub>2</sub> @TiO <sub>2</sub> composite as an anode material for lithium ion batteries. <i>RSC Advances</i> , <b>2017</b> , 7, 46263-46270	3.7	13
76	Synthesis and magnetoelectric effect of composites with CoFe <sub>2</sub> O <sub>4</sub> -epoxy embedded in 3D type porous PZT ceramics. <i>Ceramics International</i> , <b>2015</b> , 41, 11080-11085	5.1	13
75	Synthesis and chromatic properties of zircon encapsulated ceramic black pigment with carbon sphere as carbon source. <i>Journal of the European Ceramic Society</i> , <b>2018</b> , 38, 2218-2227	6	13
74	Manganous-Manganic Oxide@Carbon Core-Shell Nanorods for Supercapacitors with High Cycle Retention. <i>ECS Journal of Solid State Science and Technology</i> , <b>2016</b> , 5, M5-M11	2	13
73	Synthesis of aluminum-doped mesoporous zirconia with improved thermal stability. <i>Microporous and Mesoporous Materials</i> , <b>2014</b> , 186, 1-6	5.3	12
72	Synthesis and growth of anorthite crystal during in situ preparation of porous anorthite ceramics by foam-gelcasting. <i>International Journal of Applied Ceramic Technology</i> , <b>2017</b> , 14, 957-962	2	12
71	Multi-enhanced-phonon scattering modes in Ln-Me-A sites co-substituted LnMeA <sub>11</sub> O <sub>19</sub> ceramics. <i>Scientific Reports</i> , <b>2014</b> , 4, 6823	4.9	12
70	Preparation and mechanical properties of ZrB <sub>2</sub> -based ceramics using MoSi <sub>2</sub> as sintering aids. <i>Frontiers of Materials Science in China</i> , <b>2010</b> , 4, 271-275		12
69	Preparation of acrylic anodic electrophoretic resin/clay nanocomposite films by water-based electrodeposition. <i>Composites Science and Technology</i> , <b>2008</b> , 68, 880-887	8.6	12
68	Effects of Mullite Content on the Properties and Microstructure of Porous Anorthite/Mullite Composite Ceramics. <i>Wuji Cailiao Xuebao/Journal of Inorganic Materials</i> , <b>2011</b> , 26, 1095-1100	1	12
67	Blending Poly(ethylene oxide) and Li <sub>6.4</sub> La <sub>3</sub> Zr <sub>1.4</sub> Ta <sub>0.6</sub> O <sub>12</sub> by Haake Rheomixer without any solvent: A low-cost manufacture method for mass production of composite polymer electrolyte. <i>Journal of Power Sources</i> , <b>2020</b> , 451, 227797	8.9	12
66	Microstructure and mechanical properties of high entropy CrMnFeCoNi alloy processed by electropulsing-assisted ultrasonic surface rolling. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2020</b> , 795, 140004	5.3	12



65	Grain Orientation and Domain Configuration in 3-1 Type Porous PZT Ceramics with Ultrahigh Piezoelectric Properties. <i>Journal of the American Ceramic Society</i> , <b>2015</b> , 98, 2700-2702	3.8	11
64	Strong metal-support interactions induced by an ultrafast laser. <i>Nature Communications</i> , <b>2021</b> , 12, 6665	17.4	11
63	The rational design of sandwich-like MnO-Pd-CeO hollow spheres with enhanced activity and stability for CO oxidation. <i>Nanoscale</i> , <b>2019</b> , 11, 6776-6783	7.7	10
62	Fabrication of porous silver/titania composite hollow spheres with enhanced photocatalytic performance. <i>Materials Chemistry and Physics</i> , <b>2015</b> , 149-150, 1-6	4.4	10
61	Facile synthesis and characterization of MnO <sub>2</sub> nanomaterials as supercapacitor electrode materials. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2016</b> , 27, 5533-5542	2.1	10
60	Enhanced anti-deliquescent property and ultralow thermal conductivity of magnetoplumbite-type LnMeAl <sub>11</sub> O <sub>19</sub> materials for thermal barrier coating. <i>Journal of the American Ceramic Society</i> , <b>2018</b> , 101, 1095-1104	3.8	9
59	A new binder-free and conductive-additive-free TiO <sub>2</sub> /WO <sub>3</sub> -W integrative anode material produced by laser ablation. <i>Journal of Power Sources</i> , <b>2018</b> , 378, 362-368	8.9	9
58	Effect of YSZ fiber addition on microstructure and properties of porous YSZ ceramics. <i>Journal of Materials Science</i> , <b>2012</b> , 47, 6326-6332	4.3	9
57	Oxidation Behavior of SiC Platelet-Reinforced ZrB <sub>2</sub> Ceramic Matrix Composites. <i>International Journal of Applied Ceramic Technology</i> , <b>2012</b> , 9, 178-185	2	9
56	Molten Lithium-Brass/Zinc Chloride System as High-Performance and Low-Cost Battery. <i>Matter</i> , <b>2020</b> , 3, 1714-1724	12.7	9
55	Near net size sintering of porous cordierite ceramics with excellent properties. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 826, 154121	5.7	9
54	High Li <sup>+</sup> -conductive perovskite Li <sub>3</sub> /8Sr <sub>7</sub> /16Ta <sub>3</sub> /4Zr <sub>1</sub> /4O <sub>3</sub> electrolyte prepared by hot-pressing for all-solid-state Li-ion batteries. <i>Solid State Ionics</i> , <b>2019</b> , 338, 1-4	3.3	8
53	Facile synthesis of well-defined CeO <sub>2</sub> hollow spheres with a tunable pore structure. <i>Ceramics International</i> , <b>2016</b> , 42, 6088-6093	5.1	8
52	Indentation Deformation and Microcracking in Si <sub>3</sub> N <sub>4</sub> -Based Nanoceramic. <i>Journal of the American Ceramic Society</i> , <b>2012</b> , 95, 1421-1428	3.8	8
51	In-situ synthesis and properties of porous cordierite ceramics with adjustable pore structure. <i>Ceramics International</i> , <b>2020</b> , 46, 14808-14815	5.1	8
50	MoS <sub>2</sub> /CoS <sub>2</sub> composites composed of CoS <sub>2</sub> octahedrons and MoS <sub>2</sub> nano-flowers for supercapacitor electrode materials. <i>Frontiers of Materials Science</i> , <b>2018</b> , 12, 354-360	2.5	8
49	Formation of molybdenumbobalt sulfide by one-step hydrothermal reaction for high-performance supercapacitors. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2018</b> , 29, 13703-13708	2.1	8
48	Porous acicular mullite ceramics fabricated with in situ formed soot oxidation catalyst obtained from waste MoSi <sub>2</sub> . <i>Ceramics International</i> , <b>2017</b> , 43, 9815-9822	5.1	7

47	Honeycomb-alumina supported garnet membrane: Composite electrolyte with low resistance and high strength for lithium metal batteries. <i>Journal of Power Sources</i> , <b>2015</b> , 281, 399-403	8.9	7
46	Seed assisted in-situ synthesis of porous anorthite/mullite whisker ceramics by foam-freeze casting. <i>Ceramics International</i> , <b>2021</b> , 47, 11193-11201	5.1	7
45	A specially designed Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> semi-fuel cell: A potential choice for electric vehicle propulsion. <i>RSC Advances</i> , <b>2014</b> , 4, 18894	3.7	6
44	Complex Impedance Analysis on the Orientation Effect of Whiskers in Oriented Silicon Carbide Whisker/Silicon Nitride Composites. <i>Journal of the American Ceramic Society</i> , <b>2004</b> , 83, 2689-2692	3.8	6
43	Hollow-grained Voronoi foam ceramics with high strength and thermal superinsulation up to 1400 °C. <i>Materials Today</i> , <b>2021</b> , 46, 35-43	21.8	6
42	Carbon encapsulated Fe <sub>3</sub> O <sub>4</sub> nanospheres with high electrochemical performance as anode materials for Li-ion battery. <i>International Journal of Applied Ceramic Technology</i> , <b>2017</b> , 14, 938-947	2	5
41	Design and Synthesis of Rattle-type Au@MnO <sub>2</sub> Hollow Nanospheres as Catalysts for CO Oxidation. <i>Chemistry Letters</i> , <b>2017</b> , 46, 876-878	1.7	5
40	Hierarchically porous YSZ hollow spheres with ultralow thermal conductivity. <i>Materials Research Bulletin</i> , <b>2014</b> , 57, 79-84	5.1	5
39	Numerical calculations of effective thermal conductivity of porous ceramics by image-based finite element method. <i>Frontiers of Materials Science</i> , <b>2012</b> , 6, 79-86	2.5	5
38	Thermal shock behavior of ZrB <sub>2</sub> -SiC ceramics with different quenching media. <i>Frontiers of Materials Science</i> , <b>2013</b> , 7, 184-189	2.5	5
37	Porous YSZ Ceramics Reinforced by Different Kinds of Fibers. <i>International Journal of Applied Ceramic Technology</i> , <b>2014</b> , 11, 824-831	2	5
36	Improved sinterability of SiC(w)/Si <sub>3</sub> N <sub>4</sub> composites by whisker-oriented alignment. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 390, 319-325	5.3	5
35	Fabrication of Low Density High Strength Porous Mullite Ceramics by Tert-butyl Alcohol-based Gelcasting Process. <i>Wuji Cailiao Xuebao/Journal of Inorganic Materials</i> , <b>2009</b> , 24, 1173-1177	1	5
34	Solvent-Free Process for Blended PVDF-HFP/PEO and LLZTO Composite Solid Electrolytes with Enhanced Mechanical and Electrochemical Properties for Lithium Metal Batteries. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 11802-11812	6.1	5
33	In Situ Electrode Stress Monitoring: An Effective Approach to Study the Electrochemical Behavior of a Lithium Metal Anode. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 3993-4001	6.1	5
32	An integrated solvent-free modification and composite process of Li <sub>6.4</sub> La <sub>3</sub> Zr <sub>1.4</sub> Ta <sub>0.6</sub> O <sub>12</sub> /Poly(ethylene oxide) solid electrolytes: Enhanced compatibility and cycle performance. <i>Journal of Power Sources</i> , <b>2021</b> , 492, 229672	8.9	5
31	Defocused laser ablation process: A high-efficiency way to fabricate MoO <sub>3</sub> /Mo integrative anode with excellent electrochemical performance for lithium ion batteries. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 787, 295-300	5.7	4
30	Microstructure and properties of porous anorthite/mullite whiskers ceramics with high porosity. <i>International Journal of Applied Ceramic Technology</i> , <b>2020</b> , 17, 2104-2113	2	4



29	Correlation between the photocatalysis and growth mechanism of SnO <sub>2</sub> nanocrystals. <i>Journal Physics D: Applied Physics</i> , <b>2020</b> , 53, 154005	3	4
28	One-step synthesis of hierarchically porous hybrid TiO <sub>2</sub> hollow spheres with high photocatalytic activity. <i>Frontiers of Materials Science</i> , <b>2016</b> , 10, 15-22	2.5	4
27	A monocrystal Fe <sub>3</sub> O <sub>4</sub> @ultrathin N-doped carbon core/shell structure: from magnetotactic bacteria to Li storage. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 20899-20904	13	4
26	Binder-free carbon-coated nanocotton transition metal oxides integrated anodes by laser surface ablation for lithium-ion batteries. <i>Surface and Interface Analysis</i> , <b>2019</b> , 51, 874-881	1.5	4
25	SrTiO <sub>3</sub> /TiO <sub>2</sub> heterostructure nanowires with enhanced electron-hole separation for efficient photocatalytic activity. <i>Frontiers of Materials Science</i> , <b>2019</b> , 13, 342-351	2.5	4
24	Microstructure and High-temperature Oxidation Behavior of Ti <sub>3</sub> AlC <sub>2</sub> /W Composites. <i>Journal of the American Ceramic Society</i> , <b>2013</b> , 96, 584-591	3.8	4
23	THERMAL-ELASTIC BEHAVIORS OF STAGGERED COMPOSITES. <i>International Journal of Applied Mechanics</i> , <b>2009</b> , 01, 569-580	2.4	4
22	Preparation of near net size porous alumina-calcium aluminate ceramics by gelcasting-pore-forming agent process. <i>Journal of the American Ceramic Society</i> , <b>2020</b> , 103, 4602-4610	3.8	4
21	Nanosecond Laser Cleaning Method to Reduce the Surface Inert Layer and Activate the Garnet Electrolyte for a Solid-State Li Metal Battery. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 37082-37090	8.5	4
20	Li-ion conductivity and stability of hot-pressed LiTa <sub>2</sub> PO <sub>8</sub> solid electrolyte for all-solid-state batteries. <i>Journal of Materials Science</i> , <b>2021</b> , 56, 2425-2434	4.3	4
19	Electrochemical synthesis and properties of layer-structured polypyrrole/montmorillonite nanocomposite films. <i>Journal of Materials Research</i> , <b>2010</b> , 25, 658-664	2.5	3
18	Preparation and mechanical properties of laminated zirconium diboride/molybdenum composites sintered by spark plasma sintering. <i>Frontiers of Materials Science in China</i> , <b>2009</b> , 3, 273-280		3
17	Preparation of YSZ porous ceramics with precise porosity control. <i>International Journal of Applied Ceramic Technology</i> , <b>2020</b> , 17, 974-979	2	3
16	Submicronic spherical inclusion black pigment by double-shell reaction sintering. <i>Journal of the American Ceramic Society</i> , <b>2020</b> , 103, 1520-1526	3.8	3
15	Surface Coating on a Separator with a Reductive Solid Li-Ion Conductor for Dendrite-Free Li-Metal Batteries. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 8621-8628	6.1	3
14	Au/CeO <sub>2</sub> hollow nanospheres with enhanced catalytic activity for CO oxidation. <i>International Journal of Applied Ceramic Technology</i> , <b>2017</b> , 14, 908-914	2	2
13	Optimal Synthesis of Manganese Oxide/Carbon Sphere Hybrids through a Chemical Deposition Process. <i>ECS Journal of Solid State Science and Technology</i> , <b>2015</b> , 4, M46-M50	2	2
12	Near net shape fabrication of porous cordierite by combination of foam gel-casting and freeze-drying. <i>International Journal of Applied Ceramic Technology</i> , <b>2021</b> , 18, 2121	2	2

11	Highly elastic and low resistance deformable current collectors for safe and high-performance silicon and metallic lithium anodes. <i>Journal of Power Sources</i> , <b>2021</b> , 511, 230418	8.9	2
10	Rapid Assembly Processes of Ordered Inorganic/Organic Nanocomposites <b>2010</b> ,		1
9	Microstructure and properties of porous Si <sub>3</sub> N <sub>4</sub> ceramics by gelcasting-self-propagating high-temperature synthesis (SHS). <i>Journal of Advanced Ceramics</i> ,1	10.7	1
8	Facile synthesis of multi-shelled MnO <sub>2</sub> @Co <sub>3</sub> O <sub>4</sub> hollow spheres with superior catalytic activity for CO oxidation. <i>Ceramics International</i> , <b>2021</b> , 47, 18411-18416	5.1	1
7	Tailored lithium metal/polymer electrolyte interface with LiTa <sub>2</sub> PO <sub>8</sub> fillers in PEO-based composite electrolyte. <i>Rare Metals</i> ,1	5.5	1
6	Constructing the lithium polymeric salt interfacial phase in composite solid-state electrolytes for enhancing cycle performance of lithium metal batteries. <i>Chemical Engineering Journal</i> , <b>2022</b> , 442, 136154	14.7	1
5	Exploring the Formation Mechanism of Deformation Twins in CrMnFeCoNi High Entropy Alloy. <i>Acta Metallurgica Sinica (English Letters)</i> ,1	2.5	0
4	Effect of alumina fiber content on pore structure and properties of porous ceramics. <i>International Journal of Applied Ceramic Technology</i> , <b>2019</b> , 16, 814-819	2	0
3	Microwave dielectric properties of (0.75ZnAl <sub>2</sub> O <sub>4</sub> ·0.25TiO <sub>2</sub> )MgTiO <sub>3</sub> ceramics prepared using digital light processing technology. <i>Journal of the American Ceramic Society</i> , <b>2022</b> , 105, 4191-4199	3.8	0
2	Excellent Li/Garnet Interface Wettability Achieved by Porous Hard Carbon Layer for Solid State Li Metal Battery. <i>Small</i> , <b>2021</b> , e2106142	11	0
1	Realizing highly reversible and deeply rechargeable Zn anode by porous zeolite layer. <i>Journal of Power Sources</i> , <b>2022</b> , 540, 231659	8.9	0