

# Chang-An Wang

## List of Publications by Year in descending order

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156  
papers

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5689  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | A review of fabrication strategies and applications of porous ceramics prepared by freeze-casting method. <i>Ceramics International</i> , 2016, 42, 2907-2925.   | 4.8  | 177       |
| 2  | An intermediate temperature garnet-type solid electrolyte-based molten lithium battery for grid energy storage. <i>Nature Energy</i> , 2018, 3, 732-738.   | 39.5 | 170       |
| 3  | Ceramics with Special Porous Structures Fabricated by Freeze-casting: Using tert-Butyl Alcohol as a Template. <i>Journal of the American Ceramic Society</i> , 2007, 90, 3478-3484.  | 3.8  | 165       |
| 4  | A dopamine modified $\text{Li}_{6.4}\text{La}_3\text{Zr}_{1.4}\text{Ta}_{0.6}\text{O}_{12}$ /PEO solid-state electrolyte: enhanced thermal and electrochemical properties. <i>Journal of Materials Chemistry A</i> , 2019, 7, 16425-16436. | 10.3 | 162       |
| 5  | The 2021 battery technology roadmap. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 183001.   | 2.8  | 158       |
| 6  | 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> , 2010, 30, 3389-3396.              | 5.7  | 136       |
| 7  | Design and Preparation of $\text{MnO}_2/\text{CeO}_2$ "MnO <sub>2</sub> Double-Shelled Binary Oxide Hollow Spheres and Their Application in CO Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 8670-8677.              | 8.0  | 128       |
| 8  | High lithium ion conduction in garnet-type $\text{Li}_6\text{La}_3\text{ZrTaO}_{12}$ . <i>Electrochemistry Communications</i> , 2011, 13, 1289-1292.   | 4.7  | 125       |
| 9  | Processing and Mechanical Properties of Zirconium Diboride-Based Ceramics Prepared by Spark Plasma Sintering. <i>Journal of the American Ceramic Society</i> , 2007, 90, 1992-1997.  | 3.8  | 118       |
| 10 | High-Energy-Density Solid-Electrolyte-Based Liquid Li-S and Li-Se Batteries. <i>Joule</i> , 2020, 4, 262-274.  | 24.0 | 109       |
| 11 | A possible mechanism on synthesis of $\text{Ti}_3\text{AlC}_2$ . <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 352, 333-339.                                       | 5.6  | 107       |
| 12 | Porous anorthite ceramics with ultra-low thermal conductivity. <i>Journal of the European Ceramic Society</i> , 2013, 33, 2573-2578.   | 5.7  | 107       |
| 13 | Porous yttria-stabilized zirconia ceramics with ultra-low thermal conductivity. <i>Journal of Materials Science</i> , 2010, 45, 3242-3246.   | 3.7  | 105       |
| 14 | Synthesis and mechanical properties of $\text{Ti}_3\text{AlC}_2$ by spark plasma sintering. <i>Journal of Materials Science</i> , 2003, 38, 3111-3115.   | 3.7  | 101       |
| 15 | Effect of starch addition on microstructure and properties of highly porous alumina ceramics. <i>Ceramics International</i> , 2013, 39, 8833-8839.   | 4.8  | 100       |
| 16 | Excess lithium salt functions more than compensating for lithium loss when synthesizing $\text{Li}_{6.5}\text{La}_3\text{Ta}_{0.5}\text{Zr}_{1.5}\text{O}_{12}$ in alumina crucible. <i>Journal of Power Sources</i> , 2014, 260, 109-114. | 7.8  | 100       |
| 17 | Polyacrylamide-clay nacre-like nanocomposites prepared by electrophoretic deposition. <i>Composites Science and Technology</i> , 2007, 67, 2770-2774.  | 7.8  | 98        |
| 18 | Designing pinecone-like and hierarchical manganese cobalt sulfides for advanced supercapacitor electrodes. <i>Journal of Materials Chemistry A</i> , 2018, 6, 12782-12793.   | 10.3 | 93        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 19 | Li-Ion Conduction and Stability of Perovskite $\text{Li}_{3/8}\text{Sr}_{7/16}\text{Hf}_{1/4}\text{Ta}_{3/4}\text{O}_3$ . ACS Applied Materials & Interfaces, 2016, 8, 14552-14557.                                 | 8.0  | 89        |
| 20 | Effect of sintering temperature on compressive strength of porous yttria-stabilized zirconia ceramics. Ceramics International, 2010, 36, 1697-1701.   | 4.8  | 88        |
| 21 | Ceramics With Ultra-Low Density Fabricated by Gelcasting: An Unconventional View. Journal of the American Ceramic Society, 2007, 90, 3424-3429.   | 3.8  | 84        |
| 22 | Preparation of $\text{Ti}_3\text{AlC}_2$ and $\text{Ti}_2\text{AlC}$ by self-propagating high-temperature synthesis. Journal of Materials Science Letters, 2001, 20, 1971-1973.                                     | 0.5  | 81        |
| 23 | Strong metal-support interactions induced by an ultrafast laser. Nature Communications, 2021, 12, 6665.   | 12.8 | 80        |
| 24 | An efficient biomimetic process for fabrication of artificial nacre with ordered-nanostructure. Materials Science and Engineering C, 2008, 28, 218-222.   | 7.3  | 79        |
| 25 | Carbon-based flexible self-supporting cathode for lithium-sulfur batteries: Progress and perspective. , 2021, 3, 271-302.   |      | 77        |
| 26 | A novel simple method to stably synthesize $\text{Ti}_3\text{AlC}_2$ powder with high purity. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 428, 54-58. | 5.6  | 74        |
| 27 | Mullite whisker reinforced porous anorthite ceramics with low thermal conductivity and high strength. Journal of the European Ceramic Society, 2016, 36, 761-765.   | 5.7  | 73        |
| 28 | Effects of mono-dispersed PMMA micro-balls as pore-forming agent on the properties of porous YSZ ceramics. Journal of the European Ceramic Society, 2013, 33, 1859-1865.  | 5.7  | 70        |
| 29 | A novel way to fabricate highly porous fibrous YSZ ceramics with improved thermal and mechanical properties. Journal of the European Ceramic Society, 2012, 32, 2213-2218.  | 5.7  | 69        |
| 30 | Nano-network $\text{MnO}_2$ /polyaniline composites with enhanced electrochemical properties for supercapacitors. Materials and Design, 2016, 97, 512-518.  | 7.0  | 66        |
| 31 | A soft non-porous separator and its effectiveness in stabilizing Li metal anodes cycling at $10 \text{ mA cm}^{-2}$ observed in situ in a capillary cell. Journal of Materials Chemistry A, 2017, 5, 4300-4307.     | 10.3 | 66        |
| 32 | A novel way to fabricate tubular porous mullite membrane supports by TBA-based freezing casting method. Journal of the European Ceramic Society, 2013, 33, 3249-3256.   | 5.7  | 65        |
| 33 | Impregnation of porous mullite with $\text{Na}_2\text{SO}_4$ phase change material for thermal energy storage. Solar Energy Materials and Solar Cells, 2015, 134, 268-274.  | 6.2  | 64        |
| 34 | Effects of pore size and orientation on dielectric and piezoelectric properties of $\lambda/3$ type porous PZT ceramics. Journal of the European Ceramic Society, 2011, 31, 605-609.                                | 5.7  | 63        |
| 35 | Hierarchically porous $\text{Co}_3\text{O}_4$ hollow spheres with tunable pore structure and enhanced catalytic activity. Chemical Communications, 2013, 49, 7427.  | 4.1  | 59        |
| 36 | Control of Composition and Structure in Laminated Silicon Nitride/Boron Nitride Composites. Journal of the American Ceramic Society, 2002, 85, 2457-2461.   | 3.8  | 55        |

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|----|--|------|-----------|
| 37 | Effects of sintering behavior on microstructure and piezoelectric properties of porous PZT ceramics. <i>Ceramics International</i> , 2010, 36, 549-554.  | 4.8  | 54        |
| 38 | Enhanced Performance of $\text{Li}_{6.4}\text{La}_3\text{Zr}_{1.4}\text{Ta}_{0.6}\text{O}_{12}$ Solid Electrolyte by the Regulation of Grain and Grain Boundary Phases. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 56118-56125. | 8.0  | 54        |
| 39 | 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> , 2013, 96, 266-271.                                  | 3.8  | 51        |
| 40 | Quantitative phase analysis in the Ti-Al-C ternary system by X-ray diffraction. <i>Powder Diffraction</i> , 2005, 20, 218-223.   | 0.2  | 49        |
| 41 | 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> , 2020, 117, 27847-27853.   | 7.1  | 49        |
| 42 | Piezoelectric Properties of the 1-3 Type Porous Lead Zirconate Titanate Ceramics. <i>Journal of the American Ceramic Society</i> , 2011, 94, 1794-1799.  | 3.8  | 48        |
| 43 | Enhanced mechanical strength and ionic conductivity of LLZO solid electrolytes by oscillatory pressure sintering. <i>Ceramics International</i> , 2019, 45, 18115-18118.   | 4.8  | 46        |
| 44 | 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> , 2010, 93, 1427-1431.   | 3.8  | 45        |
| 45 | Control of pore size and wall thickness of 3-1 type porous PZT ceramics during freeze-casting process. <i>Materials and Design</i> , 2016, 91, 242-247.  | 7.0  | 43        |
| 46 | 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> , 2021, 4, 11802-11812.          | 5.1  | 43        |
| 47 | Microstructure and Electrical Properties of Porous PZT Ceramics Fabricated by Different Methods. <i>Journal of the American Ceramic Society</i> , 2010, 93, 1984-1990.   | 3.8  | 39        |
| 48 | Microstructure and properties of porous $\text{Si}_3\text{N}_4$ ceramics by gelcasting-self-propagating high-temperature synthesis (SHS). <i>Journal of Advanced Ceramics</i> , 2022, 11, 172-183.   | 17.4 | 39        |
| 49 | Fabrication of porous alumina-zirconia ceramics by gel-casting and infiltration methods. <i>Materials &amp; Design</i> , 2014, 63, 1-5.  | 5.1  | 36        |
| 50 | 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> , 2021, 13, 37082-37090.                              | 8.0  | 35        |
| 51 | Special assembly of laminated nanocomposite that mimics nacre. <i>Materials Science and Engineering C</i> , 2008, 28, 1031-1037.   | 7.3  | 34        |
| 52 | Effect of two-step sintering on micro-honeycomb $\text{BaTiO}_3$ ceramics prepared by freeze-casting process. <i>Journal of the European Ceramic Society</i> , 2016, 36, 2647-2652.  | 5.7  | 34        |
| 53 | Smart tuning of 3D ordered electrocatalysts for enhanced oxygen reduction reaction. <i>Applied Catalysis B: Environmental</i> , 2017, 219, 640-644.  | 20.2 | 33        |
| 54 | $\text{Al}_2\text{O}_3$ -fiber-reinforced porous YSZ ceramics with high mechanical strength. <i>Ceramics International</i> , 2014, 40, 10329-10335.  | 4.8  | 32        |

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|----|--|------|-----------|
| 55 | 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. Journal of Power Sources, 2020, 451, 227797. | 7.8  | 32        |
| 56 | Enhanced piezoelectric property of porous lead zirconate titanate ceramics with one dimensional ordered pore structure. Journal of Applied Physics, 2010, 108, .   | 2.5  | 31        |
| 57 | Porous yttria-stabilized zirconia ceramics with ultra-low thermal conductivity. Part II: temperature dependence of thermophysical properties. Journal of Materials Science, 2011, 46, 623-628.   | 3.7  | 31        |
| 58 | 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. Electrochemistry Communications, 2014, 48, 147-150.   | 4.7  | 31        |
| 59 | Extremely facile synthesis of manganese dioxide-polyaniline nano-reticulation with enhanced electrochemical properties. Journal of Alloys and Compounds, 2016, 677, 281-287.   | 5.5  | 31        |
| 60 | Brownian-snowball-mechanism-induced hierarchical cobalt sulfide for supercapacitors. Journal of Power Sources, 2019, 412, 321-330.   | 7.8  | 31        |
| 61 | Microstructure and mechanical properties of high entropy CrMnFeCoNi alloy processed by electropulsing-assisted ultrasonic surface rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 795, 140004.                                | 5.6  | 31        |
| 62 | Piezoelectric Properties of a Pioneering $\lambda$ Type $\text{PZT}/\text{Epoxy}$ Composites Based on Freeze-Casting Processing. Journal of the American Ceramic Society, 2014, 97, 1511-1516.   | 3.8  | 30        |
| 63 | 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. Journal of Materials Chemistry A, 2017, 5, 19781-19789.   | 10.3 | 30        |
| 64 | Flower-like Hollow MoSe <sub>2</sub> Nanospheres as Efficient Earth-Abundant Electrocatalysts for Nitrogen Reduction Reaction under Ambient Conditions. Inorganic Chemistry, 2020, 59, 12941-12946.  | 4.0  | 28        |
| 65 | Porous YSZ ceramics with unidirectionally aligned pore channel structure: Lowering thermal conductivity by silica aerogels impregnation. Journal of the European Ceramic Society, 2011, 31, 2915-2922.   | 5.7  | 27        |
| 66 | Improved Heat Insulation and Mechanical Properties of Highly Porous $\text{YSZ}$ Ceramics After Silica Aerogels Impregnation. Journal of the American Ceramic Society, 2013, 96, 3223-3227.  | 3.8  | 27        |
| 67 | Design and synthesis of hierarchically porous MnO <sub>2</sub> /carbon hybrids for high performance electrochemical capacitors. Journal of Colloid and Interface Science, 2015, 438, 61-67.  | 9.4  | 27        |
| 68 | Sintering behavior of 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> in Li <sub>2</sub> CO <sub>3</sub> atmosphere and its electrochemical property. International Journal of Applied Ceramic Technology, 2017, 14, 921-927.                  | 2.1  | 27        |
| 69 | Near net size sintering of porous cordierite ceramics with excellent properties. Journal of Alloys and Compounds, 2020, 826, 154121.   | 5.5  | 26        |
| 70 | Poly(amic acid)-clay nacrel-like composites prepared by electrophoretic deposition. Journal of Materials Research, 2008, 23, 1706-1712.  | 2.6  | 25        |
| 71 | Effect of Heating Rate on Spark Plasma Sintering of a Nanosized $\gamma$ -Si <sub>3</sub> N <sub>4</sub> -Based Powder. Journal of the American Ceramic Society, 2011, 94, 1182-1190.  | 3.8  | 25        |
| 72 | Fabrication and characterization of ceramic coatings with alumina-silica sol-incorporated $\gamma$ -alumina powder coated on woven quartz fiber fabrics. Ceramics International, 2013, 39, 6041-6050.  | 4.8  | 25        |

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|----|---|-------|-----------|
| 73 | 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 Terephthalate) based solid-state Li metal battery. <i>Journal of Materials Science</i> , 2021, 492, 229672. | 10.78 | 1425      |
| 74 | Excellent Li/Garnet Interface Wettability Achieved by Porous Hard Carbon Layer for Solid State Li Metal Battery. <i>Small</i> , 2022, 18, e2106142.   | 10.0  | 25        |
| 75 | Preparation and characterization of ZrB <sub>2</sub> -SiC ultra-high temperature ceramics by microwave sintering. <i>Frontiers of Materials Science in China</i> , 2010, 4, 276-280.  | 0.5   | 24        |
| 76 | Preparation and characterization of monodispersed spherical Fe <sub>2</sub> O <sub>3</sub> @SiO <sub>2</sub> reddish pigments with core-shell structure. <i>Journal of Advanced Ceramics</i> , 2019, 8, 39-46.  | 17.4  | 24        |
| 77 | Dual interface layers for solid-state Li metal battery with low interfacial resistance and small polarization based on garnet electrolyte. <i>Electrochimica Acta</i> , 2020, 330, 135352.  | 5.2   | 24        |
| 78 | Influence of Conductive Nano-TiC on Microstructural Evolution of Si <sub>3</sub> N <sub>4</sub> -Based Nanocomposites in Spark Plasma Sintering. <i>Journal of the American Ceramic Society</i> , 2011, 94, 959-967.  | 3.8   | 22        |
| 79 | Facile synthesis of tremella-like MnO <sub>2</sub> and its application as supercapacitor electrodes. <i>Frontiers of Materials Science</i> , 2015, 9, 234-240.  | 2.2   | 22        |
| 80 | In-situ synthesis and properties of porous cordierite ceramics with adjustable pore structure. <i>Ceramics International</i> , 2020, 46, 14808-14815.   | 4.8   | 22        |
| 81 | Seed assisted in-situ synthesis of porous anorthite/mullite whisker ceramics by foam-freeze casting. <i>Ceramics International</i> , 2021, 47, 11193-11201.   | 4.8   | 22        |
| 82 | Influence of sintering additives on Li <sup>+</sup> conductivity and electrochemical property of perovskite-type Li <sub>3/8</sub> Sr <sub>7/16</sub> Hf <sub>1/4</sub> Ta <sub>3/4</sub> O <sub>3</sub> . <i>Electrochimica Acta</i> , 2017, 234, 1-6.                           | 5.2   | 21        |
| 83 | Synthesis of bamboo-like SiC whiskers from waste silica fume. <i>Crystal Research and Technology</i> , 2014, 49, 290-297.   | 1.3   | 20        |
| 84 | 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> , 2014, 600, 76-81.                             | 5.6   | 20        |
| 85 | Multi-Enhanced-Phonon Scattering Modes in Ln-Me-A Sites co-substituted LnMeAl <sub>10</sub> O <sub>19</sub> Ceramics. <i>Scientific Reports</i> , 2014, 4, 6823.  | 3.3   | 20        |
| 86 | 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> , 2017, 14, 957-962.   | 2.1   | 20        |
| 87 | 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> , 2021, 56, 2425-2434.  | 3.7   | 20        |
| 88 | 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> , 2022, 442, 136154.  | 12.7  | 20        |
| 89 | Synthesis of aluminum-doped mesoporous zirconia with improved thermal stability. <i>Microporous and Mesoporous Materials</i> , 2014, 186, 1-6.  | 4.4   | 19        |
| 90 | A study on the orientation relationship between Ti <sub>3</sub> SiC <sub>2</sub> and TiC grains. <i>Materials Letters</i> , 2002, 57, 106-109.  | 2.6   | 18        |

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|-----|--|------|-----------|
| 91  | 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. RSC Advances, 2017, 7, 46263-46270.  | 3.6  | 18        |
| 92  | Molten Lithium-Brass/Zinc Chloride System as High-Performance and Low-Cost Battery. Matter, 2020, 3, 1714-1724.  | 10.0 | 17        |
| 93  | Synthesis of TiO <sub>2</sub> hollow spheres with tunable pore structure and enhanced photocatalytic activity. Ceramics International, 2015, 41, 14615-14620.  | 4.8  | 16        |
| 94  | Enhanced anti-deliquescent property and ultralow thermal conductivity of magnetoplumbite-type LnMeAl <sub>11</sub> O <sub>19</sub> materials for thermal barrier coating. Journal of the American Ceramic Society, 2018, 101, 1095-1104. | 3.8  | 16        |
| 95  | Improved Resistance to Damage of Silicon Carbide Whisker Reinforced Silicon Nitride Matrix Composites by Whisker Oriented Alignment. Journal of the American Ceramic Society, 2001, 84, 161-164.   | 3.8  | 15        |
| 96  | Synthesis and magnetoelectric effect of composites with CoFe <sub>2</sub> O <sub>4</sub> -epoxy embedded in 3D type porous PZT ceramics. Ceramics International, 2015, 41, 11080-11085.  | 4.8  | 15        |
| 97  | Facile synthesis of well-dispersed CeO <sub>2</sub> @CuO <sub>x</sub> composite hollow spheres with superior catalytic activity for CO oxidation. RSC Advances, 2015, 5, 95133-95139.  | 3.6  | 15        |
| 98  | Manganous-Manganic Oxide@Carbon Core-Shell Nanorods for Supercapacitors with High Cycle Retention. ECS Journal of Solid State Science and Technology, 2016, 5, M5-M11.   | 1.8  | 15        |
| 99  | Synthesis and chromatic properties of zircon encapsulated ceramic black pigment with carbon sphere as carbon source. Journal of the European Ceramic Society, 2018, 38, 2218-2227.   | 5.7  | 15        |
| 100 | The rational design of sandwich-like MnO <sub>2</sub> @Pd@CeO <sub>2</sub> hollow spheres with enhanced activity and stability for CO oxidation. Nanoscale, 2019, 11, 6776-6783.   | 5.6  | 15        |
| 101 | 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. Ceramics International, 2021, 47, 18411-18416.                                      | 4.8  | 15        |
| 102 | Preparation and mechanical properties of ZrB <sub>2</sub> -based ceramics using MoSi <sub>2</sub> as sintering aids. Frontiers of Materials Science in China, 2010, 4, 271-275.  | 0.5  | 14        |
| 103 | Grain Orientation and Domain Configuration in 3D Type Porous PZT Ceramics with Ultrahigh Piezoelectric Properties. Journal of the American Ceramic Society, 2015, 98, 2700-2702.   | 3.8  | 14        |
| 104 | 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. Frontiers of Materials Science, 2018, 12, 354-360.                      | 2.2  | 14        |
| 105 | Hollow-grained Voronoi foam ceramics with high strength and thermal superinsulation up to 1400°C. Materials Today, 2021, 46, 35-43.  | 14.2 | 14        |
| 106 | Preparation of acrylic anodic electrophoretic resin/clay nanocomposite films by water-based electrodeposition. Composites Science and Technology, 2008, 68, 880-887.   | 7.8  | 13        |
| 107 | Microstructure and properties of porous anorthite/mullite whiskers ceramics with high porosity. International Journal of Applied Ceramic Technology, 2020, 17, 2104-2113.  | 2.1  | 13        |
| 108 | Effects of Mullite Content on the Properties and Microstructure of Porous Anorthite/Mullite Composite Ceramics. Wujia Cailiao Xuebao/Journal of Inorganic Materials, 2011, 26, 1095-1100.  | 1.3  | 13        |



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|-----|--|------|-----------|
| 109 | A new binder-free and conductive-additive-free TiO <sub>2</sub> /WO <sub>3</sub> -W integrative anode material produced by laser ablation. Journal of Power Sources, 2018, 378, 362-368.   | 7.8  | 12        |
| 110 | A monocrystal Fe <sub>3</sub> O <sub>4</sub> @ultrathin N-doped carbon core/shell structure: from magnetotactic bacteria to Li storage. Journal of Materials Chemistry A, 2019, 7, 20899-20904.  | 10.3 | 12        |
| 111 | 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. Solid State Ionics, 2019, 338, 1-4. | 2.7  | 12        |
| 112 | Preparation of near net size porous alumina-calcium aluminate ceramics by gelcasting-pore-forming agent process. Journal of the American Ceramic Society, 2020, 103, 4602-4610.  | 3.8  | 12        |
| 113 | Effect of YSZ fiber addition on microstructure and properties of porous YSZ ceramics. Journal of Materials Science, 2012, 47, 6326-6332.   | 3.7  | 11        |
| 114 | Oxidation Behavior of SiC Platelet-Reinforced ZrB <sub>2</sub> Ceramic Matrix Composites. International Journal of Applied Ceramic Technology, 2012, 9, 178-185.   | 2.1  | 11        |
| 115 | Facile synthesis and characterization of MnO <sub>2</sub> nanomaterials as supercapacitor electrode materials. Journal of Materials Science: Materials in Electronics, 2016, 27, 5533-5542.  | 2.2  | 11        |
| 116 | Facile synthesis of well-defined CeO <sub>2</sub> hollow spheres with a tunable pore structure. Ceramics International, 2016, 42, 6088-6093.   | 4.8  | 11        |
| 117 | Carbon encapsulated Fe <sub>3</sub> O <sub>4</sub> nanospheres with high electrochemical performance as anode materials for Li-ion battery. International Journal of Applied Ceramic Technology, 2017, 14, 938-947.                                | 2.1  | 11        |
| 118 | In Situ Electrode Stress Monitoring: An Effective Approach to Study the Electrochemical Behavior of a Lithium Metal Anode. ACS Applied Energy Materials, 2021, 4, 3993-4001.   | 5.1  | 11        |
| 119 | Complex Impedance Analysis on the Orientation Effect of Whiskers in Oriented Silicon Carbide Whisker/Silicon Nitride Composites. Journal of the American Ceramic Society, 2000, 83, 2689-2692.   | 3.8  | 10        |
| 120 | Fabrication of porous silver/titania composite hollow spheres with enhanced photocatalytic performance. Materials Chemistry and Physics, 2015, 149-150, 1-6.   | 4.0  | 10        |
| 121 | Correlation between the photocatalysis and growth mechanism of SnO <sub>2</sub> nanocrystals. Journal Physics D: Applied Physics, 2020, 53, 154005.  | 2.8  | 10        |
| 122 | Improved sinterability of SiC(w)/Si <sub>3</sub> N <sub>4</sub> composites by whisker-oriented alignment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 390, 319-325.                  | 5.6  | 9         |
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