

William Fahrenholtz

List of Publications by Year in descending order

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228
papers

14,034
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244
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244
docs citations

244
times ranked

4668
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Refractory Diborides of Zirconium and Hafnium. Journal of the American Ceramic Society, 2007, 90, 1347-1364. | 1.9 | 1,711 |
| 2 | High-Strength Zirconium Diboride-Based Ceramics. Journal of the American Ceramic Society, 2004, 87, 1170-1172. | 1.9 | 725 |
| 3 | Ultra-high temperature ceramics: Materials for extreme environments. Scripta Materialia, 2017, 129, 94-99. | 2.6 | 551 |
| 4 | UHTCs: Ultra-High Temperature Ceramic Materials for Extreme Environment Applications. Electrochemical Society Interface, 2007, 16, 30-36. | 0.3 | 465 |
| 5 | Thermodynamic Analysis of ZrB ₂ /SiC Oxidation: Formation of a SiC-Depleted Region. Journal of the American Ceramic Society, 2007, 90, 143-148. | 1.9 | 401 |
| 6 | Evolution of structure during the oxidation of zirconium diboride-silicon carbide in air up to 1500°C. Journal of the European Ceramic Society, 2007, 27, 2495-2501. | 2.8 | 339 |
| 7 | Pressureless Densification of Zirconium Diboride with Boron Carbide Additions. Journal of the American Ceramic Society, 2006, 89, 1544-1550. | 1.9 | 299 |
| 8 | Influence of silicon carbide particle size on the microstructure and mechanical properties of zirconium diboride-silicon carbide ceramics. Journal of the European Ceramic Society, 2007, 27, 2077-2083. | 2.8 | 283 |
| 9 | Pressureless Sintering of Zirconium Diboride. Journal of the American Ceramic Society, 2006, 89, 450-456. | 1.9 | 278 |
| 10 | Thermophysical Properties of ZrB ₂ and ZrB ₂ -SiC Ceramics. Journal of the American Ceramic Society, 2008, 91, 1405-1411. | 1.9 | 278 |
| 11 | Effect of hot pressing time and temperature on the microstructure and mechanical properties of ZrB ₂ -SiC. Journal of Materials Science, 2007, 42, 2735-2744. | 1.7 | 239 |
| 12 | The ZrB ₂ Volatility Diagram. Journal of the American Ceramic Society, 2005, 88, 3509-3512. | 1.9 | 217 |
| 13 | Oxidation of ultra-high temperature transition metal diboride ceramics. International Materials Reviews, 2012, 57, 61-72. | 9.4 | 201 |
| 14 | Pressureless Sintering of Zirconium Diboride: Particle Size and Additive Effects. Journal of the American Ceramic Society, 2008, 91, 1398-1404. | 1.9 | 187 |
| 15 | Characterization of cerium-based conversion coatings for corrosion protection of aluminum alloys. Surface and Coatings Technology, 2002, 155, 208-213. | 2.2 | 183 |
| 16 | Thermal shock resistance of ZrB ₂ and ZrB ₂ -30% SiC. Materials Chemistry and Physics, 2008, 112, 140-145. | 2.0 | 169 |
| 17 | Processing and characterization of ZrB ₂ -based ultra-high temperature monolithic and fibrous monolithic ceramics. Journal of Materials Science, 2004, 39, 5951-5957. | 1.7 | 160 |
| 18 | Pressureless Sintering of Zirconium Diboride Using Boron Carbide and Carbon Additions. Journal of the American Ceramic Society, 2007, 90, 3660-3663. | 1.9 | 156 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Pressureless sintering of carbon-coated zirconium diboride powders. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 459, 167-171. | 2.6 | 152 |
| 20 | Oxidation of Zirconium Diboride/Silicon Carbide at 1500°C at a Low Partial Pressure of Oxygen. <i>Journal of the American Ceramic Society</i> , 2006, 89, 3240-3245. | 1.9 | 150 |
| 21 | Pressureless Sintering of ZrB ₂ /SiC Ceramics. <i>Journal of the American Ceramic Society</i> , 2008, 91, 26-32. | 1.9 | 144 |
| 22 | Hot Pressing of Tantalum Carbide With and Without Sintering Additives. <i>Journal of the American Ceramic Society</i> , 2007, 90, 393-401. | 1.9 | 138 |
| 23 | Pressureless sintering of carbon nanotube/Al ₂ O ₃ composites. <i>Journal of the European Ceramic Society</i> , 2010, 30, 1373-1380. | 2.8 | 134 |
| 24 | Low-temperature sintering of single-phase, high-entropy carbide ceramics. <i>Journal of the American Ceramic Society</i> , 2019, 102, 7217-7224. | 1.9 | 128 |
| 25 | Strength of Zirconium Diboride to 2300°C. <i>Journal of the American Ceramic Society</i> , 2013, 96, 47-50. | 1.9 | 123 |
| 26 | Mechanical behavior of zirconium diboride/silicon carbide/boron carbide ceramics up to 2200°C. <i>Journal of the European Ceramic Society</i> , 2015, 35, 463-476. | 2.8 | 123 |
| 27 | Low-Temperature Densification of Zirconium Diboride Ceramics by Reactive Hot Pressing. <i>Journal of the American Ceramic Society</i> , 2006, 89, 3638-3645. | 1.9 | 117 |
| 28 | Synthesis, densification, and mechanical properties of TaB ₂ . <i>Materials Letters</i> , 2008, 62, 4251-4253. | 1.3 | 116 |
| 29 | Deposition and characterization of cerium oxide conversion coatings on aluminum alloy 7075-T6. <i>Surface and Coatings Technology</i> , 2004, 176, 349-356. | 2.2 | 109 |
| 30 | Fabrication and properties of reactively hot pressed ZrB ₂ /SiC ceramics. <i>Journal of the European Ceramic Society</i> , 2007, 27, 2729-2736. | 2.8 | 109 |
| 31 | Densification and mechanical properties of TaC-based ceramics. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 501, 37-43. | 2.6 | 109 |
| 32 | Strength of single-phase high-entropy carbide ceramics up to 2300°C. <i>Journal of the American Ceramic Society</i> , 2021, 104, 419-427. | 1.9 | 104 |
| 33 | Improved Oxidation Resistance of Zirconium Diboride by Tungsten Carbide Additions. <i>Journal of the American Ceramic Society</i> , 2008, 91, 3530-3535. | 1.9 | 101 |
| 34 | Mechanical properties of sintered ZrB ₂ /SiC ceramics. <i>Journal of the European Ceramic Society</i> , 2011, 31, 893-901. | 2.8 | 99 |
| 35 | Super-strong materials for temperatures exceeding 2000°C. <i>Scientific Reports</i> , 2017, 7, 40730. | 1.6 | 99 |
| 36 | Cerium-based oxide coatings. <i>Current Opinion in Solid State and Materials Science</i> , 2015, 19, 69-76. | 5.6 | 98 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 37 | The effect of post-treatment time and temperature on cerium-based conversion coatings on Al 2024-T3. <i>Corrosion Science</i> , 2010, 52, 360-368. | 3.0 | 95 |
| 38 | Mechanical behavior of zirconium diboride-silicon carbide ceramics at elevated temperature in air. <i>Journal of the European Ceramic Society</i> , 2013, 33, 2889-2899. | 2.8 | 92 |
| 39 | Reactive hot pressing of zirconium diboride. <i>Journal of the European Ceramic Society</i> , 2009, 29, 3401-3408. | 2.8 | 90 |
| 40 | A novel freeform extrusion fabrication process for producing solid ceramic components with uniform layered radiation drying. <i>Additive Manufacturing</i> , 2017, 15, 102-112. | 1.7 | 88 |
| 41 | Microstructural evolution and mechanical properties of (Mg,Co,Ni,Cu,Zn)O high-entropy ceramics. <i>Journal of the American Ceramic Society</i> , 2019, 102, 2228-2237. | 1.9 | 87 |
| 42 | Densification, Mechanical Properties, and Oxidation Resistance of Ta ₂ Ceramics. <i>Journal of the American Ceramic Society</i> , 2008, 91, 4129-4132. | 1.9 | 86 |
| 43 | Measurement of thermal residual stresses in ZrB ₂ -SiC composites. <i>Journal of the European Ceramic Society</i> , 2011, 31, 1811-1820. | 2.8 | 85 |
| 44 | Effect of Starting Particle Size and Oxygen Content on Densification of ZrB ₂ . <i>Journal of the American Ceramic Society</i> , 2011, 94, 429-435. | 1.9 | 84 |
| 45 | A Novel Approach to Developing Biomimetic (Nacre-Like) Metal-Compliant Phase (Nickel-Alumina) Ceramics through Coextrusion. <i>Advanced Materials</i> , 2016, 28, 10061-10067. | 11.1 | 83 |
| 46 | Mechanical Characterization of ZrB ₂ -SiC Composites with Varying SiC Particle Sizes. <i>Journal of the American Ceramic Society</i> , 2011, 94, 4410-4418. | 1.9 | 76 |
| 47 | Temperature Jump Phenomenon During Plasmatron Testing of ZrB ₂ -SiC Ultrahigh-Temperature Ceramics. <i>Journal of Thermophysics and Heat Transfer</i> , 2012, 26, 559-572. | 0.9 | 70 |
| 48 | Zirconium Carbide-Tungsten Cermets Prepared by In Situ Reaction Sintering. <i>Journal of the American Ceramic Society</i> , 2007, 90, 1930-1933. | 1.9 | 69 |
| 49 | Microwave sintering of a ZrB ₂ -B ₄ C particulate ceramic composite. <i>Composites Part A: Applied Science and Manufacturing</i> , 2008, 39, 449-453. | 3.8 | 69 |
| 50 | Microstructure and mechanical characterization of Zr-Mo cermets produced by hot isostatic pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 497, 79-86. | 2.6 | 68 |
| 51 | Enhanced densification and mechanical properties of ZrB ₂ -SiC processed by a preceramic polymer coating route. <i>Scripta Materialia</i> , 2008, 59, 123-126. | 2.6 | 68 |
| 52 | Al ₂ O ₃ -Ni Composites with High Strength and Fracture Toughness. <i>Journal of the American Ceramic Society</i> , 2000, 83, 1279-1280. | 1.9 | 65 |
| 53 | Effects of acid and alkaline based surface preparations on spray deposited cerium based conversion coatings on Al 2024-T3. <i>Applied Surface Science</i> , 2009, 255, 4061-4065. | 3.1 | 65 |
| 54 | Borate Volatility from SOFC Sealing Glasses. <i>Journal of the American Ceramic Society</i> , 2008, 91, 2564-2569. | 1.9 | 64 |

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| 55 | Stress measurements in ZrB ₂ -SiC composites using Raman spectroscopy and neutron diffraction. Journal of the European Ceramic Society, 2010, 30, 2165-2171. | 2.8 | 63 |
| 56 | Thermal Properties of (Zr, TM) ₂ Solid Solutions with TM=Hf, Nb, W, Ti, and Y. Journal of the American Ceramic Society, 2014, 97, 1552-1558. | 1.9 | 63 |
| 57 | Synthesis of ultra-refractory transition metal diboride compounds. Journal of Materials Research, 2016, 31, 2757-2772. | 1.2 | 63 |
| 58 | Processing of dense high-entropy boride ceramics. Journal of the European Ceramic Society, 2020, 40, 3815-3823. | 2.8 | 62 |
| 59 | Freeze-form extrusion fabrication of ceramic parts. Virtual and Physical Prototyping, 2006, 1, 93-100. | 5.3 | 61 |
| 60 | Two-step synthesis process for high-entropy diboride powders. Journal of the American Ceramic Society, 2020, 103, 724-730. | 1.9 | 59 |
| 61 | Ultra-High Temperature Mechanical Properties of a Zirconium Diboride-Zirconium Carbide Ceramic. Journal of the American Ceramic Society, 2016, 99, 597-603. | 1.9 | 58 |
| 62 | Oxidation of Zirconium Diboride with Tungsten Carbide Additions. Journal of the American Ceramic Society, 2011, 94, 1198-1205. | 1.9 | 57 |
| 63 | Zirconium Diboride with High Thermal Conductivity. Journal of the American Ceramic Society, 2014, 97, 1689-1691. | 1.9 | 56 |
| 64 | A study of size effects in bioinspired, "nacre-like", metal-compliant-phase (nickel-alumina) coextruded ceramics. Acta Materialia, 2018, 148, 147-155. | 3.8 | 56 |
| 65 | Silicon carbide-titanium diboride ceramic composites. Journal of the European Ceramic Society, 2013, 33, 2943-2951. | 2.8 | 54 |
| 66 | High-Entropy Ultra-High-Temperature Borides and Carbides: A New Class of Materials for Extreme Environments. Annual Review of Materials Research, 2021, 51, 165-185. | 4.3 | 53 |
| 67 | Oxidation of ZrB ₂ -SiC Ultrahigh-Temperature Ceramic Composites in Dissociated Air. Journal of Thermophysics and Heat Transfer, 2009, 23, 267-278. | 0.9 | 52 |
| 68 | Mechanical behaviour of carbon fibre reinforced TaC/SiC and ZrC/SiC composites up to 2100°C. Journal of the European Ceramic Society, 2019, 39, 780-787. | 2.8 | 52 |
| 69 | Dispersion of Zirconium Diboride in an Aqueous, High-Solids Paste. International Journal of Applied Ceramic Technology, 2007, 4, 470-479. | 1.1 | 50 |
| 70 | Effect of alkaline cleaning and activation on aluminum alloy 7075-T6. Applied Surface Science, 2011, 257, 1859-1863. | 3.1 | 50 |
| 71 | Dissolution of cerium from cerium-based conversion coatings on Al 7075-T6 in 0.1M NaCl solutions. Corrosion Science, 2012, 60, 290-295. | 3.0 | 50 |
| 72 | TEM investigation of hot pressed 10vol.%SiC-ZrB ₂ composite. Advances in Applied Ceramics, 2011, 110, 1-7. | 0.6 | 47 |

| # | ARTICLE | IF | CITATIONS |
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| 73 | Chromate formation at the interface between a solid oxide fuel cell sealing glass and interconnect alloy. <i>Journal of Power Sources</i> , 2012, 205, 301-306. | 4.0 | 47 |
| 74 | The effect of a graphite addition on oxidation of ZrB ₂ -SiC in air at 1500°C. <i>Journal of the European Ceramic Society</i> , 2013, 33, 413-421. | 2.8 | 45 |
| 75 | Effect of Nb content on the phase composition, densification, microstructure, and mechanical properties of high-entropy boride ceramics. <i>Journal of the European Ceramic Society</i> , 2021, 41, 92-100. | 2.8 | 45 |
| 76 | Sintering Mechanisms and Kinetics for Reaction Hot-Pressed ZrB ₂ . <i>Journal of the American Ceramic Society</i> , 2015, 98, 2344-2351. | 1.9 | 44 |
| 77 | Effect of a weak fiber interface coating in ZrB ₂ reinforced with long SiC fibers. <i>Materials and Design</i> , 2015, 88, 610-618. | 3.3 | 42 |
| 78 | Effects of temperature and the incorporation of W on the oxidation of ZrB ₂ ceramics. <i>Corrosion Science</i> , 2014, 80, 221-228. | 3.0 | 41 |
| 79 | Response of nanocrystalline cerium-based conversion coatings on Al 2024-T3 to chloride environments. <i>Materials Letters</i> , 2007, 61, 3778-3782. | 1.3 | 40 |
| 80 | ZrB ₂ -MoSi ₂ ceramics: A comprehensive overview of microstructure and properties relationships. Part I: Processing and microstructure. <i>Journal of the European Ceramic Society</i> , 2019, 39, 1939-1947. | 2.8 | 40 |
| 81 | Effect of Precursor Particle Size on the Densification and Crystallization Behavior of Mullite. <i>Journal of the American Ceramic Society</i> , 1993, 76, 433-437. | 1.9 | 38 |
| 82 | Microstructure and properties of Al ₂ O ₃ -Al(Si) and Al ₂ O ₃ -Al(Si)-Si composites formed by in situ reaction of Al with aluminosilicate ceramics. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1996, 27, 2122-2129. | 1.1 | 38 |
| 83 | Processing of ZrC-Mo Cermets for High-Temperature Applications, Part I: Chemical Interactions in the ZrC-Mo System. <i>Journal of the American Ceramic Society</i> , 2007, 90, 1998-2002. | 1.9 | 38 |
| 84 | Entropy Landscaping of High-Entropy Carbides. <i>Advanced Materials</i> , 2021, 33, e2102904. | 11.1 | 38 |
| 85 | Titanium diboride-silicon carbide-boron carbide ceramics with super-high hardness and strength. <i>Journal of the American Ceramic Society</i> , 2018, 101, 497-501. | 1.9 | 37 |
| 86 | Effect of Phosphate Source on Post-Treatment of Cerium-Based Conversion Coatings on Al 2024-T3. <i>Journal of the Electrochemical Society</i> , 2009, 156, C400. | 1.3 | 36 |
| 87 | Densification Behavior and Microstructure Evolution of Hot-Pressed HfB ₂ . <i>Journal of the American Ceramic Society</i> , 2011, 94, 49-58. | 1.9 | 36 |
| 88 | Processing, microstructure, and mechanical properties of large-grained zirconium diboride ceramics. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 670, 196-204. | 2.6 | 36 |
| 89 | Processing of ZrC-Mo Cermets for High Temperature Applications, Part II: Pressureless Sintering and Mechanical Properties. <i>Journal of the American Ceramic Society</i> , 2008, 91, 873-878. | 1.9 | 34 |
| 90 | Formation of subsurface crevices in aluminum alloy 2024-T3 during deposition of cerium-based conversion coatings. <i>Surface and Coatings Technology</i> , 2010, 204, 4095-4100. | 2.2 | 34 |

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| 91 | Formation of microporous silica gels from a modified silicon alkoxide. I. Base-catalyzed gels. Journal of Non-Crystalline Solids, 1992, 144, 45-52. | 1.5 | 33 |
| 92 | Reactive Processing in Ceramic-Based Systems. International Journal of Applied Ceramic Technology, 2006, 3, 1-12. | 1.1 | 33 |
| 93 | Plasma arc welding of ZrB ₂ -20vol% ZrC ceramics. Journal of the European Ceramic Society, 2014, 34, 3549-3557. | 2.8 | 33 |
| 94 | Thermal Shock Resistance and Fracture Behavior of ZrB ₂ -Based Fibrous Monolith Ceramics. Journal of the American Ceramic Society, 2009, 92, 161-166. | 1.9 | 32 |
| 95 | Densification, microstructure, and mechanical properties of ZrC-SiC ceramics. Journal of the American Ceramic Society, 2019, 102, 5786-5795. | 1.9 | 32 |
| 96 | The irradiation response of ZrC ceramics under 10 MeV Au ³⁺ ion irradiation at 800 °C. Journal of the European Ceramic Society, 2020, 40, 1791-1800. | 2.8 | 32 |
| 97 | Kinetics of Ceramic-Metal Composite Formation by Reactive Metal Penetration. Journal of the American Ceramic Society, 1998, 81, 2533-2541. | 1.9 | 31 |
| 98 | Effect of gelatin additions on the corrosion resistance of cerium based conversion coatings spray deposited on Al 2024-T3. Surface and Coatings Technology, 2009, 203, 3533-3540. | 2.2 | 31 |
| 99 | Superhard Boride-Carbide Particulate Composites. Journal of the American Ceramic Society, 2010, 93, 3580-3583. | 1.9 | 31 |
| 100 | Alkaline activation of Al 7075-T6 for deposition of cerium-based conversion coatings. Surface and Coatings Technology, 2011, 205, 4312-4319. | 2.2 | 31 |
| 101 | Influence of fibre content on the strength of carbon fibre reinforced HfC/SiC composites up to 2100 °C. Journal of the European Ceramic Society, 2019, 39, 3594-3603. | 2.8 | 31 |
| 102 | A simple route to fabricate strong boride hierarchical composites for use at ultra-high temperature. Composites Part B: Engineering, 2020, 183, 107618. | 5.9 | 31 |
| 103 | Thermal Properties of Hf-Doped ZrB ₂ Ceramics. Journal of the American Ceramic Society, 2015, 98, 2689-2691. | 1.9 | 30 |
| 104 | Densification behavior of ZrB ₂ -MoSi ₂ ceramics: The formation and evolution of core-shell solid solution structures. Journal of Alloys and Compounds, 2019, 779, 950-961. | 2.8 | 30 |
| 105 | Investigation of laser sintering for freeform fabrication of zirconium diboride parts. Virtual and Physical Prototyping, 2012, 7, 25-36. | 5.3 | 29 |
| 106 | Binderless WC with high strength and toughness up to 1500 °C. Journal of the European Ceramic Society, 2020, 40, 2287-2294. | 2.8 | 29 |
| 107 | Near-Net-Shape Processing of Metal-Ceramic Composites by Reactive Metal Penetration. Journal of the American Ceramic Society, 1996, 79, 2497-2499. | 1.9 | 28 |
| 108 | Nano-scale microstructure damage by neutron irradiations in a novel Boron-11 enriched TiB ₂ ultra-high temperature ceramic. Acta Materialia, 2019, 165, 26-39. | 3.8 | 28 |

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|-----|--|-----|-----------|
| 109 | Effect of ZrB ₂ content on the densification, microstructure, and mechanical properties of ZrC-SiC ceramics. Journal of the European Ceramic Society, 2020, 40, 220-225. | 2.8 | 28 |
| 110 | Thermal Properties of (Zr, TM) ₂ Solid Solutions with TM=Ta, Mo, Re, V, and Cr. Journal of the American Ceramic Society, 2015, 98, 637-644. | 1.9 | 27 |
| 111 | Oxidation of zirconium diboride with niobium additions. Journal of the European Ceramic Society, 2013, 33, 1591-1598. | 2.8 | 26 |
| 112 | Thermal properties and thermal shock resistance of liquid phase sintered ZrC-Mo cermets. Materials Chemistry and Physics, 2009, 115, 690-695. | 2.0 | 24 |
| 113 | Optical Emission Spectroscopy During Plasmatron Testing of ZrB ₂ -SiC Ultrahigh-Temperature Ceramic Composites. Journal of Thermophysics and Heat Transfer, 2009, 23, 279-285. | 0.9 | 24 |
| 114 | Effect of Carbon and Oxygen on the Densification and Microstructure of Hot Pressed Zirconium Diboride. Journal of the American Ceramic Society, 2013, 96, 3622-3630. | 1.9 | 24 |
| 115 | Microstructural evolution of cerium-based coatings on AZ31 magnesium alloys. Surface and Coatings Technology, 2014, 246, 77-84. | 2.2 | 24 |
| 116 | Effect of carbon on the thermal and electrical transport properties of zirconium diboride. Journal of the European Ceramic Society, 2015, 35, 887-896. | 2.8 | 24 |
| 117 | Characterization of Localized Surface States of Al 7075-T6 during Deposition of Cerium-Based Conversion Coatings. Journal of the Electrochemical Society, 2010, 157, C282. | 1.3 | 23 |
| 118 | The role of ceramic and glass science research in meeting societal challenges: Report from an NSF-sponsored workshop. Journal of the American Ceramic Society, 2017, 100, 1777-1803. | 1.9 | 23 |
| 119 | A modified phase-field model for quantitative simulation of crack propagation in single-phase and multi-phase materials. Engineering Fracture Mechanics, 2018, 200, 339-354. | 2.0 | 23 |
| 120 | Effects of Ti, Y, and Hf additions on the thermal properties of ZrB ₂ . Journal of the European Ceramic Society, 2020, 40, 3824-3828. | 2.8 | 22 |
| 121 | From thermal conductive to thermal insulating: Effect of carbon vacancy content on lattice thermal conductivity of ZrC. Journal of Materials Science and Technology, 2021, 82, 105-113. | 5.6 | 22 |
| 122 | Characterization of Cerium-Based Conversion Coatings on Al 7075-T6 Deposited from Chloride and Nitrate Salt Solutions. Journal of the Electrochemical Society, 2011, 158, C88. | 1.3 | 21 |
| 123 | Elevated Temperature Thermal Properties of ZrB ₂ with Carbon Additions. Journal of the American Ceramic Society, 2012, 95, 1077-1085. | 1.9 | 21 |
| 124 | Formation of structural intermetallics by reactive metal penetration of Ti and Ni oxides and aluminates. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1996, 27, 2100-2104. | 1.1 | 20 |
| 125 | Elevated Temperature Strength Enhancement of ZrB ₂ -30 vol% SiC Ceramics by Postsintering Thermal Annealing. Journal of the American Ceramic Society, 2016, 99, 962-970. | 1.9 | 20 |
| 126 | Reaction Processing of Ultra-High Temperature W/Ta ₂ C-Based Cermets. Journal of the American Ceramic Society, 2009, 92, 1966-1971. | 1.9 | 19 |

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|-----|--|-----|-----------|
| 127 | Processing of Carbon Nanofiber Reinforced ZrB ₂ Matrix Composites for Aerospace Applications. <i>Advanced Engineering Materials</i> , 2010, 12, 623-626. | 1.6 | 19 |
| 128 | Microstructural Effects on the Mechanical Properties of SiC-15 vol% TiB ₂ Particulate-Reinforced Ceramic Composites. <i>Journal of the American Ceramic Society</i> , 2013, 96, 577-583. | 1.9 | 19 |
| 129 | Predicting effective fracture toughness of ZrB ₂ -based ultra-high temperature ceramics by phase-field modeling. <i>Materials and Design</i> , 2020, 192, 108713. | 3.3 | 19 |
| 130 | Synthesis of ZrC _x with controlled carbon stoichiometry by low temperature solid state reaction. <i>Journal of the European Ceramic Society</i> , 2019, 39, 2594-2600. | 2.8 | 18 |
| 131 | High-entropy boride-carbide ceramics by sequential boro/carbothermal synthesis. <i>Journal of the American Ceramic Society</i> , 2022, 105, 5543-5547. | 1.9 | 18 |
| 132 | Mechanical and thermal properties of AlN-BN-SiC ceramics. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 494, 239-246. | 2.6 | 17 |
| 133 | ZrB ₂ -MoSi ₂ ceramics: A comprehensive overview of microstructure and properties relationships. Part II: Mechanical properties. <i>Journal of the European Ceramic Society</i> , 2019, 39, 1948-1954. | 2.8 | 17 |
| 134 | Room-temperature mechanical properties of a high-entropy diboride. <i>International Journal of Applied Ceramic Technology</i> , 2022, 19, 2293-2299. | 1.1 | 17 |
| 135 | Transmission electron microscopy study of interfacial microstructure formed by reacting Al-Mg alloy with mullite at high temperature. <i>Acta Materialia</i> , 1999, 47, 3099-3104. | 3.8 | 16 |
| 136 | Mechanical properties of reactively processed W-Ta ₂ C-based composites. <i>Journal of the European Ceramic Society</i> , 2010, 30, 2197-2201. | 2.8 | 16 |
| 137 | Thermal decomposition behavior of praseodymium oxides, hydroxides, and carbonates. <i>Inorganic Materials</i> , 2011, 47, 974-978. | 0.2 | 16 |
| 138 | Plasma Arc Welding of TiB ₂ -20 vol% TiC. <i>Journal of the American Ceramic Society</i> , 2014, 97, 56-59. | 1.9 | 16 |
| 139 | Characterization of fusion welded ceramics in the SiC-ZrB ₂ -ZrC system. <i>Journal of the European Ceramic Society</i> , 2021, 41, 2255-2262. | 2.8 | 16 |
| 140 | Densification Behavior and Thermal Properties of Hafnium Diboride with the Addition of Boron Carbides. <i>Journal of the American Ceramic Society</i> , 2012, 95, 2035-2043. | 1.9 | 15 |
| 141 | Escape from the strength-to-toughness paradox: Bulk ceramics through dual composite architectures. <i>Journal of the European Ceramic Society</i> , 2018, 38, 2961-2970. | 2.8 | 15 |
| 142 | Effect of moisture on the oxidation behavior of ZrB ₂ . <i>Journal of the American Ceramic Society</i> , 2021, 104, 1058-1066. | 1.9 | 15 |
| 143 | Design of ultra-high temperature ceramic nano-composites from multi-scale length microstructure approach. <i>Composites Part B: Engineering</i> , 2021, 226, 109344. | 5.9 | 15 |
| 144 | Spray Deposition of Cerium Oxide-Based Conversion Coatings on Al 2024-T3. <i>International Journal of Applied Ceramic Technology</i> , 2008, 5, 63-73. | 1.1 | 14 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 145 | Thermal Shock Resistance of an AlN-BN-SiC Ceramic. Journal of the American Ceramic Society, 2009, 92, 1358-1361. | 1.9 | 14 |
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