

Yu-Jin Wang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6563538/publications.pdf>

Version: 2024-02-01

95
papers

1,929
citations

304368

22
h-index

315357

38
g-index

95
all docs

95
docs citations

95
times ranked

1065
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Grain growth kinetics and densification mechanism of (TiZrHfVNbTa)C high-entropy ceramic under pressureless sintering. Journal of Materials Science and Technology, 2022, 110, 57-64. | 5.6 | 23 |
| 2 | The influence of Ti-induced precipitates on the microstructure and mechanical properties of (Zr,W)C solid solution. Materials Characterization, 2022, 183, 111604. | 1.9 | 2 |
| 3 | Microstructure, mechanical properties and thermal conductivity of (Ti _{0.5} Nb _{0.5})C-SiC composites. Ceramics International, 2022, 48, 6745-6749. | 2.3 | 5 |
| 4 | Single-phase formation and mechanical properties of (TiZrNbTaMo)C high-entropy ceramics: First-principles prediction and experimental study. Journal of the European Ceramic Society, 2022, 42, 2021-2027. | 2.8 | 22 |
| 5 | Novel (Zr, Ti)B ₂ -(Zr, Ti)C-SiC ceramics via reactive hot pressing. Journal of the European Ceramic Society, 2022, 42, 4045-4052. | 2.8 | 12 |
| 6 | Texture and anisotropy of hot-pressed h-BN matrix composite ceramics with in situ formed YAG. Journal of Advanced Ceramics, 2022, 11, 532-544. | 8.9 | 17 |
| 7 | Microstructure evolution, enhanced hardness and toughness in the solid-solution ceramic composite by reaction pressureless sintering of ZrB ₂ and TiC powders. Ceramics International, 2022, 48, 17981-17986. | 2.3 | 4 |
| 8 | Compressive creep properties and mechanisms of (Ti-Zr-Nb-Ta-Mo)C high entropy ceramics at high temperatures. Journal of the European Ceramic Society, 2022, 42, 5280-5289. | 2.8 | 4 |
| 9 | Reactive sintering of dual-phase high-entropy ceramics with superior mechanical properties. Journal of Materials Science and Technology, 2022, 129, 223-227. | 5.6 | 17 |
| 10 | Novel (Zr, Ti)(C, N)-SiC ceramics via reactive hot-pressing at low temperature. Ceramics International, 2022, 48, 29641-29651. | 2.3 | 5 |
| 11 | Non-stoichiometry of (TiZrHfVNbTa)C and its significance to the microstructure and mechanical properties. Journal of the European Ceramic Society, 2022, 42, 6347-6355. | 2.8 | 13 |
| 12 | Densification, microstructures, and mechanical properties of (Zr, Ti)(C, N) ceramics fabricated by spark plasma sintering. Journal of the European Ceramic Society, 2022, 42, 6445-6456. | 2.8 | 10 |
| 13 | A sector deposition mechanism of carbon onions operated in a large discharge furnace. Fullerenes Nanotubes and Carbon Nanostructures, 2021, 29, 156-162. | 1.0 | 4 |
| 14 | Densification, microstructure and mechanical properties of multicomponent (TiZrHfNbTaMo)C ceramic prepared by pressureless sintering. Journal of Materials Science and Technology, 2021, 72, 23-28. | 5.6 | 32 |
| 15 | Reactive hot pressing of super hard (Ti,Ta)(B,C)-SiC composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 800, 140292. | 2.6 | 8 |
| 16 | Microstructural evolution of h-BN matrix composite ceramics with La-Al-Si-O glass phase during hot-pressed sintering. Journal of Advanced Ceramics, 2021, 10, 493-501. | 8.9 | 22 |
| 17 | Effect of Ti and its compounds on the mechanical properties and microstructure of B ₄ C ceramics fabricated via pressureless sintering. Ceramics International, 2021, 47, 13756-13761. | 2.3 | 10 |
| 18 | Mechanical properties and microstructural evolution of pressureless sintered ceramics obtained from high-energy ball-milled TiB ₂ -TiC powders. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 819, 141510. | 2.6 | 10 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Novel TiC-based composites with enhanced mechanical properties. Journal of the European Ceramic Society, 2021, 41, 5466-5473. | 2.8 | 9 |
| 20 | Influence of vanadium content on the microstructural evolution and mechanical properties of (TiZrHfVNBa)C high-entropy carbides processed by pressureless sintering. Journal of the European Ceramic Society, 2021, 41, 60-67. | 2.8 | 27 |
| 21 | Laser surface nanocrystallization of oxide ceramics with eutectic composition: a comprehensive review. Heat Treatment and Surface Engineering, 2021, 3, 37-54. | 0.4 | 3 |
| 22 | CMAS hot corrosion behavior of rare-earth silicates for environmental barrier coatings applications: a comprehensive review. Heat Treatment and Surface Engineering, 2021, 3, 9-28. | 0.4 | 6 |
| 23 | Microstructure and mechanical properties of (TiZrNbTaMo)C high-entropy ceramic. Journal of Materials Science and Technology, 2020, 39, 99-105. | 5.6 | 133 |
| 24 | Strengthened interfacial bonding and its effects on fracture mode of TaC ceramics with addition of B. Journal of the European Ceramic Society, 2020, 40, 1067-1077. | 2.8 | 4 |
| 25 | In situ reaction and solid solution induced hardening in (Ti,Zr)B ₂ -(Zr,Ti)C composites. Journal of the American Ceramic Society, 2020, 103, 6101-6105. | 1.9 | 13 |
| 26 | Mechanism of Incongruent Reactions Between Zr-Cu Melts and Solid Tungsten Carbide. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2020, 51, 1603-1616. | 1.0 | 7 |
| 27 | The effect of transition metal carbides MeC (Me=Ti, Zr, Nb, Ta, and W) on mechanical properties of B4C ceramics fabricated via pressureless sintering. Ceramics International, 2020, 46, 27283-27291. | 2.3 | 17 |
| 28 | The Effects of Transition Metal Oxides (Me = Ti, Zr, Nb, and Ta) on the Mechanical Properties and Interfaces of B4C Ceramics Fabricated via Pressureless Sintering. Coatings, 2020, 10, 1253. | 1.2 | 4 |
| 29 | Reactive sintering behavior and enhanced densification of (Ti,Zr)B ₂ -(Zr,Ti)C composites. Journal of the European Ceramic Society, 2020, 40, 4373-4380. | 2.8 | 22 |
| 30 | Precipitations of W/Cu metallic phases in ZrC in the reactive melt infiltrated ZrC/W composite. Journal of Alloys and Compounds, 2020, 843, 155919. | 2.8 | 8 |
| 31 | Insights into intragranular precipitation and toughening effect of W in (Ti, W)C solid solution with TiH ₂ as the inducer. Ceramics International, 2019, 45, 20626-20633. | 2.3 | 6 |
| 32 | Two-step sintering of TiB ₂ -40wt%TiN composites. International Journal of Refractory Metals and Hard Materials, 2019, 84, 105037. | 1.7 | 7 |
| 33 | Safe trapping of cesium into doping-enhanced pollucite structure by geopolymer precursor technique. Journal of Hazardous Materials, 2019, 367, 577-588. | 6.5 | 43 |
| 34 | Effect of mechanical alloying on sinterability and phase evolution in pressure-less sintered TiB ₂ -TiC ceramics. Journal of Materiomics, 2019, 5, 670-678. | 2.8 | 14 |
| 35 | Microstructure Evolution in ZrC _x with Different Stoichiometries Irradiated by Four MeV Au Ions. Materials, 2019, 12, 3768. | 1.3 | 8 |
| 36 | Effect of boron addition on microstructure, mechanical properties and oxidation resistance of TaC ceramics. Ceramics International, 2019, 45, 6712-6717. | 2.3 | 10 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Microstructural evolution, mechanical and thermal properties of TiC-ZrC-Cr ₃ C ₂ composites. International Journal of Refractory Metals and Hard Materials, 2019, 80, 188-194. | 1.7 | 15 |
| 38 | Formation mechanism of a wrinkled and textured Al ₂ O ₃ -ZrO ₂ nanoeutectic rapidly solidified from oxyacetylene flame remelting. Journal of the American Ceramic Society, 2019, 102, 63-69. | 1.9 | 9 |
| 39 | Effect of W content on the ablation properties of W-ZrC composites synthesized by reactive melt infiltration under oxyacetylene flame. International Journal of Refractory Metals and Hard Materials, 2018, 74, 28-39. | 1.7 | 16 |
| 40 | Insights into microstructural formation of pulse plasma semisolid to liquid processing of Al ₂ O ₃ -ZrO ₂ eutectic ceramics. Journal of the American Ceramic Society, 2018, 101, 3773-3779. | 1.9 | 19 |
| 41 | Microstructure and mechanical properties of intragranular W-Cu/TiC-ZrC composite prepared by reactive melt infiltration at 1300 °C. Materials Characterization, 2018, 138, 89-97. | 1.9 | 8 |
| 42 | Microstructure and mechanical properties of Mo-ZrC-Cu composites synthesized by reactive melt infiltration of Zr-Cu melt into porous Mo ₂ C preforms at 1300 °C. Materials Chemistry and Physics, 2018, 212, 51-59. | 2.0 | 8 |
| 43 | Insights into structure and high-temperature oxidation behavior of plasma electrolytic oxidation ceramic coatings formed in NaAlO ₂ -Na ₂ CrO ₄ electrolyte. Journal of Materials Science, 2018, 53, 9978-9987. | 1.7 | 8 |
| 44 | Microstructure and Mechanical Properties of W-ZrC Composites Synthesized by Reactive Melt Infiltration of Zr ₂ Cu into Porous Preforms from Partially Carburized W Powders. Journal of Materials Engineering and Performance, 2018, 27, 1866-1875. | 1.2 | 6 |
| 45 | Microstructure and mechanical properties of ZrC-TaC composite fabricated by displacive compensation of porosity at 1300 °C. Ceramics International, 2018, 44, 246-253. | 2.3 | 6 |
| 46 | Densification, mechanical and thermal properties of ZrC _{1-x} ceramics fabricated by two-step reactive hot pressing of ZrC and ZrH ₂ powders. Journal of the European Ceramic Society, 2018, 38, 411-419. | 2.8 | 38 |
| 47 | Effect of NbC content on microstructure and mechanical properties of W-NbC composites. International Journal of Refractory Metals and Hard Materials, 2018, 70, 66-76. | 1.7 | 16 |
| 48 | Microstructure and mechanical properties of TiB ₂ -40 wt% TiC composites: Effects of adding a low-temperature hold prior to sintering at high temperatures. Ceramics International, 2018, 44, 23297-23300. | 2.3 | 24 |
| 49 | Corrosion kinetics and mechanisms of ZrC _{1-x} ceramics in high temperature water vapor. RSC Advances, 2018, 8, 18163-18174. | 1.7 | 21 |
| 50 | Nano-(Ta, Zr)C Precipitates at Multigrain Junctions in TaC Ceramic with 10 mol% ZrC and 5 mol% Cu as Sintering Aid. Journal of Nanomaterials, 2018, 2018, 1-5. | 1.5 | 0 |
| 51 | Effects of Al addition on densification, microstructure and mechanical properties of TaC-Al ceramics. Journal of Alloys and Compounds, 2018, 766, 45-53. | 2.8 | 8 |
| 52 | Fabrication of ZrB ₂ ceramics by reactive hot pressing of ZrB and B. Journal of the American Ceramic Society, 2018, 101, 5294-5298. | 1.9 | 9 |
| 53 | Microstructure evolution of nonstoichiometric ZrC _{0.6} with ordered carbon vacancies under ion irradiation. Materials Letters, 2018, 228, 254-257. | 1.3 | 11 |
| 54 | W-ZrC composites prepared by reactive melt infiltration of Zr ₂ Cu alloy into partially carburized W preforms. International Journal of Refractory Metals and Hard Materials, 2017, 67, 125-128. | 1.7 | 10 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | Microstructure and mechanical properties of TaC ceramics with 1~7.5 mol% Si as sintering aid. Journal of the American Ceramic Society, 2017, 100, 2461-2470. | 1.9 | 21 |
| 56 | Microstructure and mechanical properties of ceramics obtained from chemically co-precipitated Al ₂ O ₃ -GdAlO ₃ nano-powders with eutectic composition. Ceramics International, 2017, 43, 6996-7001. | 2.3 | 12 |
| 57 | Evolution of Phase, Microstructure and ZrC Lattice Parameter in Solid-solution-treated W-ZrC Composite. Scientific Reports, 2017, 7, 6531. | 1.6 | 16 |
| 58 | Corrosion behavior and microstructural evolution of <sc>BN</sc>-ZrO ₂ -SiC composites in molten steel. International Journal of Applied Ceramic Technology, 2017, 14, 665-674. | 1.1 | 9 |
| 59 | Microstructure, mechanical and thermo-physical properties of hot-pressed Al ₂ O ₃ -GdAlO ₃ -ZrO ₂ ceramics with eutectic composition. Progress in Natural Science: Materials International, 2017, 27, 491-497. | 1.8 | 7 |
| 60 | Mechanism of superior luminescent and high-efficiency photocatalytic properties of Eu-doped calcium aluminate by low-cost self-propagating combustion synthesis technique. Scientific Reports, 2017, 7, 2906. | 1.6 | 11 |
| 61 | Effect of deposition time on growth of ZrC/SiC composite coating synthesized by low pressure chemical vapor deposition. Ceramics International, 2017, 43, 2853-2858. | 2.3 | 3 |
| 62 | Low-temperature sintering behavior and mechanical properties of BN-ZrO ₂ -SiC composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 681, 50-55. | 2.6 | 11 |
| 63 | Review on the properties of hexagonal boron nitride matrix composite ceramics. Journal of the European Ceramic Society, 2016, 36, 3725-3737. | 2.8 | 107 |
| 64 | Microstructure and properties of ZrC-W composite fabricated by reactive infiltration of Zr ₂ Cu into WC/W preform. Materials Chemistry and Physics, 2015, 153, 17-22. | 2.0 | 14 |
| 65 | Fabrication and high-temperature tribological properties of self-lubricating NiCr-BaMoO ₄ composites. Wear, 2015, 330-331, 272-279. | 1.5 | 36 |
| 66 | Influence of ZrO ₂ Content on the Performances of <sc>BN</sc>-ZrO ₂ -SiC Composites for Application in the Steel Industry. International Journal of Applied Ceramic Technology, 2015, 12, 184-191. | 1.1 | 18 |
| 67 | Crack-healing behavior and strength recovery of hot-pressed TZ3Y20A-MoSi ₂ ceramics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 648, 299-304. | 2.6 | 14 |
| 68 | Microstructure and High-Temperature Mechanical Properties of ZrO ₂ -Al ₂ O ₃ -SiC Ceramics. Journal of Materials Engineering and Performance, 2015, 24, 3615-3621. | 1.2 | 13 |
| 69 | Corrosion kinetics and corrosion mechanisms of BN-ZrO ₂ -SiC composites in molten steel. Corrosion Science, 2014, 89, 93-100. | 3.0 | 26 |
| 70 | Anisotropic mechanical properties and fracture mechanisms of textured h-BN composite ceramics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 607, 38-43. | 2.6 | 63 |
| 71 | Effect of SiC content on mechanical properties and thermal shock resistance of BN-ZrO ₂ -SiC composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 590, 346-351. | 2.6 | 27 |
| 72 | Synthesis route and mechanical properties of reactive hot pressed TiN-TiB ₂ ceramics. International Journal of Refractory Metals and Hard Materials, 2013, 41, 54-59. | 1.7 | 20 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | Microstructure and mechanical properties of ZrCW matrix composite prepared by reactive infiltration at 1300Å°C. International Journal of Refractory Metals and Hard Materials, 2013, 37, 40-44. | 1.7 | 16 |
| 74 | Influence of reactive melt infiltration parameters on microstructure and properties of low temperature derived Cf/ZrC composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 568, 25-32. | 2.6 | 33 |
| 75 | Effect of ZrO ₂ content on microstructure, mechanical properties and thermal shock resistance of (ZrB ₂ +3Y-ZrO ₂)/BN composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 573, 106-110. | 2.6 | 31 |
| 76 | Carbide Particle-Reinforced Tungsten Composites in Extreme Hazard Environments. , 2013, , 509-532. | | 1 |
| 77 | Inhibiting Effect of Additives on Formation of <sc>ZrC</sc> Phase in <sc>ZrB</sc>₂â€“BN</sc> Composites by Reactive Hot Pressing. Journal of the American Ceramic Society, 2012, 95, 3374-3376. | 1.9 | 2 |
| 78 | Dense sub-micron-sized ZrCâ€“W composite produced by reactive melt infiltration at 1200Å°C. International Journal of Refractory Metals and Hard Materials, 2012, 30, 196-199. | 1.7 | 21 |
| 79 | Dislocation Behavior in ZrC Particles during Elevated Temperature Compressive Deformation of a 30 vol.% ZrCp/W Composite. Journal of Materials Science and Technology, 2011, 27, 553-558. | 5.6 | 7 |
| 80 | Ternary Phase <sc>Zr</sc>_x<sc>Cu</sc>_y<sc>C</sc>_z in Reactively Infiltrated <sc>ZrC/W</sc> Composite. Journal of the American Ceramic Society, 2011, 94, 3178-3180. | 1.9 | 14 |
| 81 | Reactive wetting and infiltration of polycrystalline WC by molten Zr ₂ Cu alloy. Scripta Materialia, 2011, 64, 229-232. | 2.6 | 33 |
| 82 | Influence of ZrC content on the elevated temperature tensile properties of ZrCp/W composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 1805-1811. | 2.6 | 24 |
| 83 | Effect of ZrC particle size on microstructure and room temperature mechanical properties of ZrCp/W composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 4021-4027. | 2.6 | 36 |
| 84 | High temperature electrical resistivities of ZrC particleâ€“reinforced tungsten-matrix composites. International Journal of Refractory Metals and Hard Materials, 2010, 28, 498-502. | 1.7 | 23 |
| 85 | Effect of particle clustering on the effective modulus of ZrC/W composites. International Journal of Refractory Metals and Hard Materials, 2009, 27, 14-19. | 1.7 | 17 |
| 86 | Effect of temperature gradient in the disk during sintering on microstructure and mechanical properties of ZrCp/W composite. International Journal of Refractory Metals and Hard Materials, 2009, 27, 126-129. | 1.7 | 28 |
| 87 | Effect of heat treatment on microstructure and mechanical properties of ZrC particles reinforced tungsten-matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 512, 19-25. | 2.6 | 27 |
| 88 | Compressive deformation behavior of a 30vol.%ZrCp/W composite at temperatures of 1300â€“1600Å°C. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 474, 382-389. | 2.6 | 19 |
| 89 | Elevated Temperature Compressive Strength and Deformation Behavior of a ZrC_P/W Reinforced Tungsten-Matrix Composite. Journal of Computational and Theoretical Nanoscience, 2008, 5, 1730-1734. | 0.4 | 1 |
| 90 | Elevated temperature compressive failure behavior of a 30vol.%ZrCp/W composite. International Journal of Refractory Metals and Hard Materials, 2007, 25, 445-450. | 1.7 | 16 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 91 | Model to determine recrystallization temperature of tungsten based dilute solid solution alloys. Journal of Materials Science, 2006, 41, 7506-7508. | 1.7 | 5 |
| 92 | Synthesis of Al-doped LiMn ₂ O ₄ spinels by mechanical alloying and rotary heating. Journal of Materials Science, 2004, 39, 357-360. | 1.7 | 0 |
| 93 | Effect of carbide particles on the ablation properties of tungsten composites. Materials Characterization, 2003, 50, 293-303. | 1.9 | 71 |
| 94 | Thermomechanical properties of TiC particle-reinforced tungsten composites for high temperature applications. International Journal of Refractory Metals and Hard Materials, 2003, 21, 1-12. | 1.7 | 145 |
| 95 | The mechanical and thermophysical properties of ZrC/W composites at elevated temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 334, 223-232. | 2.6 | 138 |