Yu-Jin Wang

List of Publications by Year
in descending order

95 papers	1,929 citations	304743 22 h-index	315739 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.	10.7	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.	4.4	2
3	Microstructure, mechanical properties and thermal conductivity of (Ti0.5Nb0.5)Câ€“SiC composites. Ceramics International, 2022, 48, 6745-6749.	4.8	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.	5.7	22
5	Novel (Zr, Ti)B2-(Zr, Ti)C-SiC ceramics via reactive hot pressing. Journal of the European Ceramic Society, 2022, 42, 4045-4052.	5.7	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.	17.4	17
7	Microstructure evolution, enhanced hardness and toughness in the solid-solution ceramic composite by reaction pressureless sintering of ZrB2 and TiC powders. Ceramics International, 2022, 48, 17981-17986.	4.8	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.	5.7	4
9	Reactive sintering of dual-phase high-entropy ceramics with superior mechanical properties. Journal of Materials Science and Technology, 2022, 129, 223-227.	10.7	17
10	Novel (Zr, Ti)(C, N)â€“SiC ceramics via reactive hot-pressing at low temperature. Ceramics International, 2022, 48, 29641-29651.	4.8	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.	5.7	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.	5.7	10
13	A sector deposition mechanism of carbon onions operated in a large discharge furnace. Fullerenes Nanotubes and Carbon Nanostructures, 2021, 29, 156-162.	2.1	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.	10.7	32
15	Reactive hot pressing of super hard (Ti,Ta)(B,C)â€“(Ta,Ti)C composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 800, 140292.	5.6	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.	17.4	22
17	Effect of Ti and its compounds on the mechanical properties and microstructure of B4C ceramics fabricated via pressureless sintering. Ceramics International, 2021, 47, 13756-13761.	4.8	10
18	Mechanical properties and microstructural evolution of pressureless sintered ceramics obtained from high-energy ball-milled TiB2â€“TiC powders. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 819, 141510.	5.6	10

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19	Novel TiC-based composites with enhanced mechanical properties. Journal of the European Ceramic Society, 2021, 41, 5466-5473.	5.7	9
20	Influence of vanadium content on the microstructural evolution and mechanical properties of (TiZrHfVNbTa)C high-entropy carbides processed by pressureless sintering. Journal of the European Ceramic Society, 2021, 41, 60-67.	5.7	27
21	Laser surface nanocrystallization of oxide ceramics with eutectic composition: a comprehensive review. Heat Treatment and Surface Engineering, 2021, 3, 37-54.	1.0	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.	1.0	6
23	Microstructure and mechanical properties of (TiZrNbTaMo)C high-entropy ceramic. Journal of Materials Science and Technology, 2020, 39, 99-105.	10.7	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.	5.7	4
25	In situ reaction and solid solution induced hardening in (Ti,Zr)B₂â€(Zr,Ti)C composites. Journal of the American Ceramic Society, 2020, 103, 6101-6105.	3.8	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.	2.1	7
27	The effect of transition metal carbides MeC (MeÂ=ÂTi, Zr, Nb, Ta, and W) on mechanical properties of B4C ceramics fabricated via pressureless sintering. Ceramics International, 2020, 46, 27283-27291.	4.8	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.	2.6	4
29	Reactive sintering behavior and enhanced densification of (Ti,Zr)B2â€“(Zr,Ti)C composites. Journal of the European Ceramic Society, 2020, 40, 4373-4380.	5.7	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.	5.5	8
31	Insights into intragranular precipitation and toughening effect of W in (Ti, W)C solid solution with TiH2 as the inducer. Ceramics International, 2019, 45, 20626-20633.	4.8	6
32	Two-step sintering of TiB2â€“40wt%TiN composites. International Journal of Refractory Metals and Hard Materials, 2019, 84, 105037.	3.8	7
33	Safe trapping of cesium into doping-enhanced pollucite structure by geopolymer precursor technique. Journal of Hazardous Materials, 2019, 367, 577-588.	12.4	43
34	Effect of mechanical alloying on sinterability and phase evolution in pressure-less sintered TiB2â€™TiC ceramics. Journal of Materiomics, 2019, 5, 670-678.	5.7	14
35	Microstructure Evolution in ZrCx with Different Stoichiometries Irradiated by Four MeV Au Ions. Materials, 2019, 12, 3768.	2.9	8
36	Effect of boron addition on microstructure, mechanical properties and oxidation resistance of TaC ceramics. Ceramics International, 2019, 45, 6712-6717.	4.8	10

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37	Microstructural evolution, mechanical and thermal properties of TiC-ZrC-Cr3C2 composites. International Journal of Refractory Metals and Hard Materials, 2019, 80, 188-194.	3.8	15
38	Formation mechanism of a wrinkled and textured Al₂O₃â€ZrO₂ nanoeutectic rapidly solidified from oxyâ€acetylene flame remelting. Journal of the American Ceramic Society, 2019, 102, 63-69.	3.8	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.	3.8	16
40	Insights into microstructural formation of pulse plasma semisolid to liquid processing of Al₂O₃â€“ZrO₂ eutectic ceramics. Journal of the American Ceramic Society, 2018, 101, 3773-3779.	3.8	19
41	Microstructure and mechanical properties of intragranular W-Cu/TiC-ZrC composite prepared by reactive melt infiltration at 1300â€Â°C. Materials Characterization, 2018, 138, 89-97.	4.4	8
42	Microstructure and mechanical properties of Mo-ZrC-Cu composites synthesized by reactive melt infiltration of Zr-Cu melt into porous Mo2C preforms at 1300â€Â°C. Materials Chemistry and Physics, 2018, 212, 51-59.	4.0	8
43	Insights into structure and high-temperature oxidation behavior of plasma electrolytic oxidation ceramic coatings formed in NaAlO2â€“Na2CrO4 electrolyte. Journal of Materials Science, 2018, 53, 9978-9987.	3.7	8
44	Microstructure and Mechanical Properties of W-ZrC Composites Synthesized by Reactive Melt Infiltration of Zr2Cu into Porous Preforms from Partially Carburized W Powders. Journal of Materials Engineering and Performance, 2018, 27, 1866-1875.	2.5	6
45	Microstructure and mechanical properties of ZrC-TaC composite fabricated by displacive compensation of porosity at 1300 Â°C. Ceramics International, 2018, 44, 246-253.	4.8	6
46	Densification, mechanical and thermal properties of ZrC1â^' ceramics fabricated by two-step reactive hot pressing of ZrC and ZrH2 powders. Journal of the European Ceramic Society, 2018, 38, 411-419.	5.7	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.	3.8	16
48	Microstructure and mechanical properties of TiB2-40â€wt% TiC composites: Effects of adding a low-temperature hold prior to sintering at high temperatures. Ceramics International, 2018, 44, 23297-23300.	4.8	24
49	Corrosion kinetics and mechanisms of ZrC_{1â^'x}ceramics in high temperature water vapor. RSC Advances, 2018, 8, 18163-18174.	3.6	21
50	Nano-(Ta, Zr)C Precipitates at Multigrain Conjunctions in TaC Ceramic with 10â€‰mol% ZrC and 5â€‰mol% Cu as Sintering Aid. Journal of Nanomaterials, 2018, 2018, 1-5.	2.7	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.	5.5	8
52	Fabrication of ZrB₂ ceramics by reactive hot pressing of ZrB and B. Journal of the American Ceramic Society, 2018, 101, 5294-5298.	3.8	9
53	Microstructure evolution of nonstoichiometric ZrC0.6 with ordered carbon vacancies under ion irradiation. Materials Letters, 2018, 228, 254-257.	2.6	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.	3.8	10

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55	Microstructure and mechanical properties of TaC ceramics with 1â€“7.5 mol% Si as sintering aid. Journal of the American Ceramic Society, 2017, 100, 2461-2470.	3.8	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.	4.8	12
57	Evolution of Phase, Microstructure and ZrC Lattice Parameter in Solid-solution-treated W-ZrC Composite. Scientific Reports, 2017, 7, 6531.	3.3	16
58	Corrosion behavior and microstructural evolution of <scp>BN</scp>â€“ZrO₂â€“SiC composites in molten steel. International Journal of Applied Ceramic Technology, 2017, 14, 665-674.	2.1	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.	4.4	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.	3.3	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.	4.8	3
62	Low-temperature sintering behavior and mechanical properties of BN-ZrO2-SiC composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 681, 50-55.	5.6	11
63	Review on the properties of hexagonal boron nitride matrix composite ceramics. Journal of the European Ceramic Society, 2016, 36, 3725-3737.	5.7	107
64	Microstructure and properties of ZrCâ€“W composite fabricated by reactive infiltration of Zr2Cu into WC/W preform. Materials Chemistry and Physics, 2015, 153, 17-22.	4.0	14
65	Fabrication and high-temperature tribological properties of self-lubricating NiCrâ€“BaMoO 4 composites. Wear, 2015, 330-331, 272-279.	3.1	36
66	Influence of ZrO₂ Content on the Performances of <scp>BN</scp>â€“ZrO₂â€“SiC Composites for Application in the Steel Industry. International Journal of Applied Ceramic Technology, 2015, 12, 184-191.	2.1	18
67	Crack-healing behavior and strength recovery of hot-pressed TZ3Y20Aâ€“MoSi2 ceramics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 648, 299-304.	5.6	14
68	Microstructure and High-Temperature Mechanical Properties of ZrO2-Al2O3-SiC Ceramics. Journal of Materials Engineering and Performance, 2015, 24, 3615-3621.	2.5	13
69	Corrosion kinetics and corrosion mechanisms of BNâ€“ZrO2â€“SiC composites in molten steel. Corrosion Science, 2014, 89, 93-100.	6.6	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.	5.6	63
71	Effect of SiC content on mechanical properties and thermal shock resistance of BNâ€“ZrO2â€“SiC composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 590, 346-351.	5.6	27
72	Synthesis route and mechanical properties of reactive hot pressed TiNâ€“TiB2 ceramics. International Journal of Refractory Metals and Hard Materials, 2013, 41, 54-59.	3.8	20

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73	Microstructure and mechanical properties of ZrCW matrix composite prepared by reactive infiltration at 1300Â°C. International Journal of Refractory Metals and Hard Materials, 2013, 37, 40-44.	3.8	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.	5.6	33
75	Effect of ZrO2 content on microstructure, mechanical properties and thermal shock resistance of (ZrB2+3Y-ZrO2)/BN composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 573, 106-110.	5.6	31
76	Carbide Particle-Reinforced Tungsten Composites in Extreme Hazard Environments. , 2013, , 509-532.		1
77	Inhibiting Effect of Additives on Formation of <scp><scp>ZrC</scp></scp> Phase in <scp><scp>ZrB</scp></scp>₂â€“<scp>BN</scp> Composites by Reactive Hot Pressing. Journal of the American Ceramic Society, 2012, 95, 3374-3376.	3.8	2
78	Dense sub-micron-sized ZrCâ€“W composite produced by reactive melt infiltration at 1200Â°C. International Journal of Refractory Metals and Hard Materials, 2012, 30, 196-199.	3.8	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.	10.7	7
80	Ternary Phase <scp><scp>Zr</scp>_x<scp>Cu</scp>_y<scp>C</scp>_z</scp> in Reactively Infiltrated <scp><scp>ZrC/W</scp></scp> Composite. Journal of the American Ceramic Society, 2011, 94, 3178-3180.	3.8	14
81	Reactive wetting and infiltration of polycrystalline WC by molten Zr2Cu alloy. Scripta Materialia, 2011, 64, 229-232.	5.2	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.	5.6	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.	5.6	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.	3.8	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.	3.8	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.	3.8	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.	5.6	27
88	Compressive deformation behavior of a 30vol.%ZrCp/W composite at temperatures of 1300â€“1600Â°C. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 474, 382-389.	5.6	19
89	Elevated Temperature Compressive Strength and Deformation Behavior of a ZrC_P 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.	3.8	16

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91	Model to determine recrystallization temperature of tungsten based dilute solid solution alloys. Journal of Materials Science, 2006, 41, 7506-7508.	3.7	5
92	Synthesis of Al-doped LiMn2O4spinels by mechanical alloying and rotary heating. Journal of Materials Science, 2004, 39, 357-360.	3.7	0
93	Effect of carbide particles on the ablation properties of tungsten composites. Materials Characterization, 2003, 50, 293-303.	4.4	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.	3.8	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.	5.6	138