Yu-Jin Wang

List of Publications by Year
in descending order

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	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
2	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
3	Microstructure and mechanical properties of (TiZrNbTaMo)C high-entropy ceramic. Journal of Materials Science and Technology, 2020, 39, 99-105.	5.6	133
4	Review on the properties of hexagonal boron nitride matrix composite ceramics. Journal of the European Ceramic Society, 2016, 36, 3725-3737.	2.8	107
5	Effect of carbide particles on the ablation properties of tungsten composites. Materials Characterization, 2003, 50, 293-303.	1.9	71
6	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
7	Safe trapping of cesium into doping-enhanced pollucite structure by geopolymer precursor technique. Journal of Hazardous Materials, 2019, 367, 577-588.	6.5	43
8	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.	2.8	38
9	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
10	Fabrication and high-temperature tribological properties of self-lubricating NiCrâ€“BaMoO 4 composites. Wear, 2015, 330-331, 272-279.	1.5	36
11	Reactive wetting and infiltration of polycrystalline WC by molten Zr2Cu alloy. Scripta Materialia, 2011, 64, 229-232.	2.6	33
12	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
13	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
14	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.	2.6	31
15	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
16	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
17	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.	2.6	27
18	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.	2.8	27

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19	Corrosion kinetics and corrosion mechanisms of BNâ€“ZrO2â€“SiC composites in molten steel. Corrosion Science, 2014, 89, 93-100.	3.0	26
20	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
21	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.	2.3	24
22	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
23	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
24	Reactive sintering behavior and enhanced densification of (Ti,Zr)B2â€“(Zr,Ti)C composites. Journal of the European Ceramic Society, 2020, 40, 4373-4380.	2.8	22
25	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
26	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
27	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.	1.7	21
28	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.	1.9	21
29	Corrosion kinetics and mechanisms of ZrC_{1â^'x}ceramics in high temperature water vapor. RSC Advances, 2018, 8, 18163-18174.	1.7	21
30	Synthesis route and mechanical properties of reactive hot pressed TiNâ€“TiB2 ceramics. International Journal of Refractory Metals and Hard Materials, 2013, 41, 54-59.	1.7	20
31	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.	2.6	19
32	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.	1.9	19
33	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.	1.1	18
34	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
35	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.	2.3	17
36	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

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37	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
38	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
39	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.	1.7	16
40	Evolution of Phase, Microstructure and ZrC Lattice Parameter in Solid-solution-treated W-ZrC Composite. Scientific Reports, 2017, 7, 6531.	1.6	16
41	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
42	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
43	Microstructural evolution, mechanical and thermal properties of TiC-ZrC-Cr3C2 composites. International Journal of Refractory Metals and Hard Materials, 2019, 80, 188-194.	1.7	15
44	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.	1.9	14
45	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.	2.0	14
46	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.	2.6	14
47	Effect of mechanical alloying on sinterability and phase evolution in pressure-less sintered TiB2â€'TiC ceramics. Journal of Materiomics, 2019, 5, 670-678.	2.8	14
48	Microstructure and High-Temperature Mechanical Properties of ZrO2-Al2O3-SiC Ceramics. Journal of Materials Engineering and Performance, 2015, 24, 3615-3621.	1.2	13
49	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.	1.9	13
50	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
51	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
52	Novel (Zr, Ti)B2-(Zr, Ti)C-SiC ceramics via reactive hot pressing. Journal of the European Ceramic Society, 2022, 42, 4045-4052.	2.8	12
53	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
54	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.	2.6	11

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55	Microstructure evolution of nonstoichiometric ZrC0.6 with ordered carbon vacancies under ion irradiation. Materials Letters, 2018, 228, 254-257.	1.3	11
56	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
57	Effect of boron addition on microstructure, mechanical properties and oxidation resistance of TaC ceramics. Ceramics International, 2019, 45, 6712-6717.	2.3	10
58	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.	2.3	10
59	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.	2.6	10
60	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
61	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.	1.1	9
62	Fabrication of ZrB₂ ceramics by reactive hot pressing of ZrB and B. Journal of the American Ceramic Society, 2018, 101, 5294-5298.	1.9	9
63	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.	1.9	9
64	Novel TiC-based composites with enhanced mechanical properties. Journal of the European Ceramic Society, 2021, 41, 5466-5473.	2.8	9
65	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.	1.9	8
66	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.	2.0	8
67	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.	1.7	8
68	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
69	Microstructure Evolution in ZrCx with Different Stoichiometries Irradiated by Four MeV Au Ions. Materials, 2019, 12, 3768.	1.3	8
70	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
71	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.	2.6	8
72	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

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73	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
74	Two-step sintering of TiB2â€“40wt%TiN composites. International Journal of Refractory Metals and Hard Materials, 2019, 84, 105037.	1.7	7
75	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
76	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.	1.2	6
77	Microstructure and mechanical properties of ZrC-TaC composite fabricated by displacive compensation of porosity at 1300 Â°C. Ceramics International, 2018, 44, 246-253.	2.3	6
78	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.	2.3	6
79	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
80	Model to determine recrystallization temperature of tungsten based dilute solid solution alloys. Journal of Materials Science, 2006, 41, 7506-7508.	1.7	5
81	Microstructure, mechanical properties and thermal conductivity of (Ti0.5Nb0.5)Câ€“SiC composites. Ceramics International, 2022, 48, 6745-6749.	2.3	5
82	Novel (Zr, Ti)(C, N)â€“SiC ceramics via reactive hot-pressing at low temperature. Ceramics International, 2022, 48, 29641-29651.	2.3	5
83	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
84	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
85	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
86	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.	2.3	4
87	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
88	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
89	Laser surface nanocrystallization of oxide ceramics with eutectic composition: a comprehensive review. Heat Treatment and Surface Engineering, 2021, 3, 37-54.	0.4	3
90	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.	1.9	2

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91	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
92	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
93	Carbide Particle-Reinforced Tungsten Composites in Extreme Hazard Environments. , 2013, , 509-532.		1
94	Synthesis of Al-doped LiMn2O4spinels by mechanical alloying and rotary heating. Journal of Materials Science, 2004, 39, 357-360.	1.7	0
95	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.	1.5	0