Yanchun Zhou

List of Publications by Year
in descending order

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448	21,250	8749	20343
papers	citations	75 h-index	116 g-index

458	458	458	8383
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High-entropy ceramics: Present status, challenges, and a look forward. Journal of Advanced Ceramics, 2021, 10, 385-441.	8.9	510
2	Layered Machinable and Electrically Conductive Ti2AlC and Ti3AlC2 Ceramics: a Review. Journal of Materials Science and Technology, 2010, 26, 385-416.	5.6	499
3	Electrochemical Deposition of Copper(I) Oxide Films. Chemistry of Materials, 1996, 8, 2499-2504.	3.2	399
4	Recent Progress in Theoretical Prediction, Preparation, and Characterization of Layered Ternary Transition-Metal Carbides. Annual Review of Materials Research, 2009, 39, 415-443.	4.3	340
5	Oxidation behavior of Ti3AlC2 at 1000â€“1400 Â°C in air. Corrosion Science, 2003, 45, 891-907.	3.0	311
6	Dependence of elastic stiffness on electronic band structure of nanolaminateM2AlC(M=Ti,V,Nb,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 5	1.1	301
7	Investigation of the relationship between elastic modulus and hardness based on depth-sensing indentation measurements. Acta Materialia, 2004, 52, 5397-5404.	3.8	292
8	High-temperature oxidation and hot corrosion of Cr2AlC. Acta Materialia, 2007, 55, 6182-6191.	3.8	277
9	High-Temperature Oxidation Behavior of Ti2AlC in Air. Oxidation of Metals, 2003, 59, 303-320.	1.0	254
10	Hydrothermal synthesis and sintering of ultrafine CeO₂ powders. Journal of Materials Research, 1993, 8, 1680-1686.	1.2	240
11	(La0.2Ce0.2Nd0.2Sm0.2Eu0.2)2Zr2O7: A novel high-entropy ceramic with low thermal conductivity and sluggish grain growth rate. Journal of Materials Science and Technology, 2019, 35, 2647-2651.	5.6	237
12	Advances on strategies for searching for next generation thermal barrier coating materials. Journal of Materials Science and Technology, 2019, 35, 833-851.	5.6	233
13	Solidâ€“liquid reaction synthesis of layered machinable Ti3AlC2 ceramic. Journal of Materials Chemistry, 2002, 12, 455-460.	6.7	231
14	Electrochemical Synthesis and Sintering of Nanocrystalline Cerium(IV) Oxide Powders. Journal of the American Ceramic Society, 1995, 78, 981-985.	1.9	177
15	Electronic and structural properties of the layered ternary carbide Ti3AlC2. Journal of Materials Chemistry, 2001, 11, 2335-2339.	6.7	167
16	Microstructural characterization of layered ternary Ti2AlC. Acta Materialia, 2006, 54, 1009-1015.	3.8	166
17	Electronic structure and bonding properties of layered machinableTi2AlCandTi2AlNceramics. Physical Review B, 2000, 61, 12570-12573.	1.1	163
18	Oxidation behaviour of Ti3SiC2-based ceramic at 900â€“1300Â°C in air. Corrosion Science, 2001, 43, 1095-1109.	3.0	160

#	Article	IF	Citations
19	Strengthening of Ti3AlC2 by incorporation of Si to form Ti3Al1â^'xSixC2 solid solutions. Acta Materialia, 2006, 54, 1317-1322.	3.8	152
20	Theoretical elastic stiffness, structural stability and thermal conductivity of La2T2O7 (T=Ge, Ti, Sn, Zr,) Tj ETQq0 0 0 rgBT /Overlock 10 T	3.8	152
21	In-situ hot pressing/solid-liquid reaction synthesis of dense titanium silicon carbide bulk ceramics. Materials Research Innovations, 1998, 2, 142-146.	1.0	148
22	High temperature oxidation behavior of Ti3SiC2-based material in air. Acta Materialia, 2001, 49, 4347-4353.	3.8	145
23	Nb4AlC3: A new compound belonging to the MAX phases. Scripta Materialia, 2007, 57, 893-896.	2.6	144
24	Thermal properties of single-phase Y2SiO5. Journal of the European Ceramic Society, 2009, 29, 551-557.	2.8	136
25	High porosity and low thermal conductivity high entropy (Zr0.2Hf0.2Ti0.2Nb0.2Ta0.2)C. Journal of Materials Science and Technology, 2019, 35, 1700-1705.	5.6	136
26	A first-principles investigation of the phase stability of Ti2AlC with Al vacancies. Scripta Materialia, 2008, 58, 227-230.	2.6	132
27	Theoretical elastic stiffness, structure stability and thermal conductivity of La2Zr2O7 pyrochlore. Acta Materialia, 2007, 55, 2949-2957.	3.8	127
28	Mechanism for Hydrothermal Synthesis of LiFePO₄ Platelets as Cathode Material for Lithium-Ion Batteries. Journal of Physical Chemistry C, 2010, 114, 16806-16812.	1.5	127
29	First demonstration of possible two-dimensional MBene CrB derived from MAB phase Cr2AlB2. Journal of Materials Science and Technology, 2018, 34, 2022-2026.	5.6	127
30	Solid-Liquid Reaction Synthesis and Simultaneous Densification of Polycrystalline Ti₂AlC. International Journal of Materials Research, 2002, 93, 66-71.	0.8	125
31	Effect of redox reaction on the sintering behavior of cerium oxide. Acta Materialia, 1997, 45, 3635-3639.	3.8	124
32	Strengthening of Ti2AlC by substituting Ti with V. Scripta Materialia, 2005, 53, 1369-1372.	2.6	123
33	Ab initiogeometry optimization and ground state properties of layered ternary carbides Ti3MC2(M = Al,) Tj ETQq1 1 0.784314 rgBT /O	0.7	121
34	Theoretical Prediction and Experimental Investigation on the Thermal and Mechanical Properties of Bulk Î²â€<scp><scp>Yb</scp></scp>₂<scp><scp>Si</scp></scp>₂<scp><scp>O</scp></scp>₇. Journal of the American Ceramic Society, 2013, 96, 3891-3900.	1.9	121
35	Thermal Properties and Thermal Shock Resistance of Î³â€²₂Si₂O₇. Journal of the American Ceramic Society, 2008, 91, 2623-2629.	1.9	119
36	Microstructures and Theoretical Bulk Modulus of Layered Ternary Tantalum Aluminum Carbides. Journal of the American Ceramic Society, 2006, 89, 3765-3769.	1.9	118

#	Article	IF	Citations
37	In-situ hot pressing/solid-liquid reaction synthesis of bulk Cr₂AlC. International Journal of Materials Research, 2005, 96, 291-296.	0.8	115
38	Polymorphism ofTi3SiC2ceramic: First-principles investigations. Physical Review B, 2004, 69, .	1.1	114
39	Improving the oxidation resistance of Ti3SiC2 by forming a Ti3Si0.9Al0.1C2 solid solution. Acta Materialia, 2004, 52, 3631-3637.	3.8	112
40	Synthesis and microstructure of layered-ternary Ti2AlN ceramic. Scripta Materialia, 2007, 56, 1115-1118.	2.6	112
41	In Situ Reaction Synthesis, Electrical and Thermal, and Mechanical Properties of Nb₄AlC₃. Journal of the American Ceramic Society, 2008, 91, 2258-2263.	1.9	112
42	?-Y2Si2O7, a Machinable Silicate Ceramic: Mechanical Properties and Machinability. Journal of the American Ceramic Society, 2007, 90, 2535-2541.	1.9	111
43	Structure stability of Ti3AlC2 in Cu and microstructure evolution of Cuâ€“Ti3AlC2 composites. Acta Materialia, 2007, 55, 4381-4390.	3.8	110
44	General Trends in Electronic Structure, Stability, Chemical Bonding and Mechanical Properties of Ultrahigh Temperature Ceramics TMB2 (TMÂ=Âtransition metal). Journal of Materials Science and Technology, 2015, 31, 285-294.	5.6	108
45	Phase stability, electronic structure and mechanical properties of ternary-layered carbide Nb4AlC3: An ab initio study. Acta Materialia, 2008, 56, 1511-1518.	3.8	107
46	Stability and Selective Oxidation of Aluminum in Nano-Laminate Ti3AlC2upon Heating in Argon. Chemistry of Materials, 2003, 15, 3716-3720.	3.2	106
47	New MAXâ€Phase Compounds in the Vâ€“Crâ€“Alâ€“C System. Journal of the American Ceramic Society, 2008, 91, 1357-1360.	1.9	101
48	Porous high entropy (Zr0.2Hf0.2Ti0.2Nb0.2Ta0.2)B2: A novel strategy towards making ultrahigh temperature ceramics thermal insulating. Journal of Materials Science and Technology, 2019, 35, 2404-2408.	5.6	100
49	Recent progress on synthesis, multi-scale structure, and properties of Yâ€“Siâ€“O oxides. International Materials Reviews, 2014, 59, 357-383.	9.4	99
50	Microstructure and mechanism of damage tolerance for Ti3SiC2 bulk ceramics. Materials Research Innovations, 1999, 2, 360-363.	1.0	98
51	Mechanical properties and atomistic deformation mechanism of Î³-Y2Si2O7 from first-principles investigations. Acta Materialia, 2007, 55, 6019-6026.	3.8	98
52	Electrochemical Deposition and Microstructure of Copper (I) Oxide Films. Scripta Materialia, 1998, 38, 1731-1738.	2.6	94
53	Electronic structure and bonding properties in layered ternary carbide Ti3SiC2. Journal of Physics Condensed Matter, 2000, 12, L457-L462.	0.7	92
54	Ti3SiC2â€”a self-lubricating ceramic. Materials Letters, 2002, 55, 285-289.	1.3	90

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55	Mechanical and Thermal Properties of Yb₂SiO₅: A Promising Material for T/<scp>EBC</scp>s Applications. Journal of the American Ceramic Society, 2016, 99, 1404-1411.	1.9	90
56	(Y0.25Yb0.25Er0.25Lu0.25)2(Zr0.5Hf0.5)2O7: A defective fluorite structured high entropy ceramic with low thermal conductivity and close thermal expansion coefficient to Al2O3. Journal of Materials Science and Technology, 2020, 39, 167-172.	5.6	90
57	Ab initiocalculation of titanium silicon carbide. Physical Review B, 1999, 60, 1441-1443.	1.1	89
58	Synthesis and structureâ€“property relationships of a new family of layered carbides in Zr-Al(Si)-C and Hf-Al(Si)-C systems. Journal of the European Ceramic Society, 2013, 33, 2831-2865.	2.8	89
59	High-entropy (Nd0.2Sm0.2Eu0.2Y0.2Yb0.2)4Al2O9 with good high temperature stability, low thermal conductivity, and anisotropic thermal expansivity. Journal of Advanced Ceramics, 2020, 9, 595-605.	8.9	89
60	High entropy (Yb0.25Y0.25Lu0.25Er0.25)2SiO5 with strong anisotropy in thermal expansion. Journal of Materials Science and Technology, 2020, 36, 134-139.	5.6	88
61	One-step synthesis and electromagnetic absorption properties of high entropy rare earth hexaborides (HE REB6) and high entropy rare earth hexaborides/borates (HE REB6/HE REBO3) composite powders. Journal of Advanced Ceramics, 2021, 10, 62-77.	8.9	88
62	Growth of cerium(IV) oxide films by the electrochemical generation of base method. Journal of Alloys and Compounds, 1996, 237, 1-5.	2.8	86
63	Potential oscillations during the electrochemical self-assembly of copper/cuprous oxide layered nanostructures. Journal of Materials Research, 1998, 13, 909-916.	1.2	86
64	Low-temperature instability of Ti₂SnC: A combined transmission electron microscopy, differential scanning calorimetry, and x-ray diffraction investigations. Journal of Materials Research, 2009, 24, 39-49.	1.2	84
65	Theoretical Prediction of Elastic Stiffness and Minimum Lattice Thermal Conductivity of <scp><scp>Y</scp></scp>₃<scp><scp>Al</scp></scp>₅<scp><scp>O</scp></scp>₁₂, <scp><scp>YAlO</scp></scp>₃ and <scp><scp>Y</scp></scp>₄<scp><scp>Al</scp></scp>₂<scp><scp>O</scp></scp>₉. Journal of the American Ceramic Society, 2012, 95, 1429-1434.	1.9	84
66	Mechanical Properties and Damage Tolerance of Bulk Yb3Al5O12 Ceramic. Journal of Materials Science and Technology, 2015, 31, 369-374.	5.6	84
67	Phase pure and well crystalline Cr2AlB2: A key precursor for two-dimensional CrB. Journal of Materials Science and Technology, 2019, 35, 1593-1600.	5.6	84
68	Physical and Mechanical Properties of Bulk Ta4AlC3Ceramic Prepared by an In Situ Reaction Synthesis/Hot-Pressing Method. Journal of the American Ceramic Society, 2007, 90, 2542-2548.	1.9	82
69	(La0.2Ce0.2Nd0.2Sm0.2Eu0.2)PO4: A high-entropy rare-earth phosphate monazite ceramic with low thermal conductivity and good compatibility with Al2O3. Journal of Materials Science and Technology, 2019, 35, 2892-2896.	5.6	81
70	Thermal shock behavior of Ti3AlC2 from between 200Â°C and 1300Â°C. Journal of the European Ceramic Society, 2005, 25, 3367-3374.	2.8	80
71	Preparation and properties of CMAS resistant bixbyite structured high-entropy oxides RE2O3 (RE = Sm,) Tj ETQq1 1 0.784314 rgBT /Ov Journal of Advanced Ceramics, 2021, 10, 596-613.	8.9	79
72	Strengthening of Ti3AlC2 by incorporation of Al2O3. Scripta Materialia, 2004, 50, 897-901.	2.6	78

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73	Tribological behavior of Ti2SnC particulate reinforced copper matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 422, 266-271.	2.6	78
74	Deformation modes and ideal strengths of ternary layeredTi2AlCandTi2AlNfrom first-principles calculations. Physical Review B, 2006, 73, .	1.1	78
75	In Situ Reaction Synthesis and Mechanical Properties of V₂AlC. Journal of the American Ceramic Society, 2008, 91, 4029-4035.	1.9	78
76	A polysilazane coating protecting polyimide from atomic oxygen and vacuum ultraviolet radiation erosion. Surface and Coatings Technology, 2009, 203, 3338-3343.	2.2	78
77	Electrical conductive and damage-tolerant nanolaminated MAB phases Cr₂AlB₂, Cr₃AlB₄ and Cr₄AlB₆. Materials Research Letters, 2017, 5, 440-448.	4.1	78
78	First-principles prediction of low shear-strain resistance of Al3BC3: A metal borocarbide containing short linear BC2 units. Applied Physics Letters, 2006, 89, 021917.	1.5	77
79	High-entropy (Y0.2Nd0.2Sm0.2Eu0.2Er0.2)AlO3: A promising thermal/environmental barrier material for oxide/oxide composites. Journal of Materials Science and Technology, 2020, 47, 45-51.	5.6	77
80	First-principles elastic stiffness of LaPO4 monazite. Applied Physics Letters, 2005, 87, 051902.	1.5	76
81	High-entropy spinel ferrites MFe2O4 (M = Mg, Mn, Fe, Co, Ni, Cu, Zn) with tunable electromagnetic properties and strong microwave absorption. Journal of Advanced Ceramics, 2022, 11, 754-768.	8.9	76
82	Crystal Structure of V₄AlC₃: A New Layered Ternary Carbide. Journal of the American Ceramic Society, 2008, 91, 636-639.	1.9	75
83	High entropy (Y0.2Yb0.2Lu0.2Eu0.2Er0.2)3Al5O12: A novel high temperature stable thermal barrier material. Journal of Materials Science and Technology, 2020, 48, 57-62.	5.6	75
84	Raman active phonon modes and heat capacities of Ti2AlC and Cr2AlC ceramics: first-principles and experimental investigations. Applied Physics Letters, 2005, 86, 101902.	1.5	74
85	(Ti_{0.5}Nb_{0.5})₅AlC₄: A Newâ€Layered Compound Belonging to MAX Phases. Journal of the American Ceramic Society, 2010, 93, 3068-3071.	1.9	74
86	Oxidation behavior of Ti3AlC2 powders in flowing air. Journal of Materials Chemistry, 2002, 12, 2781-2785.	6.7	73
87	Mechanical properties and damage tolerance of Y2SiO5. Journal of the European Ceramic Society, 2008, 28, 2895-2901.	2.8	73
88	Si-induced twinning of TiC and formation of Ti3SiC2 platelets. Acta Materialia, 2002, 50, 4127-4135.	3.8	72
89	Structural characterization of a new layered-ternary Ta4AlC3 ceramic. Journal of Materials Research, 2006, 21, 2587-2592.	1.2	72
90	Galvanostatic electrodeposition and microstructure of copper (I) oxide film. Materials Research Innovations, 1998, 2, 22-27.	1.0	70

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91	Deformation of polycrystalline Ti2AlC under compression. Materials Research Innovations, 2001, 5, 87-93.	1.0	69
92	Intermediate-temperature oxidation behavior of Ti₂AlC in air. Journal of Materials Research, 2002, 17, 2974-2981.	1.2	69
93	In situ reaction synthesis and characterization of Ti3Si(Al)C2/SiC composites. Ceramics International, 2006, 32, 883-890.	2.3	69
94	Influence of water vapor on the oxidation behavior of Ti3AlC2 and Ti2AlC. Scripta Materialia, 2008, 58, 29-32.	2.6	69
95	Microstructure, mechanical, and electrical properties of Cuâ€“Ti₃AlC₂ and in situ Cuâ€“TiC_x composites. Journal of Materials Research, 2008, 23, 924-932.	1.2	69
96	Effect of solid solution additives on the sintering of ultra-fine CeO2 powders. Journal of the European Ceramic Society, 1995, 15, 939-950.	2.8	67
97	Ab initioelastic stiffness of nano-laminate (MxMÂ2Âx)AlC (M and MÂ= Ti, V and Cr) solid solution. Journal of Physics Condensed Matter, 2004, 16, 2819-2827.	0.7	67
98	First-principles prediction of the mechanical properties and electronic structure of ternary aluminum carbideZr3Al3C5. Physical Review B, 2006, 73, .	1.1	67
99	Synthesis and Characterization of Bulk Zr₂Al₃C₄Ceramic. Journal of the American Ceramic Society, 2007, 90, 3687-3689.	1.9	67
100	Intermediate phases in synthesis of Ti3SiC2 and Ti3Si(Al)C2 solid solutions from elemental powders. Journal of the European Ceramic Society, 2006, 26, 2373-2380.	2.8	66
101	Crystal structure of Cr4AlB4: A new MAB phase compound discovered in Cr-Al-B system. Journal of Materials Science and Technology, 2019, 35, 530-534.	5.6	66
102	Polydimethylsiloxane/silica hybrid coatings protecting Kapton from atomic oxygen attack. Materials Chemistry and Physics, 2008, 112, 1093-1098.	2.0	64
103	Micro-scale plastic deformation of polycrystalline Ti3SiC2 under room-temperature compression. Journal of the European Ceramic Society, 2001, 21, 1007-1011.	2.8	63
104	Atomic-scale microstructures of Zr2Al3C4 and Zr3Al3C5 ceramics. Acta Materialia, 2006, 54, 3843-3851.	3.8	63
105	Abnormal thermal shock behavior of Ti3SiC2 and Ti3AlC2. Journal of Materials Research, 2006, 21, 2401-2407.	1.2	63
106	Microstructure and properties of bulk Ta2AlC ceramic synthesized by an in situ reaction/hot pressing method. Journal of the European Ceramic Society, 2008, 28, 1679-1685.	2.8	63
107	Theoretical prediction on mechanical and thermal properties of a promising thermal barrier material: Y4Al2O9. Journal of Advanced Ceramics, 2015, 4, 83-93.	8.9	63
108	Crystallographic relations between Ti3SiC2 and TiC. Materials Research Innovations, 2000, 3, 286-291.	1.0	62

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109	Synthesis, Physical, and Mechanical Properties of Bulk Zr3Al3C5Ceramic. Journal of the American Ceramic Society, 2007, 90, 1164-1170.	1.9	62
110	Low-temperature synthesis/densification and properties of Si2N2O prepared with Li2O additive. Journal of the European Ceramic Society, 2007, 27, 4767-4772.	2.8	60
111	Discovery of ABO₃ perovskites as thermal barrier coatings through high-throughput first principles calculations. Materials Research Letters, 2019, 7, 145-151.	4.1	60
112	Cu/Ti3SiC2 composite: a new electrofriction material. Materials Research Innovations, 1999, 3, 80-84.	1.0	59
113	Low-temperature synthesis and sintering of Î³-Y2Si2O7. Journal of Materials Research, 2006, 21, 1443-1450.	1.2	59
114	Temperature fluctuation/hot pressing synthesis of Ti3SiC2. Journal of Materials Science, 2000, 35, 4343-4346.	1.7	58
115	Ab initio modeling of the formation and migration of monovacancies in Ti2AlC. Scripta Materialia, 2008, 59, 854-857.	2.6	58
116	Resistance of polyimide/silica hybrid films to atomic oxygen attack. Surface and Coatings Technology, 2006, 200, 6671-6677.	2.2	57
117	Atomistic deformation modes and intrinsic brittleness ofAl4SiC4: A first-principles investigation. Physical Review B, 2006, 74, .	1.1	57
118	Theoretical investigation of anisotropic mechanical and thermal properties of ABO₃ (A=Sr, Ba; B=Ti, Zr, Hf) perovskites. Journal of the American Ceramic Society, 2018, 101, 3527-3540.	1.9	57
119	Tribological Properties of Polycrystalline Ti3SiC2and Al2O3-Reinforced Ti3SiC2Composites. Journal of the American Ceramic Society, 2006, 89, 3456-3461.	1.9	56
120	Variation of microstructure and composition of the Cr2AlC coating prepared by sputtering at 370 and 500Â°C. Surface and Coatings Technology, 2010, 204, 3838-3845.	2.2	56
121	Corrosion behavior of Ti3AlC2 in NaOH and H2SO4. Journal of the European Ceramic Society, 2010, 30, 3227-3234.	2.8	56
122	Theoretical prediction, synthesis, and crystal structure determination of new MAX phase compound V2SnC. Journal of Advanced Ceramics, 2020, 9, 481-492.	8.9	56
123	(TiZrHf)P2O7: An equimolar multicomponent or high entropy ceramic with good thermal stability and low thermal conductivity. Journal of Materials Science and Technology, 2019, 35, 2227-2231.	5.6	55
124	Structural defects in MAX phases and their derivative MXenes: A look forward. Journal of Materials Science and Technology, 2020, 38, 205-220.	5.6	55
125	A novel high-entropy monoboride (Mo0.2Ta0.2Ni0.2Cr0.2W0.2)B with superhardness and low thermal conductivity. Ceramics International, 2020, 46, 26626-26631.	2.3	55
126	Atomic-scale microstructure and elastic properties of quaternary Zrâ€“Alâ€“Siâ€“C ceramics. Acta Materialia, 2008, 56, 2022-2031.	3.8	54

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127	Theoretical Investigation on Mechanical and Thermal Properties of a Promising Thermal Barrier Material: Yb3Al5O12. Journal of Materials Science and Technology, 2014, 30, 631-638.	5.6	54
128	Shear strength and shear failure of layered machinable Ti3AlC2 ceramics. Journal of the European Ceramic Society, 2004, 24, 855-860.	2.8	53
129	Preparation Of TiC Free Ti3SiC2 With Improved Oxidation Resistance By Substitution Of Si With Al. Materials Research Innovations, 2004, 8, 97-102.	1.0	52
130	Theoretical investigation of A-element atom diffusion in Ti2AC (A=Sn, Ga, Cd, In, and Pb). Applied Physics Letters, 2009, 94, .	1.5	52
131	Insights into high temperature oxidation of Al2O3-forming Ti3AlC2. Corrosion Science, 2012, 58, 95-103.	3.0	52
132	Segregation of solute atoms (Y, Nb, Ta, Mo and W) in ZrB2 grain boundaries and their effects on grain boundary strengths: A first-principles investigation. Acta Materialia, 2017, 127, 312-318.	3.8	52
133	Application of high-throughput first-principles calculations in ceramic innovation. Journal of Materials Science and Technology, 2021, 88, 143-157.	5.6	52
134	Chemical reaction and stability of Ti₃SiC₂in Cu during high-temperature processing of Cu/Ti₃SiC₂composites. International Journal of Materials Research, 2004, 95, 50-56.	0.8	51
135	Effect of grain size, notch width, and testing temperature on the fracture toughness of Ti3Si(Al)C2 and Ti3AlC2 using the chevron-notched beam (CNB) method. Journal of the European Ceramic Society, 2008, 28, 663-669.	2.8	51
136	In Situ Processing and High-Temperature Properties of Ti3Si(Al)C2/SiC Composites. International Journal of Applied Ceramic Technology, 2006, 3, 47-54.	1.1	50
137	Corrosion behavior of selected Mn+1AXn phases in hot concentrated HCl solution: Effect of A element and MX layer. Corrosion Science, 2012, 60, 129-135.	3.0	50
138	Preparation, mechanical, and thermal properties of a promising thermal barrier material: Y4Al2O9. Journal of Advanced Ceramics, 2015, 4, 94-102.	8.9	50
139	Short-term oxidation resistance and degradation of Cr2AlC coating on M38G superalloy at 900â€“1100 Â°C. Corrosion Science, 2011, 53, 3813-3820.	3.0	49
140	Low thermal conductivity and high porosity ZrC and HfC ceramics prepared by in-situ reduction reaction/partial sintering method for ultrahigh temperature applications. Journal of Materials Science and Technology, 2019, 35, 2778-2784.	5.6	49
141	Seed-mediated synthesis of uniform ZnO nanorods in the presence of polyethylene glycol. Journal of Crystal Growth, 2004, 270, 527-534.	0.7	48
142	Damage tolerance of nanolayer grained ceramics and quantitative estimation. Materials Science and Technology, 2006, 22, 227-230.	0.8	48
143	Ab initio study of polymorphism in layered ternary carbide M4AlC3 (M=V, Nb and Ta). Scripta Materialia, 2008, 58, 1043-1046.	2.6	48
144	Highly conductive and strengthened copper matrix composite reinforced by Zr2Al3C4 particulates. Scripta Materialia, 2009, 60, 976-979.	2.6	48

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145	First-principles study of equilibrium properties and electronic structure of Ti3Si0.75Al0.25C2solid solution. Journal of Physics Condensed Matter, 2003, 15, 5959-5968.	0.7	47
146	Electrochemical deposition and characterization of Cu2O nanowires. Applied Physics A: Materials Science and Processing, 2005, 81, 685-689.	1.1	47
147	Interfacial microstructure of Ti3AlC2 and Al2O3 oxide scale. Scripta Materialia, 2006, 54, 1815-1820.	2.6	47
148	Effect of reaction routes on the porosity and permeability of porous high entropy (Y0.2Yb0.2Sm0.2Nd0.2Eu0.2)B6 for transpiration cooling. Journal of Materials Science and Technology, 2020, 38, 80-85.	5.6	47
149	Temperature Dependent Thermal and Elastic Properties of High Entropy (Ti0.2Zr0.2Hf0.2Nb0.2Ta0.2)B2: Molecular Dynamics Simulation by Deep Learning Potential. Journal of Materials Science and Technology, 2021, 72, 8-15.	5.6	47
150	Crystal structure and theoretical elastic property of two new ternary ceramics Hf3Al4C6 and Hf2Al4C5. Scripta Materialia, 2008, 58, 679-682.	2.6	46
151	Zn0.1Ca0.1Sr0.4Ba0.4ZrO3: A non-equimolar multicomponent perovskite ceramic with low thermal conductivity. Journal of the European Ceramic Society, 2020, 40, 6272-6277.	2.8	46
152	Enabling highly efficient and broadband electromagnetic wave absorption by tuning impedance match in high-entropy transition metal diborides (HE TMB2). Journal of Advanced Ceramics, 2021, 10, 1299-1316.	8.9	46
153	Synthesis and oxidation of Zr₃Al₃C₅ powders. International Journal of Materials Research, 2007, 98, 3-9.	0.1	45
154	Microstructure and mechanical strength of diffusion-bonded Ti3SiC2/Ni joints. Journal of Materials Research, 2006, 21, 2415-2421.	1.2	44
155	Oxidation behavior of bulk Ti3SiC2 at intermediate temperatures in dry air. Journal of Materials Research, 2006, 21, 402-408.	1.2	44
156	Atomic scale characterization of layered ternary Cr2AlC ceramic. Journal of Applied Physics, 2006, 99, 076109.	1.1	44
157	Thermal stability of Ti3AlC2/Al2O3 composites in high vacuum. Materials Chemistry and Physics, 2007, 104, 109-112.	2.0	44
158	Solidâ€“liquid reaction synthesis and thermal stability of Ti2SnC powders. Journal of Materials Chemistry, 2001, 11, 1402-1407.	6.7	43
159	Reactive Hot Pressing and Properties of Nb₂AlC. Journal of the American Ceramic Society, 2009, 92, 2396-2399.	1.9	43
160	Pressureless Sintering and Properties of Ti₃AlC₂. International Journal of Applied Ceramic Technology, 2010, 7, 744-751.	1.1	43
161	Preparation, Microstructure, and Mechanical Properties of <scp><scp>TiB</scp></scp>₂ Using <scp><scp>Ti</scp></scp>₃<scp><scp>AlC</scp></scp>₂ as a Sintering Aid. Journal of the American Ceramic Society, 2012, 95, 2028-2034.	1.9	43
162	Preparation of Reticulated MAXâ€Phase Support with Morphologyâ€Controllable Nanostructured Ceria Coating for Gas Exhaust Catalyst Devices. Journal of the American Ceramic Society, 2010, 93, 2591-2597.	1.9	42

#	Article	IF	Citations
163	Fluctuation synthesis and characterization of Ti3SiC2 powders. Materials Research Innovations, 1999, 2, 227-231.	1.0	41
164	Preparation of Ti2SnC by solidâ€"liquid reaction synthesis and simultaneous densification method. Materials Research Innovations, 2002, 6, 219-225.	1.0	41
165	Oxidation of Zr₂[Al(Si)]₄C₅ and Zr₃[Al(Si)]₄C₆ in air. Journal of Materials Research, 2008, 23, 3339-3346.	1.2	41
166	Theoretical investigation of thermodynamic stability and mobility of the intrinsic point defects in Ti₃AC₂ (A = Si, Al). Physical Chemistry Chemical Physics, 2015, 17, 8927-8934.	1.3	41
167	Oxidation behavior of TiC-containing Ti3AlC2 based material at 500â€"900 Â°C in air. Materials Research Innovations, 2003, 7, 381-390.	1.0	40
168	Oxidation resistance of Cr1â^'xAlxN (0.18â‰¤xâ‰¤0.47) coatings on K38G superalloy at 1000â€"1100Â°C in air. Surface and Coatings Technology, 2006, 201, 2878-2886.	2.2	40
169	Mechanical and Thermophysical Properties of Zrâ€"Alâ€"Siâ€"C Ceramics. Journal of the American Ceramic Society, 2009, 92, 445-451.	1.9	40
170	Microstructural relationships between compounds in the Tiâ€"Siâ€"C system. Scripta Materialia, 2006, 55, 445-448.	2.6	39
171	Isothermal oxidation of bulk Zr₂Al₃C₄ at 500 to 1000 Â°C in air. Journal of Materials Research, 2008, 23, 359-366.	1.2	39
172	High-temperature internal friction, stiffness and strength of Zrâ€"Al(Si)â€"C ceramics. Scripta Materialia, 2009, 61, 60-63.	2.6	39
173	Reciprocating friction and wear behavior of Ti3AlC2 and Ti3AlC2/Al2O3 composites against AISI52100 bearing steel. Wear, 2009, 266, 158-166.	1.5	39
174	Ab initio computations of electronic, mechanical, lattice dynamical and thermal properties of ZrP2O7. Journal of the European Ceramic Society, 2014, 34, 1809-1818.	2.8	39
175	First-principles investigation of intrinsic defects and (N, O) impurity atom stimulated Al vacancy in Ti2AlC. Applied Physics Letters, 2008, 93, .	1.5	38
176	Surface Chemistry, Dispersion Behavior, and Slip Casting of Ti₃AlC₂ Suspensions. Journal of the American Ceramic Society, 2009, 92, 1695-1702.	1.9	37
177	Thermal properties of a prospective thermal barrier material: Yb₃Al₅O₁₂. Journal of Materials Research, 2014, 29, 2673-2681.	1.2	37
178	Mechanical and thermal properties of Yb₂SiO₅: First-principles calculations and chemical bond theory investigations. Journal of Materials Research, 2014, 29, 1609-1619.	1.2	37
179	Discovery of carbon-vacancy ordering in Nb4AlC3â€"x under the guidance of first-principles calculations. Scientific Reports, 2015, 5, 14192.	1.6	37
180	Cr5Si3B and Hf5Si3B: New MAB phases with anisotropic electrical, mechanical properties and damage tolerance. Journal of Materials Science and Technology, 2018, 34, 1441-1448.	5.6	37

#	Article	IF	Citations
181	Polymorphism of Ti₃SiC₂. Journal of Materials Research, 2002, 17, 948-950.	1.2	36
182	Reactions between Al and Ti3SiC2 in temperature range of 600â€“650 Â°C. Scripta Materialia, 2003, 49, 1075-1080.	2.6	36
183	Assessing the elastic parameters and energy-dissipation capacity of solid materials: A residual indent may tell all. Acta Materialia, 2005, 53, 4857-4862.	3.8	36
184	Effect of LiYO₂ on the synthesis and pressureless sintering of Y₂SiO₅. Journal of Materials Research, 2008, 23, 732-736.	1.2	36
185	Synthesis and characterization of Î²-Yb2Si2O7 powders. Ceramics International, 2013, 39, 5805-5811.	2.3	36
186	First-principles investigation on the chemical bonding, elastic properties and ideal strengths of MoAlB and WAlB nanolaminated MAB phases. Computational Materials Science, 2018, 147, 331-337.	1.4	36
187	High entropy rare earth hexaborides/tetraborides (HE REB6/HE REB4) composite powders with enhanced electromagnetic wave absorption performance. Journal of Materials Science and Technology, 2021, 87, 155-166.	5.6	36
188	Ab initioinvestigation of the electronic structure and bonding properties of the layered ternary compound Ti3SiC2at high pressure. Journal of Physics Condensed Matter, 2003, 15, 1983-1991.	0.7	35
189	Evaluating elastic modulus and strength of hard coatings by relative method. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 458, 268-274.	2.6	35
190	Microstructural characterization of bulk Ti3AlC2ceramics. Philosophical Magazine, 2004, 84, 2969-2977.	0.7	34
191	Hot corrosion and protection of Ti2AlC against Na2SO4 salt in air. Journal of the European Ceramic Society, 2006, 26, 3871-3879.	2.8	34
192	Effect of SiC particles on the friction and wear behavior of Ti3Si(Al)C2-based composites. Wear, 2007, 262, 826-832.	1.5	34
193	Amorphization by dislocation accumulation in shear bands. Acta Materialia, 2009, 57, 2851-2857.	3.8	34
194	Mechanical properties of Ti3SiC2particulate reinforced copper prepared by hot pressing of copper coated Ti3SiC2and copper powder. Materials Science and Technology, 2004, 20, 661-665.	0.8	33
195	Superior mechanical properties of Nb2AsC to those of other layered ternary carbides: a first-principles study. Journal of Physics Condensed Matter, 2006, 18, L527-L533.	0.7	33
196	Material removal and surface damage in EDM of Ti3SiC2 ceramic. Ceramics International, 2008, 34, 537-541.	2.3	33
197	Microstructure and mechanical and thermal properties of ternary carbides in Hfâ€“Alâ€“C system. Acta Materialia, 2009, 57, 2765-2774.	3.8	33
198	Temperature-dependence of structural and mechanical properties of TiB2: A first principle investigation. Journal of Applied Physics, 2015, 117, .	1.1	33

#	Article	IF	Citations
199	Theoretical investigations on mechanical and dynamical properties of MAlB (MÂ=ÂMo, W) nanolaminated borides at ground-states and elevated temperatures. Journal of Alloys and Compounds, 2018, 738, 461-472.	2.8	33
200	Elastic and thermal properties of Zr2Al3C4: Experimental investigations and ab initio calculations. Journal of Applied Physics, 2007, 102, .	1.1	32
201	In-situ reaction synthesis and decomposition of Ta₂AlC. International Journal of Materials Research, 2008, 99, 8-13.	0.1	32
202	Mechanism of Intrinsic Point Defects and Oxygen Diffusion in Yttrium Aluminum Garnet: Firstâ€Principles Investigation. Journal of the American Ceramic Society, 2012, 95, 3628-3633.	1.9	32
203	Layered stacking characteristics of ternary zirconium aluminum carbides. Journal of Materials Research, 2007, 22, 3058-3066.	1.2	31
204	Trend in crystal structure of layered ternary T-Al-C carbides (T = Sc, Ti, V, Cr, Zr, Nb, Mo,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.2	31
205	Theoretical Study on the Mechanism of Anisotropic Thermal Properties of <scp><scp>Ti</scp></scp>₂<scp><scp>AlC</scp></scp> and <scp><scp>Cr</scp></scp>₂<scp><scp>AlC</scp></scp>. Journal of the American Ceramic Society, 2014, 97, 1202-1208.	1.9	31
206	Microstructure and mechanical properties of h-BN/Y2SiO5 composites. Ceramics International, 2015, 41, 1279-1283.	2.3	31
207	Preparation and mechanical properties of dense polycrystalline hydroxyapatite through freeze-drying. Journal of Materials Science: Materials in Medicine, 1998, 9, 583-587.	1.7	30
208	Electronic structure of the layered ternary carbides Ti2SnC and Ti2GeC. Journal of Physics Condensed Matter, 2000, 12, 9617-9627.	0.7	30
209	First-principles investigations of the stability and electronic structure of ZrV2Hx (x=0.5, 1, 2, 3, 4, 6) Tj ETQq1 1 0.784314 rgBT /Overlock	3.8	30
210	Kinetics and Mechanism of Hot Corrosion of Î³â€Y₂Si₂O₇ in Thinâ€Film Na₂SO₄ Molten Salt. Journal of the American Ceramic Society, 2008, 91, 2236-2242.	1.9	30
211	Synthesis and elastic properties of V₂AlC thin films by magnetron sputtering from elemental targets. Journal Physics D: Applied Physics, 2009, 42, 185408.	1.3	30
212	Chemical bonding and mechanical properties of M₂AC (M = Ti, V, Cr,) Tj ETQq0 0 0 rgBT /Overlock 10 2009, 24, 556-564.	1.2	30
213	Direct diffusion bonding of Ti3SiC2 and Ti3AlC2. Materials Research Bulletin, 2009, 44, 1379-1384.	2.7	30
214	Effect of Ti5Si3 on wear properties of Ti3Si(Al)C2. Journal of the European Ceramic Society, 2009, 29, 3379-3385.	2.8	30
215	A New Method to Improve the Highâ€Temperature Mechanical Properties of Ti₃SiC₂by Substituting Ti with Zr, Hf, or Nb. Journal of the American Ceramic Society, 2010, 93, 1749-1753.	1.9	30
216	Understanding Formation Mechanism of Titanate Nanowires through Hydrothermal Treatment of Various Ti-Containing Precursors in Basic Solutions. Journal of Materials Science and Technology, 2012, 28, 488-494.	5.6	30

#	Article	IF	Citations
217	Theoretical investigation of mechanical and thermal properties of MPO4 (M=Al, Ga). Journal of the European Ceramic Society, 2013, 33, 2817-2821.	2.8	30
218	Electronic Structure and Mechanical Properties of NiB: A Promising Interphase Material for Future UHTC_f/UHTC Composites. Journal of the American Ceramic Society, 2016, 99, 2110-2119.	1.9	30
219	(Ca,Sr,Ba)ZrO3: A promising entropy-stabilized ceramic for titanium alloys smelting. Journal of Materials Science and Technology, 2021, 65, 82-88.	5.6	30
220	Basal-plane slip systems and polymorphic phase transformation in Ti2AlC and Ti2AlN: aÂfirst-principles study. Journal of Physics Condensed Matter, 2006, 18, 6183-6192.	0.7	29
221	Ultrahigh-temperature oxidation of Zr2Al3C4 via rapid induction heating. Scripta Materialia, 2009, 60, 547-550.	2.6	29
222	<scp><scp>Ti</scp></scp>₅<scp><scp>Al</scp></scp>₂<scp><scp>C</scp></scp>₃: A New Ternary Carbide Belonging to <scp>MAX</scp> Phases in the <scp><scp>Ti</scp></scp>â€“<scp><scp>Al</scp></scp>â€“<scp><scp>C</scp></scp> System. Journal of the American Ceramic Society, 2012, 95, 1508-1510.	1.9	29
223	Porous YbB₆ Ceramics Prepared by In Situ Reaction between Yb₂O₃ and B₄C Combined with Partial Sintering. Journal of the American Ceramic Society, 2015, 98, 2234-2239.	1.9	29
224	Synthesis of ZrCâ€“SiC Powders from Hybrid Liquid Precursors with Improved Oxidation Resistance. Journal of the American Ceramic Society, 2015, 98, 197-204.	1.9	29
225	Electrochemical Synthesis and Room Temperature Oxidation Behavior of Cu Nanowires. Journal of Materials Research, 2005, 20, 2371-2378.	1.2	28
226	Mechanical and Thermal Properties of Antiperovskite Ti₃AlC Prepared by an In Situ Reaction/Hotâ€Pressing Route. Journal of the American Ceramic Society, 2009, 92, 2698-2703.	1.9	28
227	Transient of alumina oxide scale on Î²-NiAl coated on M38G alloy at 950Â°C. Intermetallics, 2007, 15, 1285-1290.	1.8	27
228	In SituSynthesis and Properties of Ti₃AlC₂/TiB₂Composites. Journal of the American Ceramic Society, 2007, 90, 3615-3620.	1.9	27
229	Diffusion bonding of Ti3AlC2 ceramic via a Si interlayer. Journal of Materials Science, 2007, 42, 7081-7085.	1.7	27
230	Surface strengthening of Ti3SiC2 through magnetron sputtering Cu and subsequent annealing. Journal of the European Ceramic Society, 2008, 28, 2099-2107.	2.8	27
231	Titanium Silicon Carbide Pest Induced by Nitridation. Journal of the American Ceramic Society, 2008, 91, 494-499.	1.9	27
232	Theoretical investigations on mechanical and thermal properties of MSiO₄ (M = Zr, Hf). Journal of Materials Research, 2015, 30, 2030-2039.	1.2	27
233	Cyclic-Oxidation Behavior of Ti3SiC2-Base Material at 1100Â°C. Oxidation of Metals, 2002, 57, 379-394.	1.0	26
234	Investigation of Native Point Defects and Nonstoichiometry Mechanisms of Two Yttrium Silicates by Firstâ€Principles Calculations. Journal of the American Ceramic Society, 2013, 96, 3304-3311.	1.9	26

#	Article	IF	Citations
235	The compressive property and brittle-to-ductile transition of Ti3SiC2 ceramics. Materials Research Innovations, 1999, 3, 171-174.	1.0	25
236	The anomalous flow behaviour in the layered Ti3SiC2ceramic. Philosophical Magazine Letters, 2000, 80, 289-293.	0.5	25
237	Evaluating high-temperature modulus and elastic recovery of Ti3SiC2 and Ti3AlC2 ceramics. Materials Letters, 2003, 57, 4018-4022.	1.3	25
238	Reactions between Ti and Ti3SiC2 in temperature range of 1273-1573 K. Transactions of Nonferrous Metals Society of China, 2006, 16, 1281-1288.	1.7	25
239	Investigation on reliability of nanolayer-grained Ti3SiC2 via Weibull statistics. Journal of Materials Science, 2007, 42, 4470-4475.	1.7	25
240	Hot corrosion of Î³-Y2Si2O7 in strongly basic Na2CO3 molten salt environment. Journal of the European Ceramic Society, 2008, 28, 259-265.	2.8	25
241	Stable M₂AlC(0001) surfaces (M = Ti, V and Cr) by first-principles investigation. Journal of Physics Condensed Matter, 2008, 20, 225006.	0.7	25
242	First-principles study of oxygen incorporation and migration mechanisms in Ti₂AlC. Journal of Materials Research, 2009, 24, 3190-3196.	1.2	25
243	High-temperature mechanical and thermal properties of h-BN/30 vol%Y2SiO5 composite. Ceramics International, 2015, 41, 10891-10896.	2.3	25
244	Electronic structure and mechanical properties of layered compound YB2C2: A promising precursor for making two dimensional (2D) B2C2 nets. Journal of Materials Science and Technology, 2017, 33, 1044-1054.	5.6	25
245	Discovery of ABO4 scheelites with the extra low thermal conductivity through high-throughput calculations. Journal of Materiomics, 2020, 6, 702-711.	2.8	25
246	(Cr0.2Mn0.2Fe0.2Co0.2Mo0.2)B: A novel high-entropy monoboride with good electromagnetic interference shielding performance in K-band. Journal of Materials Science and Technology, 2021, 77, 58-65.	5.6	25
247	Synthesis and characterization of ternary layered Nb2SB ceramics fabricated by spark plasma sintering. Journal of Alloys and Compounds, 2021, 878, 160344.	2.8	25
248	Improved thermal stability and infrared emissivity of high-entropy REMgAl11O19 and LaMAl11O19 (RE=La,) Tj ETQq0 0 0 rgBT /Overlock	5.6	25
249	Hot corrosion behavior of Ti3SiC2 in the mixture of Na2SO4â€“NaCl melts. Journal of the European Ceramic Society, 2005, 25, 1033-1039.	2.8	24
250	Microstructure and mechanical strength of transient liquid phase bonded Ti3SiC2 joints using Al interlayer. Journal of the European Ceramic Society, 2007, 27, 3539-3544.	2.8	24
251	Joining of Tiâ€“Alâ€“C ceramics by oxidation at low oxygen partial pressure. Journal of the European Ceramic Society, 2009, 29, 2619-2625.	2.8	24
252	Mechanisms and Kinetics of the Hydrothermal Oxidation of Bulk Titanium Silicon Carbide. Journal of the American Ceramic Society, 2010, 93, 1148-1155.	1.9	24

#	Article	IF	Citations
253	Effects of transition metal (TM = Zr, Hf, Nb, Ta, Mo, W) elements on the shear properties of TMB2s: A first-principles investigation. Computational Materials Science, 2016, 117, 266-269.	1.4	24
254	Effect of SI Content on the Oxidation Resistance of Ti3Al1-x Si x C2 (xâ©½ 0.25) Solid Solutions at 1000â€“1400Â°C in Air. Oxidation of Metals, 2006, 65, 123-135.	1.0	23
255	Improving the Highâ€Temperature Oxidation Resistance of Ti₃(SiAl)C₂by Nbâ€Doping. Journal of the American Ceramic Society, 2011, 94, 3579-3586.	1.9	23
256	<scp><scp>Y</scp></scp>₄<scp><scp>Si</scp></scp>₂<scp><scp>O</scp></scp>₇<scp><scp>N</scp></scp>₂: A New Oxynitride with Low Thermal Conductivity. Journal of the American Ceramic Society, 2012, 95, 3278-3284.	1.9	23
257	Influence of carbon on phase stability of tetragonal ZrO2. Ceramics International, 2014, 40, 5645-5651.	2.3	23
258	Insights into Highâ€Temperature Uniaxial Compression Deformation Behavior of Ti₃AlC₂. Journal of the American Ceramic Society, 2015, 98, 3332-3337.	1.9	23
259	Preparation of porous YB4 ceramics using a combination of in-situ borothermal reaction and high temperature partial sintering. Journal of the European Ceramic Society, 2015, 35, 3411-3418.	2.8	23
260	Oxidation behavior and thermal stability of Cr2AlB2 powders. Corrosion Science, 2020, 176, 108941.	3.0	23
261	Electronic Structure and Structural Properties of Ti4AlN3Investigated byAb initioCalculations. Journal of the Physical Society of Japan, 2002, 71, 1313-1317.	0.7	22
262	Stacking faults and grain boundaries of Ti 3 SiC 2. Philosophical Magazine Letters, 2003, 83, 325-331.	0.5	22
263	Phase segregation and its effect on the adhesion of Crâ€“Alâ€“N coatings on K38G alloy prepared by magnetron sputtering method. Surface and Coatings Technology, 2007, 201, 7692-7698.	2.2	22
264	Interfacial structure of V2AlC thin films deposited on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:mo		

#	Article	IF	Citations
271	Effect of Processing Temperature on the Morphology of Silicon Carbide Whiskers. Journal of the American Ceramic Society, 1991, 74, 447-449.	1.9	21
272	Hot Corrosion of Na[sub 2]SO[sub 4]-Coated Ti[sub 3]AlC[sub 2] in Air at 700-1000Â°C. Journal of the Electrochemical Society, 2004, 151, B505.	1.3	21
273	Improving the surface hardness and wear resistance of Ti3SiC2 by boronizing treatment. Surface and Coatings Technology, 2007, 201, 6005-6011.	2.2	21
274	High temperature corrosion behavior of a multilayer CrAlN coating prepared by magnetron sputtering method on a K38G alloy. Surface and Coatings Technology, 2008, 202, 1985-1993.	2.2	21
275	A novel Ni2AlTi-containing composite with excellent wear resistance and anomalous flexural strength. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 597, 70-74.	2.6	21
276	Shear anisotropy: Tuning high temperature metal hexaborides from soft to extremely hard. Journal of Materials Science and Technology, 2017, 33, 1371-1377.	5.6	21
277	Hot corrosion of Ti3SiC2-based ceramics coated with Na2SO4 at 900 and 1000 Â°C in air. Corrosion Science, 2003, 45, 1217-1226.	3.0	20
278	High-Temperature Oxidation Behavior of a Polycrystalline Ti₂SnC Ceramic. Oxidation of Metals, 2004, 61, 365-377.	1.0	20
279	Investigation on the properties of Nb and Al doped Ti3SiC2 as a new interconnect material for IT-SOFC. International Journal of Hydrogen Energy, 2012, 37, 1084-1088.	3.8	20
280	Solidâ€“liquid synthesis of Ti3SiC2 particulate by fluctuation procedure. Scripta Materialia, 2003, 49, 249-253.	2.6	19
281	Synthesis of AlN nanowires by nitridation of Ti3Si0.9Al0.1C2 solid solution. Journal of Materials Research, 2007, 22, 561-564.	1.2	19
282	Preparation and properties of Si2N2O/Î²-cristobalite composites. Journal of the European Ceramic Society, 2008, 28, 1227-1234.	2.8	19
283	Theoretical investigations on mechanical anisotropy and intrinsic thermal conductivity of YbAlO 3. Journal of the European Ceramic Society, 2015, 35, 1549-1557.	2.8	19
284	Electronic structure of the layered compound Ti3GeC2. Journal of Applied Physics, 1999, 86, 1430-1432.	1.1	18
285	Influence of Al-La Cocementation on the Oxidation Behavior of Ti3SiC2-Base Ceramic. Oxidation of Metals, 2003, 60, 179-193.	1.0	18
286	Neutron diffraction studies of Ti3Si0.9Al0.1C2 compound. Materials Letters, 2005, 59, 2715-2719.	1.3	18
287	Influence of solâ€“gel derived Al2O3 film on the oxidation behavior of a Ti3Al based alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 415, 177-183.	2.6	18
288	Microstructure, mechanical, thermal, and oxidation properties of a Zr2[Al(Si)]4C5â€“SiC composite prepared by in situ reaction/hot-pressing. Journal of the European Ceramic Society, 2010, 30, 2147-2154.	2.8	18

#	Article	IF	Citations
289	A Novel Method to Make Tough Ti₂AlC/Al₂O₃â€•and Ti₃AlC₂/Al₂O₃â€Laminated Composites. Journal of the American Ceramic Society, 2010, 93, 4110-4114.	1.9	18
290	Crystal structure determination of nanolaminated Ti5Al2C3 by combined techniques of XRPD, TEM and ab initio calculations. Journal of Advanced Ceramics, 2012, 1, 268-273.	8.9	18
291	Mechanisms of Monoâ€Vacancy and Oxygen Permeability in <scp><scp>Y₂SiO₅</scp></scp> Orthosilicate Studied by Firstâ€Principles Calculations. Journal of the American Ceramic Society, 2012, 95, 1093-1099.	1.9	18
292	Crystal structure, mechanical and thermal properties of Yb4Al2O9: A combination of experimental and theoretical investigations. Journal of the European Ceramic Society, 2017, 37, 2491-2499.	2.8	18
293	Theoretical predictions on intrinsic lattice thermal conductivity of ZrB2. Journal of the European Ceramic Society, 2019, 39, 2982-2988.	2.8	18
294	The electronic structure and chemical bonding of Ti3GeC2. Journal of Materials Chemistry, 2000, 10, 343-345.	6.7	17
295	Microstructures and Adhesion of the Oxide Scale Formed on Titanium Aluminum Carbide Substrates. Journal of the American Ceramic Society, 2006, 89, 060623005134003-???.	1.9	17
296	Hydrolysis and Dispersion Properties of Aqueous Y₂Si₂O₇ Suspensions. Journal of the American Ceramic Society, 2009, 92, 54-61.	1.9	17
297	Tribological properties of Î³-Y2Si2O7 ceramic against AISI 52100 steel and Si3N4 ceramic counterparts. Wear, 2009, 266, 960-967.	1.5	17
298	M2M'AlB4 (M = Mn, Fe, Co, M' = Cr, Mo, W): Theoretical predicted ordered MAB phases with Cr3AlB4 crystal structure. Journal of Materials Science and Technology, 2019, 35, 1432-1438.	5.6	17
299	On the potential of porous ZrP2O7 ceramics for thermal insulating and wave-transmitting applications at high temperatures. Journal of the European Ceramic Society, 2020, 40, 789-797.	2.8	17
300	Grain boundary strengthening in ZrB2 by segregation of W: Atomistic simulations with deep learning potential. Journal of the European Ceramic Society, 2020, 40, 5029-5036.	2.8	17
301	Abnormal thermal expansion and thermal stability of Ti3Al1â^'xSixC2 solid solutions. Scripta Materialia, 2006, 55, 675-678.	2.6	16
302	Synthesis, Microstructure, and Mechanical Properties of Al₃BC₃. Journal of the American Ceramic Society, 2008, 91, 2343-2348.	1.9	16
303	Fracture toughness determination of Ti3Si(Al)C2 and Al2O3 using a single gradient notched beam (SGNB) method. Journal of the European Ceramic Society, 2009, 29, 763-771.	2.8	16
304	Hydrothermal Oxidation Behavior of Bulk Titanium Aluminum Carbide. Journal of the American Ceramic Society, 2011, 94, 3460-3466.	1.9	16
305	Theoretical prediction on electronic structure, mechanical properties and lattice dynamics of YB 4 for ultrahigh temperature applications. Journal of the European Ceramic Society, 2015, 35, 4437-4445.	2.8	16
306	Theoretical prediction on the stability, electronic structure, room and elevated temperature properties of a new MAB phase Mo2AlB2. Journal of Materials Science and Technology, 2019, 35, 2926-2934.	5.6	16

#	Article	IF	Citations
307	High strength and high porosity YB2C2 ceramics prepared by a new high temperature reaction/ partial sintering process. Journal of Materials Science and Technology, 2019, 35, 2883-2891.	5.6	16
308	Grain boundary segregation induced strong UHTCs at elevated temperatures: A universal mechanism from conventional UHTCs to high entropy UHTCs. Journal of Materials Science and Technology, 2022, 123, 26-33.	5.6	16
309	Corrosion behavior and strength degradation of Ti3SiC2 exposed to a eutectic K2CO3 and Li2CO3 mixture. Journal of the European Ceramic Society, 2003, 23, 1957-1962.	2.8	15
310	Interfacial reaction between Cu and Ti₂SnC during processing of Cu-Ti₂SnC composite. International Journal of Materials Research, 2005, 96, 1314-1320.	0.8	15
311	Mechanical and electrical properties of Ti₂SnC dispersion-strengthened copper. International Journal of Materials Research, 2005, 96, 847-852.	0.8	15
312	Influence of pre-oxidation on the hot corrosion of Ti3SiC2 in the mixture of Na2SO4â€“NaCl melts. Corrosion Science, 2006, 48, 650-661.	3.0	15
313	Failure-mode dependence of the strengthening effect in Ti3AlC2/10 vol.% Al2O3 composite. International Journal of Materials Research, 2006, 97, 1115-1118.	0.1	15
314	Improved strength-impairing contact damage resistance of Ti3Si(Al)C2/SiC composites. Journal of the European Ceramic Society, 2007, 27, 2069-2076.	2.8	15
315	Preparation and Properties of Machinable Si₂N₂O/BN Composites. International Journal of Applied Ceramic Technology, 2008, 5, 295-304.	1.1	15
316	Synthesis of Ti3SiC2 by high energy ball milling and reactive sintering from Ti, Si, and C elements. Journal of Nuclear Materials, 2009, 386-388, 647-649.	1.3	15
317	Atomic-scale studies of native point defect and nonstoichiometry in silicon oxynitride. Journal of Physics and Chemistry of Solids, 2009, 70, 982-988.	1.9	15
318	Hf₃AlN: A Novel Layered Ternary Ceramic with Excellent Damage Tolerance. Journal of the American Ceramic Society, 2010, 93, 228-234.	1.9	15
319	Al stabilized TiC twinning platelets. Journal of Materials Research, 2014, 29, 1113-1121.	1.2	15
320	Y5Si3C and Y3Si2C2: Theoretically predicted MAX phase like damage tolerant ceramics and promising interphase materials for SiCf/SiC composites. Journal of Materials Science and Technology, 2019, 35, 313-322.	5.6	15
321	Anti-perovskite carbides and nitrides A3BX: A new family of damage tolerant ceramics. Journal of Materials Science and Technology, 2020, 40, 64-71.	5.6	15
322	Electromagnetic wave absorbing properties of Cr 2 AlB 2 powders and the effect of highâ€temperature oxidation. Journal of the American Ceramic Society, 2021, 104, 2213-2224.	1.9	15
323	Development of two-dimensional titanium tin carbide (Ti2SnC) plates based on the electronic structure investigation. Materials Research Innovations, 2000, 4, 36-41.	1.0	14
324	Oxidation behavior of silicide coating on Ti3SiC2-based ceramic. Materials Research Innovations, 2002, 6, 226-231.	1.0	14

#	Article	IF	Citations
325	First-principles investigation on chemical bonding and bulk modulus of the ternary carbideZr2Al3C5. Physical Review B, 2005, 72, .	1.1	14
326	Temperature Dependence of Elastic Properties for Amorphous SiO ₂ by Molecular Dynamics Simulation. Chinese Physics Letters, 2008, 25, 2747-2750.	1.3	14
327	Effect of Al dopant on the hydrothermal oxidation behavior of Ti3SiC2 powders. Journal of the European Ceramic Society, 2009, 29, 2097-2103.	2.8	14
328	In situ Reaction Synthesis and Mechanical Properties of TaCâ€“TaSi₂ Composites. International Journal of Applied Ceramic Technology, 2010, 7, 697-703.	1.1	14
329	Theoretical prediction, preparation, and mechanical properties of YbB6, a candidate interphase material for future UHTCf/UHTC composites. Journal of the European Ceramic Society, 2016, 36, 3571-3579.	2.8	14
330	Influence of ordered carbonâ€vacancy networks on the electronic structures and elastic properties of Nb₄AlC_{3â^'x}. Journal of the American Ceramic Society, 2017, 100, 724-731.	1.9	14
331	Unraveling surface functionalization of Cr2B2T2 (TÂ=ÂOH, O, Cl, H) MBene by first-principles calculations. Computational Materials Science, 2021, 199, 110810.	1.4	14
332	Cracking behavior of oxide scale formed on Ti3SiC2-based ceramic. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 360, 408-414.	2.6	13
333	Improving the Na2SO4-induced corrosion resistance of Ti3AlC2 by pre-oxidation in air. Corrosion Science, 2006, 48, 3271-3280.	3.0	13
334	Microstructure and Highâ€Temperature Corrosion Behavior of a Crâ€“Alâ€“C Composite. Journal of the American Ceramic Society, 2007, 90, 3930-3937.	1.9	13
335	Joining of Ti₃SiC₂ by Magnetron Sputtering a Layer of Cu or Zr Followed by Heat Treating at Relatively Low Temperatures. Journal of the American Ceramic Society, 2011, 94, 3072-3077.	1.9	13
336	Role of Nanolaminated Crystal Structure on the Radiation Damage Tolerance of Ti₃SiC₂: Theoretical Investigation of Native Point Defects. Journal of Nanomaterials, 2013, 2013, 1-5.	1.5	13
337	Developments in hot pressing (HP) and hot isostatic pressing (HIP) of ceramic matrix composites. , 2014, , 164-189.		13
338	Synthesis, characterization, and sintering behavior of Yb3Al5O12 powders. Ceramics International, 2015, 41, 1735-1742.	2.3	13
339	A Theoretical Investigation on the Anisotropic Surface Stability and Oxygen Adsorption Behavior of ZrB₂. Journal of the American Ceramic Society, 2016, 99, 4113-4120.	1.9	13
340	Theoretical predicted high-thermal-conductivity cubic Si3N4 and Ge3N4: promising substrate materials for high-power electronic devices. Scientific Reports, 2018, 8, 14374.	1.6	13
341	Theoretical investigation on the stability, mechanical and thermal properties of the newly discovered MAB phase Cr4AlB4. Journal of Materials Science and Technology, 2020, 39, 161-166.	5.6	13
342	Segregation of solute atoms in ZrC grain boundaries and their effects on grain boundary strengths. Journal of Materials Science and Technology, 2022, 101, 234-241.	5.6	13

#	Article	IF	Citations
343	Theoretical predictions and experimental verification on the phase stability of enthalpy-stabilized HE TMREB2s. Journal of Materials Science and Technology, 2022, 121, 154-162.	5.6	13
344	Tailoring Texture of Î³â€²₂Si₂O₇ by Strong Magnetic Field Alignment and Twoâ€Step Sintering. Journal of the American Ceramic Society, 2008, 91, 2521-2528.	1.9	12
345	Experimental and thermodynamic study of the hydrothermal oxidation behavior of Ti3SiC2 powders. Scripta Materialia, 2008, 59, 746-749.	2.6	12
346	Crystal Structure and Electronic Structure of a Novel Hf₃AlN Ceramic. Journal of the American Ceramic Society, 2009, 92, 476-480.	1.9	12
347	Effect of Ti Dopant on the Mechanical Properties and Oxidation Behavior of Zr2[Al(Si)]4C5 Ceramics. Journal of the American Ceramic Society, 2011, 94, 1872-1877.	1.9	12
348	Al₅BO₉: A Wide Band Gap, Damageâ€Tolerant, and Thermal Insulating Lightweight Material for Highâ€Temperature Applications. Journal of the American Ceramic Society, 2016, 99, 2742-2751.	1.9	12
349	M₂YSi (M=Rh, Ir): Theoretically predicted damageâ€tolerant MAX phaseâ€like layered silicides. Journal of the American Ceramic Society, 2018, 101, 365-375.	1.9	12
350	First principles investigation on mechanical and thermal properties of Î±â€•and Î²â€²AlB4ultraâ€high temperature ceramics. Journal of the American Ceramic Society, 2018, 101, 5694-5704.	1.9	12
351	Microstructure of alpha-silicon nitride whiskers. Journal of Materials Science, 1991, 26, 3914-3916.	1.7	11
352	A simple method for measuring tensile and shear bond strength of ceramic-ceramic and metal-ceramic joining. Materials Research Innovations, 2002, 6, 277-280.	1.0	11
353	Improvement of intermediate-temperature oxidation resistance of Ti3AlC2 by pre-oxidation at high temperatures. Materials Research Innovations, 2003, 7, 205-211.	1.0	11
354	Reciprocating Friction and Wear Behavior of Zr₂[Al(Si)]₄C₅ and Zr₂[Al(Si)]₄C₅â€“SiC Composite Against Si₃N₄ Ball. Journal of the American Ceramic Society, 2010, 93, 2369-2376.	1.9	11
355	Raman spectrometry study of phase stability and phonon anharmonicity of Al3BC3 at elevated temperatures and high pressures. Journal of Applied Physics, 2011, 110, .	1.1	11
356	Electrodeposition and Characterization of Ni/Ti3Si(Al)C2 Composite Coatings. Journal of Materials Science and Technology, 2011, 27, 1016-1024.	5.6	11
357	Improving the Highâ€Temperature Oxidation Resistance of <scp><scp>Nb</scp></scp>₄<scp><scp>AlC</scp></scp>₃ by Silicon Pack Cementation. Journal of the American Ceramic Society, 2014, 97, 552-561.	1.9	11
358	Theoretical Investigations on the Structural, Electronic, Mechanical, and Thermal Properties of <scp><scp>MP</scp></scp>₂<scp><scp>O</scp></scp>₇ (<scp><scp>M</scp></scp>Â=Â<scp><scp>Ti</scp></scp>,<scp><scp>Hf</scp></scp>). Journal of the American Ceramic Society, 2014, 97, 2484-2490.	1.9	11
359	Manufacture of porous SiC/C ceramics with excellent damage tolerance by impregnation of LPCS into carbonized pinewood. Journal of the European Ceramic Society, 2015, 35, 1751-1759.	2.8	11
360	Mechanical and thermal properties of light weight boronâ€mullite Al₅BO₉. Journal of the American Ceramic Society, 2020, 103, 5939-5951.	1.9	11

#	Article	IF	Citations
361	Punch-shear tests and size effects for evaluating the shear strength of machinable ceramics. International Journal of Materials Research, 2004, 95, 372-376.	0.8	11
362	Medium-entropy (Me,Ti)0.1(Zr,Hf,Ce)0.9O2 (Me = Y and Ta): Promising thermal barrier materials for high-temperature thermal radiation shielding and CMAS blocking. Journal of Materials Science and Technology, 2022, 123, 144-153.	5.6	11
363	The Influence of Redox Reaction of the Sintering of Cerium Oxide. Journal of Materials Synthesis and Processing, 1998, 6, 411-414.	0.3	10
364	Beneficial Effects of Ce Implantation into Preformed Cr2O3Scales on the Subsequent Oxidation of Niâ€“20Cr Alloy. Oxidation of Metals, 2004, 61, 529-544.	1.0	10
365	Effect of Na2SO4 and Water Vapor on the Corrosion of Ti3SiC2. Oxidation of Metals, 2006, 66, 115-125.	1.0	10
366	Evaluation of the elastic modulus and strength of unsymmetrical Al2O3 coating on Ti3SiC2 substrate by a modified relative methodology. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 474, 64-70.	2.6	10
367	Oxidation Behavior of a Ti₃AlC₂/TiB₂ Composite at 1000Â°â˜1400Â°C in Air. Journal of the American Ceramic Society, 2010, 93, 554-560.	1.9	10
368	Oxidation Behavior of Ternary Carbide Ceramics in Hfâ€“Alâ€“C System in Air. Journal of the American Ceramic Society, 2010, 93, 3427-3431.	1.9	10
369	Physical insight of superconductivity of Nb₂AlC: in situ Raman spectrometry investigation. Journal of Raman Spectroscopy, 2013, 44, 485-488.	1.2	10
370	Gelcasting of Yb3Al5O12 using a nontoxic water-soluble copolymer as both dispersant and gelling agent. Ceramics International, 2016, 42, 421-427.	2.3	10
371	Strategy to design high performance TiB 2 â€based materials: Strengthen grain boundaries by solid solute segregation. Journal of the American Ceramic Society, 2020, 103, 3311-3320.	1.9	10
372	Progressive damage during thermal shock cycling of D-gun sprayed thermal barrier coatings with hollow spherical ZrO2â€“8Y2O3. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 435-436, 228-236.	2.6	9
373	Crystal Structure and Theoretical Elastic Property of a New Ternary Ceramic HfAl₄C₄. Journal of the American Ceramic Society, 2010, 93, 1164-1168.	1.9	9
374	Preparation of <scp><scp>Y</scp></scp>₂<scp><scp>Si</scp></scp>₂<scp><scp>O</scp></scp>₇/<scp><sc Composites and Their Composition â€“ Mechanical Properties â€“ Tribology Relationships. Journal of the American Ceramic Society, 2013, 96, 3228-3238.	1.9	9
375	Preparation, Microstructure, and Mechanical Properties of Nb4 AlC3 -Nb5 (Si,Al)3 Composites. Journal of the American Ceramic Society, 2013, 96, 365-368.	1.9	9
376	Reducing the Ideal Shear Strengths of ZrB2 by High Efficient Alloying Elements (Ag, Au, Pd and Pt). Scientific Reports, 2017, 7, 43416.	1.6	9
377	A New Method for Precracking Beam for Fracture Toughness Experiments. Journal of the American Ceramic Society, 2006, 89, 1118-1121.	1.9	8
378	Transient oxidation behavior of nanocrystalline CoCrAlY coating at 1 050 Â°C. Transactions of Nonferrous Metals Society of China, 2007, 17, 595-599.	1.7	8

#	Article	IF	Citations
379	Oxidation Resistance of a Cr0.50Al0.50N Coating Prepared by Magnetron Sputtering on Alloy K38G. Oxidation of Metals, 2007, 68, 193-210.	1.0	8
380	Theoretical elastic stiffness of quaternary crystalY3Si5N9Oby first-principles investigation. Physical Review B, 2008, 77, .	1.1	8
381	Relationship between layered crystal structure and mechanical properties of M₃AlN (M =) Tj ETQq1 1 0.784314 rgBT /Ov	1.2	8
382	Zirconium Aluminum Carbides: New Precursors for Synthesizing ZrO₂â€“Al₂O₃ Composites. Journal of the American Ceramic Society, 2009, 92, 2751-2758.	1.9	8
383	Electrophoretic Deposition of Ti₃Si(Al)C₂ from Aqueous Suspension. Journal of the American Ceramic Society, 2010, 93, 1916-1921.	1.9	8
384	Strengthening of <scp><scp>Ti</scp></scp>₃(<scp><scp>Si</scp></scp>,<scp><scp>Al</scp></scp>)<scp><scp>C</scp></scp><sub>2</ by Doping with Tungsten. Journal of the American Ceramic Society, 2012, 95, 3726-3728.	1.9	8
385	First-principles Study of Point Defects in Stoichiometric and Non-stoichiometric Y4Al2O9. Journal of Materials Science and Technology, 2013, 29, 1161-1165.	5.6	8
386	Dynamical and dielectric properties of MP2O7 (M=Ti, Zr, and Hf): A first-principles investigation. Computational Materials Science, 2014, 95, 371-376.	1.4	8
387	Electrically Conductive Honeycomb Monolith of Nanolaminated Ti3AlC2: Preparation and Characterization. Journal of Materials Science and Technology, 2015, 31, 125-128.	5.6	8
388	On the small angle twist sub-grain boundaries in Ti3AlC2. Scientific Reports, 2016, 6, 23943.	1.6	8
389	Theoretical insight into the solar thermal absorption property of ultra-high temperature ceramics TMB2 (TM = Ti, Zr, and Hf). Solar Energy Materials and Solar Cells, 2021, 225, 111032.	3.0	8
390	Pressure-induced polymorphism in Al3BC3: A first-principles study. Journal of Solid State Chemistry, 2006, 179, 2739-2743.	1.4	7
391	Effect of interstitial lithium atom on crystal and electronic structure of silicon oxynitride. Journal of Materials Science, 2009, 44, 6416-6422.	1.7	7
392	Microstructure evolution of Zr₂Al₃C₄ in Cu matrix. Journal of Materials Research, 2011, 26, 372-383.	1.2	7
393	Strengthening <scp><scp>Ti</scp></scp>₃<scp><scp>AlC</scp></scp>₂ by In Situ Synthesizing <scp><scp>Ti</scp></scp>₃<scp><scp>AlC</scp></scp>₂â€“<scp><scp>Y</scp></scp>₄<sc Composites. Journal of the American Ceramic Society, 2012, 95, 2314-2321.	1.9	7
394	Phonon engineering in tuning the thermal conductivity of alkaline-earth hexaborides. Journal of the European Ceramic Society, 2020, 40, 1352-1360.	2.8	7
395	Stresses and Microstructural Development of Thermal Barrier Coatings Using AlP/D-gun Two-Step Processing. Journal of the American Ceramic Society, 2007, 90, 936-941.	1.9	6
396	Molten Salt Synthesis of Magnesium Aluminate (MgAl₂O₄) Spinel on Ti₃AlC₂ Substrate. Journal of the American Ceramic Society, 2009, 92, 1074-1078.	1.9	6

#	Article	IF	Citations
397	A Costâ€Efficient Fabrication Strategy for Conductive Ti₂AlC Honeycomb Monolith Using Elemental Powders. Advanced Engineering Materials, 2015, 17, 1344-1350.	1.6	6
398	Near-isotropic elastic properties and high shear deformation resistance: Making low symmetry and open structured YbAlB14, LuAlB14 and ScMgB14 superhard. Acta Materialia, 2017, 135, 44-53.	3.8	6
399	Fine-grained and electrically conductive NdB6/SiO2: A promising electromagnetic interference shielding material with good thermal and mechanical properties. Journal of the European Ceramic Society, 2021, 41, 4794-4805.	2.8	6
400	Preparation and properties of porous Al₅BO₉ for highâ€temperature waveâ€transparent and thermal insulating applications. International Journal of Applied Ceramic Technology, 2022, 19, 866-875.	1.1	6
401	Interfacial reaction between Cu and Ti₂SnC during processing of Cuâ€“Ti₂SnC composite. International Journal of Materials Research, 2022, 96, 1314-1320.	0.1	6
402	Twin morphology in bicrystalline silicon carbide whiskers. Materials Letters, 1990, 10, 288-290.	1.3	5
403	Tribological Properties of a Zr₂Al₃C₄Ceramic at Ambient Temperature. Journal of the American Ceramic Society, 2009, 92, 141-146.	1.9	5
404	Mechanical and thermal properties of a Hf2[Al(Si)]4C5 ceramic prepared by in situ reaction/hot-pressing. Scripta Materialia, 2010, 62, 427-430.	2.6	5
405	Developments in hot pressing (HP) and hot isostatic pressing (HIP) of ceramic matrix composites. , 2014, , 177-202.		5
406	Micro-Raman spectroscopic study of nanolaminated Ti5Al2C3. Applied Physics Letters, 2014, 104, 131903.	1.5	5
407	A green fabrication strategy for porous Yb3Al5O12 ceramics with high strength and tunable gas permeability. Journal of Materials Research, 2016, 31, 3078-3087.	1.2	5
408	Anisotropic surface stability of TiB₂: A theoretical explanation for the easy grain coarsening. Journal of Materials Research, 2017, 32, 2755-2763.	1.2	5
409	General trends in surface stability and oxygen adsorption behavior of transition metal diborides (TMB2). Journal of Materials Science and Technology, 2019, 35, 584-590.	5.6	5
410	High temperature mechanical and thermal properties of CaxBa1-xZrO3 solid solutions. Ceramics International, 2020, 46, 17416-17422.	2.3	5
411	Microstructure change in SiC whiskers after high-temperature annealing. Philosophical Magazine Letters, 1991, 63, 19-22.	0.5	4
412	Low-temperature chemical synthesis of lanthanum copper oxide. Journal of Materials Science, 2001, 36, 3277-3282.	1.7	4
413	Title is missing!. Journal of Materials Science Letters, 2002, 21, 1755-1757.	0.5	4
414	Effect Of Sample Size And Testing Temperature On The Fracture Toughness Of Ti₃SiC₂. Materials Research Innovations, 2005, 9, 41-42.	1.0	4

#	Article	IF	Citations
415	Strengthening of Soft Ceramics by Forming Sandwich Composites with Strong Interfaces: A Combination of Analytical Study and Experimental Procedure. Journal of the American Ceramic Society, 2007, 90, 553-558.	1.9	4
416	Atomicâ€Scale Microstructure of <scp><scp>Hfâ€“Alâ€“C</scp></scp> Ceramics. Journal of the American Ceramic Society, 2011, 94, 4534-4540.	1.9	4
417	Direct Observation of a Screw Dislocation Normal to the Beam by Zâ€Contrast <scp>STEM</scp>. Journal of the American Ceramic Society, 2012, 95, 466-468.	1.9	4
418	On the Faceted and Inclined Twin Boundary of Titanium Carbide Derived from Nanolaminated Ti₃AlC₂. Journal of the American Ceramic Society, 2015, 98, 1664-1667.	1.9	4
419	Branching phenomena in SiC whiskers. Journal of Materials Science Letters, 1992, 11, 891-892.	0.5	3
420	Synthesis and Oxidation of Bulk Ti₃AlC₂. Key Engineering Materials, 2002, 224-226, 785-790.	0.4	3
421	High Temperature Oxidation and Hot Corrosion Behavior of Ti₃SiC₂-Based Materials. Key Engineering Materials, 2002, 224-226, 791-796.	0.4	3
422	Investigation of growth stresses in NiO scale formed on Ni at 1000Â°C by a modified deflection method. Materials Research Bulletin, 2004, 39, 1985-1992.	2.7	3
423	Anisotropic Deformation and Damage Behavior of Brittle-Ductile Laminated Composites in Bending at High Temperature. Journal of Composite Materials, 2005, 39, 147-162.	1.2	3
424	Effect of ion implantation upon erosion resistance of polyimide films in space environment. Transactions of Nonferrous Metals Society of China, 2006, 16, s661-s664.	1.7	3
425	Oxidation of pre-oxidized GH128 alloy implanted with Ce+ at 1 000 Â°C. Transactions of Nonferrous Metals Society of China, 2008, 18, 493-498.	1.7	3
426	High-temperature corrosion mechanism of layered ternary ceramics. , 2008, , 255-289.		3
427	Shortâ€term oxidation and hot corrosion resistance of a gradient CrN/Cr_{1â^'x}Al_xN coating. Materials and Corrosion - Werkstoffe Und Korrosion, 2010, 61, 939-946.	0.8	3
428	Effect of Nb Dopant on the Oxidation Behavior of Zr2[Al(Si)]4C5 at 1000-1300Â°C. Journal of the American Ceramic Society, 2011, 94, 1687-1690.	1.9	3
429	Vacuum Ultraviolet/Atomic Oxygen Erosion Resistance of Amorphous Si0.26C0.43N0.31 Coating. Journal of Spacecraft and Rockets, 2011, 48, 507-512.	1.3	3
430	Partial dislocation in carbon-vacancy-ordered Nb12Al3C8. Scripta Materialia, 2018, 145, 85-89.	2.6	3
431	Preparation and mechanical properties of Î²-Zr2O(PO4)2: A soft and damage tolerant ceramic with machinability and good thermal shock resistance. Journal of the European Ceramic Society, 2020, 40, 155-164.	2.8	3
432	Failure-mode dependence of the strengthening effect in Ti₃AlC₂/10 vol.% Al₂O₃ composite. International Journal of Materials Research, 2022, 97, 1115-1118.	0.1	3

#	Article	IF	Citations
433	Bending Creep and Stress Relaxation of Ti₃AlC₂ at High Temperature. Key Engineering Materials, 2005, 280-283, 1373-1378.	0.4	2
434	Effects of CeO2applied to preformed oxide scales on subsequent oxidation of Feâ€“20Cr at 1000Â°C. Corrosion Engineering Science and Technology, 2007, 42, 73-79.	0.7	2
435	Prediction of superconductivity of Ta₂AlC: in situ Raman spectrometry and density functional investigations. Journal of Raman Spectroscopy, 2014, 45, 202-207.	1.2	2
436	Growth of rutile TiO 2 nanosheets with {0 1 0} exposed facets on bulk Ti 3 Si 0.9 Al 0.1 C 2 solid solution. Scripta Materialia, 2015, 108, 92-95.	2.6	2
437	Fabrication of TiO 2 nanowhiskers by the heat treatment of bulk Ti 3 Si 0.9 Al 0.1 C 2 in rough vacuum. Ceramics International, 2016, 42, 6868-6873.	2.3	2
438	Y2B3C2: A strain-stiffening ceramic for ultra-high temperature applications. Ceramics International, 2017, 43, 14031-14036.	2.3	2
439	Simple methods for measuring tensile and shear bond strength and for determining elastic modulus and strength of coating. Materials Research Society Symposia Proceedings, 2002, 750, 1.	0.1	1
440	Effects of strain hardening and residual stress in impression on the instrumented indentation technique. Journal of Materials Research, 2006, 21, 1680-1686.	1.2	1
441	Surface strengthening of Ti3SiC2 through magnetron sputtering of Mo and Zr and subsequent annealing. Journal of the European Ceramic Society, 2010, 30, 2123-2130.	2.8	1
442	Sintering and Properties of Nb4AlC3 Ceramic. , 0, , .		1
443	Interfacial structure in SiC/Si3N4composite whiskers. Philosophical Magazine Letters, 1990, 62, 389-391.	0.5	0
444	Branching phenomena in Si3N4 whiskers. Materials Letters, 1992, 14, 55-57.	1.3	0
445	Predicting remnant lifetime of high-temperature materials by a resistance degradation model. Materials at High Temperatures, 2007, 24, 303-306.	0.5	0
446	V ₂SnC: A Newly Discovered Layered-Ternary Compound. SSRN Electronic Journal, 2019, , .	0.4	0
447	A Novel Method to Fabricate Tough Cylindrical Ti₂AlC/Graphite Layered Composite with Improved Deformation Capacity. Journal of the Korean Ceramic Society, 2012, 49, 369-374.	1.1	0
448	Punch-shear tests and size effects for evaluating the shear strength of machinable ceramics. International Journal of Materials Research, 2022, 95, 372-376.	0.1	0