High-entropy ceramics: Present status, challenges, and

Journal of Advanced Ceramics
10, 385-441
DOI: 10.1007/s40145-021-0477-y

Citation Report

#	Article	IF	Citations
1	Highâ€entropy ferroelastic rareâ€earth tantalite ceramic: (Y_{0.2}Ce_{0.2}Sm_{0.2}Gd_{0.2}Dy_{0.2})TaO₄ Journal of the American Ceramic Society, 2021, 104, 5873-5882.	1.9	49
2	Structures, and Thermophysical Properties Characterizations of (La1-xHox)3NbO7 Solid Solutions as Thermal Barrier Coatings. Frontiers in Materials, 2021, 8, .	1.2	0
3	Edgeâ€Rich Reduced Graphene Oxide Embedded in Silicaâ€Based Laminated Ceramic Composites for Efficient and Robust Electrocatalytic Hydrogen Evolution. Small Methods, 2021, 5, e2100621.	4.6	5
4	Theoretical investigation of formation and diffusion mechanisms for point defects in ytterbium and lutetium silicates. Journal of the American Ceramic Society, 2022, 105, 653-667.	1.9	5
5	Synthesis, microstructure and mechanical properties of high-entropy (VNbTaMoW)C5 ceramics. Journal of the European Ceramic Society, 2021, 41, 7498-7506.	2.8	33
6	Thermophysical performances of (La1/6Nd1/6Yb1/6Y1/6Sm1/6Lu1/6)2Ce2O7 high-entropy ceramics for thermal barrier coating applications. Ceramics International, 2022, 48, 1512-1521.	2.3	21
7	Effect of alloying element on microstructure, mechanical property, and oxidation resistance of Zrâ”€Meâ”€C (Meâ•Si/Y) coatings. International Journal of Applied Ceramic Technology, 0, , .	1.1	0
8	Porous (Ce0.2Zr0.2Ti0.2Sn0.2Ca0.2)O2-Î´ high-entropy ceramics with both high strength and low thermal conductivity. Journal of the European Ceramic Society, 2021, 41, 309-314.	2.8	15
9	Nanocrystalline highâ€entropy carbide ceramics with improved mechanical properties. Journal of the American Ceramic Society, 2022, 105, 606-613.	1.9	46
10	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
11	Local Lattice Distortion in High-Entropy Carbide Ceramics. Metals, 2021, 11, 1399.	1.0	3
12	Comparative study of phase structure, dielectric properties and electrocaloric effect in novel high-entropy ceramics. Journal of Materials Science, 2021, 56, 18417-18429.	1.7	16
13	Densifying (Hf_{0.2}Zr_{0.2}Ta_{0.2}Nb_{0.2}Ti_{0.2})C highâ€entropy ceramics by twoâ€step pressureless sintering. Journal of the American Ceramic Society, 2022, 105, 76-81.	1.9	9
14	A novel (La0.2Sm0.2Eu0.2Gd0.2Tm0.2)2Zr2O7 high-entropy ceramic nanofiber with excellent thermal stability. Ceramics International, 2021, 47, 29379-29385.	2.3	37
15	Tuning stoichiometry of highâ€entropy oxides for tailorable thermal expansion coefficients and low thermal conductivity. Journal of the American Ceramic Society, 2022, 105, 1548-1557.	1.9	21
16	Improved tribological behavior of plasma-nitrided AlCrTiV and AlCrTiVSi high-entropy alloy films. Tribology International, 2021, 163, 107195.	3.0	19
17	Directionally solidified Al2O3/(Y0.2Er0.2Yb0.2Ho0.2Lu0.2)3Al5O12 eutectic high-entropy oxide ceramics with well-oriented structure, high hardness, and low thermal conductivity. Journal of the European Ceramic Society, 2021, 41, 7119-7129.	2.8	16
18	Oxidation behaviors of compositionally complex MAX phases in air. Ceramics International, 2021, 47, 30188-30193.	2.3	19

#	Article	IF	Citations
19	Preparation and corrosion resistance of high-entropy disilicate (Y0.25Yb0.25Er0.25Sc0.25)2Si2O7 ceramics. Corrosion Science, 2021, 192, 109786.	3.0	30
20	A novel high-entropy (Sm0.2Eu0.2Tb0.2Dy0.2Lu0.2)2Zr2O7 ceramic aerogel with ultralow thermal conductivity. Ceramics International, 2021, 47, 29960-29968.	2.3	33
21	Ultra-low temperature reactive flash sintering synthesis of high-enthalpy and high-entropy Ca0.2Co0.2Ni0.2Cu0.2Zn0.2O oxide ceramics. Materials Letters, 2021, 304, 130679.	1.3	21
22	High-entropy (Y0.2Gd0.2Dy0.2Er0.2Yb0.2)2Hf2O7 ceramic: A promising thermal barrier coating material. Journal of Materials Science and Technology, 2022, 101, 199-204.	5.6	37
23	Low temperature synthesis of high-entropy (Y0.2Yb0.2Sm0.2Eu0.2Er0.2)2O3 nanofibers by a novel electrospinning method. Journal of Materials Science and Technology, 2022, 103, 215-220.	5.6	17
24	Improved thermal stability and infrared emissivity of high-entropy REMgAl11O19 and LaMAl11O19 (RE=La,) Tj ETQq1 1 0.784314 rgB	5.6	25
25	Machine learning guided discovery of super-hard high entropy ceramics. Materials Letters, 2022, 306, 130899.	1.3	18
26	Preparation and electrical conductivity of (Zr, Hf, Pr, Y, La) O high entropy fluorite oxides. Journal of Materials Science and Technology, 2022, 105, 122-130.	5.6	21
27	Theoretical exploration of quaternary hexagonal MAB phases and two-dimensional derivatives. Nanoscale, 2021, 13, 13208-13214.	2.8	16
28	Ultraâ€high strength mediumâ€entropy (Ti,Zr,Ta)C ceramics at 1800Â°C by consolidating a coreâ€shell structured powder. Journal of the American Ceramic Society, 2022, 105, 823-829.	1.9	5
29	Highly efficient thermal insulation in crystalline weberites RE3NbO7 (RE=La, Nd, Sm, Eu, Gd) with glass-like thermal conductivity. Ceramics International, 2022, 48, 2686-2692.	2.3	7
30	Microstructure and corrosion behavior of AlCrTiV-X (XÂ=ÂCu, Mo, CuMo) high-entropy alloy films in 3.5Âwt.% NaCl solution. Surfaces and Interfaces, 2021, 27, 101558.	1.5	6
31	Effect of carbon content on the microstructure and mechanical properties of high-entropy (Ti0.2Zr0.2Nb0.2Ta0.2Mo0.2)Cx ceramics. Journal of the European Ceramic Society, 2022, 42, 336-343.	2.8	31
32	Design and fabrication of high-entropy oxide anchored on graphene for boosting kinetic performance and energy storage. Ceramics International, 2022, 48, 3344-3350.	2.3	13
33	Highâ€Entropy Energy Materials in the Age of Big Data: A Critical Guide to Nextâ€Generation Synthesis and Applications. Advanced Energy Materials, 2021, 11, 2102355.	10.2	37
34	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
35	Tailoring high-temperature stability and electrical conductivity of high entropy lanthanum manganite for solid oxide fuel cell cathodes. Journal of Materials Chemistry A, 2022, 10, 2256-2270.	5.2	37
36	Electrospun Ceramic Nanofibers for Photocatalysis. Nanomaterials, 2021, 11, 3221.	1.9	8

#	Article	IF	Citations
37	Preparation and molten salts corrosion behavior of high-entropy (Ca,Sr,Ba)TMO3 (TM= Zr, Hf and Ta): Promising protecting materials of reference electrode for metal smelting through fused salts electrolysis. Corrosion Communications, 2021, 3, 10-22.	2.7	6
38	Hardness and toughness improvement of SiCâ€based ceramics with the addition of (Hf_{0.2}Mo_{0.2}Ta_{0.2}Nb_{0.2}Ti_{0.2})B₂. Journal of the American Ceramic Society, 2022, 105, 1629-1634.	1.9	7
39	Lattice stability, mechanical and thermal properties of a new class of multicomponent (Fe, Mo, W)6C Î· carbides with different atomic site configurations. Ceramics International, 2022, 48, 5107-5118.	2.3	8
40	Thermophysical performances of (Er1-xYbx)3TaO7 oxides for high-temperature applications. Ceramics International, 2022, 48, 5674-5680.	2.3	5
41	Rational Composition and Structural Control for Enhancing Thermoelectric Properties in pâ€Type Bi 0.4 Sb 1.6 Te 3 Thin Films. Advanced Materials Interfaces, 0, , 2101812.	1.9	1
42	Design and Synthesis of Single Phase Hf _{0.25}Zr _{0.25}Ce _{0.25}Y _{0.125}Si _{0.125}O _{2-Î´} High Entropy Ceramics. SSRN Electronic Journal, 0, , .	0.4	0
43	High Thermoelectric Performance Achieved in Sb-Doped GeTe by Manipulating Carrier Concentration and Nanoscale Twin Grains. Materials, 2022, 15, 406.	1.3	5
44	Engineering the oxygen vacancies of rocksalt-type high-entropy oxides for enhanced electrocatalysis. Nanoscale, 2022, 14, 515-524.	2.8	30
45	Local orders, lattice distortions, and electronic structure dominated mechanical properties of (ZrHfTaM1M2)C (M = Nb, Ti, V). Journal of the American Ceramic Society, 2022, 105, 4260-4276.	1.9	8
46	Characterization of novel high-entropy (La0.2Nd0.2Sm0.2Dy0.2Yb0.2)2Zr2O7 electrospun ceramic nanofibers. Ceramics International, 2022, 48, 12074-12078.	2.3	8
47	Thermophysical performances of high-entropy (La0.2Nd0.2Yb0.2Y0.2Sm0.2)2Ce2O7 and (La0.2Nd0.2Yb0.2Y0.2Lu0.2)2Ce2O7 oxides. Ceramics International, 2022, 48, 5574-5580.	2.3	22
48	Spinel-type high-entropy (Co0.2Mn0.2Fe0.2Zn0.2Ti0.2)3O4 oxides constructed from disordered cations and oxygen vacancies. Journal of Alloys and Compounds, 2022, 897, 163188.	2.8	16
49	Fundamentals and practical dielectric implications of stoichiometry and chemical design in a high-performance ferroelectric oxide: BaTiO3. Journal of the European Ceramic Society, 2022, 42, 1445-1473.	2.8	27
50	Preparation of Gd2Zr2O7 nanopowders by polyacrylamide gel method and their sintering behaviors. Journal of the European Ceramic Society, 2022, 42, 1585-1593.	2.8	8
51	Sacrificial template synthesis of (V0.8Ti0.1Cr0.1)2AlC and carbon fiber@(V0.8Ti0.1Cr0.1)2AlC microrods for efficient microwave absorption. Journal of Materials Science and Technology, 2022, 111, 236-244.	5.6	14
52	Ablation behaviour of (Hf-Ta-Zr-Nb)C high entropy carbide ceramic at temperatures above 2100ÂÂ°C. Journal of Materials Science and Technology, 2022, 113, 40-47.	5.6	28
53	Optical Properties and Irradiation Resistance of Novel High-Entropy Oxide Glasses La ₂O ₃-TiO ₂-Nb ₂O ₅-WO ₃-M ₂O ₃ (M=B/Ga/In). SSRN Electronic Journal, 0, , .	0.4	0
54	Lowâ€temperature reactive sintering of carbon vacant highâ€entropy carbide ceramics with inâ€situ formed silicon carbide. Journal of the American Ceramic Society, 2022, 105, 2392-2398.	1.9	13

#	Article	IF	Citations
55	Grain coalescence in (Ti_{0.2}Zr_{0.2}Hf_{0.2}Nb_{0.2}Ta_{0.2})C during spark plasma sintering. Journal of the American Ceramic Society, 2022, 105, 3838-3849.	1.9	3
56	Reactive flash sintering and electrical transport properties of highâ€entropy (MgCoNiCuZn)_{1â€‹}_xLi_xO oxides. Journal of the American Ceramic Society, 2022, 105, 3765-3773.	1.9	16
57	Design and investigate the electrical properties of Pb(Mg0.2Zn0.2Nb0.2Ta0.2W0.2)O3â€“PbTiO3 high-entropy ferroelectric ceramics. Ceramics International, 2022, 48, 12848-12855.	2.3	16
58	Thermophysical properties of (La0.25Sm0.25Gd0.25Yb0.25)2Ce2+xO7+2x(x=0.1, 0.2, and 0.3) high entropy oxides. Ceramics International, 2022, 48, 14980-14986.	2.3	4
59	Novel YSV Fiber Strengthened (La _{0.2}Nd _{0.2}Sm _{0.2}Gd) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 592 Toward Ultralow Thermal Conductivity and Enhanced Mechanical Property. SSRN Electronic Journal, 0, , .	0.4	0
60	Multicomponent (Hf0.25Zr0.25Ti0.25Cr0.25)B2 ceramic modified SiCâ€“Si composite coatings: In-situ synthesis and high-temperature oxidation behavior. Ceramics International, 2022, 48, 12608-12624.	2.3	13
61	Ablation behavior of (TiZrHfNbTa)C high-entropy ceramics with the addition of SiC secondary under an oxyacetylene flame. Ceramics International, 2022, 48, 12790-12799.	2.3	16
62	Rare-earth-niobate high-entropy ceramic foams with enhanced thermal insulation performance. Journal of Materials Science and Technology, 2022, 116, 94-102.	5.6	12
63	Dielectric and energy storage properties of (La,Li) [(Bi,Na)BaSrCa]1-TiO3 high-entropy perovskite ceramics. Ceramics International, 2022, 48, 24268-24275.	2.3	17
64	Low-temperature synthesis of high-entropy (Mg0.2Co0.2Ni0.2Cu0.2Zn0.2)O nanoparticles via polyol process. Open Ceramics, 2022, 9, 100223.	1.0	0
65	Critical scale grain size for optimal lifetime of TBCs. Journal of Materials Science and Technology, 2022, 115, 241-250.	5.6	12
67	High entropy oxide nanofiber by electrospun method and its application for lithium battery anode material. International Journal of Applied Ceramic Technology, 2022, 19, 2004-2015.	1.1	14
68	Design and synthesis of single phase Hf0.25Zr0.25Ce0.25Y0.125Si0.125O2-Î´ high-entropy ceramics. Journal of Alloys and Compounds, 2022, 904, 164097.	2.8	7
69	Advances in ultra-high temperature ceramics, composites, and coatings. Journal of Advanced Ceramics, 2022, 11, 1-56.	8.9	256
70	Processing and properties of high entropy carbides. Advances in Applied Ceramics, 2022, 121, 57-78.	0.6	33
71	Interdependence of the Electrical Performance of Nicufecomn High-Entropy Carbonates as Electrode Material for Supercapacitors. SSRN Electronic Journal, 0, , .	0.4	0
72	A perspective on highâ€entropy twoâ€dimensional materials. SusMat, 2022, 2, 65-75.	7.8	19
73	Machine learning based approach for phase prediction in high entropy borides. Ceramics International, 2022, 48, 16695-16706.	2.3	17

#	Article	IF	Citations
74	Synthesis and thermophysical properties of ATa₂O₆ (AÂ=ÂCo, Ni,) Tj ETQq0 0 0 rgBT /Overlock 4840-4858.	1.9	10
75	Large magnetic entropy change in weberite-type oxides Gd3MO7 (M = Nb, Sb, and Ta). Science China: Physics, Mechanics and Astronomy, 2022, 65, 1.	2.0	6
76	Cold Spray and Laser-Assisted Cold Spray of CrMnCoFeNi High Entropy Alloy Using Nitrogen as the Propelling Gas. Journal of Thermal Spray Technology, 2022, 31, 1129-1142.	1.6	11
77	21-Component compositionally complex ceramics: Discovery of ultrahigh-entropy weberite and fergusonite phases and a pyrochlore-weberite transition. Journal of Advanced Ceramics, 2022, 11, 641-655.	8.9	24
78	High-entropy perovskite RETa3O9 ceramics for high-temperature environmental/thermal barrier coatings. Journal of Advanced Ceramics, 2022, 11, 556-569.	8.9	69
79	Achieving ultra-broadband electromagnetic wave absorption in high-entropy transition metal carbides (HE TMCs). Journal of Advanced Ceramics, 2022, 11, 545-555.	8.9	50
80	Thermophysical properties of tantalum carbide (TaC) within 2000â€“5500ÂK temperature range. Ceramics International, 2022, 48, 19655-19661.	2.3	5
81	Lowâ€temperature synthesis and oxidation resistance of random combination of Hf, Nb, and Ta carbides microcuboids. Journal of the American Ceramic Society, 0, , .	1.9	5
82	High-entropy (La0.2Nd0.2Sm0.2Eu0.2Gd0.2)2Ce2O7: A potential thermal barrier material with improved thermo-physical properties. Journal of Advanced Ceramics, 2022, 11, 615-628.	8.9	62
83	Oxygen-vacancy-related dielectric relaxations and electrical properties in [Lix(BaSrCaMg)(1â^'x)/4]TiO3 high-entropy perovskite ceramics. Journal of Materials Science: Materials in Electronics, 0, , 1.	1.1	1
84	Promising PVDF-CNT-Graphene-NiCo chains composite films with excellent electromagnetic interference shielding performance. Journal of Alloys and Compounds, 2022, 908, 164538.	2.8	23
85	Orthorhombic to tetragonal polymorphic transformation of YTa3O9 and its inhibition through the design of high-entropy (Y0.2La0.2Ce0.2Nd0.2Gd0.2)Ta3O9. Journal of the European Ceramic Society, 2022, 42, 3559-3569.	2.8	5
86	Horizontally aligned BN nanosheet array for nanometer-thick ZrO2 coating with greatly enhanced anticorrosion and hydrogen isotope resistance property. Chemical Engineering Journal, 2022, 440, 135920.	6.6	12
87	A novel high-entropy perovskite ceramics Sr0.9La0.1(Zr0.25Sn0.25Ti0.25Hf0.25)O3 with low thermal conductivity and high Seebeck coefficient. Journal of the European Ceramic Society, 2022, 42, 3480-3488.	2.8	36
88	High entropy ultra-high temperature ceramic thermal insulator (Zr1/5Hf1/5Nb1/5Ta1/5Ti1/5)C with controlled microstructure and outstanding properties. Journal of Materials Science and Technology, 2022, 119, 190-199.	5.6	21
89	High-entropy Sm2B2O7 (B=Ti, Zr, Sn, Hf, Y, Yb, Nb, and Ta) oxides with highly disordered B-site cations for ultralow thermal conductivity. Journal of Materials Science and Technology, 2022, 119, 182-189.	5.6	26
90	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
91	Regulating the formation ability and mechanical properties of high-entropy transition metal carbides by carbon stoichiometry. Journal of Materials Science and Technology, 2022, 121, 181-189.	5.6	19

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92	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
93	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
94	á»¨ng dá»¥ng mÃ´ hÃ¬nh Ä‘Ã¡nh giÃ¡ tá»•ng há»£p DPSIR trong nghiÃªn cá»©u thá»±c tráº¡ng quáº£n lÃ½ cháº¥t tháº£i ráº¯n sinh hoáº¡t Cá»u Long. Tap Chi Khoa Hoc = Journal of Science, 2021, 57, 108-120.	0.1	1
95	High-Entropy Pyrochlore A2B2O7 with Both Heavy and Light Rare-Earth Elements at the A Site. Materials, 2022, 15, 129.	1.3	11
96	Layered Oxygen-Deficient Double Perovskites as Promising Cathode Materials for Solid Oxide Fuel Cells. Materials, 2022, 15, 141.	1.3	40
97	Phase composition and property evolution of (Yb1â^'xHox)2Si2O7 solid solution as environmental/thermal barrier coating candidates. Journal of the European Ceramic Society, 2022, 42, 4377-4387.	2.8	11
98	Low-temperature densification of high-entropy (Ti,Zr,Nb,Ta,Mo)Câ€"Co composites with high hardness and high toughness. Journal of Advanced Ceramics, 2022, 11, 805-813.	8.9	29
99	Ultrafast high-temperature sintering of (Y0.2Dy0.2Er0.2Tm0.2Yb0.2)4Hf3O12 high-entropy ceramics with defective fluorite structure. Journal of the European Ceramic Society, 2022, 42, 4686-4691.	2.8	15
100	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
101	A high-entropy spinel ceramic oxide as the cathode for proton-conducting solid oxide fuel cells. Journal of Advanced Ceramics, 2022, 11, 794-804.	8.9	102
102	Inactive Al3+-doped La(CoCrFeMnNiAlx)1/(5+x)O3 high-entropy perovskite oxides as high performance supercapacitor electrodes. Journal of Advanced Ceramics, 2022, 11, 742-753.	8.9	42
103	Interdependence of the Electrical Performance of Nicufecomn Multi-Structure Carbonates as Electrode Material for Supercapacitors. SSRN Electronic Journal, 0, , .	0.4	0
104	Direct observation of elemental fluctuation and oxygen octahedral distortion-dependent charge distribution in high entropy oxides. Nature Communications, 2022, 13, 2358.	5.8	35
105	Phase evolution and thermophysical properties of highâ€entropy RE₂(Y_{0.2}Yb_{0.2}Nb_{0.2}Ta_{0.2}Ce_{0.2})₂O₇ oxides. Journal of the American Ceramic Society, 2022, 105, 5490-5500.	3.9	17
106	Dielectric properties of (Y0.2Eu0.2Er0.2Dy0.2Lu0.2)3(AlxFe1-x)5O12 high-entropy garnet ceramics. Ceramics International, 2023, 49, 7208-7213.	2.3	5
107	Optical properties and irradiation resistance of novel high-entropy oxide glasses La2O3â€"TiO2â€"Nb2O5â€"WO3â€"M2O3 (M=B/Ga/In). Journal of Rare Earths, 2023, 41, 507-515.	2.5	4
108	Enhanced electrical properties of (Bi0.2Na0.2Ba0.2Ca0.2Sr0.2)TiO3 high-entropy ceramics prepared by hydrothermal method. Ceramics International, 2022, 48, 19492-19500.	2.3	23
109	Structural Design and Fabrication of Multifunctional Nanocarbon Materials for Extreme Environmental Applications. Advanced Materials, 2022, 34, e2201046.	11.1	26

#	Article	IF	Citations
110	Superior phase stability of high entropy oxide ceramic in a wide temperature range. Journal of the European Ceramic Society, 2022, 42, 5053-5064.	2.8	16
111	High-entropy rare-earth zirconate ceramics with low thermal conductivity for advanced thermal-barrier coatings. Journal of Advanced Ceramics, 2022, 11, 961-973.	8.9	56
112	Self-ball milling strategy to construct high-entropy oxide coated LiNi0.8Co0.1Mn0.1O2 with enhanced electrochemical performance. Journal of Advanced Ceramics, 2022, 11, 882-892.	8.9	23
113	Surface energies in highâ€entropy carbides with variable carbon stoichiometry. Journal of the American Ceramic Society, 2022, 105, 5835-5842.	1.9	6
114	The Inverse and Conventional Magnetocaloric Effects in Ni0.4Cu0.2Zn0.4Fe2-xDyxO4 Nanoferrites Over an Extraordinary Temperature Range. Journal of Electronic Materials, 2022, 51, 3359-3363.	1.0	7
115	Optical, thermal, and mechanical properties of (Y1â^'xScx)2O3 transparent ceramics. Journal of Advanced Ceramics, 2022, 11, 901-911.	8.9	29
116	Sintering, thermal expansion, and thermal transport properties of A4Ta2O9 (A= Ca, Mg) tantalates. Ceramics International, 2022, 48, 23397-23403.	2.3	2
117	Preparation, properties and applications of fly ash-based porous geopolymers: A review. Journal of Cleaner Production, 2022, 359, 132043.	4.6	50
118	The effect of pressure tuning on the structure and mechanical properties of high-entropy carbides. Scripta Materialia, 2022, 216, 114755.	2.6	7
119	(Sm0.2Eu0.2Tb0.2Dy0.2Lu0.2)2Si2O7: A novel high-entropy rare earth disilicate porous ceramics with high porosity and low thermal conductivity. Materials Chemistry and Physics, 2022, 286, 126181.	2.0	11
120	Non-ergodic â€“ ergodic transition and corresponding electrocaloric effect in lead-free bismuth sodium titanate-based relaxor ferroelectrics. Journal of the European Ceramic Society, 2022, 42, 4917-4925.	2.8	19
121	Processing-dependent stabilization of a dissimilar rare-earth boride in high-entropy (Ti0.2Zr0.2Hf0.2Ta0.2Er0.2)B2 with enhanced hardness and grain boundary segregation. Journal of the European Ceramic Society, 2022, 42, 5164-5171.	2.8	11
122	Ultra-dense dislocations stabilized in high entropy oxide ceramics. Nature Communications, 2022, 13, .	5.8	50
123	Effect of sintering condition on crystal structure and dielectric properties of novel LuGa1/3Ti2/3O3+x/2 and RGa1/3Ti2/3O3+x/2 (R= Lu0.2Yb0.2Tm0.2Er0.2Ho0.2) high-entropy ceramic compounds: A comparative study. Materials Chemistry and Physics, 2022, 287, 126307.	2.0	3
124	The new complex highâ€entropy metal boron carbonitride: Microstructure and mechanical properties. Journal of the American Ceramic Society, 2022, 105, 6417-6426.	1.9	3
125	Reactive Flash Sintering of High-Entropy Oxide (Mg, Co, Ni, Cu, Zn)1â^'xLixO at Room Temperature. Materials, 2022, 15, 3836.	1.3	3
126	Pyrochlore-based high-entropy ceramics for capacitive energy storage. Journal of Advanced Ceramics, 2022, 11, 1179-1185.	8.9	33
127	Highly porous (La1/5Nd1/5Sm1/5Gd1/5Yb1/5)2Zr2O7 ceramics with ultra-low thermal conductivity. Ceramics International, 2022, 48, 26400-26407.	2.3	7

#	Article	IF	Citations
128	High hardness (TiZr)C ceramic with dislocation networks. Journal of the American Ceramic Society, 2022, 105, 5984-5993.	1.9	6
129	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
130	Review: High-Entropy Materials for Lithium-Ion Battery Electrodes. Frontiers in Energy Research, 0, 10, .	1.2	23
131	Immobilizing U cations in Sr2Fe2O6-Î´ as a new cathode for proton-conducting solid oxide fuel cells. Ceramics International, 2022, 48, 28751-28758.	2.3	2
132	Fiber reinforced porous (La_{1/5}Nd_{1/5}Sm_{1/5}Gd_{1/5}Yb_{1/5})₂Zr₂O<sub> ceramics with enhanced compressive strength. Journal of the American Ceramic Society, 2022, 105, 6816-6825.	1.9	0
133	Fabrication of heavily doped Nd:YAG transparent ceramics and their thin disc solid state laser performance. Ceramics International, 2022, 48, 27799-27806.	2.3	4
134	Wear behavior of (Moâ€“Nbâ€“Taâ€“Vâ€“W)C highâ€entropy carbide. International Journal of Applied Ceramic Technology, 2023, 20, 224-235.	1.1	11
135	The role of Cr addition on the processing and mechanical properties of high entropy carbides. Journal of the European Ceramic Society, 2022, 42, 5273-5279.	2.8	13
136	Properties of high entropy borides synthesized via microwave-induced plasma. APL Materials, 2022, 10, .	2.2	13
137	(Ho0.25Lu0.25Yb0.25Eu0.25)2SiO5 high-entropy ceramic with low thermal conductivity, tunable thermal expansion coefficient, and excellent resistance to CMAS corrosion. Journal of Advanced Ceramics, 2022, 11, 1279-1293.	8.9	32
138	Microstructure and Mechanical Properties of In-Situ B4C-(TiZrHfNbTa) B2 Composite by Reactive Spark Plasma Sintering. Jom, 2022, 74, 4129-4137.	0.9	4
139	Origins of high fracture toughness and glassâ€like thermal conductivity in Zrâ€“Taâ€“O composites. Journal of the American Ceramic Society, 2022, 105, 6508-6516.	1.9	4
140	Improving intermediate-temperature stability of BSCF by constructing high entropy perovskites. , 2022, 2, 100026.		4
141	Highâ€entropy yttrium pyrochlore ceramics with glassâ€like thermal conductivity for thermal barrier coating application. Journal of the American Ceramic Society, 2022, 105, 6437-6448.	1.9	6
142	High-entropy (Hf0.25Zr0.25Ti0.25Cr0.25)B2 ceramic incorporated SiC-Si composite coating to protect C/C composites against ablation above 2400ÂK. Ceramics International, 2022, 48, 27106-27119.	2.3	8
143	Lowâ€temperature synthesis of highâ€entropy (Hf_{0.2}Ti_{0.2}Mo_{0.2}Ta_{0.2}Nb_{0.2})B₂ powders combined with theoretical forecast of its elastic and thermal properties. Journal of the American Ceramic Society, 2022, 105, 6370-6383.	1.9	7
144	Rattler effect on the properties of multicomponent rare-earth-zirconate ceramics. Ceramics International, 2022, 48, 28586-28594.	2.3	5
145	Ablation behavior of (Hfâ€“Taâ€“Zrâ€“Nbâ€“Ti)C highâ€entropy carbide and (Hfâ€“Taâ€“Zrâ€“Nbâ€“Ti)Câ€“xSiC composites. Journal of the American Ceramic Society, 2022, 105, 6395-6406.	1.9	9

#	Article	IF	Citations
146	Preparing high-entropy ceramic films from high-entropy alloy substrate. Materials Chemistry and Physics, 2022, 287, 126365.	2.0	4
147	Composite structures BaSrTiO₃/NiFe₂O₄ for microwave applications. Ferroelectrics, 2022, 592, 134-142.	0.3	1
148	Achieving Excellent Energy Storage Properties in Fineâ€Grain Highâ€Entropy Relaxor Ferroelectric Ceramics. Advanced Electronic Materials, 2022, 8, .	2.6	25
149	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
150	Interdependence of the electrical performance of NiCuFeCoMn multi-structure carbonates as electrode material for supercapacitors. Journal of Alloys and Compounds, 2022, 922, 166222.	2.8	10
151	Equiatomic 9-cation high-entropy carbide ceramics of the IVB, VB, and VIB groups and thermodynamic analysis of the sintering process. Journal of Advanced Ceramics, 2022, 11, 1082-1092.	8.9	17
152	Quantitative Evaluation of Loss Capability for In Situ Conductive Phase Enhanced Microwave Absorption of Highâ€Entropy Transition Metal Oxides. Advanced Functional Materials, 2022, 32, .	7.8	26
153	Response of structure and mechanical properties of high entropy pyrochlore to heavy ion irradiation. Journal of the European Ceramic Society, 2022, 42, 6624-6632.	2.8	15
154	Stress profile and crack evolution in a three-dimensional (3D) thermal barrier coatings during isothermal cyclic test. Ceramics International, 2022, 48, 30606-30620.	2.3	3
155	High-entropy titanate pyrochlore as newly low-thermal conductivity ceramics. Journal of the European Ceramic Society, 2022, 42, 6614-6623.	2.8	14
156	Progress in ceramic materials and structure design toward advanced thermal barrier coatings. Journal of Advanced Ceramics, 2022, 11, 985-1068.	8.9	135
157	Reactive flash sintering of SrFe12O19 ceramic permanent magnets. Journal of Alloys and Compounds, 2022, 922, 166203.	2.8	8
158	Influence of order-disorder transition on the mechanical and thermophysical properties of A2B2O7 high-entropy ceramics. Journal of Advanced Ceramics, 2022, 11, 1222-1234.	8.9	21
159	Influence of equiatomic Zr/(Ti,Nb) substitution on microstructure and ultra-high strength of (Ti,Zr,Nb)C medium-entropy ceramics at 1900 Â°C. Journal of Advanced Ceramics, 2022, 11, 1457-1465.	8.9	13
160	Influence of chemical disorder on mechanical and thermal properties of multi-component rare earth zirconate pyrochlores (nRE1/n)2Zr2O7. Journal of Applied Physics, 2022, 132, .	1.1	3
161	Medium and high-entropy transition mental disilicides with improved infrared emissivity for thermal protection applications. Journal of Materials Science and Technology, 2023, 136, 149-158.	5.6	14
162	A-site deficiency in La0.5Ca0.5MnO3-Î´ cathode allows high performance for proton-conducting solid oxide fuel cells. Ceramics International, 2022, 48, 35586-35592.	2.3	2
163	Highâ€entropy oxide: A future anode contender for lithiumâ€ion battery. EcoMat, 2022, 4, .	6.8	28

#	Article	IF	Citations
164	Composition effects on elastic, thermal and corrosion properties of multiple-RE silicate (Ho1/4Er1/4Yb1/4Lu1/4)2SiO5 as a promising thermal and environmental barrier coating material. Journal of the European Ceramic Society, 2022, 42, 7258-7266.	2.8	5
165	ZrB₂â€based solid solution ceramics and their mechanical and thermal properties. International Journal of Applied Ceramic Technology, 2023, 20, 790-802.	1.1	7
166	Ablation behavior and mechanisms of Cf/(Ti0.2Zr0.2Hf0.2Nb0.2Ta0.2)Câ€“SiC high-entropy ceramic matrix composites. Composites Part B: Engineering, 2022, 243, 110177.	5.9	24
167	High-entropy fluorite oxides: Atomic stabiliser effects on thermal-mechanical properties. Journal of the European Ceramic Society, 2022, 42, 6608-6613.	2.8	9
168	Synthesis of high-entropy La2B2O7 ceramics with non-equivalent principal elements in B-sites and their CMAS resistance performance. Journal of Alloys and Compounds, 2022, 924, 166635.	2.8	6
169	Directionally solidified high-entropy (Y0.2Gd0.2Ho0.2Er0.2Yb0.2)3Al5O12/Al2O3 eutectic with outstanding crystallographic texture formation capability. Scripta Materialia, 2022, 220, 114939.	2.6	5
170	Enhanced ferroelectric relaxation behaviors of KSr2Nb5O15-based ceramics by A-site entropy-engineering. Materials Letters, 2022, 326, 132923.	1.3	1
171	Super-hard (MoSiTiVZr)Nx high-entropy nitride coatings. Journal of Alloys and Compounds, 2022, 926, 166807.	2.8	17
172	High-entropy oxides for catalysis: A diamond in the rough. Chemical Engineering Journal, 2023, 451, 138659.	6.6	41
173	Phase transformation and amorphization resistance in high-entropy MAX phase M2SnC (MÂ=ÂTi, V, Nb, Zr,) Tj ETQq1 1 0.784314 rgB	3.8	17
174	Synthesis and electromagnetic wave absorption performances of a novel (Mo0.25Cr0.25Ti0.25V0.25)3AlC2 high-entropy MAX phase. Journal of Materials Science and Technology, 2023, 137, 112-122.	5.6	29
175	High Entropy Oxide Ceramics (MgCoNiCuZn)Oï¼šFlash Sintering Synthesis and Properties. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2022, , 320.	0.6	0
176	Microstructure, Mechanical and TribologicalÂProperties of High-Entropy (Tativw)C4ÂCeramics. SSRN Electronic Journal, 0, , .	0.4	0
177	Effects of (Ta0.2w0.2nb0.2mo0.2v0.2)C High-Entropy Carbide Content on the Microstructure and Properties of Ti(C0.7n0.3)-Based Cermet. SSRN Electronic Journal, 0, , .	0.4	0
178	Microstructure and Properties of Sic Composites Binded with High Entropy Ceramics. SSRN Electronic Journal, 0, , .	0.4	0
179	Protonic SOFCs with a novel La0.4K0.1Ca0.5MnO3-Î´ cathode. Ceramics International, 2022, 48, 35599-35605.	2.3	3
180	Improving oxidation resistance of Si coating by isolated-particle healing. Corrosion Communications, 2022, 8, 9-17.	2.7	4
181	Sr-doped BaZr0.5Fe0.5O3-Î´ cathode with improved chemical stability and higher performance for proton-conducting solid oxide fuel cells. Ceramics International, 2022, 48, 35642-35648.	2.3	3

#	Article	IF	Citations
182	Planar Zintl-phase high-temperature thermoelectric materials XCuSb (X = Ca, Sr, Ba) with low lattice thermal conductivity. Journal of Advanced Ceramics, 2022, 11, 1604-1612.	8.9	13
183	Ultrafast high-temperature sintering of high-entropy (La0.2Nd0.2Sm0.2Eu0.2Gd0.2)2Hf2O7 ceramics with fluorite structure. Ceramics International, 2022, 48, 35649-35654.	2.3	10
184	Porous Refractory Ceramics for High-Temperature Thermal Insulation - Part 3: Innovation in Energy Saving. InterCeram: International Ceramic Review, 2022, 71, 30-37.	0.2	0
185	High-entropy transparent (Y0.2La0.2Gd0.2Yb0.2Dy0.2)2Zr2O7 ceramics as novel phosphor materials with multi-wavelength excitation and emission properties. Journal of the European Ceramic Society, 2023, 43, 143-149.	2.8	7
186	Discovery of orthorhombic perovskite oxides with low thermal conductivity by first-principles calculations. Journal of Advanced Ceramics, 2022, 11, 1596-1603.	8.9	15
187	Strain-induced strengthening in superconducting Î²-Mo2C through high pressure and high temperature. Journal of the European Ceramic Society, 2023, 43, 88-98.	2.8	6
188	Crystallization and phase evolution in novel (Gd_{1/6}Tb_{1/6}Dy_{1/6}Tm_{1/6}Yb_{1/6}Lu_{1/6})₂Si<su environmental barrier coating. International Journal of Applied Ceramic Technology, 2023, 20, 896-905.		
189	Insights into grain boundary segregation and solubility limit of Cr in (TiZrNbTaCr)C. Journal of Materials Science and Technology, 2023, 139, 1-9.	5.6	4
190	A new CoFe1.9Li0.1O4 spinel oxide cathode for proton-conducting solid oxide fuel cells. Ceramics International, 2022, 48, 34098-34104.	2.3	4
191	Microstructure and dielectric properties of high-entropy Sr0.9La0.1MeO3 (Me: Zr, Sn, Ti, Hf, Mn, Nb) perovskite ceramics. Journal of Materials Research and Technology, 2022, 21, 850-858.	2.6	6
192	Sintering of high-entropy nanoparticles obtained by polyol process: A case study of (La0.2Y0.2Nd0.2Sm0.2Gd0.2)2Ce2O7-Î´. Journal of the European Ceramic Society, 2022, 42, 7538-7545.	2.8	2
193	Hot corrosion of high-entropy hafnate for thermal barrier coating material subjected to molten CMAS. Corrosion Science, 2022, 209, 110714.	3.0	10
194	Structural Defects in Phaseâ€Regulated Highâ€Entropy Oxides toward Superior Microwave Absorption Properties. Advanced Functional Materials, 2023, 33, .	7.8	102
195	Thermo-mechanical properties and CMAS resistance of (Ho0.4Yb0.3Lu0.3)2SiO5 solid solution for environmental barrier coating applications. Ceramics International, 2023, 49, 6429-6439.	2.3	5
196	Improving performances of oxide solid electrolytes by a magnetic field for all-solid-state lithium-metal batteries. Applied Physics Letters, 2022, 121, 173903.	1.5	2
197	Air plasma-sprayed high-entropy (Y0.2Yb0.2Lu0.2Eu0.2Er0.2)3Al5O12 coating with high thermal protection performance. Journal of Advanced Ceramics, 2022, 11, 1571-1582.	8.9	63
198	New class of high-entropy pseudobrookite titanate with excellent thermal stability, low thermal expansion coefficient, and low thermal conductivity. Journal of Advanced Ceramics, 2022, 11, 1654-1670.	8.9	9
199	Direct selective laser sintering of high-entropy carbide ceramics. Journal of Materials Research, 2023, 38, 187-197.	1.2	2

#	Article	IF	Citations
200	Elucidating the role of preferential oxidation during ablation: Insights on the design and optimization of multicomponent ultra-high temperature ceramics. Journal of Advanced Ceramics, 2022, 11, 1956-1975.	8.9	14
201	A novel high entropy perovskite oxide with co-substitution in A and B sites (Ca1/3Sr1/3Ba1/3)(Y1/4Zr1/2Nb1/4)O3 design, synthesis and structural characterization. Ceramics International, 2023, 49, 7920-7926.	2.3	2
202	Structure and magnetic properties of (Mg1/6Zn1/6Mn1/6Co1/6Ni1/6Fe1/6)3O4 nanocrystalline high-entropy oxide synthesized using a sol-gel auto combustion approach. Journal of Magnetism and Magnetic Materials, 2022, 564, 170108.	1.0	3
203	Ordered metal substitution in Ti3AlC2 and the effect on tribological behaviors in a wide temperature range. Tribology International, 2023, 178, 108009.	3.0	11
204	Multi-component oxide lens glass with ultra-high mechanical properties inspired by the high-entropy concept. Ceramics International, 2023, 49, 9298-9306.	2.3	5
205	Long- and short-range orders in 10-component compositionally complex ceramics. , 2023, 2, 100098.		3
206	High-Entropy Perovskites Pr1â^'xSrx(Cr,Mn,Fe,Co,Ni)O3â^'Î´ (x = 0â€“0.5): Synthesis and Oxygen Permeation Properties. Membranes, 2022, 12, 1123.	1.4	5
207	Powder metallurgical processing of CrMnFeCoMo high entropy alloy: Phase evolution, microstructure, thermal stability and mechanical properties. Journal of Alloys and Compounds, 2023, 935, 168002.	2.8	17
208	In-situ phase evolution of multi-component boride to high-entropy ceramic upon ultra-high temperature ablation. Journal of the European Ceramic Society, 2023, 43, 1322-1333.	2.8	7
209	Optical properties of bulk high-entropy diborides for solar energy applications. Journal of Alloys and Compounds, 2023, 935, 167965.	2.8	7
210	A Promising High-Entropy Thermal Barrier Material with the Formula (Y0.2Dy0.2Ho0.2Er0.2Yb0.2)3Al5O12. Materials, 2022, 15, 8079.	1.3	4
211	Large electrocaloric effect over a wide temperature span in lead-free bismuth sodium titanate-based relaxor ferroelectrics. Journal of Materiomics, 2023, 9, 289-298.	2.8	7
212	Machine learning of carbon vacancy formation energy in high-entropy carbides. Journal of the European Ceramic Society, 2023, 43, 1315-1321.	2.8	6
213	Effects of (Ta0.2W0.2Nb0.2Mo0.2V0.2)C high-entropy carbide content on the microstructure and properties of Ti(C0.7N0.3)-based cermet. Ceramics International, 2023, 49, 10280-10286.	2.3	7
214	Medium-entropy ceramic aerogels for robust thermal sealing. Journal of Materials Chemistry A, 2023, 11, 742-752.	5.2	2
215	Low thermal conductivity of dense (TiZrHfVNbTa)C_xhigh-entropy carbides by tailoring carbon stoichiometry. Journal of Advanced Ceramics, 2023, 12, 49-58.	8.9	9
216	Fast grain growth phenomenon in high-entropy ceramics: A case study in rare-earth hexaaluminates. Journal of Advanced Ceramics, 2023, 12, 111-121.	8.9	9
217	Zn _{0.5}Co _{0.5}Mn _{0.5}Fe _{0.5}Al _{0.5}Mg _{0.5}O ₄ high-entropy oxide with high capacity and ultra-long life for Li-ion battery anodes. Journal of Advanced Ceramics, 2023, 12, 59-71.	8.9	10

#	Article	IF	Citations
218	High-entropy MTiO3 perovskite oxides with glass-like thermal conductivity for thermoelectric applications. Journal of Alloys and Compounds, 2023, 937, 168366.	2.8	15
219	Low-temperature sintered (Ti, Zr, Nb, Ta, Mo)C-based composites toughened with damage-free SiCw. Journal of the European Ceramic Society, 2023, 43, 1740-1745.	2.8	6
220	Layer-structured Cr/CrxN coating via electroplating-based nitridation achieving high deuterium resistance as the hydrogen permeation barrier. Journal of Advanced Ceramics, 2022, 11, 1944-1955.	8.9	3
221	Study on gradient structure and interface mechanical properties of nâ€“8YSZ/AlCoCrFeNi highâ€“entropy coatings. Ceramics International, 2023, 49, 10305-10318.	2.3	4
222	Electronic structures and strengthening mechanisms of superhard high-entropy diborides. Rare Metals, 2023, 42, 614-628.	3.6	10
223	Synthesis of high entropy carbide powders by low temperature processing. International Journal of Applied Ceramic Technology, 2023, 20, 1487-1503.	1.1	6
224	Fabrication and characterization of mediumâ€entropy carbide ceramics in low temperature sintering. International Journal of Applied Ceramic Technology, 2023, 20, 1504-1511.	1.1	1
225	Visualizing the Formation of High-Entropy Fluorite Oxides from an Amorphous Precursor at Atomic Resolution. ACS Nano, 2022, 16, 21397-21406.	7.3	7
226	Achieving high energy storage properties in perovskite oxide via high-entropy design. Ceramics International, 2023, 49, 12214-12223.	2.3	37
227	The phase structure, thermodynamic properties, and dissolution behavior of Ca₅Mg₄V₆O₂₄. Journal of the American Ceramic Society, 2023, 106, 2529-2538.	1.9	2
228	Hydrothermal synthesis of rGO/Al/CoFe2O4 with low infrared emissivity and strong microwave absorption. Ceramics International, 2023, 49, 12814-12821.	2.3	3
229	The CMAS corrosion behavior of high-entropy (Y0.2Dy0.2Er0.2Tm0.2Yb0.2)4Hf3O12 hafnate material prepared by ultrafast high-temperature sintering (UHS). Journal of the European Ceramic Society, 2023, 43, 2185-2195.	2.8	10
230	The effect of plasma-assisted ball milling on preparation and sintering behavior of (Zr0.1429Hf0.1429Ce0.1429Y0.2857La0.2857)O2-Î´ high entropy fluorite oxide. Ceramics International, 2023, 49, 13092-13101.	2.3	2
231	Thermodynamics of dual-phase compositionally complex ceramics: A case study of ultrahigh-entropy fluorite-bixbyite refractory oxides. Journal of the European Ceramic Society, 2023, 43, 2104-2114.	2.8	3
232	Local cation order and ferrimagnetism in compositionally complex spinel ferrites. APL Materials, 2022, 10, .	2.2	8
233	Highâ€Entropy Enhanced Microwave Attenuation in Titanate Perovskites. Advanced Materials, 2023, 35, .	11.1	93
234	Room-Temperature Ferroelectricity of Paraelectric Oxides Tailored by Nano-Engineering. ACS Applied Materials & Interfaces, 2023, 15, 4226-4233.	4.0	1
235	Microstructure, mechanical and tribological properties of high-entropy (TaTiVW)C4 ceramics. International Journal of Refractory Metals and Hard Materials, 2023, 112, 106114.	1.7	6

#	Article	IF	Citations
236	Facile synthesis of metal carbides with high-entropy strategy for engineering electrical properties. Journal of Materials Research and Technology, 2023, 23, 1312-1320.	2.6	2
237	Reactive HiTUS TiNbVTaZrHf-Nx Coatings: Structure, Composition and Mechanical Properties. Materials, 2023, 16, 563.	1.3	4
238	A novel strategy for rapid fabrication of continuous carbon fiber reinforced (TiZrHfNbTa)C high-entropy ceramic composites: High-entropy alloy in-situ reactive melt infiltration. Journal of the European Ceramic Society, 2023, 43, 2295-2305.	2.8	10
239	Formation and properties of Ca2+ substituted (Ce0.2Zr0.2Ti0.2Sn0.2Hf0.2)O2 high-entropy ceramics. Journal of the European Ceramic Society, 2023, 43, 2586-2592.	2.8	6
240	Ablation behavior of high-entropy carbides ceramics (Hf0.2Zr0.2Ta0.2Nb0.2Ti0.2)C upon exposition to an oxyacetylene torch at 2000ÂÂ°C. Journal of the European Ceramic Society, 2023, 43, 2306-2319.	2.8	5
241	Theoretical and experimental investigations on the phase stability and fabrication of high-entropy monoborides. Journal of the European Ceramic Society, 2023, 43, 2320-2330.	2.8	33
242	Bifunctional SiC/Si ₃N ₄ aerogel for highly efficient electromagnetic wave absorption and thermal insulation. Journal of Advanced Ceramics, 2023, 12, 309-320.	8.9	10
243	Synthesis and mechanical and elevated temperature tribological properties of a novel high-entropy (TiVNbMoW)C _{4.375} with carbon stoichiometry deviation. Journal of Advanced Ceramics, 2023, 12, 242-257.	8.9	12
244	Oscillatory pressure-assisted sinter forging for preparation of high-performance SiC whisker reinforced Al₂O₃composites. Journal of Advanced Ceramics, 2023, 12, 321-328.	8.9	5
245	Mechanical property enhancements and amorphous thermal transports of ordered weberite-type RE₃Nb/TaO₇high-entropy oxides. Journal of Advanced Ceramics, 2023, 12, 399-413.	8.9	9
246	High-performance multifunctional (Hf _{0.2}Nb _{0.2}Ta _{0.2}Ti) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3 grapheneâ€“carbon nanotube. Journal of Advanced Ceramics, 2023, 12, 341-356.	8.9	7
247	Oxygen transport kinetics of BSCF-based high entropy perovskite membranes. Separation and Purification Technology, 2023, 309, 123093.	3.9	1
248	Structure evolutions of the polymer derived medium-/high-entropy metal carbides. Journal of Alloys and Compounds, 2023, 939, 168737.	2.8	3
249	Effect of Sintering Time on Mechanical Properties of (Hf-Ta-Zr-Nb-Ti)C. Powder Metallurgy Progress, 2021, 21, 50-57.	0.6	1
250	High Entropy Rare-Earth Molybdate Ceramics with Broad Operating-Temperature Window and Anti-Hygroscopicity Ability: A Promising Strategy for Negative Thermal Expansion Materials. , 2023, 1, 841-850.		3
251	High-entropy silicide superconductors with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">W</mml:mi><mml:mn>5</mml:mn></mml:msub><mml:msub><mml:mi>Si</mml:mi><mml:mn>3</mml:mn> -type structure. Physical Review Materials, 2023, 7, .	2.9	1
252	Suppressing the phase-transition-induced cracking of SiO2 TGOs by lattice solid solution. Journal of the European Ceramic Society, 2023, 43, 3201-3215.	2.8	7
253	Computing grain boundary â€œphaseâ€•diagrams. , 2023, 2, 137-160.		9

#	Article	IF	Citations
254	Preparation of a nano-size (La0.2Nd0.2Sm0.2Sr0.2Ba0.2)Co0.2Fe0.8O3-Î´/SDC high-entropy oxide composite cathode. Materials Letters, 2023, 338, 134029.	1.3	4
255	Reduced He ion irradiation damage in ZrC-based high-entropy ceramics. Journal of Advanced Ceramics, 2023, 12, 916-929.	8.9	9
256	Phase transformation and radiation resistance of B-site high entropy pyrochlores. Scripta Materialia, 2023, 229, 115367.	2.6	6
257	A (Hf0.2Mo0.2Nb0.2Ta0.2Ti0.2)C system high-entropy ceramic with excellent mechanical and tribological properties prepared at low temperature. Tribology International, 2023, 184, 108471.	3.0	5
258	Characteristics of ferroelastic domains and thermal transport limits in HfO2 alloying YTaO4 ceramics. Acta Materialia, 2023, 251, 118870.	3.8	14
259	Influence of molten-salt-synthesised high-entropy (V0.2Cr0.2Mo0.2W0.2Ni0.2)B powder characteristics on superhard mechanism during spark plasma sintering. Journal of Alloys and Compounds, 2023, 947, 169618.	2.8	3
260	The effects of mixing non-metal atoms in the B1 structured transition metal carbo-nitrides on their structure and mechanical properties: HfC1-N. Open Ceramics, 2023, 14, 100356.	1.0	0
261	CALPHAD aided mechanical properties screening in full composition space of NbC-TiC-VC-ZrC ultra-high temperature ceramics. International Journal of Refractory Metals and Hard Materials, 2023, 113, 106191.	1.7	3
262	High-entropy ferroelastic (10RE0.1)TaO4 ceramics with oxygen vacancies and improved thermophysical properties. Journal of Materials Science and Technology, 2023, 157, 98-106.	5.6	22
263	Preparation and characterization of a novel monazite-type high-entropy (La1/7Ce1/7Pr1/7Nd1/7Sm1/7Eu1/7Gd1/7)PO4 for thermal/environmental barrier coatings. Journal of Alloys and Compounds, 2023, 952, 169978.	2.8	12
264	Microstructure and properties of high-entropy diboride composites prepared by pressureless sintering. Journal of Alloys and Compounds, 2023, 952, 169975.	2.8	5
265	High-entropy (Sm0.2Eu0.2Gd0.2Dy0.2Er0.2)2Hf2O7 ceramic with superb resistance to radiation-induced amorphization. Journal of Materials Science and Technology, 2023, 155, 1-9.	5.6	2
266	Thermal and ablation properties of a high-entropy metal diboride: (Hf0.2Zr0.2Ti0.2Ta0.2Nb0.2)B<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si9.svg" display="inline" id="d1e351"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math>. Journal of the European Ceramic Society, 2023, 43, 4581-4587.	2.8	2
267	Irradiation induced structural damage and evolution of mechanical properties in high entropy fluorite oxide. Journal of the European Ceramic Society, 2023, 43, 3507-3515.	2.8	8
268	High entropy (Y1/5Ho1/5Er1/5Yb1/5Lu1/5)3Al5O12 with low thermal conductivity and high thermal stability. Journal of Alloys and Compounds, 2023, 949, 169736.	2.8	4
269	Defective multi-element hydroxides nanosheets for rapid removal of anionic organic dyes from water and oxygen evolution reaction. Journal of Hazardous Materials, 2023, 447, 130803.	6.5	2
270	Ferroelastic tetragonal-monoclinic phase transition and anisotropic thermal expansion of LuNbO4 ceramics. Scripta Materialia, 2023, 228, 115258.	2.6	4
271	First principle study on high-entropy perovskites Ca(Ti0.25Zr0.25Hf0.25Sn0.25)O3 and Ca(Ti0.25Zr0.25Hf0.25Ce0.25)O3 as thermal barrier coatings. Materials Chemistry and Physics, 2023, 297, 127460.	2.0	1

#	Article	IF	Citations
272	Microstructure, Mechanical and Tribological Properties of High-Entropy Carbide Ceramics (VNbTaMoW)C5â€“SiC. Powder Metallurgy and Metal Ceramics, 2022, 61, 451-458.	0.4	1
273	Carbon-deficient high-entropy (Zr0.17Nb0.2Ta0.2Mo0.2W0.2)C0.89: A potential high temperature and vacuum wear-resistant material. Materials and Design, 2023, 226, 111680.	3.3	4
274	Accelerating the design of multicomponent rare earth silicates for SiCf/SiC CMC by combinatorial material chip design and high throughput screening. Journal of Materials Science and Technology, 2023, 150, 96-103.	5.6	3
275	Tuning structure, mechanical properties, and oxidation resistance of (Nb, Ta)C1- solid solution powders via the dissolution-precipitation process. Ceramics International, 2023, 49, 16753-16765.	2.3	0
276	Evolution behaviour of the lattice and thermal expansion of a high-entropy fluorite oxide (Zr0.2Ce0.2Hf0.2Y0.2Al0.2)O2-Î´ during heating and cooling in an inert atmosphere. Ceramics International, 2023, 49, 17245-17254.	2.3	7
277	Synergistic effects of high-entropy engineering and particulate toughening on the properties of rare-earth aluminate-based ceramic composites. Journal of Advanced Ceramics, 2023, 12, 861-872.	8.9	5
278	The highest melting point material: Searched by Bayesian global optimization with deep potential molecular dynamics. Journal of Advanced Ceramics, 2023, 12, 803-814.	8.9	3
281	Synthesis of porous (Co0.2Cu0.2Mg0.2Ni0.2Zn0.2)O high entropy oxide catalysts for peroxymonosulfate activation toward tetracycline degradation. Inorganic Chemistry Communication, 2023, 150, 110547.	1.8	2
282	Facile synthesis of high-entropy zirconate nanopowders and their sintering behaviors. Journal of Advanced Ceramics, 2023, 12, 498-509.	8.9	5
284	Will high-entropy carbides and borides be enabling materials for extreme environments?. International Journal of Extreme Manufacturing, 2023, 5, 022002.	6.3	7
285	Synthesis of (HfZrTiNbTa)N powders via nitride thermal reduction with soft mechano-chemical assistance. Journal of Advanced Ceramics, 2023, 12, 565-577.	8.9	3
286	B₄Câ€“(Ti_{0.9}Cr_{0.1})B₂ composites with excellent specific hardness and enhanced toughness. Journal of the American Ceramic Society, 2023, 106, 4013-4022.	1.9	3
287	Xenotime-type high-entropy (Dy_{1/7}Ho_{1/7}Er_{1/7}Tm_{1/7}Yb_{1/7}Lu_{1/7}Y_{1/7})PO A promising thermal/environmental barrier coating material for SiC_f/SiC ceramic matrix composites. Journal of Advanced Ceramics, 2023, 12, 1033-1045.	8.9	16
288	Microstructure and cation distribution of Mn2â€“xAlxZn0.2Ni0.6Mg0.2O4 high entropy oxide films. Journal of Materials Science: Materials in Electronics, 2023, 34, .	1.1	4
289	Entropy regulation in LaNbO₄-based fergusonite to implement high-temperature phase transition and promising dielectric properties. Journal of Advanced Ceramics, 2023, 12, 1067-1080.	8.9	13
290	Influence of average radii of RE³⁺ions on phase structures and thermal expansion coefficients of high-entropy pyrosilicates. Journal of Advanced Ceramics, 2023, 12, 1090-1104.	8.9	5
291	Phase formation capability and compositional design of Î²-phase multiple rare-earth principal component disilicates. Nature Communications, 2023, 14, .	5.8	3
293	Achieving high energy storage performance below 200ÂkV/cm in BaTiO3-based medium-entropy ceramics. Ceramics International, 2023, 49, 20326-20333.	2.3	10

#	Article	IF	Citations
294	High-entropy design for dielectric materials: Status, challenges, and beyond. Journal of Applied Physics, 2023, 133, .	1.1	5
295	Dual-Porosity (Ta0.2Nb0.2Ti0.2Zr0.2Hf0.2)C High-Entropy Ceramics with High Compressive Strength and Low Thermal Conductivity Prepared by Pressureless Sintering. Materials, 2023, 16, 2495.	1.3	5
296	Microstructural evolution and electromagnetic wave absorbing performance of single-source-precursor-synthesized SiCuCN-based ceramic nanocomposites. Journal of Advanced Ceramics, 2023, 12, 1299-1316.	8.9	3
297	High-Pressure Torsion for Highly-Strained and High-Entropy Photocatalysts. KONA Powder and Particle Journal, 2024, 41, 123-139.	0.9	5
298	Structural, mechanical and thermal properties of cubic bixbyite-structured high-entropy oxides. Chemical Engineering Journal, 2023, 464, 142649.	6.6	6
299	Attempted preparation of La _{0.5}Ba _{0.5}MnO _{3â^' Î´} leading to an in-situ formation of manganate nanocomposites as a cathode for proton-conducting solid oxide fuel cells. Journal of Advanced Ceramics, 2023, 12, 1189-1200.	8.9	24
300	In situ reaction synthesis, microstructure and thermomechanical properties of novel medium-entropy (Ti,V,Nb,Ta)2AlC ceramics. Ceramics International, 2023, 49, 21206-21212.	2.3	3
301	ADASYN-assisted machine learning for phase prediction of high entropy carbides. Computational Materials Science, 2023, 223, 112142.	1.4	5
302	Grain growth inhibition by sluggish diffusion and Zener pinning in highâ€entropy diboride ceramics. Journal of the American Ceramic Society, 2023, 106, 4997-5004.	1.9	4
303	Reactive flash synthesis and phase compositions of Li (CoCrFeMnNi)O (x = 0â€“1) oxides. Ceramics International, 2023, 49, 21555-21560.	2.3	1
304	Highâ€temperature selfâ€lubricating properties of singleâ€phase highâ€entropy carbides under a vacuum environment. Journal of the American Ceramic Society, 2023, 106, 4987-4996.	1.9	1
305	Fast ion-conducting high-entropy garnet solid-state electrolytes with excellent air stability. Journal of Advanced Ceramics, 2023, 12, 1201-1213.	8.9	8
306	Unveiling surface stability and oxygen vacancy segregation of Yb₂SiO₅ and Lu₂SiO₅ by firstâ€principles calculations. Journal of the American Ceramic Society, 2023, 106, 5033-5045.	1.9	1
307	Formation mechanism and high-temperature self-lubricating behavior of (HfMoNbTaTi)C system single-phase high-entropy ceramics. Journal of the European Ceramic Society, 2023, 43, 5099-5107.	2.8	4
308	Synergetic effect of lattice distortion and oxygen vacancies on high-rate lithium-ion storage in high-entropy perovskite oxides. Journal of Advanced Ceramics, 2023, 12, 1214-1227.	8.9	6
309	Rare-Earth-Zirconate Porous High-Entropy Ceramics with Unique Pore Structures for Thermal Insulating Applications. Materials, 2023, 16, 3040.	1.3	0
310	Magnetic Field Effects on the Structure, Dielectric and Energy Storage Properties of High-Entropy Spinel Ferrite (La0.14Ce0.14Mn0.14Zr0.14Cu0.14Ca0.14Ni0.14)Fe2O4/PVDF Nanocomposites. Polymers, 2023, 15, 1842.	2.0	3
311	Fabrication of multi-anionic high-entropy carbonitride ultra-high-temperature ceramics by a green and low-cost process with excellent mechanical properties. Journal of Advanced Ceramics, 2023, 12, 1258-1272.	8.9	8

#	Article	IF	Citations
312	Prediction of lattice distortion and mechanical behavior of tetragonal phase (Bi0.2Na0.2Ba0.2Sr0.2Ca0.2)TiO3 high-entropy perovskite with A-site disorder from first-principles calculations. Journal of Alloys and Compounds, 2023, 954, 170205.	2.8	3
313	Fluorite-pyrochlore structured high-entropy oxides: Tuning the ratio of B-site cations for resistance to CMAS corrosion. Corrosion Science, 2023, 218, 111199.	3.0	2
314	High-performance thermoelectric oxide ceramics. , 2023, , 327-345.		0
315	Composition-structure-property synergistically tailoring of Zr-Y-Ta-O oxides as candidate abradable seal coatings materials. Journal of the European Ceramic Society, 2023, 43, 5347-5358.	2.8	2
327	High-entropy ceramic coatings. , 2023, , 87-101.		0
395	Structure and properties of composites based on multicomponent solid solution with inclusions hexagonal boron nitride. AIP Conference Proceedings, 2023, , .	0.3	0
427	A review of progress in proton ceramic electrochemical cells: material and structural design, coupled with value-added chemical production. Energy and Environmental Science, 2023, 16, 5721-5770.	15.6	12
430	High Entropy Alloys and Materials. , 2023, 1, 1-3.		2
465	High-entropy rare earth materials: synthesis, application and outlook. Chemical Society Reviews, 2024, 53, 2211-2247.	18.7	0