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Microstructure and room temperature properties of a high-entropy TaNbHfZrTi alloy

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#	Paper	IF	Citations
974	Microstructure and properties of a refractory NbCrMo <sub>0.5</sub> Ta <sub>0.5</sub> TiZr alloy. <b>2011</b> , 529, 311-320		249
973	Determination of the transition to the high entropy regime for alloys of refractory elements. <i>Journal of Alloys and Compounds</i> , <b>2012</b> , 534, 25-31	5.7	31
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4 <sup>15</sup>	Laser metal deposition of refractory high-entropy alloys for high-throughput synthesis and structure-property characterization. <b>2021</b> , 3, 015201	7
4 <sup>14</sup>	Phase transformation and strengthening mechanisms of nanostructured high-entropy alloys. <b>2021</b> , 10, 1116-1139	4
4 <sup>13</sup>	Pseudoelastic Deformation in Refractory (MoW) 85 Zr 7.5(TaTi) 7.5 High-Entropy Alloy.	
4 <sup>12</sup>	Machine Learning for High-Entropy Alloys. <b>2021</b> , 21-58	0
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4 <sup>10</sup>	Study on Microstructure, Mechanical, and Thermal Properties of High-Entropy Alloys. <b>2021</b> , 655-663	
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4 <sup>08</sup>	Solid solution strengthening in multicomponent fcc and bcc alloys: Analytical approach. <b>2021</b> , 31, 95-104	6
4 <sup>07</sup>	Effects of Nb on deformation-induced transformation and mechanical properties of HfNb <sub>x</sub> Ta <sub>0.2</sub> TiZr high entropy alloys. <b>2021</b> , 805, 140798	5
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4 <sup>03</sup>	Powder Bed Fusion Additive Manufacturing Using Critical Raw Materials: A Review. <b>2021</b> , 14,	25
4 <sup>02</sup>	Spark plasma sintering behavior of TaNbHfZrTi high-entropy alloy powder synthesized by hydrogenation-dehydrogenation reaction. <b>2021</b> , 130, 107077	2
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4 <sup>00</sup>	Investigation of a Novel CoCrCuNiTi High Entropy Alloy on Microstructure and Mechanical Properties. <b>2021</b> , 62, 197-205	0

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- 115 A lightweight Al<sub>0.8</sub>Nb<sub>0.5</sub>Ti<sub>2</sub>V<sub>2</sub>Zr<sub>0.5</sub> refractory high entropy alloy with high specific yield strength. **2022**, 328, 133144 ○
- 114 Body-Centered Cubic High-Entropy Alloys. **2022**, 3-34 ○
- 113 The Status of Bulk Metallic Glass and High Entropy Alloys Research. **2022**, 233-278 ○
- 112 Strengthening Mechanisms of AlCoCrFeNi-Wc-Ti Coating from First-Principles Calculations. ○

111	Fatigue of Biomaterials and Biomedical Systems. <b>2022,</b>	0
110	Mechanical Properties of Complex Concentrated Alloys: Implications for Structural Integrity. <b>2022,</b>	1
109	Uncovering heterogeneity of local lattice distortion in TiZrHfNbTa refractory high entropy alloy by SR-XRD and EXAFS. <b>2023,</b> 223, 115079	0
108	Atom Location by Channeling-Enhanced Microanalysis (ALCHEMI) Study of Structure of Complex Concentrated Alloys Derived From FeAl Iron Aluminide. <b>2022,</b> 53, 3968-3976	0
107	Microstructure and Mechanical Properties of Intergranular Boride Precipitation-Toughened HfMoNbTaTiZr Refractory High-Entropy Alloy. <b>2022,</b> 15, 6666	0
106	Microstructure and Mechanical Properties of Novel High-Strength, Low-Activation W <sub>x</sub> (TaVZr) <sub>100-x</sub> (x = 5, 10, 15, 20, 25) Refractory High Entropy Alloys. <b>2022,</b> 24, 1342	0
105	Heat treatment effects on microstructure and mechanical properties of TiZrNbTa high-entropy alloy. <b>2022,</b> 167408	0
104	Design of oxygen-doped TiZrHfNbTa refractory high entropy alloys with enhanced strength and ductility. <b>2022,</b> 111239	0
103	Influence of Cr, Fe, or Cu 3d Transition Metals on Phase Components, Microstructures, and Mechanical Properties of CoNiTiV-Base High Entropy Alloys.	0
102	Correlations of Composition, Structure, and Hardness in the High-Entropy Alloy System NbMoTaW.	0
101	Strengthening of cost-effective Co-free medium entropy alloys by Al/C alloying. <b>2022,</b> 857, 144080	0
100	A novel Hf <sub>30</sub> Nb <sub>25</sub> Ta <sub>25</sub> Ti <sub>15</sub> Mo <sub>5</sub> refractory high entropy alloy with excellent combination of strength and ductility. <b>2022,</b> 857, 144035	0
99	Excellent room-temperature tensile ductility in as-cast Ti <sub>37</sub> V <sub>15</sub> Nb <sub>22</sub> Hf <sub>23</sub> W <sub>3</sub> refractory high entropy alloys. <b>2022,</b> 151, 107735	0
98	A novel Ti <sub>42.5</sub> Zr <sub>42.5</sub> Nb <sub>5</sub> Ta <sub>10</sub> multi-principal element alloy with excellent properties for biomedical applications. <b>2022,</b> 151, 107731	0
97	Complex Concentrated Alloys: A Cornucopia of Possible Structural and Functional Applications. <b>2022,</b>	1
96	Additive manufacturing of metallic glasses and high-entropy alloys: Significance, unsettled issues, and future directions. <b>2022,</b>	2
95	Edge-dislocation-induced ultrahigh elevated-temperature strength of HfMoNbTaW refractory high-entropy alloys. <b>2022,</b> 23, 642-654	1
94	Refractory Multi-Principal Element Alloys, CrHfNbTa <sub>0.5</sub> Zr and CrHfMo <sub>0.5</sub> Ta <sub>0.5</sub> Zr, with High Strength at Ambient Temperature.	0

93	An experimentally driven high-throughput approach to design refractory high-entropy alloys. <b>2022</b> , 223, 111259	0
92	Refractory high-entropy alloys: A focused review of preparation methods and properties. <b>2022</b> ,	1
91	Comprehensive understanding of local lattice distortion in dilute and equiatomic FCC alloys. <b>2023</b> , 293, 126928	0
90	Microstructure and strengthening mechanisms of novel lightweight TiAlV0.5CrMo refractory high-entropy alloy fabricated by mechanical alloying and spark plasma sintering. <b>2023</b> , 932, 167659	1
89	Microstructural design via spinodal-mediated phase transformation pathways in high-entropy alloys (HEAs) using phase-field modelling. <b>2023</b> , 243, 118438	0
88	3D printable low density B2+BCC refractory element based complex concentrated alloy with high compressive strength and plasticity. <b>2023</b> , 225, 115160	0
87	Machine-learning-based intelligent framework for discovering refractory high-entropy alloys with improved high-temperature yield strength. <b>2022</b> , 8,	0
86	Strain-Rate Effects and Dynamic Behavior of High Entropy Alloys. <b>2022</b> ,	1
85	Explainable Artificial Intelligence Approach for Yield Strength Prediction in As-Cast Multi-Principal Element Alloys. <b>2022</b> , 101628	0
84	High-temperature deformation behavior and microstructural evolution of NbZrTiTa refractory high entropy alloy. <b>2022</b> , 168059	0
83	Ideal simple shear strengths of two HfNbTaTi-based quinary refractory multi-principal element alloys. <b>2022</b> , 10, 111107	1
82	Strengthening mechanisms of AlCoCrFeNi-WC-Ti coating from first-principles calculations. <b>2022</b> , 33, 104869	0
81	High specific yield strength TiZrAlNbV high-entropy alloys via coherent nanoprecipitation strengthening. <b>2022</b> , 861, 144346	0
80	Composition design to tune the mechanical behavior of a TRIP-TWIP (CrMnFeCoNi) <sub>50</sub> Fe <sub>50-x</sub> Cr <sub>x</sub> multi-principal element alloys. <b>2022</b> , 144357	0
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78	High Entropy Materials: Basic Concepts. <b>2022</b> , 27-46	1
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46	Influences of Synthetic Parameters on Morphology and Growth of High Entropy Oxide Nanotube Arrays. <b>2023</b> , 13, 46	o
45	Effects of the Environment and Temperature on the Tribological Behavior of TiZrHfNbTa Refractory High-Entropy Alloy.	o
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