Michael Frank

List of Publications by Year
in descending order

28	1,034	471371 17	501076 28
papers	citations	h-index	g-index

28	28	28	656
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Corrosion-resistant high entropy alloy with high strength and ductility. Scripta Materialia, 2019, 166, 168-172.	2.6	148
2	Enhanced strength and ductility in a friction stir processing engineered dual phase high entropy alloy. Scientific Reports, 2017, 7, 16167.	1.6	127
3	Extremely high strength and work hardening ability in a metastable high entropy alloy. Scientific Reports, 2018, 8, 9920.	1.6	96
4	Reversed strength-ductility relationship in microstructurally flexible high entropy alloy. Scripta Materialia, 2018, 154, 163-167.	2.6	72
5	Extremely high fatigue resistance in an ultrafine grained high entropy alloy. Applied Materials Today, 2019, 15, 525-530.	2.3	61
6	Metastability-assisted fatigue behavior in a friction stir processed dual-phase high entropy alloy. Materials Research Letters, 2018, 6, 613-619.	4.1	54
7	Unexpected strengthâ€“ductility response in an annealed, metastable, high-entropy alloy. Applied Materials Today, 2018, 13, 198-206.	2.3	50
8	Nanoindentation behavior of high entropy alloys with transformation-induced plasticity. Scientific Reports, 2019, 9, 6639.	1.6	41
9	On the evolving nature of c/a ratio in a hexagonal close-packed epsilon martensite phase in transformative high entropy alloys. Scientific Reports, 2019, 9, 13185.	1.6	40
10	Development of in situ composites via reactive friction stir processing of Tiâ€“B4C system. Composites Part B: Engineering, 2019, 172, 54-60.	5.9	38
11	Microstructurally flexible high entropy alloys: Linkages between alloy design and deformation behavior. Materials and Design, 2020, 194, 108968.	3.3	34
12	Towards Obtaining Sound Butt Joint Between Metallurgically Immiscible Pure Cu and Stainless Steel Through Friction Stir Welding. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 2578-2582.	1.1	30
13	Deformation mechanisms and ductile fracture characteristics of a friction stir processed transformative high entropy alloy. Acta Materialia, 2020, 184, 164-178.	3.8	30
14	Metastability driven hierarchical microstructural engineering: Overview of mechanical properties of metastable complex concentrated alloys. Journal of Alloys and Compounds, 2020, 842, 155625.	2.8	24
15	Superplasticity in fine grained dual phase high entropy alloy. Materialia, 2020, 9, 100521.	1.3	20
16	Investigating the deformation mechanisms of a highly metastable high entropy alloy using in-situ neutron diffraction. Materials Today Communications, 2020, 23, 100858.	0.9	18
17	Direct evidence of the stacking fault-mediated strain hardening phenomenon. Applied Physics Letters, 2021, 119, .	1.5	18
18	Correlating work hardening with co-activation of stacking fault strengthening and transformation in a high entropy alloy using in-situ neutron diffraction. Scientific Reports, 2020, 10, 22263.	1.6	17

#	Article	IF	Citations
19	Revealing the microstructural evolution in a high entropy alloy enabled with transformation, twinning and precipitation. Materialia, 2019, 6, 100310.	1.3	16
20	Towards attaining dissimilar lap joint of CuCrZr alloy and 316L stainless steel using friction stir welding. Science and Technology of Welding and Joining, 2018, 23, 715-720.	1.5	15
21	Friction stir gradient alloying: A novel solid-state high throughput screening technique for high entropy alloys. Materials Today Communications, 2020, 23, 100869.	0.9	14
22	Notch-tensile behavior of Al0.1CrFeCoNi high entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 774, 138918.	2.6	13
23	Transformative high entropy alloy conquers the strength-ductility paradigm by massive interface strengthening. Scripta Materialia, 2021, 203, 114070.	2.6	13
24	Evolution of bond formation and fracture process of ultrasonic spot welded dissimilar materials. Science and Technology of Welding and Joining, 2019, 24, 171-177.	1.5	12
25	Microstructural Evolution and Deformation Behavior of Ni-Si- and Co-Si-Containing Metastable High Entropy Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 179-190.	1.1	10
26	Evaluating the microstructure and origin of nonmetallic inclusions in as-cast U-10Mo fuel. Journal of Nuclear Materials, 2021, 554, 152949.	1.3	10
27	Co-introduction of precipitate hardening and TRIP in a TWIP high-entropy alloy using friction stir alloying. Scientific Reports, 2021, 11, 1579.	1.6	8
28	Effect of Strain Rate on Deformation Response of Metastable High Entropy Alloys Upon Friction Stir Processing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 5043-5048.	1.1	5