

# Saurabh Nene

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4424272/publications.pdf>

Version: 2024-02-01

34  
papers

996  
citations

471061

17  
h-index

433756

31  
g-index

34  
all docs

34  
docs citations

34  
times ranked

707  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced strength and ductility in a friction stir processing engineered dual phase high entropy alloy. <i>Scientific Reports</i> , 2017, 7, 16167.	1.6	127
2	Extremely high strength and work hardening ability in a metastable high entropy alloy. <i>Scientific Reports</i> , 2018, 8, 9920.	1.6	96
3	Microstructure refinement and its effect on specific strength and bio-corrosion resistance in ultralight Mg <sup>4</sup> Li <sup>1</sup> Ca (LC41) alloy by hot rolling. <i>Journal of Alloys and Compounds</i> , 2014, 615, 501-506.	2.8	68
4	Segregation engineering of grain boundaries of a metastable Fe-Mn-Co-Cr-Si high entropy alloy with laser-powder bed fusion additive manufacturing. <i>Acta Materialia</i> , 2021, 219, 117271.	3.8	67
5	Extremely high fatigue resistance in an ultrafine grained high entropy alloy. <i>Applied Materials Today</i> , 2019, 15, 525-530.	2.3	61
6	Metastability-assisted fatigue behavior in a friction stir processed dual-phase high entropy alloy. <i>Materials Research Letters</i> , 2018, 6, 613-619.	4.1	54
7	Unexpected strength-ductility response in an annealed, metastable, high-entropy alloy. <i>Applied Materials Today</i> , 2018, 13, 198-206.	2.3	50
8	Nanoindentation behavior of high entropy alloys with transformation-induced plasticity. <i>Scientific Reports</i> , 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. <i>Scientific Reports</i> , 2019, 9, 13185.	1.6	40
10	Towards Obtaining Sound Butt Joint Between Metallurgically Immiscible Pure Cu and Stainless Steel Through Friction Stir Welding. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 2578-2582.	1.1	30
11	Deformation mechanisms and ductile fracture characteristics of a friction stir processed transformative high entropy alloy. <i>Acta Materialia</i> , 2020, 184, 164-178.	3.8	30
12	Excellent strength-ductility synergy in metastable high entropy alloy by laser powder bed additive manufacturing. <i>Additive Manufacturing</i> , 2020, 32, 101098.	1.7	29
13	Biocorrosion and biodegradation behavior of ultralight Mg <sup>4</sup> Li <sup>1</sup> Ca (LC41) alloy in simulated body fluid for degradable implant applications. <i>Journal of Materials Science</i> , 2015, 50, 3041-3050.	1.7	27
14	Metastability driven hierarchical microstructural engineering: Overview of mechanical properties of metastable complex concentrated alloys. <i>Journal of Alloys and Compounds</i> , 2020, 842, 155625.	2.8	24
15	Superplasticity in fine grained dual phase high entropy alloy. <i>Materialia</i> , 2020, 9, 100521.	1.3	20
16	Friction stir welding of $\beta$ -fcc dominated metastable high entropy alloy: Microstructural evolution and strength. <i>Scripta Materialia</i> , 2021, 204, 114161.	2.6	20
17	Investigating the deformation mechanisms of a highly metastable high entropy alloy using in-situ neutron diffraction. <i>Materials Today Communications</i> , 2020, 23, 100858.	0.9	18
18	Direct evidence of the stacking fault-mediated strain hardening phenomenon. <i>Applied Physics Letters</i> , 2021, 119, .	1.5	18

#	ARTICLE	IF	CITATIONS
19	Damage-tolerant, corrosion-resistant high entropy alloy with high strength and ductility by laser powder bed fusion additive manufacturing. Additive Manufacturing, 2020, 36, 101455.	1.7	17
20	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
21	Some Unique Aspects of Mechanical Behavior of Metastable Transformative High Entropy Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 889-896.	1.1	17
22	Revealing the microstructural evolution in a high entropy alloy enabled with transformation, twinning and precipitation. Materialia, 2019, 6, 100310.	1.3	16
23	Role of Cu addition in enhancing strength-ductility synergy in transforming high entropy alloy. Materials and Design, 2022, 215, 110487.	3.3	16
24	Friction stir processing of newly-designed Mg-5Al-3.5Ca-1Mn (AXM541) alloy: Microstructure evolution and mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 729, 294-299.	2.6	15
25	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
26	Effects of plasticity-induced martensitic transformation and grain refinement on the evolution of microstructure and mechanical properties of a metastable high entropy alloy. Journal of Alloys and Compounds, 2022, 891, 161871.	2.8	13
27	Friction stir butt welding of a high strength Al-7050 alloy with a metastable transformative high entropy alloy. Materialia, 2020, 11, 100740.	1.3	13
28	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
29	Microstructure-Property Correlation in a Laser Powder Bed Fusion Processed High-Strength AF628 Steel. Advanced Engineering Materials, 2021, 23, .	1.6	7
30	Microstructural evolution in and flow properties of Zr-2.5Nb pressure tube material at elevated temperature. Journal of Nuclear Materials, 2014, 449, 62-68.	1.3	5
31	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
32	Effect of Rolling on Microstructure and Room Temperature Tensile Properties of Newly Developed Mg-4Li-1Ca Alloy. Advanced Materials Research, 0, 922, 537-542.	0.3	4
33	Friction stir processing of a high entropy alloy Fe <sub>42</sub> Co <sub>10</sub> Cr <sub>15</sub> Mn <sub>28</sub> Si <sub>5</sub> with transformative characteristics: Microstructure and mechanical properties. Materials Today Communications, 2021, 28, 102635.	0.9	4
34	Towards microstructure-cytocompatibility relationship in ultralight Mg-4Li-1Ca (LX41) alloy for degradable implant applications. BioNanoMaterials, 2016, 17, .	1.4	2