Praveen Sathiyamoorthi

List of Publications by Year
in descending order

44	2,815	218381	276539
papers	citations	26 h-index	41 g-index

45	45	45	1650
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nanocrystalline High Entropy Alloys: Processing and Properties. , 2022, , 372-380.		1
2	High-entropy alloys with heterogeneous microstructure: Processing and mechanical properties. Progress in Materials Science, 2022, 123, 100709.	16.0	270
3	1.7 Gpa tensile strength in ferrous medium entropy alloy via martensite and precipitation. Materials Letters, 2022, 307, 130958.	1.3	7
4	Deformation-induced grain boundary segregation mediated high-strain rate superplasticity in medium entropy alloy. Scripta Materialia, 2022, 207, 114239.	2.6	32
5	Role of cellular structure on deformation twinning and hetero-deformation induced strengthening of laser powder-bed fusion processed CuSn alloy. Additive Manufacturing, 2022, 54, 102744.	1.7	5
6	A powder-metallurgy-based fabrication route towards achieving high tensile strength with ultra-high ductility in high-entropy alloy. Scripta Materialia, 2021, 190, 69-74.	2.6	50
7	Unusual strain-induced martensite and absence of conventional grain refinement in twinning induced plasticity high-entropy alloy processed by high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 803, 140570.	2.6	17
8	Superplastic Behavior in High-Pressure Torsion-Processed Mo7.5Fe55Co18Cr12.5Ni7 Medium-Entropy Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 1-7.	1.1	7
9	Architectured multi-metal CoCrFeMnNi-Inconel 718 lamellar composite by high-pressure torsion. Scripta Materialia, 2021, 195, 113722.	2.6	28
10	Synergetic strengthening from grain refinement and nano-scale precipitates in non-equiatomic CoCrFeNiMo medium-entropy alloy. Intermetallics, 2021, 135, 107212.	1.8	20
11	2.3 GPa cryogenic strength through thermal-induced and deformation-induced body-centered cubic martensite in a novel ferrous medium entropy alloy. Scripta Materialia, 2021, 204, 114157.	2.6	26
12	Effect of heat treatment on microstructural heterogeneity and mechanical properties of 1%C-CoCrFeMnNi alloy fabricated by selective laser melting. Additive Manufacturing, 2021, 47, 102283.	1.7	9
13	Delayed deformation-induced martensite transformation and enhanced cryogenic tensile properties in laser additive manufactured 316L austenitic stainless steel. Additive Manufacturing, 2021, 47, 102314.	1.7	13
14	TiC-reinforced CoCrFeMnNi composite processed by cold-consolidation and subsequent annealing. Materials Letters, 2021, 303, 130503.	1.3	13
15	Fabrication of Layered Cu-Fe-Cu Structure by Cold Consolidation of Powders using High-pressure Torsion. Journal of Korean Powder Metallurgy Institute, 2021, 28, 287-292.	0.2	1
16	Effect of Initial Grain Size on Deformation Mechanism during Highâ€Pressure Torsion in V 10 Cr 15 Mn 5 Fe 35 Co 10 Ni 25 Highâ€Entropy Alloy. Advanced Engineering Materials, 2020, 22, 1900587.	1.6	21
17	Fine-tuning of mechanical properties in V10Cr15Mn5Fe35Co10Ni25 high-entropy alloy through high-pressure torsion and annealing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 771, 138604.	2.6	38
18	Novel precipitation and enhanced tensile properties in selective laser melted Cu-Sn alloy. Materialia, 2020, 13, 100861.	1.3	21

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19	Ultrahigh high-strain-rate superplasticity in a nanostructured high-entropy alloy. Nature Communications, 2020, 11, 2736.	5.8	116
20	Effect of Initial Grain Size on Deformation Mechanism during Highâ€Pressure Torsion in V₁₀Cr₁₅Mn₅Fe₃₅Co₁₀Ni₂₅ Highâ€Entropy Alloy. Advanced Engineering Materials, 2020, 22, 2070002.	1.6	1
21	Fine tuning of tensile properties in CrCoNi medium entropy alloy through cold rolling and annealing. Intermetallics, 2019, 113, 106578.	1.8	49
22	Superplasticity of V10Cr15Mn5Fe35Co10Ni25 high-entropy alloy processed using high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 764, 138198.	2.6	16
23	Exceptional cryogenic strength-ductility synergy in Al0.3CoCrNi medium-entropy alloy through heterogeneous grain structure and nano-scale precipitates. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 766, 138372.	2.6	50
24	Achieving high strength and high ductility in Al0.3CoCrNi medium-entropy alloy through multi-phase hierarchical microstructure. Materialia, 2019, 8, 100442.	1.3	47
25	Superior cryogenic tensile properties of ultrafine-grained CoCrNi medium-entropy alloy produced by high-pressure torsion and annealing. Scripta Materialia, 2019, 163, 152-156.	2.6	102
26	Plastic Deformation Behavior of 40Feâ€“25Niâ€“15Crâ€“10Coâ€“10V High-Entropy Alloy for Cryogenic Applications. Metals and Materials International, 2019, 25, 277-284.	1.8	46
27	Effect of grain size on the tensile behavior of V10Cr15Mn5Fe35Co10Ni25 high entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 744, 610-617.	2.6	51
28	Fabrication and mechanical properties of TiC reinforced CoCrFeMnNi high-entropy alloy composite by water atomization and spark plasma sintering. Journal of Alloys and Compounds, 2019, 781, 389-396.	2.8	120
29	Phase evolution and thermal stability of AlCoCrFe high entropy alloy with carbon as unsolicited addition from milling media. Materials Chemistry and Physics, 2018, 210, 57-61.	2.0	41
30	High-temperature tensile deformation behavior of hot rolled CrMnFeCoNi high-entropy alloy. Journal of Alloys and Compounds, 2018, 730, 242-248.	2.8	74
31	Highâ€Entropy Alloys: Potential Candidates for Highâ€Temperature Applications â€“ An Overview. Advanced Engineering Materials, 2018, 20, 1700645.	1.6	270
32	Effect of Annealing on Microstructure and Tensile Behavior of CoCrNi Medium Entropy Alloy Processed by High-Pressure Torsion. Entropy, 2018, 20, 849.	1.1	40
33	Annealing-induced hardening in high-pressure torsion processed CoCrNi medium entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 734, 338-340.	2.6	75
34	Ultra-high tensile strength nanocrystalline CoCrNi equi-atomic medium entropy alloy processed by high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 735, 394-397.	2.6	89
35	Shock wave compaction and sintering of mechanically alloyed CoCrFeMnNi high-entropy alloy powders. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 708, 291-300.	2.6	33
36	Thermal stability and grain boundary strengthening in ultrafine-grained CoCrFeNi high entropy alloy composite. Materials and Design, 2017, 134, 426-433.	3.3	195

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37	Exceptional resistance to grain growth in nanocrystalline CoCrFeNi high entropy alloy at high homologous temperatures. Journal of Alloys and Compounds, 2016, 662, 361-367.	2.8	159
38	Plasma-Sprayed High Entropy Alloys: Microstructure and Properties of AlCoCrFeNi and MnCoCrFeNi. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 791-800.	1.1	149
39	Effect of Molybdenum and Niobium on the Phase Formation and Hardness of Nanocrystalline CoCrFeNi High Entropy Alloys. Journal of Nanoscience and Nanotechnology, 2014, 14, 8106-8109.	0.9	35
40	Characterization of Oxide Dispersed AlCoCrFe High Entropy Alloy Synthesized by Mechanical Alloying and Spark Plasma Sintering. Transactions of the Indian Institute of Metals, 2013, 66, 369-373.	0.7	58
41	Phase Evolution and Densification Behavior of Nanocrystalline Multicomponent High Entropy Alloys During Spark Plasma Sintering. Jom, 2013, 65, 1797-1804.	0.9	93
42	Alloying behavior in multi-component AlCoCrCuFe and NiCoCrCuFe high entropy alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 534, 83-89.	2.6	326
43	A Powder-Metallurgy-Based Fabrication Route Towards Achieving High Tensile Strength with Ultra-High Ductility in High-Entropy Alloy. SSRN Electronic Journal, 0, , .	0.4	0
44	The influence of laser powder-bed fusion microstructures on the corrosion behavior of CuSn alloy. Journal of Materials Science, 0, , 1.	1.7	1