Jongun Moon

List of Publications by Year in descending order

51 papers	2,359 citations	159525 30 h-index	206029 48 g-index
51 all docs	51 docs citations	51 times ranked	1308 citing authors

#	Article	IF	Citations
1	Exceptional phase-transformation strengthening of ferrous medium-entropy alloys at cryogenic temperatures. Acta Materialia, 2018, 161, 388-399.	3.8	174
2	Strain rate effects of dynamic compressive deformation on mechanical properties and microstructure of CoCrFeMnNi high-entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 719, 155-163.	2.6	163
3	Superior tensile properties of 1%C-CoCrFeMnNi high-entropy alloy additively manufactured by selective laser melting. Materials Research Letters, 2020, 8, 1-7.	4.1	135
4	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
5	Thermally activated deformation and the rate controlling mechanism in CoCrFeMnNi high entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 682, 569-576.	2.6	96
6	Effect of Î¼-precipitates on the microstructure and mechanical properties of non-equiatomic CoCrFeNiMo medium-entropy alloys. Journal of Alloys and Compounds, 2019, 781, 75-83.	2.8	90
7	Trade-off between tensile property and formability by partial recrystallization of CrMnFeCoNi high-entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 703, 324-330.	2.6	85
8	A new strategy for designing immiscible medium-entropy alloys with excellent tensile properties. Acta Materialia, 2020, 193, 71-82.	3.8	80
9	On the strain rate-dependent deformation mechanism of CoCrFeMnNi high-entropy alloy at liquid nitrogen temperature. Materials Research Letters, 2017, 5, 472-477.	4.1	78
10	High-temperature tensile deformation behavior of hot rolled CrMnFeCoNi high-entropy alloy. Journal of Alloys and Compounds, 2018, 730, 242-248.	2.8	74
11	Effect of annealing heat treatment on microstructural evolution and tensile behavior of Al0.5CoCrFeMnNi high-entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 728, 251-258.	2.6	61
12	Role of BCC phase on tensile behavior of dual-phase Al0.5CoCrFeMnNi high-entropy alloy at cryogenic temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 746, 443-447.	2.6	59
13	Precipitation-driven metastability engineering of carbon-doped CoCrFeNiMo medium-entropy alloys at cryogenic temperature. Scripta Materialia, 2020, 188, 140-145.	2.6	59
14	Laser weldability of cast and rolled high-entropy alloys for cryogenic applications. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 742, 224-230.	2.6	59
15	Nano-scale heterogeneity-driven metastability engineering in ferrous medium-entropy alloy induced by additive manufacturing. Acta Materialia, 2021, 221, 117426.	3.8	58
16	Deformation-induced phase transformation of Co20Cr26Fe20Mn20Ni14 high-entropy alloy during high-pressure torsion at 77 K. Materials Letters, 2017, 202, 86-88.	1.3	55
17	Twinning Engineering of a CoCrFeMnNi High-Entropy Alloy. Scripta Materialia, 2021, 197, 113808.	2.6	53
18	Mechanical behavior and solid solution strengthening model for face-centered cubic single crystalline and polycrystalline high-entropy alloys. Intermetallics, 2018, 98, 89-94.	1.8	52

#	Article	IF	Citations
19	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
20	Deformation behavior of a Co-Cr-Fe-Ni-Mo medium-entropy alloy at extremely low temperatures. Materials Today, 2021, 50, 55-68.	8.3	51
21	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
22	Constitutive modeling of deformation behavior of high-entropy alloys with face-centered cubic crystal structure. Materials Research Letters, 2017, 5, 350-356.	4.1	48
23	Achieving high strength and high ductility in Al0.3CoCrNi medium-entropy alloy through multi-phase hierarchical microstructure. Materialia, 2019, 8, 100442.	1.3	47
24	Microstructure and Mechanical Properties of High-Entropy Alloy Co20Cr26Fe20Mn20Ni14 Processed by High-Pressure Torsion at 77â€‰K and 300â€‰K. Scientific Reports, 2018, 8, 11074.	1.6	45
25	Toward excellent tensile properties of nitrogen-doped CoCrFeMnNi high-entropy alloy at room and cryogenic temperatures. Journal of Alloys and Compounds, 2022, 897, 163217.	2.8	43
26	Strain-rate sensitivity of high-entropy alloys and its significance in deformation. Materials Research Letters, 2019, 7, 503-509.	4.1	39
27	Hetero-deformation-induced strengthening by twin-mediated martensitic transformation in an immiscible medium-entropy alloy. Scripta Materialia, 2020, 186, 24-28.	2.6	34
28	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
29	Isotropic and kinematic hardening of a high entropy alloy. Scripta Materialia, 2021, 191, 107-110.	2.6	32
30	Constitutive Modeling with Critical Twinning Stress in CoCrFeMnNi High Entropy Alloy at Cryogenic Temperature and Room Temperature. Metals and Materials International, 2021, 27, 2300-2309.	1.8	30
31	Simultaneous effects of deformation-induced plasticity and precipitation hardening in metastable non-equiatomic FeNiCoMnTiSi ferrous medium-entropy alloy at room and liquid nitrogen temperatures. Scripta Materialia, 2021, 202, 114013.	2.6	28
32	Superior Pre-Osteoblast Cell Response of Etched Ultrafine-Grained Titanium with a Controlled Crystallographic Orientation. Scientific Reports, 2017, 7, 44213.	1.6	27
33	Compaction behavior of water-atomized CoCrFeMnNi high-entropy alloy powders. Materials Chemistry and Physics, 2018, 210, 95-102.	2.0	27
34	Heterostructured alloys with enhanced strength-ductility synergy through laser-cladding. Scripta Materialia, 2022, 215, 114732.	2.6	23
35	Effects of homogenization temperature on cracking during cold-rolling of Al0.5CoCrFeMnNi high-entropy alloy. Materials Chemistry and Physics, 2018, 210, 187-191.	2.0	21
36	Synergetic strengthening from grain refinement and nano-scale precipitates in non-equiatomic CoCrFeNiMo medium-entropy alloy. Intermetallics, 2021, 135, 107212.	1.8	20

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37	Deep Drawing Behavior of CoCrFeMnNi High-Entropy Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 4111-4120.	1.1	18
38	Precipitation behaviour and mechanical properties of a new wrought high entropy superalloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 749, 271-280.	2.6	18
39	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
40	Novel Co-Cu-Based Immiscible Medium-Entropy Alloys with Promising Mechanical Properties. Metals, 2021, 11, 238.	1.0	16
41	Metastability engineering of partially recrystallized C-doped non-equiatomic CoCrFeNiMo medium-entropy alloy. Applied Physics Letters, 2021, 119, .	1.5	16
42	Corrosion-resistant Cu-Fe-based immiscible medium-entropy alloy with tri-layer passivation. Corrosion Science, 2021, 193, 109888.	3.0	14
43	Twinning engineering of high-entropy alloys: An exercise in process optimization and modeling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 822, 141681.	2.6	13
44	Superior phase transformation-assisted mechanical properties of a metastable medium-entropy ferrous alloy with heterogeneous microstructure. Materials Letters, 2021, 302, 130391.	1.3	13
45	Hetero-deformation-induced strengthening of multi-phase Cuâ€“Feâ€“Mn medium entropy alloys by dynamic heterostructuring. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 799, 140275.	2.6	12
46	Temperature- and strain-dependent thermally-activated deformation mechanism of a ferrous medium-entropy alloy. Intermetallics, 2021, 134, 107202.	1.8	10
47	Unraveling the discontinuous plastic flow of a Co-Cr-Fe-Ni-Mo multiprincipal-element alloy at deep cryogenic temperatures. Physical Review Materials, 2021, 5, .	0.9	9
48	On the control of structural/compositional ratio of coherent order-disorder interfaces. Journal of Alloys and Compounds, 2019, 777, 1222-1233.	2.8	6
49	A thermodynamic description of the Alâ€“Cuâ€“Feâ€“Mn system for an immiscible medium-entropy alloy design. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2020, 71, 101995.	0.7	6
50	Diffuse Î³/Î³â€² interfaces in the hierarchical dual-phase nanostructure of a Ni-Al-Ti alloy. Materials Characterization, 2019, 153, 284-293.	1.9	5
51	Excellent combination of cryogenic strength and ductility of a metastable Fe65Ni15Co8Mn8Ti3Si medium entropy alloy through the exceptional deformation-induced martensitic transformation. Journal of Materials Science, 2022, 57, 18062-18074.	1.7	5