# Jongun Moon

## List of Publications by Citations



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| 50 papers | 1,256 citations | 23 h-index | 34 g-index |
| 51 ext. papers | 1,813 ext. citations | 5.3 avg, IF | 5.15 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 50 | Exceptional phase-transformation strengthening of ferrous medium-entropy alloys at cryogenic temperatures. *Acta Materialia*, **2018**, 161, 388-399 | 8.4 | 100 |
| 49 | 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 | 5.3 | 84 |
| 48 | Superior tensile properties of 1%C-CoCrFeMnNi high-entropy alloy additively manufactured by selective laser melting. *Materials Research Letters*, **2020**, 8, 1-7 | 7.4 | 76 |
| 47 | 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 | 5.3 | 68 |
| 46 | Superior cryogenic tensile properties of ultrafine-grained CoCrNi medium-entropy alloy produced by high-pressure torsion and annealing. *Scripta Materialia*, **2019**, 163, 152-156 | 5.6 | 60 |
| 45 | 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 | 5.3 | 59 |
| 44 | On the strain rate-dependent deformation mechanism of CoCrFeMnNi high-entropy alloy at liquid nitrogen temperature. *Materials Research Letters*, **2017**, 5, 472-477 | 7.4 | 54 |
| 43 | Effect of Ɛprecipitates on the microstructure and mechanical properties of non-equiatomic CoCrFeNiMo medium-entropy alloys. *Journal of Alloys and Compounds*, **2019**, 781, 75-83 | 5.7 | 49 |
| 42 | High-temperature tensile deformation behavior of hot rolled CrMnFeCoNi high-entropy alloy. *Journal of Alloys and Compounds*, **2018**, 730, 242-248 | 5.7 | 44 |
| 41 | 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 | 5.3 | 41 |
| 40 | Deformation-induced phase transformation of Co 20 Cr 26 Fe 20 Mn 20 Ni 14 high-entropy alloy during high-pressure torsion at 77 K. *Materials Letters*, **2017**, 202, 86-88 | 3.3 | 40 |
| 39 | A new strategy for designing immiscible medium-entropy alloys with excellent tensile properties. *Acta Materialia*, **2020**, 193, 71-82 | 8.4 | 38 |
| 38 | Precipitation-driven metastability engineering of carbon-doped CoCrFeNiMo medium-entropy alloys at cryogenic temperature. *Scripta Materialia*, **2020**, 188, 140-145 | 5.6 | 36 |
| 37 | Constitutive modeling of deformation behavior of high-entropy alloys with face-centered cubic crystal structure. *Materials Research Letters*, **2017**, 5, 350-356 | 7.4 | 35 |
| 36 | Mechanical behavior and solid solution strengthening model for face-centered cubic single crystalline and polycrystalline high-entropy alloys. *Intermetallics*, **2018**, 98, 89-94 | 3.5 | 35 |
| 35 | 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 | 5.3 | 32 |
| 34 | 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 | 5.3 | 32 |

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| 33 | Microstructure and Mechanical Properties of High-Entropy Alloy CoCrFeMnNi Processed by High-Pressure Torsion at 77 K and 300 K. *Scientific Reports*, **2018**, 8, 11074 | 4.9 | 30 |
| 32 | 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 | 5.3 | 26 |
| 31 | 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 | 5.3 | 26 |
| 30 | Superior Pre-Osteoblast Cell Response of Etched Ultrafine-Grained Titanium with a Controlled Crystallographic Orientation. *Scientific Reports*, **2017**, 7, 44213 | 4.9 | 24 |
| 29 | 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 | 5.3 | 23 |
| 28 | Strain-rate sensitivity of high-entropy alloys and its significance in deformation. *Materials Research Letters*, **2019**, 7, 503-509 | 7.4 | 23 |
| 27 | Achieving high strength and high ductility in Al0.3CoCrNi medium-entropy alloy through multi-phase hierarchical microstructure. *Materialia*, **2019**, 8, 100442 | 3.2 | 23 |
| 26 | Compaction behavior of water-atomized CoCrFeMnNi high-entropy alloy powders. *Materials Chemistry and Physics*, **2018**, 210, 95-102 | 4.4 | 22 |
| 25 | Hetero-deformation-induced strengthening by twin-mediated martensitic transformation in an immiscible medium-entropy alloy. *Scripta Materialia*, **2020**, 186, 24-28 | 5.6 | 15 |
| 24 | Twinning Engineering of a CoCrFeMnNi High-Entropy Alloy. *Scripta Materialia*, **2021**, 197, 113808 | 5.6 | 15 |
| 23 | Nano-scale heterogeneity-driven metastability engineering in ferrous medium-entropy alloy induced by additive manufacturing. *Acta Materialia*, **2021**, 221, 117426 | 8.4 | 14 |
| 22 | Isotropic and kinematic hardening of a high entropy alloy. *Scripta Materialia*, **2021**, 191, 107-110 | 5.6 | 13 |
| 21 | Effects of homogenization temperature on cracking during cold-rolling of Al0.5CoCrFeMnNi high-entropy alloy. *Materials Chemistry and Physics*, **2018**, 210, 187-191 | 4.4 | 12 |
| 20 | Deep Drawing Behavior of CoCrFeMnNi High-Entropy Alloys. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2017**, 48, 4111-4120 | 2.3 | 12 |
| 19 | 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 | 5.3 | 10 |
| 18 | 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 | 2.4 | 10 |
| 17 | Deformation behavior of a Co-Cr-Fe-Ni-Mo medium-entropy alloy at extremely low temperatures. *Materials Today*, **2021**, 50, 55-55 | 21.8 | 10 |
| 16 | Superplasticity of V10Cr15Mn5Fe35Co10Ni25 high-entropy alloy processed using high-pressure torsion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 764, 138198 | 5.3 | 9 |

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| 15 | Synergetic strengthening from grain refinement and nano-scale precipitates in non-equiatomic CoCrFeNiMo medium-entropy alloy. *Intermetallics*, **2021**, 135, 107212 | 3.5 | 8 |
| 14 | 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 | 5.6 | 8 |
| 13 | Toward excellent tensile properties of nitrogen-doped CoCrFeMnNi high-entropy alloy at room and cryogenic temperatures. *Journal of Alloys and Compounds*, **2022**, 897, 163217 | 5.7 | 6 |
| 12 | Temperature- and strain-dependent thermally-activated deformation mechanism of a ferrous medium-entropy alloy. *Intermetallics*, **2021**, 134, 107202 | 3.5 | 5 |
| 11 | Novel Co-Cu-Based Immiscible Medium-Entropy Alloys with Promising Mechanical Properties. *Metals*, **2021**, 11, 238 | 2.3 | 5 |
| 10 | 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 | 5.3 | 5 |
| 9 | On the control of structural/compositional ratio of coherent order-disorder interfaces. *Journal of Alloys and Compounds*, **2019**, 777, 1222-1233 | 5.7 | 4 |
| 8 | Unraveling the discontinuous plastic flow of a Co-Cr-Fe-Ni-Mo multiprincipal-element alloy at deep cryogenic temperatures. *Physical Review Materials*, **2021**, 5, | 3.2 | 4 |
| 7 | Diffuse □ interfaces in the hierarchical dual-phase nanostructure of a Ni-Al-Ti alloy. *Materials Characterization*, **2019**, 153, 284-293 | 3.9 | 3 |
| 6 | Metastability engineering of partially recrystallized C-doped non-equiatomic CoCrFeNiMo medium-entropy alloy. *Applied Physics Letters*, **2021**, 119, 141901 | 3.4 | 3 |
| 5 | Superior phase transformation-assisted mechanical properties of a metastable medium-entropy ferrous alloy with heterogeneous microstructure. *Materials Letters*, **2021**, 302, 130391 | 3.3 | 3 |
| 4 | Hetero-deformation-induced strengthening of multi-phase Cu□Fe□Mn medium entropy alloys by dynamic heterostructuring. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 799, 140275 | 5.3 | 1 |
| 3 | Corrosion-resistant Cu-Fe-based immiscible medium-entropy alloy with tri-layer passivation. *Corrosion Science*, **2021**, 193, 109888 | 6.8 | 0 |
| 2 | A thermodynamic description of the Al□Cu□Fe□Mn system for an immiscible medium-entropy alloy design. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2020**, 71, 101995 | 1.9 | 0 |
| 1 | Heterostructured alloys with enhanced strength-ductility synergy through laser-cladding. *Scripta Materialia*, **2022**, 215, 114732 | 5.6 | 0 |