Jung Gi Kim

List of Publications by Year
in descending order

70	1,614	331642 21	315719 38
papers	citations	h-index	g-index

70	70	70	1149
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fe55Co17.5Ni10Cr12.5Mo5 High-Entropy Alloy with Outstanding Cryogenic Mechanical Properties Driven by Deformation-Induced Phase Transformation Behavior. Metals and Materials International, 2023, 29, 95-107.	3.4	12
2	Optimization of Laserâ€Powder Bed Fusion Processed Feâ€“4.5Si Alloy via Response Surface Methodology. Steel Research International, 2023, 94, .	1.8	2
3	Effects of Laser Power on the Microstructure Evolution and Mechanical Properties of Tiâ€“6Alâ€“4V Alloy Manufactured by Direct Energy Deposition. Metals and Materials International, 2022, 28, 197-204.	3.4	20
4	Superelasticity, microstructure and texture characteristics of the rapidly solidified Tiâ€“Zrâ€“Nbâ€“Sn shape memory alloy fibers for biomedical applications. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 831, 142001.	5.6	11
5	Effect of Annealing and Crack Orientation on Fatigue Crack Propagation of Ti64 Alloy Fabricated by Direct Energy Deposition Process. Metals and Materials International, 2022, 28, 205-215.	3.4	8
6	Microstructure, transformation behavior and superelasticity of an aged Ti-40Ni-12Cu (at%) shape memory alloy. Journal of Alloys and Compounds, 2022, 900, 163390.	5.5	1
7	Evolution of Microstructure, Mechanical Properties and Residual Stress of a Cold Rolled Invar Sheet Due to Heat Treatment. Metals, 2022, 12, 110.	2.3	1
8	Evolution of nanosized Cu-rich clusters in a Feâ€“15Cuâ€“15Ni alloy produced by laser powder bed fusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 832, 142462.	5.6	4
9	Mechanical properties and microstructural evolution of high-pressure torsion-processed Al7075 alloy at elevated temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 835, 142692.	5.6	5
10	Post-annealing effect on the tensile deformation mechanism of a Tiâ€“6Alâ€“4V alloy manufactured via directed energy deposition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 836, 142729.	5.6	5
11	On the stacking fault forming probability and stacking fault energy in carbon-doped 17 at% Mn steels via transmission electron microscopy and atom probe tomography. Journal of Materials Science and Technology, 2022, 115, 177-188.	10.7	9
12	Low cycle fatigue behavior of Inconel 706 at 650ÂÂ°C. Journal of Materials Research and Technology, 2022, 17, 2624-2635.	5.8	2
13	Polyvinyl pyrrolidone (<scp>PVP</scp>) as an efficient and biocompatible binder for metal alloy processing: A case study with <scp>Tiâ€20Zrâ€11Nbâ€3Sn</scp>. Journal of Applied Polymer Science, 2022, 139, .	2.6	3
14	Direct observation of chemical short-range order in 25 wt% Mn steel via transmission electron microscopy. Scripta Materialia, 2022, 213, 114642.	5.2	12
15	A feasible route to produce 1.1 GPa ferritic-based low-Mn lightweight steels with ductility of 47%. Journal of Materials Science and Technology, 2022, 117, 225-237.	10.7	10
16	Laser powder bed fusion for AI assisted digital metal components. Virtual and Physical Prototyping, 2022, 17, 806-820.	10.4	2
17	Tuning the texture characteristics and superelastic behaviors of Tiâ€“Zrâ€“Nbâ€“Sn shape memory alloys by varying Nb content. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 845, 143243.	5.6	10
18	Improvement in the superelasticity of a Tiâ€“35.5Niâ€“15Cu (at.%) alloy using Ti(Ni,Cu)2 phase. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 847, 143346.	5.6	2

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19	Transformation-induced plasticity in the heterogeneous microstructured Ti-Zr-Nb-Sn alloy via in-situ alloying with directed energy deposition. Additive Manufacturing, 2022, 58, 102990.	3.0	1
20	Effect of the Difference in Strength of Hard and Soft Components on the Synergetic Strengthening of Layered Materials. Metals and Materials International, 2021, 27, 376-383.	3.4	11
21	Effects of Cell Network Structure on the Strength of Additively Manufactured Stainless Steels. Metals and Materials International, 2021, 27, 2614-2622.	3.4	33
22	Tailoring Extra-Strength of a TWIP Steel by Combination of Multi-Pass Equal-Channel Angular Pressing and Warm Rolling. Metals, 2021, 11, 518.	2.3	13
23	Reverse effect of hot isostatic pressing on high-speed selective laser melted Tiâ€“6Alâ€“4V alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 807, 140880.	5.6	3
24	Mechanical property enhancement in gradient structured aluminum alloy by ultrasonic nanocrystalline surface modification. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 812, 141101.	5.6	20
25	Outstanding mechanical properties of ultrafine-grained Al7075 alloys by high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 810, 141020.	5.6	19
26	Hydrogen-induced ordering on the deformation mechanism of the as-cast high-Mn steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 825, 141923.	5.6	3
27	Metastable Î´-ferrite and twinning-induced plasticity on the strain hardening behavior of directed energy deposition-processed 304L austenitic stainless steel. Additive Manufacturing, 2021, 47, 102363.	3.0	4
28	Effect of Interdendritic Precipitations on the Mechanical Properties of GBF or EMS Processed Al-Zn-Mg-Cu Alloys. Crystals, 2021, 11, 1162.	2.2	4
29	Development of 1.2 GPa Ferrite-based Lightweight Steels via Low-temperature Tempering. Journal of Korean Institute of Metals and Materials, 2021, 59, 683-691.	1.0	0
30	Development of 1.2 GPa Ferrite-based Lightweight Steels via Low-temperature Tempering. Journal of Korean Institute of Metals and Materials, 2021, 59, 683-691.	1.0	1
31	Near atomic-scale comparison of passive film on a 17 wt% Cr-added 18 wt% Mn steel with those on typical austenitic stainless steels. Scripta Materialia, 2021, 203, 114112.	5.2	9
32	Effect of Sn content on microstructure, texture evolution, transformation behavior and superelastic properties of Tiâ€“20Zrâ€“9Nbâ€'(2â€“5)Sn (at.%) shape memory alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 827, 141994.	5.6	15
33	Superior tensile properties of 1%C-CoCrFeMnNi high-entropy alloy additively manufactured by selective laser melting. Materials Research Letters, 2020, 8, 1-7.	8.7	135
34	Nano-scale solute heterogeneities in the ultrastrong selectively laser melted carbon-doped CoCrFeMnNi alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 773, 138726.	5.6	50
35	Analysis of bending behavior of TiN particle-reinforced martensitic steel using micro-digital image correlation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 794, 139965.	5.6	5
36	On the mechanistic understanding of annealing-induced strength enhancement of ultrafine-grained high-Mn steel. Materialia, 2020, 13, 100837.	2.7	5

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37	Short-range order strengthening in boron-doped high-entropy alloys for cryogenic applications. Acta Materialia, 2020, 194, 366-377.	7.9	117
38	On the phase transformation and dynamic stressâ€“strain partitioning of ferrous medium-entropy alloy using experimentation and finite element method. Materialia, 2020, 9, 100619.	2.7	18
39	The role of ultrasonic nanocrystalline surface modification at elevated temperature on the hydrogen charging behavior of high-Mn steels. Materialia, 2020, 9, 100626.	2.7	5
40	Synergetic strengthening of additively manufactured (CoCrFeMnNi)99C1 high-entropy alloy by heterogeneous anisotropic microstructure. Additive Manufacturing, 2020, 35, 101333.	3.0	18
41	Effects of microstructure and internal defects on mechanical anisotropy and asymmetry of selective laser-melted 316L austenitic stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 763, 138152.	5.6	73
42	Synergetic strengthening of layered steel sheet investigated using an in situ neutron diffraction tensile test. Scientific Reports, 2019, 9, 6829.	3.3	14
43	In situ neutron diffraction study of phase stress evolution in a ferrous medium-entropy alloy under low-temperature tensile loading. Scripta Materialia, 2019, 165, 60-63.	5.2	27
44	Back-Stress Effect on the Mechanical Strength of TWIP-IF Steels Layered Sheet. Metals and Materials International, 2019, 25, 912-917.	3.4	36
45	Strength and ductility enhancement in the gradient structured twinning-induced plasticity steel by ultrasonic nanocrystalline surface modification. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 739, 105-108.	5.6	27
46	Stretch-flangeability of twinning-induced plasticity steel-cored three-layer steel sheet. Journal of Materials Processing Technology, 2018, 258, 220-225.	6.3	5
47	Boron doped ultrastrong and ductile high-entropy alloys. Acta Materialia, 2018, 151, 366-376.	7.9	230
48	Suppressed deformation instability in the twinning-induced plasticity steel-cored three-layer steel sheet. Acta Materialia, 2018, 147, 304-312.	7.9	44
49	Deep drawing behavior of twinning-induced plasticity-cored three-layer steel sheet. International Journal of Material Forming, 2018, 11, 11-18.	2.0	3
50	Effect of Annealing on Microstructure and Tensile Behavior of CoCrNi Medium Entropy Alloy Processed by High-Pressure Torsion. Entropy, 2018, 20, 849.	2.2	40
51	Superior Strength and Multiple Strengthening Mechanisms in Nanocrystalline TWIP Steel. Scientific Reports, 2018, 8, 11200.	3.3	48
52	Quantitative study on yield point phenomenon of low carbon steels processed by compact endless casting and rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 734, 408-415.	5.6	5
53	Residual Stress Effect on the Delayed Fracture of Twinning-Induced Plasticity Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 2692-2696.	2.2	16
54	On the rule-of-mixtures of the hardening parameters in TWIP-cored three-layer steel sheet. Metals and Materials International, 2017, 23, 459-464.	3.4	17

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55	Continuum understanding of twin formation near grain boundaries of FCC metals with low stacking fault energy. Npj Computational Materials, 2017, 3, .	8.7	32
56	Key factors of stretch-flangeability of sheet materials. Journal of Materials Science, 2017, 52, 7808-7823.	3.7	38
57	Deformation rate controls atomic-scale dynamic strain aging and phase transformation in high Mn TRIP steels. Acta Materialia, 2017, 131, 187-196.	7.9	40
58	Effect of initial grain size on the microstructure and mechanical properties of high-pressure torsion processed twinning-induced plasticity steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 682, 164-167.	5.6	19
59	Multiscale architectured materials with composition and grain size gradients manufactured using high-pressure torsion. Scientific Reports, 2016, 6, 26590.	3.3	34
60	Outstanding mechanical properties of high-pressure torsion processed multiscale TWIP-cored three layer steel sheet. Scripta Materialia, 2016, 123, 122-125.	5.2	28
61	Experimental and finite element analyses of plastic deformation behavior in vortex extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 674, 472-479.	5.6	14
62	Large deformation behavior of twin-induced plasticity steels under high-pressure torsion. Metals and Materials International, 2016, 22, 1003-1008.	3.4	17
63	Effects of Annealing Treatment Prior to Cold Rolling on Delayed Fracture Properties in Ferrite-Austenite Duplex Lightweight Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 706-717.	2.2	18
64	Structural and phase transformation in a TWIP steel subjected to high pressure torsion. Materials Letters, 2016, 166, 321-324.	2.6	27
65	Obtaining Reliable True Plastic Stress-Strain Curves in a Wide Range of Strains Using Digital Image Correlation in Tensile Testing. Journal of Korean Institute of Metals and Materials, 2016, 54, 231-236.	1.0	34
66	Effect of the interfacial condition on the microtexture near the interface of Al/Cu composites during multi-pass caliber rolling. Materials and Design, 2015, 82, 28-36.	7.0	12
67	Plastic Deformation Behavior and Microstructural Evolution of Al-Core/Cu-Sheath Composites in Multi-pass Caliber Rolling. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 260-269.	2.2	8
68	Finite element analysis of the plastic deformation in tandem process of simple shear extrusion and twist extrusion. Materials and Design, 2015, 83, 858-865.	7.0	37
69	Dynamic strain aging of twinning-induced plasticity (TWIP) steel in tensile testing and deep drawing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 633, 136-143.	5.6	51
70	The relationship between photo-catalytic performance and optical property over Si-incorporated TiO2. Journal of Industrial and Engineering Chemistry, 2008, 14, 869-873.	5.8	12