

Jung Gi Kim

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4034874/publications.pdf>

Version: 2024-02-01

70
papers

1,614
citations

331670

21
h-index

315739

38
g-index

70
all docs

70
docs citations

70
times ranked

1149
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 Laser Powder Bed Fusion Processed Fe4.5Si 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 Ti6Al4V 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 TiZrNbSn 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 Fe15Cu15Ni 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 Ti6Al4V 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 650°C. Journal of Materials Research and Technology, 2022, 17, 2624-2635.	5.8	2
13	Polyvinyl pyrrolidone (PVP) as an efficient and biocompatible binder for metal alloy processing: A case study with Ti20Zr41Nb3Sn. 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 TiZrNbSn 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 Ti35.5Ni15Cu (at.%) alloy using Ti(Ni,Cu)2 phase. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 847, 143346.	5.6	2

#	ARTICLE	IF	CITATIONS
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 Ti-6Al-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 δ -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 Ti-20Zr-9Nb-(2-5)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

#	ARTICLE	IF	CITATIONS
37	Short-range order strengthening in boron-doped high-entropy alloys for cryogenic applications. <i>Acta Materialia</i> , 2020, 194, 366-377.	7.9	117
38	On the phase transformation and dynamic stress-strain partitioning of ferrous medium-entropy alloy using experimentation and finite element method. <i>Materialia</i> , 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. <i>Materialia</i> , 2020, 9, 100626.	2.7	5
40	Synergetic strengthening of additively manufactured (CoCrFeMnNi) ₉₉ C ₁ high-entropy alloy by heterogeneous anisotropic microstructure. <i>Additive Manufacturing</i> , 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. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 763, 138152.	5.6	73
42	Synergetic strengthening of layered steel sheet investigated using an in situ neutron diffraction tensile test. <i>Scientific Reports</i> , 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. <i>Scripta Materialia</i> , 2019, 165, 60-63.	5.2	27
44	Back-Stress Effect on the Mechanical Strength of TWIP-IF Steels Layered Sheet. <i>Metals and Materials International</i> , 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. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 739, 105-108.	5.6	27
46	Stretch-flangeability of twinning-induced plasticity steel-cored three-layer steel sheet. <i>Journal of Materials Processing Technology</i> , 2018, 258, 220-225.	6.3	5
47	Boron doped ultrastrong and ductile high-entropy alloys. <i>Acta Materialia</i> , 2018, 151, 366-376.	7.9	230
48	Suppressed deformation instability in the twinning-induced plasticity steel-cored three-layer steel sheet. <i>Acta Materialia</i> , 2018, 147, 304-312.	7.9	44
49	Deep drawing behavior of twinning-induced plasticity-cored three-layer steel sheet. <i>International Journal of Material Forming</i> , 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. <i>Entropy</i> , 2018, 20, 849.	2.2	40
51	Superior Strength and Multiple Strengthening Mechanisms in Nanocrystalline TWIP Steel. <i>Scientific Reports</i> , 2018, 8, 11200.	3.3	48
52	Quantitative study on yield point phenomenon of low carbon steels processed by compact endless casting and rolling. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 734, 408-415.	5.6	5
53	Residual Stress Effect on the Delayed Fracture of Twinning-Induced Plasticity Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017, 48, 2692-2696.	2.2	16
54	On the rule-of-mixtures of the hardening parameters in TWIP-cored three-layer steel sheet. <i>Metals and Materials International</i> , 2017, 23, 459-464.	3.4	17

#	ARTICLE	IF	CITATIONS
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 architected 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 TiO ₂ . Journal of Industrial and Engineering Chemistry, 2008, 14, 869-873.	5.8	12