

# Hyoung Seop Kim

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

740  
papers

16,195  
citations

60  
h-index

89  
g-index

769  
ext. papers

19,982  
ext. citations

4.2  
avg, IF

7.42  
L-index

#	Paper	IF	Citations
740	Fast and fully-scalable synthesis of reduced graphene oxide. <i>Scientific Reports</i> , <b>2015</b> , 5, 10160	4.9	360
739	Plastic deformation behaviour of fine-grained materials. <i>Acta Materialia</i> , <b>2000</b> , 48, 493-504	8.4	272
738	On the die corner gap formation in equal channel angular pressing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2000</b> , 291, 86-90	5.3	225
737	On the rule of mixtures for the hardness of particle reinforced composites. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2000</b> , 289, 30-33	5.3	213
736	Cryogenic strength improvement by utilizing room-temperature deformation twinning in a partially recrystallized VCrMnFeCoNi high-entropy alloy. <i>Nature Communications</i> , <b>2017</b> , 8, 15719	17.4	190
735	Dislocation density-based modeling of deformation behavior of aluminium under equal channel angular pressing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2003</b> , 351, 86-97	5.3	179
734	Heterostructured materials: superior properties from hetero-zone interaction. <i>Materials Research Letters</i> , <b>2021</b> , 9, 1-31	7.4	160
733	The effects of grain size and porosity on the elastic modulus of nanocrystalline materials. <i>Scripta Materialia</i> , <b>1999</b> , 11, 361-367		159
732	High-Entropy Alloys: Potential Candidates for High-Temperature Applications [An Overview]. <i>Advanced Engineering Materials</i> , <b>2018</b> , 20, 1700645	3.5	148
731	Strain partitioning and mechanical stability of retained austenite. <i>Scripta Materialia</i> , <b>2010</b> , 63, 297-299	5.6	144
730	Effects of Al addition on deformation and fracture mechanisms in two high manganese TWIP steels. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 2922-2928	5.3	141
729	Boron doped ultrastrong and ductile high-entropy alloys. <i>Acta Materialia</i> , <b>2018</b> , 151, 366-376	8.4	139
728	Finite element analysis of equal channel angular pressing using a round corner die. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2001</b> , 315, 122-128	5.3	136
727	High-pressure torsion for enhanced atomic diffusion and promoting solid-state reactions in the aluminum-copper system. <i>Acta Materialia</i> , <b>2013</b> , 61, 3482-3489	8.4	132
726	Structure and properties of ultrafine-grained CoCrFeMnNi high-entropy alloys produced by mechanical alloying and spark plasma sintering. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 698, 591-604	5.7	125
725	Tubular channel angular pressing (TCAP) as a novel severe plastic deformation method for cylindrical tubes. <i>Materials Letters</i> , <b>2011</b> , 65, 3009-3012	3.3	124
724	Microstructure and corrosion properties of ultrafine-grained interstitial free steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2007</b> , 462, 243-247	5.3	119

723	Micromechanical finite element analysis of strain partitioning in multiphase medium manganese TWIP+TRIP steel. <i>Acta Materialia</i> , <b>2016</b> , 108, 219-228	8.4	110
722	Tensile deformation behavior and deformation twinning of an equimolar CoCrFeMnNi high-entropy alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2017</b> , 689, 122-133	5.3	109
721	Novel Co-rich high performance twinning-induced plasticity (TWIP) and transformation-induced plasticity (TRIP) high-entropy alloys. <i>Scripta Materialia</i> , <b>2019</b> , 165, 39-43	5.6	108
720	Additional hardening in harmonic structured materials by strain partitioning and back stress. <i>Materials Research Letters</i> , <b>2018</b> , 6, 261-267	7.4	104
719	Finite element analysis of deformation behaviour of metals during equal channel multi-angular pressing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2002</b> , 328, 317-323	5.3	104
718	On the rule of mixtures for predicting the mechanical properties of composites with homogeneously distributed soft and hard particles. <i>Journal of Materials Processing Technology</i> , <b>2001</b> , 112, 109-113	5.3	103
717	Plastic deformation analysis of metals during equal channel angular pressing. <i>Journal of Materials Processing Technology</i> , <b>2001</b> , 113, 622-626	5.3	103
716	Phase mixture modeling of the strain rate dependent mechanical behavior of nanostructured materials. <i>Acta Materialia</i> , <b>2005</b> , 53, 765-772	8.4	100
715	Exceptional phase-transformation strengthening of ferrous medium-entropy alloys at cryogenic temperatures. <i>Acta Materialia</i> , <b>2018</b> , 161, 388-399	8.4	100
714	Enhanced plasticity in a bulk amorphous matrix composite: macroscopic and microscopic viewpoint studies. <i>Acta Materialia</i> , <b>2005</b> , 53, 129-139	8.4	95
713	Plastic Yield Behaviour of Porous Metals. <i>Powder Metallurgy</i> , <b>1992</b> , 35, 275-280	1.9	95
712	Dislocation density-based finite element analysis of large strain deformation behavior of copper under high-pressure torsion. <i>Acta Materialia</i> , <b>2014</b> , 76, 281-293	8.4	94
711	Wear properties of ECAP-processed ultrafine grained AlCu alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2010</b> , 527, 3726-3732	5.3	88
710	Strain rate effects of dynamic compressive deformation on mechanical properties and microstructure of CoCrFeMnNi high-entropy alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2018</b> , 719, 155-163	5.3	84
709	Deformation-induced nanocrystallization and its influence on work hardening in a bulk amorphous matrix composite. <i>Acta Materialia</i> , <b>2004</b> , 52, 1525-1533	8.4	82
708	Phosphorus doped ZnO light emitting diodes fabricated via pulsed laser deposition. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 112108	3.4	80
707	Novel Co-rich high entropy alloys with superior tensile properties. <i>Materials Research Letters</i> , <b>2019</b> , 7, 82-88	7.4	80
706	Effects of strain hardenability and strain-rate sensitivity on the plastic flow and deformation homogeneity during equal channel angular pressing. <i>Journal of Materials Research</i> , <b>2001</b> , 16, 856-864	2.5	79

705	High-entropy alloys with heterogeneous microstructure: Processing and mechanical properties. <i>Progress in Materials Science</i> , <b>2020</b> , 100709	42.2	78
704	Gas tungsten arc welding of as-rolled CrMnFeCoNi high entropy alloy. <i>Materials and Design</i> , <b>2020</b> , 189, 108505	8.1	78
703	High temperature oxidation behavior of Cr-Mn-Fe-Co-Ni high entropy alloy. <i>Intermetallics</i> , <b>2018</b> , 98, 45-53	5.5	77
702	Superior tensile properties of 1%C-CoCrFeMnNi high-entropy alloy additively manufactured by selective laser melting. <i>Materials Research Letters</i> , <b>2020</b> , 8, 1-7	7.4	76
701	Review of principles and methods of severe plastic deformation for producing ultrafine-grained tubes. <i>Materials Science and Technology</i> , <b>2017</b> , 33, 905-923	1.5	71
700	Architecturing of Metal-Based Composites with Concurrent Nanostructuring: A New Paradigm of Materials Design. <i>Advanced Engineering Materials</i> , <b>2013</b> , 15, 336-340	3.5	71
699	Effect of nanoparticle content on the microstructural and mechanical properties of nano-SiC dispersed bulk ultrafine-grained Cu matrix composites. <i>Materials &amp; Design</i> , <b>2013</b> , 52, 881-887		70
698	Finite element analysis of plastic deformation behavior during high pressure torsion processing. <i>Journal of Materials Processing Technology</i> , <b>2008</b> , 201, 32-36	5.3	70
697	Wear properties of high pressure torsion processed ultrafine grained Al7%Si alloy. <i>Materials &amp; Design</i> , <b>2014</b> , 53, 373-382		68
696	Thermally activated deformation and the rate controlling mechanism in CoCrFeMnNi high entropy alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2017</b> , 682, 569-576	5.3	68
695	Development of strong and ductile metastable face-centered cubic single-phase high-entropy alloys. <i>Acta Materialia</i> , <b>2019</b> , 181, 318-330	8.4	67
694	Austenite stability and heterogeneous deformation in fine-grained transformation-induced plasticity-assisted steel. <i>Scripta Materialia</i> , <b>2013</b> , 68, 933-936	5.6	66
693	Surface modification of multipass caliber-rolled Ti alloy with dexamethasone-loaded graphene for dental applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 9598-607	9.5	65
692	Fabrication and mechanical properties of TiC reinforced CoCrFeMnNi high-entropy alloy composite by water atomization and spark plasma sintering. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 781, 389-396	5.7	65
691	Work-hardening induced tensile ductility of bulk metallic glasses via high-pressure torsion. <i>Scientific Reports</i> , <b>2015</b> , 5, 9660	4.9	64
690	Microstructure and hardness of copper-carbon nanotube composites consolidated by High Pressure Torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 4690-4695	5.3	64
689	A composite model for mechanical properties of nanocrystalline materials. <i>Scripta Materialia</i> , <b>1998</b> , 39, 1057-1061	5.6	64
688	Consolidation of 1vol.% carbon nanotube reinforced metal matrix nanocomposites via equal channel angular pressing. <i>Journal of Materials Processing Technology</i> , <b>2007</b> , 187-188, 318-320	5.3	64

687	Mechanical properties and deformation twinning behavior of as-cast CoCrFeMnNi high-entropy alloy at low and high temperatures. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2018</b> , 712, 108-113	5.3	64
686	Finite element analysis of equal channel angular pressing of strain rate sensitive metals. <i>Journal of Materials Processing Technology</i> , <b>2002</b> , 130-131, 497-503	5.3	63
685	Evaluation of Strain Rate During Equal-channel Angular Pressing. <i>Journal of Materials Research</i> , <b>2002</b> , 17, 172-179	2.5	63
684	Microstructure inhomogeneity in ultra-fine grained bulk AZ91 produced by accumulative back extrusion (ABE). <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 4312-4317	5.3	62
683	Superior cryogenic tensile properties of ultrafine-grained CoCrNi medium-entropy alloy produced by high-pressure torsion and annealing. <i>Scripta Materialia</i> , <b>2019</b> , 163, 152-156	5.6	60
682	Fabrication, characterization and mechanical properties of hybrid composites of copper using the nanoparticulates of SiC and carbon nanotubes. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 572, 83-90	5.3	60
681	Severe plastic deformation and strain localization in groove pressing. <i>Computational Materials Science</i> , <b>2008</b> , 43, 641-645	3.2	60
680	Effect of Equal Channel Angular Pressing on Microstructure and Mechanical Properties of IF Steel. <i>Advanced Engineering Materials</i> , <b>2005</b> , 7, 43-46	3.5	60
679	Finite element analysis of high pressure torsion processing. <i>Journal of Materials Processing Technology</i> , <b>2001</b> , 113, 617-621	5.3	60
678	A model of the ductile-Brittle transition of partially crystallized amorphous AlNi alloys. <i>Acta Materialia</i> , <b>1999</b> , 47, 2059-2066	8.4	60
677	Trade-off between tensile property and formability by partial recrystallization of CrMnFeCoNi high-entropy alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2017</b> , 703, 324-330	5.3	59
676	Finite element analysis of plastic deformation in twist extrusion. <i>Computational Materials Science</i> , <b>2012</b> , 60, 194-200	3.2	59
675	Structural characterization of ultrafine-grained interstitial-free steel prepared by severe plastic deformation. <i>Acta Materialia</i> , <b>2016</b> , 105, 258-272	8.4	57
674	Microstructural features, texture and strengthening mechanisms of nanostructured AA6063 alloy processed by powder metallurgy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 3981-3989	5.3	57
673	Ultra-high tensile strength nanocrystalline CoCrNi equi-atomic medium entropy alloy processed by high-pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2018</b> , 735, 394-397	5.3	55
672	Method for measuring nanoscale local strain in a dual phase steel using digital image correlation with nanodot patterns. <i>Scripta Materialia</i> , <b>2013</b> , 68, 245-248	5.6	55
671	Ductility of ultrafine grained copper. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 4115-4117	3.4	55
670	On the strain rate-dependent deformation mechanism of CoCrFeMnNi high-entropy alloy at liquid nitrogen temperature. <i>Materials Research Letters</i> , <b>2017</b> , 5, 472-477	7.4	54

669	Plastic flow and deformation homogeneity of 6061 Al during equal channel angular pressing. <i>Scripta Materialia</i> , <b>2002</b> , 46, 131-136	5.6	54
668	3D FEM simulations for the homogeneity of plastic deformation in AlCu alloys during ECAP. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2010</b> , 527, 1404-1410	5.3	53
667	Modeling of deformation behavior of copper under equal channel angular pressing. <i>International Journal of Materials Research</i> , <b>2003</b> , 94, 754-760		53
666	Space-holder effect on designing pore structure and determining mechanical properties in porous titanium. <i>Materials &amp; Design</i> , <b>2014</b> , 57, 712-718		51
665	Constitutive modelling of strength and plasticity of nanocrystalline metallic materials. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2001</b> , 316, 195-199	5.3	51
664	High tensile ductility of Ti-based amorphous matrix composites modified from conventional TiAlV titanium alloy. <i>Acta Materialia</i> , <b>2013</b> , 61, 3012-3026	8.4	50
663	Twist Extrusion as a Potent Tool for Obtaining Advanced Engineering Materials: A Review . <i>Advanced Engineering Materials</i> , <b>2017</b> , 19, 1600873	3.5	49
662	High temperature thermal stability of pure copper and copper/carbon nanotube composites consolidated by High Pressure Torsion. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2013</b> , 51, 71-79	8.4	49
661	Mechanical properties of copper after compression stage of high-pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 4840-4844	5.3	49
660	Effect of the gap distance on the cooling behavior and the microstructure of indirect squeeze cast and gravity die cast 5083 wrought Al alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2002</b> , 338, 182-190	5.3	49
659	Effect of precipitates on the microstructure and mechanical properties of non-equiatomic CoCrFeNiMo medium-entropy alloys. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 781, 75-83	5.7	49
658	Evolution of microstructure and hardness in AZ31 alloy processed by high pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2015</b> , 625, 98-106	5.3	48
657	Ultra-high high-strain-rate superplasticity in a nanostructured high-entropy alloy. <i>Nature Communications</i> , <b>2020</b> , 11, 2736	17.4	48
656	Wear properties of brass samples subjected to constrained groove pressing process. <i>Materials &amp; Design</i> , <b>2014</b> , 63, 531-537		48
655	A phase mixture model of a particle reinforced composite with fine microstructure. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2000</b> , 276, 175-185	5.3	48
654	Microstructural development and mechanical properties of nanostructured copper reinforced with SiC nanoparticles. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 568, 33-39	5.3	47
653	Correlation between fracture toughness and stretch-flangeability of advanced high strength steels. <i>Materials Letters</i> , <b>2016</b> , 180, 322-326	3.3	46
652	The dead metal zone in high-pressure torsion. <i>Scripta Materialia</i> , <b>2012</b> , 67, 384-387	5.6	46

651	Wear and friction behavior of self-lubricating hybrid Cu-(SiC + x CNT) composites. <i>Composites Part B: Engineering</i> , <b>2019</b> , 158, 92-101	10	46
650	Dissimilar laser welding of a CoCrFeMnNi high entropy alloy to 316 stainless steel. <i>Scripta Materialia</i> , <b>2022</b> , 206, 114219	5.6	46
649	Dynamic strain aging of twinning-induced plasticity (TWIP) steel in tensile testing and deep drawing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2015</b> , 633, 136-143	5.3	45
648	Heavily drawn CuBeAg and CuBeCr microcomposites. <i>Journal of Materials Processing Technology</i> , <b>2001</b> , 113, 610-616	5.3	45
647	Mechanical properties of partially crystallized aluminum based amorphous alloys. <i>Scripta Materialia</i> , <b>1999</b> , 11, 241-247		45
646	High-temperature tensile deformation behavior of hot rolled CrMnFeCoNi high-entropy alloy. <i>Journal of Alloys and Compounds</i> , <b>2018</b> , 730, 242-248	5.7	44
645	Microstructure and mechanical properties of a MgZn alloy produced by a powder metallurgy route. <i>Journal of Alloys and Compounds</i> , <b>2014</b> , 586, S95-S100	5.7	44
644	Effect of strain rate on compressive behavior of Ti45Zr16Ni9Cu10Be20 bulk metallic glass. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2007</b> , 449-451, 290-294	5.3	44
643	Influence of nanoprecipitation on strength of Cu60Zr30Ti10 glass containing Er-ZrC particle reinforcements. <i>Scripta Materialia</i> , <b>2004</b> , 51, 577-581	5.6	44
642	Quasi-static and dynamic deformation mechanisms interpreted by microstructural evolution in TWinning Induced Plasticity (TWIP) steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2017</b> , 684, 54-63	5.3	43
641	Short-range order strengthening in boron-doped high-entropy alloys for cryogenic applications. <i>Acta Materialia</i> , <b>2020</b> , 194, 366-377	8.4	43
640	Annealing-induced hardening in high-pressure torsion processed CoCrNi medium entropy alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2018</b> , 734, 338-340	5.3	43
639	Numerical and experimental investigation of the deformation behavior during the accumulative back extrusion of an AZ91 magnesium alloy. <i>Materials &amp; Design</i> , <b>2012</b> , 35, 251-258		43
638	A comment on the role of FrankRead sources in plasticity of nanomaterials. <i>Acta Materialia</i> , <b>2007</b> , 55, 6401-6407	8.4	43
637	Die design for homogeneous plastic deformation during equal channel angular pressing. <i>Journal of Materials Processing Technology</i> , <b>2007</b> , 187-188, 46-50	5.3	43
636	Compressive deformation behavior of CrMnFeCoNi high-entropy alloy. <i>Metals and Materials International</i> , <b>2016</b> , 22, 982-986	2.4	42
635	Deformation behavior of copper during a high pressure torsion process. <i>Journal of Materials Processing Technology</i> , <b>2003</b> , 142, 334-337	5.3	42
634	Mechanical properties and microstructural evaluation of AA1100 to AZ31 dissimilar friction stir welds. <i>Materials Chemistry and Physics</i> , <b>2016</b> , 170, 251-260	4.4	41

633	Microstructure, texture and mechanical properties of the magnesium alloy AZ31 processed by ECAP. <i>International Journal of Materials Research</i> , <b>2008</b> , 99, 50-55	0.5	41
632	Microstructural modelling of equal channel angular pressing for producing ultrafine grained materials. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 410-411, 285-289	5.3	41
631	Laser weldability of cast and rolled high-entropy alloys for cryogenic applications. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2019</b> , 742, 224-230	5.3	41
630	Hygroscopic Auxetic On-Skin Sensors for Easy-to-Handle Repeated Daily Use. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 40141-40148	9.5	41
629	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. <i>Materials Letters</i> , <b>2017</b> , 202, 86-88	3.3	40
628	Ultrastrong duplex high-entropy alloy with 2 GPa cryogenic strength enabled by an accelerated martensitic transformation. <i>Scripta Materialia</i> , <b>2019</b> , 171, 67-72	5.6	40
627	Microstructure and compressibility of SiC nanoparticles reinforced Cu nanocomposite powders processed by high energy mechanical milling. <i>Ceramics International</i> , <b>2014</b> , 40, 951-960	5.1	40
626	Effects of the spin line temperature profile and melt index of poly(propylene) on melt-electrospinning. <i>Polymer Engineering and Science</i> , <b>2009</b> , 49, 391-396	2.3	40
625	Nano-web formation by the electrospinning at various electric fields. <i>Journal of Materials Science</i> , <b>2007</b> , 42, 8106-8112	4.3	40
624	Modeling of texture evolution in copper under equal channel angular pressing. <i>International Journal of Materials Research</i> , <b>2003</b> , 94, 1189-1198		40
623	High-cycle fatigue and tensile deformation behaviors of coarse-grained equiatomic CoCrFeMnNi high entropy alloy and unexpected hardening behavior during cyclic loading. <i>Intermetallics</i> , <b>2019</b> , 111, 106486	3.5	39
622	Microstructure and tensile behavior of Al and Al-matrix carbon nanotube composites processed by high pressure torsion of the powders. <i>Journal of Materials Science</i> , <b>2010</b> , 45, 4652-4658	4.3	39
621	Dynamic ageing and the mechanical response of AlMgSi alloy through equal channel angular pressing. <i>Materials &amp; Design</i> , <b>2010</b> , 31, 4076-4082		39
620	Calculation of Deformation Behavior and Texture Evolution during Equal Channel Angular Pressing of IF Steel Using Dislocation Based Modeling of Strain Hardening. <i>Materials Science Forum</i> , <b>2002</b> , 408-412, 697-702	0.4	39
619	Microstructural behavior of rapidly solidified and extruded Al-14wt%Ni-14wt%Mm (Mm, misch metal) alloy powders. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1999</b> , 271, 469-476	5.3	39
618	A new strategy for designing immiscible medium-entropy alloys with excellent tensile properties. <i>Acta Materialia</i> , <b>2020</b> , 193, 71-82	8.4	38
617	A combination of severe plastic deformation and ageing phenomena in AlMgSi Alloys. <i>Materials &amp; Design</i> , <b>2012</b> , 36, 735-740		38
616	Band-edge electroluminescence from N <sup>+</sup> -implanted bulk ZnO. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 102107	3.4	38



615	FCC to BCC transformation-induced plasticity based on thermodynamic phase stability in novel VCrFeCoNi medium-entropy alloys. <i>Scientific Reports</i> , <b>2019</b> , 9, 2948	4.9	38
614	An efficient machine learning approach to establish structure-property linkages. <i>Computational Materials Science</i> , <b>2019</b> , 156, 17-25	3.2	38
613	Heterogeneous Aspects of Additive Manufactured Metallic Parts: A Review. <i>Metals and Materials International</i> , <b>2021</b> , 27, 1-39	2.4	38
612	Effect of post weld heat treatment on weldability of high entropy alloy welds. <i>Science and Technology of Welding and Joining</i> , <b>2018</b> , 23, 420-427	3.7	38
611	Factors governing hole expansion ratio of steel sheets with smooth sheared edge. <i>Metals and Materials International</i> , <b>2016</b> , 22, 1009-1014	2.4	37
610	Effects of microstructure and internal defects on mechanical anisotropy and asymmetry of selective laser-melted 316L austenitic stainless steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2019</b> , 763, 138152	5.3	37
609	Grain refinement under high strain rate impact: A numerical approach. <i>Computational Materials Science</i> , <b>2010</b> , 48, 124-132	3.2	37
608	An experimental verification of the finite element modelling of equal channel angular pressing. <i>Computational Materials Science</i> , <b>2009</b> , 46, 347-351	3.2	37
607	Development of TiNbTaZrMo bio-high entropy alloy (BioHEA) super-solid solution by selective laser melting, and its improved mechanical property and biocompatibility. <i>Scripta Materialia</i> , <b>2021</b> , 194, 113658	5.6	37
606	Plastic Deformation Behavior of 40Fe25Ni15Cr10Co10V High-Entropy Alloy for Cryogenic Applications. <i>Metals and Materials International</i> , <b>2019</b> , 25, 277-284	2.4	37
605	Grain refinement and tensile strength of carbon nanotube-reinforced Cu matrix nanocomposites processed by high-pressure torsion. <i>Metals and Materials International</i> , <b>2013</b> , 19, 927-932	2.4	36
604	Numerical Investigation of Mechanical Behaviour of Nanocrystalline Copper. <i>Powder Metallurgy</i> , <b>1998</b> , 41, 217-220	1.9	36
603	Beating Thermal Coarsening in Nanoporous Materials via High-Entropy Design. <i>Advanced Materials</i> , <b>2020</b> , 32, e1906160	2.4	36
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4 <sup>12</sup>	Fabrication of NiTi and NiTi-nano Al <sub>2</sub> O <sub>3</sub> composites by powder metallurgy methods: Comparison of hot isostatic pressing and spark plasma sintering techniques. <i>Ceramics International</i> , <b>2018</b> , 44, 15981-15988	5.1	13
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205	Printed Stretchable Single-Nanofiber Interconnections for Individually-Addressable Highly-Integrated Transparent Stretchable Field Effect Transistor Array. <i>Nano Letters</i> , <b>2021</b> , 21, 5819-5827	11.5	4
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202	On the control of structural/compositional ratio of coherent order-disorder interfaces. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 777, 1222-1233	5.7	4

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77	Microstructural and Mechanical Properties of a Material Processed by Streamline Proposed Vortex Extrusion Die. <i>Metals and Materials International</i> , <b>2021</b> , 27, 522-529	2.4	1
76	Effects of temperature and loading rate on phase stability and deformation mechanism in metastable V10Cr10Co30FeNi50-x high entropy alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2021</b> , 804, 140766	5.3	1

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