

Heung Nam Han

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330
papers

5,852
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39
h-index

59
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345
ext. papers

6,994
ext. citations

4.2
avg, IF

5.92
L-index

#	Paper	IF	Citations
330	Engineering the shape and structure of materials by fractal cut. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 17390-5	11.5	196
329	A model for deformation behavior and mechanically induced martensitic transformation of metastable austenitic steel. <i>Acta Materialia</i> , 2004 , 52, 5203-5214	8.4	162
328	Electric current-induced annealing during uniaxial tension of aluminum alloy. <i>Scripta Materialia</i> , 2014 , 75, 58-61	5.6	124
327	The mechanical behavior of 5052-H32 aluminum alloys under a pulsed electric current. <i>International Journal of Plasticity</i> , 2014 , 58, 84-99	7.6	122
326	Investigation of strain-induced martensitic transformation in metastable austenite using nanoindentation. <i>Scripta Materialia</i> , 2010 , 63, 540-543	5.6	121
325	Microstructure and tensile behavior of duplex low-density steel containing 5mass% aluminum. <i>Scripta Materialia</i> , 2013 , 68, 365-369	5.6	107
324	Design method for TRIP-aided multiphase steel based on a microstructure-based modelling for transformation-induced plasticity and mechanically induced martensitic transformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009 , 499, 462-468	5.3	106
323	Three-dimensional numerical and experimental investigation on friction stir welding processes of ferritic stainless steel. <i>Acta Materialia</i> , 2013 , 61, 2649-2661	8.4	91
322	A ductile fracture criterion in sheet metal forming process. <i>Journal of Materials Processing Technology</i> , 2003 , 142, 231-238	5.3	88
321	Tyrosine-mediated two-dimensional peptide assembly and its role as a bio-inspired catalytic scaffold. <i>Nature Communications</i> , 2014 , 5, 3665	17.4	83
320	A review of electrically-assisted manufacturing. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2015 , 2, 365-376	3.8	83
319	Strain rate dependent tensile behavior of advanced high strength steels: Experiment and constitutive modeling. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 559, 222-231	5.3	82
318	Microstructural analysis of friction stir welded ferritic stainless steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 2889-2894	5.3	80
317	In Vitro and In Vivo Evaluation of Whitlockite Biocompatibility: Comparative Study with Hydroxyapatite and Tricalcium Phosphate. <i>Advanced Healthcare Materials</i> , 2016 , 5, 128-36	10.1	78
316	Crystal plasticity finite element modeling of mechanically induced martensitic transformation (MIMT) in metastable austenite. <i>International Journal of Plasticity</i> , 2010 , 26, 688-710	7.6	78
315	Microstructural visualization of compositional changes induced by transition metal dissolution in Ni-rich layered cathode materials by high-resolution particle analysis. <i>Nano Energy</i> , 2019 , 56, 434-442	17.1	77
314	Microstructure and mechanical properties of friction stir welded and laser welded high entropy alloy CrMnFeCoNi. <i>Metals and Materials International</i> , 2018 , 24, 73-83	2.4	63

3 ¹³	Electric current-assisted deformation behavior of Al-Mg-Si alloy under uniaxial tension. <i>International Journal of Plasticity</i> , 2017 , 94, 148-170	7.6	63
3 ¹²	A model for deformation, temperature and phase transformation behavior of steels on run-out table in hot strip mill. <i>Journal of Materials Processing Technology</i> , 2002 , 128, 216-225	5.3	61
3 ¹¹	A model for transformation plasticity during bainite transformation of steel under external stress. <i>Acta Materialia</i> , 2003 , 51, 4907-4917	8.4	59
3 ¹⁰	Microstructural evolution in friction stir welding of high-strength linepipe steel. <i>Materials & Design</i> , 2012 , 34, 258-267		58
3 ⁰⁹	Easy preparation of self-assembled high-density buckypaper with enhanced mechanical properties. <i>Nano Letters</i> , 2015 , 15, 190-7	11.5	57
3 ⁰⁸	Application of hot press forming process to manufacture an automotive part and its finite element analysis considering phase transformation plasticity. <i>International Journal of Mechanical Sciences</i> , 2009 , 51, 888-898	5.5	56
3 ⁰⁷	Effect of electric current on recrystallization kinetics in interstitial free steel and AZ31 magnesium alloy. <i>Materials Characterization</i> , 2017 , 133, 70-76	3.9	53
3 ⁰⁶	Microstructure Study of Electrochemically Driven Li _x Si. <i>Advanced Energy Materials</i> , 2011 , 1, 1199-1204	21.8	53
3 ⁰⁵	Atomistic investigations of ϵ -carbide precipitation in austenitic Fe-Mn-Al-C lightweight steels and the effect of Mo addition. <i>Scripta Materialia</i> , 2017 , 127, 97-101	5.6	51
3 ⁰⁴	Dilatometric analysis of austenite decomposition considering the effect of non-isotropic volume change. <i>Acta Materialia</i> , 2007 , 55, 2659-2669	8.4	49
3 ⁰³	Nanoindentation study for deformation twinning of magnesium single crystal. <i>Scripta Materialia</i> , 2013 , 68, 483-486	5.6	48
3 ⁰²	Implicit finite element formulations for multi-phase transformation in high carbon steel. <i>International Journal of Plasticity</i> , 2009 , 25, 1726-1758	7.6	48
3 ⁰¹	Analysis of Solidification Cracking Using the Specific Crack Susceptibility.. <i>ISIJ International</i> , 2000 , 40, 129-136	1.7	48
3 ⁰⁰	Phase Analysis of Steels by Grain-averaged EBSD Functions. <i>ISIJ International</i> , 2011 , 51, 130-136	1.7	45
2 ⁹⁹	Electroplastic behaviour in an aluminium alloy and dislocation density based modelling. <i>Materials and Design</i> , 2017 , 124, 131-142	8.1	43
2 ⁹⁸	Orientation-dependent indentation response of magnesium single crystals: Modeling and experiments. <i>Acta Materialia</i> , 2014 , 81, 358-376	8.4	43
2 ⁹⁷	Directing the deformation paths of soft metamaterials with prescribed asymmetric units. <i>Advanced Materials</i> , 2015 , 27, 2747-52	24	42
2 ⁹⁶	Dendrite-Free Lithium Deposition for Lithium Metal Anodes with Interconnected Microsphere Protection. <i>Chemistry of Materials</i> , 2017 , 29, 5906-5914	9.6	42

295	Fatigue-free, electrically reliable copper electrode with nanohole array. <i>Small</i> , 2012 , 8, 3300-6	11	42
294	A Finite Element Model for 2-Dimensional Slice of Cast Strand.. <i>ISIJ International</i> , 1999 , 39, 445-454	1.7	42
293	Investigations of the microstructure evolution and tensile deformation behavior of austenitic Fe-Mn-Al-C lightweight steels and the effect of Mo addition. <i>Acta Materialia</i> , 2018 , 147, 226-235	8.4	40
292	A Finite Element Model for the Prediction of Thermal and Metallurgical Behavior of Strip on Run-out-table in Hot Rolling.. <i>ISIJ International</i> , 2002 , 42, 392-400	1.7	40
291	Metal phosphate-coated Ni-rich layered oxide positive electrode materials for Li-ion batteries: improved electrochemical performance and decreased Li residuals content. <i>Electrochimica Acta</i> , 2017 , 257, 217-223	6.7	38
290	Effect of Mo and Cr additions on the microstructure, mechanical properties and pitting corrosion resistance of austenitic Fe-30Mn-10.5Al-1.1C lightweight steels. <i>Journal of Alloys and Compounds</i> , 2019 , 775, 1136-1146	5.7	38
289	Effect of pulsed electric current on dissolution of Mg 17 Al 12 phases in as-extruded AZ91 magnesium alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 684, 668-676	5.3	36
288	Elastocaloric effect in polycrystalline Ni 50 Ti 45.3 V 4.7 shape memory alloy. <i>Scripta Materialia</i> , 2018 , 144, 48-51	5.6	36
287	Hydrogen and aluminium in high-manganese twinning-induced plasticity steel. <i>Scripta Materialia</i> , 2014 , 80, 9-12	5.6	36
286	Effect of Residual Lithium Rearrangement on Ni-rich Layered Oxide Cathodes for Lithium-Ion Batteries. <i>Energy Technology</i> , 2018 , 6, 1361-1369	3.5	35
285	Investigation of the Dehydrogenation Reaction Pathway of Ca(BH ₄) ₂ and Reversibility of Intermediate Phases. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 4330-4334	3.8	35
284	A microstructure-based analysis for transformation induced plasticity and mechanically induced martensitic transformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 485, 224-233	5.3	35
283	Analysis of hot forging of porous metals. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1996 , 206, 81-89	5.3	35
282	Effects of the strain rate on the tensile properties of a TRIP-aided duplex stainless steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 666, 280-287	5.3	35
281	Less strained and more efficient GaN light-emitting diodes with embedded silica hollow nanospheres. <i>Scientific Reports</i> , 2013 , 3, 3201	4.9	33
280	On the crystal structure of Cr ₂ N precipitates in high-nitrogen austenitic stainless steel. <i>Acta Crystallographica Section B: Structural Science</i> , 2005 , 61, 137-44		32
279	Elastoplastic Finite Element Analysis for Porous Metals. <i>Powder Metallurgy</i> , 1994 , 37, 140-146	1.9	32
278	Decoupling Thermal and Electrical Effect in an Electrically Assisted Uniaxial Tensile Test Using Finite Element Analysis. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015 , 46, 3043-3051	2.3	31

277	EMn formation and aging effect on the fracture behavior of high-Mn low-density steels. <i>Scripta Materialia</i> , 2016 , 124, 193-197	5.6	31
276	Strain-induced ϵ martensite transformation during nanoindentation of high-nitrogen steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014 , 598, 56-61	5.3	31
275	Model for cooling and phase transformation behaviour of transformation induced plasticity steel on runout table in hot strip mill. <i>Materials Science and Technology</i> , 2001 , 17, 721-726	1.5	31
274	Model for compaction of metal powders. <i>International Journal of Mechanical Sciences</i> , 1999 , 41, 121-141	5.5	31
273	Relationship between yield point phenomena and the nanoindentation pop-in behavior of steel. <i>Journal of Materials Research</i> , 2012 , 27, 39-44	2.5	30
272	Variant Selection in Mechanically-induced Martensitic Transformation of Metastable Austenitic Steel. <i>ISIJ International</i> , 2005 , 45, 1217-1219	1.7	30
271	Degradation of High-Nickel-Layered Oxide Cathodes from Surface to Bulk: A Comprehensive Structural, Chemical, and Electrical Analysis. <i>Advanced Energy Materials</i> , 2020 , 10, 2001035	21.8	30
270	Indentation size effect in nanoporous gold. <i>Acta Materialia</i> , 2017 , 138, 52-60	8.4	29
269	Development of a dual phase steel using orthogonal design method. <i>Materials & Design</i> , 2009 , 30, 1251-1257		29
268	A Constitutive Model for Transformation Superplasticity under External Stress during Phase Transformation of Steels.. <i>ISIJ International</i> , 2002 , 42, 200-205	1.7	29
267	Prediction of the tensile strength of unidirectional carbon fiber composites considering the interfacial shear strength. <i>Composite Structures</i> , 2017 , 168, 92-103	5.3	28
266	Material properties of friction stir spot welded joints of dissimilar aluminum alloys. <i>Transactions of Nonferrous Metals Society of China</i> , 2012 , 22, s605-s613	3.3	28
265	Effect of aging treatment on microstructure and intrinsic mechanical behavior of Fe _{1.4} Mn _{1.4} Al _{0.89} C lightweight steel. <i>Journal of Alloys and Compounds</i> , 2016 , 656, 805-811	5.7	27
264	Relationship between formability and microstructure of Al alloy sheet locally modified by friction stir processing. <i>Scripta Materialia</i> , 2007 , 57, 17-20	5.6	27
263	Diffusion-controlled transformation plasticity of steel under externally applied stress. <i>Philosophical Magazine</i> , 2007 , 87, 159-176	1.6	27
262	A Fully Coupled Analysis of Fluid Flow, Heat Transfer and Stress in Continuous Round Billet Casting.. <i>ISIJ International</i> , 1999 , 39, 435-444	1.7	27
261	Variant selection during mechanically induced martensitic transformation of metastable austenite by nanoindentation. <i>Scripta Materialia</i> , 2015 , 104, 13-16	5.6	26
260	Auxetic elastomers: Mechanically programmable meta-elastomers with an unusual Poisson's ratio overcome the gauge limit of a capacitive type strain sensor. <i>Extreme Mechanics Letters</i> , 2019 , 31, 100516	3.9	26

259	Microstructure Evolution and Age-Hardening Behavior of Microalloyed Austenitic Fe-30Mn-9Al-0.9C Light-Weight Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017 , 48, 4500-4510	2.3	26
258	Joining and fabrication of metal matrix composites by friction stir welding/processing. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2018 , 5, 151-172	3.8	25
257	Influence of pre-strain on the gaseous hydrogen embrittlement resistance of a high-entropy alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 718, 43-47	5.3	25
256	Modeling friction stir welding process of aluminum alloys. <i>Metals and Materials International</i> , 2008 , 14, 247-258	2.4	25
255	Dilatometric analysis on phase transformations of intercritical annealing of FeMnBi and FeMnBiCu low carbon TRIP steels. <i>Metals and Materials International</i> , 2004 , 10, 399-406	2.4	25
254	In Situ Deformation Behavior of Retained Austenite in TRIP Steel. <i>Materials Science Forum</i> , 2002 , 408-412, 571-576	0.4	25
253	Effect of electric current density on the mechanical property of advanced high strength steels under quasi-static tensile loads. <i>International Journal of Precision Engineering and Manufacturing</i> , 2014 , 15, 1207-1213	1.7	24
252	Practical failure analysis of resistance spot welded advanced high-strength steel sheets. <i>International Journal of Plasticity</i> , 2017 , 94, 122-147	7.6	24
251	Estimation of phase fraction in dual phase steel using microscopic characterizations and dilatometric analysis. <i>Materials Characterization</i> , 2013 , 84, 205-215	3.9	23
250	Effect of austenitic texture on tensile behavior of lean duplex stainless steel with transformation induced plasticity (TRIP). <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 681, 114-120	5.3	22
249	Dual-scale correlation of mechanical behavior in duplex low-density steel. <i>Scripta Materialia</i> , 2013 , 69, 618-621	5.6	22
248	Hydrogen Back-Pressure Effects on the Dehydrogenation Reactions of Ca(BH ₄) ₂ . <i>Journal of Physical Chemistry C</i> , 2012 , 116, 25715-25720	3.8	22
247	Finite element investigations for the role of transformation plasticity on springback in hot press forming process. <i>Computational Materials Science</i> , 2009 , 47, 556-567	3.2	22
246	Self-similarity in the structure of coarsened nanoporous gold. <i>Scripta Materialia</i> , 2017 , 137, 46-49	5.6	21
245	Ductility enhancement of tungsten after plastic deformation. <i>Journal of Alloys and Compounds</i> , 2019 , 787, 801-814	5.7	21
244	Finite element analysis for mechanical response of Ti foams with regular structure obtained by selective laser melting. <i>Acta Materialia</i> , 2015 , 97, 199-206	8.4	21
243	A finite element simulation for carburizing heat treatment of automotive gear ring incorporating transformation plasticity. <i>Materials and Design</i> , 2016 , 99, 243-253	8.1	21
242	Electrically assisted blanking using the electroplasticity of ultra-high strength metal alloys. <i>CIRP Annals - Manufacturing Technology</i> , 2014 , 63, 273-276	4.9	21

241	Hydrogen-induced nanohardness variations in a CoCrFeMnNi high-entropy alloy. <i>International Journal of Hydrogen Energy</i> , 2017 , 42, 12015-12021	6.7	20
240	Microstructural characterization of cold-drawn CuNiBi alloy having high strength and high conductivity. <i>Journal of Alloys and Compounds</i> , 2020 , 832, 155059	5.7	20
239	Microstructure and Solidification Crack Susceptibility of Al 6014 Molten Alloy Subjected to a Spatially Oscillated Laser Beam. <i>Materials</i> , 2018 , 11,	3.5	20
238	Fabrication of sintered tungsten by spark plasma sintering and investigation of thermal stability. <i>International Journal of Refractory Metals and Hard Materials</i> , 2017 , 69, 164-169	4.1	20
237	Feasibility of electrically assisted progressive forging of aluminum 6061-T6 alloy. <i>CIRP Annals - Manufacturing Technology</i> , 2015 , 64, 277-280	4.9	20
236	Microtexture development during equibiaxial tensile deformation in monolithic and dual phase steels. <i>Acta Materialia</i> , 2011 , 59, 5462-5471	8.4	20
235	Plastic behaviour of perforated sheets under biaxial stress state. <i>International Journal of Mechanical Sciences</i> , 1997 , 39, 781-793	5.5	20
234	Modelling coarsening behaviour of TiC precipitates in high strength, low alloy steels. <i>Materials Science and Technology</i> , 2013 , 29, 1074-1079	1.5	19
233	Improvement of ductility in magnesium alloy sheet using laser scanning treatment. <i>Materials Letters</i> , 2010 , 64, 425-427	3.3	19
232	Prediction of forming limit in hydro-mechanical deep drawing of steel sheets using ductile fracture criterion. <i>Metals and Materials International</i> , 2006 , 12, 121-129	2.4	19
231	Numerical and experimental investigation of (de)lithiation-induced strains in bicontinuous silicon-coated nickel inverse opal anodes. <i>Acta Materialia</i> , 2016 , 107, 289-297	8.4	18
230	Microtexture Analysis of Friction Stir Welded Al 6061-T651 Plates. <i>Materials Science Forum</i> , 2005 , 495-497, 901-906	0.4	18
229	A new class of lightweight, stainless steels with ultra-high strength and large ductility. <i>Scientific Reports</i> , 2020 , 10, 12140	4.9	18
228	Indentation size effect for spherical nanoindentation on nanoporous gold. <i>Scripta Materialia</i> , 2018 , 143, 10-14	5.6	17
227	Enhanced mechanical property of FeAl alloy due to Mn insertion: ab initio study. <i>Journal of Alloys and Compounds</i> , 2014 , 583, 295-299	5.7	17
226	Finite Element Investigation for Edge Wave Prediction in Hot Rolled Steel during Run Out Table Cooling. <i>ISIJ International</i> , 2014 , 54, 1646-1652	1.7	17
225	Investigation of the material flow and texture evolution in friction-stir welded aluminum alloy. <i>Metals and Materials International</i> , 2009 , 15, 1027-1031	2.4	17
224	Dilatometric Analysis of Phase Fraction during Austenite Decomposition into Banded Microstructure in Low-Carbon Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2007 , 38, 2963-2973	2.3	17

223	Integrated crystal plasticity and phase field model for prediction of recrystallization texture and anisotropic mechanical properties of cold-rolled ultra-low carbon steels. <i>International Journal of Plasticity</i> , 2020 , 127, 102644	7.6	17
222	Evolution of microstructure and tensile properties of Fe ₈₁ Ni ₁₂ Cr based AFA steel during aging at 700 °C. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 672, 23-31	5.3	17
221	Simulation of Carbide Precipitation Kinetics in Aged Low-Density Fe-Mn-Al Steels and Its Effects on Strengthening. <i>Metals and Materials International</i> , 2018 , 24, 702-710	2.4	16
220	Martensite in interstitial-free steel obtained by ultra-high pressure. <i>Scripta Materialia</i> , 2012 , 66, 45-48	5.6	16
219	Analysis of forging limit for sintered porous metals. <i>Scripta Metallurgica Et Materialia</i> , 1995 , 32, 1937-1944		16
218	Evaluation of single crystal elastic constants and stacking fault energy in high-nitrogen duplex stainless steel by in-situ neutron diffraction. <i>Scripta Materialia</i> , 2016 , 119, 1-4	5.6	16
217	Extremely toughened Ti-based solid-solution carbide cermets. <i>Journal of Alloys and Compounds</i> , 2019 , 784, 906-914	5.7	15
216	Modelling continuous dynamic recrystallization of aluminum alloys based on the polycrystal plasticity approach. <i>International Journal of Plasticity</i> , 2020 , 131, 102710	7.6	15
215	Modified Johnson-Cook model incorporated with electroplasticity for uniaxial tension under a pulsed electric current. <i>Metals and Materials International</i> , 2018 , 24, 42-50	2.4	15
214	Phase transformation and impact properties in the experimentally simulated weld heat-affected zone of a reduced activation ferritic/martensitic steel. <i>Journal of Nuclear Materials</i> , 2014 , 455, 81-85	3.3	15
213	Microstructural characteristics of a cast IN718 superalloy bonded by isothermal solidification. <i>Metals and Materials International</i> , 2013 , 19, 1091-1099	2.4	15
212	Effect of microelasticity on grain growth: Texture evolution and abnormal grain growth. <i>Scripta Materialia</i> , 2011 , 64, 1079-1082	5.6	15
211	Diffusion-controlled recrystallization and grain growth-induced plasticity of steel under externally applied stress. <i>Philosophical Magazine</i> , 2008 , 88, 1811-1824	1.6	15
210	3-dimensional Mathematical Model for the Analysis of Continuous Beam Blank Casting Using Body Fitted Coordinate System.. <i>ISIJ International</i> , 1998 , 38, 132-141	1.7	15
209	Local enhancement of the material properties of aluminium sheets by a combination of additive manufacturing and friction stir processing. <i>CIRP Annals - Manufacturing Technology</i> , 2019 , 68, 289-292	4.9	14
208	Vacancy-mediated Assisted Phase formation mechanism in titanium-molybdenum alloy. <i>Acta Materialia</i> , 2015 , 83, 499-506	8.4	14
207	Elucidating the origin of electroplasticity in metallic materials. <i>Applied Materials Today</i> , 2020 , 21, 100874	6.6	14
206	Tensile-Shear Fracture Behavior Prediction of High-Strength Steel Laser Overlap Welds. <i>Metals</i> , 2018 , 8, 365	2.3	14

205	Hydrogenation reaction of CaH ₂ -CaB ₆ -Mg mixture. <i>Journal of Alloys and Compounds</i> , 2010 , 492, 597-600	5.7	14
204	Small-scale mechanical property characterization of ferrite formed during deformation of super-cooled austenite by nanoindentation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009 , 523, 173-177	5.3	14
203	A finite element analysis for asymmetric contraction after coiling of hot-rolled steel. <i>Journal of Materials Processing Technology</i> , 2010 , 210, 907-913	5.3	14
202	An observation of permanent strain during recrystallization and growth of steel under externally applied stress. <i>Materials Letters</i> , 2005 , 59, 158-161	3.3	14
201	Analysis of transformation plasticity in steel using a finite element method coupled with a phase field model. <i>PLoS ONE</i> , 2012 , 7, e35987	3.7	14
200	Investigation of the aging behavior and orientation relationships in Fe-1.4Mn-0.89C low-density steel. <i>Journal of Alloys and Compounds</i> , 2017 , 723, 146-156	5.7	13
199	Experimental and Numerical Study on the Deformation Mechanism in AZ31B Mg Alloy Sheets Under Pulsed Electric-Assisted Tensile and Compressive Tests. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016 , 47, 2783-2794	2.3	13
198	Solid-state dissimilar joining of stainless steel 316L and Inconel 718 alloys by electrically assisted pressure joining. <i>Materials Characterization</i> , 2019 , 154, 161-168	3.9	12
197	Effect of Pulsed Electric Current on TRIP-Aided Steel. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2019 , 6, 315-327	3.8	12
196	Residual-stress-induced grain growth of twinned grains and its effect on formability of magnesium alloy sheet at room temperature. <i>Materials Characterization</i> , 2015 , 109, 88-94	3.9	12
195	Effect of annealing with pressure on tungsten film properties fabricated by atmospheric plasma spray. <i>Metals and Materials International</i> , 2014 , 20, 1037-1042	2.4	12
194	Elastic softening of sapphire by Si diffusion for dislocation-free GaN. <i>Acta Materialia</i> , 2014 , 66, 97-104	8.4	12
193	Effect of micro-elasticity on grain growth and texture evolution: A phase field grain growth simulation. <i>Computational Materials Science</i> , 2012 , 56, 58-68	3.2	12
192	A numerical model for vacuum carburization of an automotive gear ring. <i>Metals and Materials International</i> , 2011 , 17, 885-890	2.4	12
191	Characterization of the crystallographic microstructure of the stress-induced void in Cu interconnects. <i>Applied Physics Letters</i> , 2008 , 92, 141917	3.4	12
190	Analysis of Coefficient of Friction in Compression of Porous Metal Rings. <i>Powder Metallurgy</i> , 1994 , 37, 259-264	1.9	12
189	Prediction of uniaxial tensile flow using finite element-based indentation and optimized artificial neural networks. <i>Materials and Design</i> , 2020 , 196, 109104	8.1	12
188	Biofunctionalized ceramic with self-assembled networks of nanochannels. <i>ACS Nano</i> , 2015 , 9, 4447-57	16.7	11

187	Effect of oxygen and nitrogen on microstructure and mechanical properties of vanadium. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 675, 92-98	5.3	11
186	Improvement of mechanical property of air plasma sprayed tungsten film using pulsed electric current treatment. <i>International Journal of Refractory Metals and Hard Materials</i> , 2016 , 60, 99-103	4.1	11
185	Characterization of friction stir welded joint of low nickel austenitic stainless steel and modified ferritic stainless steel. <i>Metals and Materials International</i> , 2017 , 23, 948-957	2.4	11
184	Friction stir spot welded joints of 409L stainless steels fabricated by a convex shoulder tool. <i>Metals and Materials International</i> , 2013 , 19, 1243-1250	2.4	11
183	Improvement of the drawability based on the surface friction stir process of AA5052-H32 automotive sheets. <i>Metals and Materials International</i> , 2008 , 14, 47-57	2.4	11
182	Annealing textures of copper damascene interconnects for ultra-large-scale integration. <i>Journal of Electronic Materials</i> , 2005 , 34, 1493-1499	1.9	11
181	Electrically assisted tensile behavior of complex phase ultra-high strength steel. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2016 , 3, 325-333	3.8	11
180	Selective crack suppression during deformation in metal films on polymer substrates using electron beam irradiation. <i>Nature Communications</i> , 2019 , 10, 4454	17.4	10
179	Integrated porous cobalt oxide/cobalt anode with micro- and nano-pores for lithium ion battery. <i>Applied Surface Science</i> , 2020 , 525, 146592	6.7	10
178	Effect of grain size on the strain rate sensitivity of CoCrFeNi high-entropy alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 782, 139281	5.3	10
177	Critical bending radius of thin single-crystalline silicon with dome and pyramid surface texturing. <i>Scripta Materialia</i> , 2017 , 140, 1-4	5.6	10
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