

Ming-Xing Zhang

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188
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8,441
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L-index

#	Paper	IF	Citations
179	Crystallographic study of grain refinement in aluminum alloys using the edge-to-edge matching model. <i>Acta Materialia</i> , 2005 , 53, 1427-1438	8.4	296
178	Current research progress in grain refinement of cast magnesium alloys: A review article. <i>Journal of Alloys and Compounds</i> , 2015 , 619, 639-651	5.7	293
177	Plastic strain-induced grain refinement in the nanometer scale in a Mg alloy. <i>Acta Materialia</i> , 2007 , 55, 975-982	8.4	274
176	The use of Al ₂ O ₃ cold spray coatings to improve the surface properties of magnesium alloys. <i>Surface and Coatings Technology</i> , 2009 , 204, 336-344	4.4	205
175	Crystallography of grain refinement in Mg/Al based alloys. <i>Acta Materialia</i> , 2005 , 53, 3261-3270	8.4	190
174	Edge-to-edge matching and its applications. <i>Acta Materialia</i> , 2005 , 53, 1085-1096	8.4	169
173	Crystallographic features of phase transformations in solids. <i>Progress in Materials Science</i> , 2009 , 54, 1101-1170	11.70	164
172	Residual stress and thermo-mechanical properties of cold spray metal coatings. <i>Acta Materialia</i> , 2011 , 59, 1259-1270	8.4	162
171	Edge-to-edge matching and its applications: Part I. Application to the simple HCP/BCC system. <i>Acta Materialia</i> , 2005 , 53, 1073-1084	8.4	160
170	A mechanism for the poisoning effect of silicon on the grain refinement of Al/Si alloys. <i>Acta Materialia</i> , 2007 , 55, 1447-1456	8.4	153
169	The grain refinement mechanism of cast aluminium by zirconium. <i>Acta Materialia</i> , 2013 , 61, 5636-5645	8.4	133
168	A new approach to designing a grain refiner for Mg casting alloys and its use in Mg/Al-based alloys. <i>Acta Materialia</i> , 2009 , 57, 3052-3059	8.4	129
167	Revisiting the role of peritectics in grain refinement of Al alloys. <i>Acta Materialia</i> , 2013 , 61, 360-370	8.4	128
166	The influence of ceramic particles on bond strength of cold spray composite coatings on AZ91 alloy substrate. <i>Surface and Coatings Technology</i> , 2010 , 205, 50-56	4.4	110
165	Crystallography and morphology of Widmanstätten cementite in austenite. <i>Acta Materialia</i> , 1998 , 46, 4617-4628	8.4	97
164	Residual stresses in cold spray Al coatings: The effect of alloying and of process parameters. <i>Surface and Coatings Technology</i> , 2012 , 206, 4249-4255	4.4	94
163	Inoculation treatment of an additively manufactured 2024 aluminium alloy with titanium nanoparticles. <i>Acta Materialia</i> , 2020 , 196, 1-16	8.4	92

162	Wear behaviour of AZ91D magnesium alloy with a nanocrystalline surface layer. <i>Surface and Coatings Technology</i> , 2008 , 202, 2859-2864	4.4	91
161	The influence of hydrogen on the mechanical and fracture properties of some martensitic advanced high strength steels studied using the linearly increasing stress test. <i>Corrosion Science</i> , 2015 , 99, 98-117	6.8	86
160	Oxidation of magnesium alloys at elevated temperatures in air: A review. <i>Corrosion Science</i> , 2016 , 112, 734-759	6.8	84
159	Current development of creep-resistant magnesium cast alloys: A review. <i>Materials and Design</i> , 2018 , 155, 422-442	8.1	82
158	A review of hydrogen embrittlement of martensitic advanced high-strength steels. <i>Corrosion Reviews</i> , 2016 , 34, 153-186	3.2	80
157	Hydrogen trapping in some advanced high strength steels. <i>Corrosion Science</i> , 2016 , 111, 770-785	6.8	72
156	Optimisation of stainless steel cold spray coatings using mixed particle size distributions. <i>Surface and Coatings Technology</i> , 2011 , 205, 5135-5140	4.4	72
155	Grain refinement by AlN particles in MgAl based alloys. <i>Journal of Alloys and Compounds</i> , 2009 , 478, 809-812	5.7	69
154	The development of a new grain refiner for magnesium alloys using the edge-to-edge model. <i>Journal of Alloys and Compounds</i> , 2008 , 456, 390-394	5.7	68
153	Crystallography of heterogeneous nucleation of Mg grains on Al ₂ Y nucleation particles in an Mg-0 wt.% Y alloy. <i>Scripta Materialia</i> , 2009 , 61, 312-315	5.6	67
152	A review on hot tearing of magnesium alloys. <i>Journal of Magnesium and Alloys</i> , 2016 , 4, 151-172	8.8	67
151	Surface alloying of an Mg alloy subjected to surface mechanical attrition treatment. <i>Surface and Coatings Technology</i> , 2008 , 202, 3947-3953	4.4	65
150	A novel approach to the mechanism for the grain refining effect of melt superheating of MgAl alloys. <i>Acta Materialia</i> , 2007 , 55, 1863-1871	8.4	64
149	Decoration of Reduced Graphene Oxide Nanosheets with Aryldiazonium Salts and Gold Nanoparticles toward a Label-Free Amperometric Immunosensor for Detecting Cytokine Tumor Necrosis Factor- α in Live Cells. <i>Analytical Chemistry</i> , 2016 , 88, 9614-9621	7.8	64
148	Hydrogen influence on some advanced high-strength steels. <i>Corrosion Science</i> , 2017 , 125, 114-138	6.8	61
147	The influence of Al ₂ O ₃ reinforcement on the properties of stainless steel cold spray coatings. <i>Surface and Coatings Technology</i> , 2012 , 206, 3275-3282	4.4	58
146	The role of crystallography and thermodynamics on phase selection in binary magnesium-lanthanum (Ce or Nd) alloys. <i>Acta Materialia</i> , 2012 , 60, 4420-4430	8.4	57
145	Grain refinement of Ca addition in a twin-roll-cast MgAlZn alloy. <i>Materials Chemistry and Physics</i> , 2012 , 133, 611-616	4.4	56

144	A review of the influence of hydrogen on the mechanical properties of DP, TRIP, and TWIP advanced high-strength steels for auto construction. <i>Corrosion Reviews</i> , 2016 , 34, 127-152	3.2	55
143	Interfacial structure between particles in an aluminum deposit produced by cold spray. <i>Materials Letters</i> , 2011 , 65, 1576-1578	3.3	55
142	The nucleation crystallography and wettability of Mg grains on active Al ₂ Y inoculants in an Mg-10 wt% Y Alloy. <i>Journal of Alloys and Compounds</i> , 2014 , 586, 39-44	5.7	54
141	The role of Al ₂ Y in grain refinement in Mg-Al-Y alloy system. <i>Journal of Magnesium and Alloys</i> , 2013 , 1, 115-121	8.8	53
140	Effect of active heterogeneous nucleation particles on the grain refining efficiency in an Mg-10 wt.% Y cast alloy. <i>Journal of Alloys and Compounds</i> , 2009 , 488, 260-264	5.7	53
139	Atomic-scale investigation of the interface precipitation in a TiB ₂ nanoparticles reinforced Al ₇₀ Mg ₃₀ Ti matrix composite. <i>Acta Materialia</i> , 2020 , 185, 287-299	8.4	53
138	The grain refining mechanism of cast zinc through silver inoculation. <i>Acta Materialia</i> , 2014 , 79, 315-326	8.4	51
137	A new approach to grain refinement of an Mg-Al cast alloy. <i>Journal of Alloys and Compounds</i> , 2010 , 492, 95-98	5.7	48
136	High tensile plasticity and strength of a CuZr-based bulk metallic glass composite. <i>Materials and Design</i> , 2016 , 90, 145-150	8.1	47
135	Nanostructured Al ₂ O ₃ -YAG-ZrO ₂ ternary eutectic components prepared by laser engineered net shaping. <i>Acta Materialia</i> , 2019 , 170, 24-37	8.4	45
134	Influence of hydrogen on the mechanical and fracture properties of some martensitic advanced high strength steels in simulated service conditions. <i>Corrosion Science</i> , 2016 , 111, 602-624	6.8	44
133	Nanomechanics of Mg-Al intermetallic compounds. <i>Surface and Coatings Technology</i> , 2010 , 204, 2118-2124	4	43
132	Surface alloying of AZ91D alloy by diffusion coating. <i>Journal of Materials Research</i> , 2002 , 17, 2477-2479	2.5	43
131	High resolution microstructure characterization of the interface between cold sprayed Al coating and Mg alloy substrate. <i>Applied Surface Science</i> , 2014 , 289, 366-369	6.7	42
130	The influence of CaO addition on grain refinement of cast magnesium alloys. <i>Scripta Materialia</i> , 2016 , 114, 103-107	5.6	41
129	Thermal stability of nanocrystallized surface produced by surface mechanical attrition treatment in aluminum alloys. <i>Surface and Coatings Technology</i> , 2012 , 206, 3970-3980	4.4	41
128	Identifying close-packed planes in complex crystal structures. <i>Acta Materialia</i> , 2010 , 58, 3091-3095	8.4	41
127	The influence of microstructure on the hydrogen embrittlement susceptibility of martensitic advanced high strength steels. <i>Materials Today Communications</i> , 2018 , 17, 1-14	2.5	40

126	Microstructure characterization and nanomechanics of cold-sprayed pure Al and Al-Al ₂ O ₃ composite coatings. <i>Surface and Coatings Technology</i> , 2013 , 232, 216-223	4.4	40
125	Surface alloying of AZ91E alloy by Al ₂ N ₃ packed powder diffusion coating. <i>Surface and Coatings Technology</i> , 2011 , 206, 425-433	4.4	40
124	In situ observation of bainite growth during isothermal holding. <i>Acta Materialia</i> , 2006 , 54, 2121-2129	8.4	39
123	Diruthenium Complexes with Bridging Diethynyl Polyaromatic Ligands: Synthesis, Spectroelectrochemistry, and Theoretical Calculations. <i>Organometallics</i> , 2015 , 34, 3967-3978	3.8	37
122	Effect of processing parameters on the densification of an additively manufactured 2024 Al alloy. <i>Journal of Materials Science and Technology</i> , 2020 , 58, 34-45	9.1	37
121	The role of the microstructure on the influence of hydrogen on some advanced high-strength steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 715, 370-378	5.3	37
120	Crystallography of spheroidite and tempered martensite. <i>Acta Materialia</i> , 1998 , 46, 4081-4091	8.4	37
119	Determination of retained austenite using an X-ray texture goniometer. <i>Materials Characterization</i> , 2000 , 45, 39-49	3.9	35
118	The intrinsic effect of long period stacking ordered phases on mechanical properties in Mg-RE based alloys. <i>Journal of Alloys and Compounds</i> , 2016 , 660, 252-257	5.7	34
117	Heat treatment, microstructure and mechanical properties of a Mg ₉₂ Gd ₈ alloy grain-refined by Al additions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 576, 298-305	5.3	34
116	The Effect of Solute Elements on the Grain Refinement of Cast Zn. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013 , 44, 4025-4030	2.3	33
115	Sliding wear-induced microstructure evolution of nanocrystalline and coarse-grained AZ91D Mg alloy. <i>Wear</i> , 2009 , 266, 666-670	3.5	33
114	Effect of the thickness of cold sprayed aluminium alloy coating on the adhesive bond strength with an aluminium alloy substrate. <i>Surface and Coatings Technology</i> , 2015 , 270, 259-265	4.4	32
113	Effect of cooling rate on grain refinement of cast aluminium alloys. <i>Materialia</i> , 2018 , 3, 113-121	3.2	32
112	Novel cost-effective Fe-based high entropy alloys with balanced strength and ductility. <i>Materials and Design</i> , 2019 , 162, 24-33	8.1	32
111	Tissue Imaging of Glutathione-Specific Naphthalimide-Cyanine Dye with Two-Photon and Near-Infrared Manners. <i>Analytical Chemistry</i> , 2019 , 91, 11343-11348	7.8	31
110	Understanding solid solution strengthening at elevated temperatures in a creep-resistant Mg ₉₂ Gd ₈ Ca alloy. <i>Acta Materialia</i> , 2019 , 181, 185-199	8.4	30
109	Further study of the hydrogen embrittlement of martensitic advanced high-strength steel in simulated auto service conditions. <i>Corrosion Science</i> , 2018 , 135, 120-135	6.8	30

108	The morphology and formation mechanism of pearlite in steels. <i>Materials Characterization</i> , 2009 , 60, 545-554	3.9	30
107	Determination of the equivalent hydrogen fugacity during electrochemical charging of 3.5NiCrMoV steel. <i>Corrosion Science</i> , 2018 , 132, 90-106	6.8	29
106	On the Formation of a Diffusion Bond from Cold-Spray Coatings. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012 , 43, 1395-1399	2.3	29
105	Crystallography of recently developed grain refiners for MgAl alloys. <i>Philosophical Magazine Letters</i> , 2007 , 87, 505-514	1	29
104	A novel method to 3D-print fine-grained AlSi10Mg alloy with isotropic properties via inoculation with LaB6 nanoparticles. <i>Additive Manufacturing</i> , 2020 , 32, 101034	6.1	29
103	Growth of diopside crystals in CMAS glass-ceramics using Cr2O3 as a nucleating agent. <i>Journal of the American Ceramic Society</i> , 2018 , 101, 3968-3978	3.8	28
102	The effect of cold sprayed coatings on the mechanical properties of AZ91D magnesium alloys. <i>Surface and Coatings Technology</i> , 2014 , 253, 89-95	4.4	28
101	Crystallographic study of Al3Zr and Al3Nb as grain refiners for Al alloys. <i>Transactions of Nonferrous Metals Society of China</i> , 2014 , 24, 2034-2040	3.3	27
100	The Influence of the Effect of Solute on the Thermodynamic Driving Force on Grain Refinement of Al Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015 , 46, 505-515	2.3	26
99	Oxidation resistance of Mg9Al1Zn alloys micro-alloyed with Be. <i>Scripta Materialia</i> , 2016 , 115, 38-41	5.6	26
98	Effect of Mg24Y5 intermetallic particles on grain refinement of Mg-9Li alloy. <i>Intermetallics</i> , 2014 , 45, 18-23	3.5	26
97	Combined influence of Be and Ca on improving the high-temperature oxidation resistance of the magnesium alloy Mg-9Al-1Zn. <i>Corrosion Science</i> , 2017 , 122, 1-11	6.8	25
96	Crystallographic study of grain refinement of Al by Nb addition. <i>Journal of Applied Crystallography</i> , 2014 , 47, 770-779	3.8	25
95	Hydrogen Trapping in Some Automotive Martensitic Advanced High-Strength Steels. <i>Advanced Engineering Materials</i> , 2018 , 20, 1700468	3.5	24
94	Hydrogen Concentration in Dual-Phase (DP) and Quenched and Partitioned (Q&P) Advanced High-Strength Steels (AHSS) under Simulated Service Conditions Compared with Cathodic Charging Conditions. <i>Advanced Engineering Materials</i> , 2016 , 18, 1588-1599	3.5	24
93	On grain coarsening and refining of the MgAl alloy by Sm. <i>Journal of Alloys and Compounds</i> , 2016 , 663, 387-394	5.7	24
92	Bonding and Electronic Properties of Linear Diethynyl Oligothienoacene-Bridged Diruthenium Complexes and Their Oxidized Forms. <i>Inorganic Chemistry</i> , 2017 , 56, 11074-11086	5.1	23
91	The use of kinetic metallization to form intermetallic reinforced composite coatings by post-spray heat treatment. <i>Surface and Coatings Technology</i> , 2009 , 203, 3019-3025	4.4	23

90	Effects of Al addition on the structure and mechanical properties of Zn alloys. <i>Journal of Alloys and Compounds</i> , 2016 , 687, 885-892	5.7	23
89	Roles of Lanthanum and Cerium in Grain Refinement of Steels during Solidification. <i>Metals</i> , 2018 , 8, 884-896	2.3	23
88	Crystallography of grain refinement in cast zinc-copper alloys. <i>Journal of Applied Crystallography</i> , 2015 , 48, 890-900	3.8	22
87	Equivalent hydrogen fugacity during electrochemical charging of some martensitic advanced high-strength steels. <i>Corrosion Science</i> , 2017 , 127, 45-58	6.8	22
86	Effect of Grain Refinement on Tensile Properties of Cast Zinc Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016 , 47, 830-841	2.3	21
85	Enhanced mechanical properties of AZ31B magnesium alloy thin sheets processed by on-line heating rolling. <i>Journal of Alloys and Compounds</i> , 2017 , 693, 414-420	5.7	21
84	Surface alloying of Mg alloys after surface nanocrystallization. <i>Journal of Nanoscience and Nanotechnology</i> , 2008 , 8, 2724-8	1.3	21
83	Achieving high ductility in a selectively laser melted commercial pure-titanium via in-situ grain refinement. <i>Scripta Materialia</i> , 2021 , 191, 155-160	5.6	21
82	Hydrogen embrittlement of an automotive 1700 MPa martensitic advanced high-strength steel. <i>Corrosion Science</i> , 2020 , 171, 108726	6.8	20
81	The influence of cold and detonation thermal spraying processes on the microstructure and properties of Al-based composite coatings on Mg alloy. <i>Surface and Coatings Technology</i> , 2018 , 352, 627-633	4.4	20
80	Effects of Sn on microstructure of as-cast and as-extruded Mg-Li alloys. <i>Transactions of Nonferrous Metals Society of China</i> , 2013 , 23, 904-908	3.3	20
79	Grain refinement of cast zinc through magnesium inoculation: Characterisation and mechanism. <i>Materials Characterization</i> , 2015 , 106, 1-10	3.9	19
78	Grain Coarsening of Cast Magnesium Alloys at High Cooling Rate: A New Observation. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017 , 48, 474-481	2.3	19
77	On the dynamic mechanical property and deformation mechanism of as-extruded Mg-Sn-Ca alloys under tension. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 664, 43-48	5.3	19
76	Improved oxidation resistance of Mg-9Al-1Zn alloy microalloyed with 60 wt ppm Be attributed to the formation of a more protective (Mg,Be)O surface oxide. <i>Corrosion Science</i> , 2018 , 132, 272-283	6.8	18
75	Effects of Cooling Rate and Solute Content on the Grain Refinement of Mg-Gd-Y Alloys by Aluminum. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014 , 45, 4665-4678	2.3	18
74	Asymmetric oxidation of vinyl- and ethynyl terthiophene ligands in triruthenium complexes. <i>Dalton Transactions</i> , 2016 , 45, 768-82	4.3	17
73	Strengthening Mechanisms and their Superposition Law in an Age-Hardenable Mg-10 wt pct Y Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012 , 43, 3314-3324	2.3	17

72	A novel composite porous coating approach for bioactive titanium-based orthopedic implants. <i>Journal of Biomedical Materials Research - Part A</i> , 2013 , 101, 862-72	5.4	17
71	Generalisation of the oxide reinforcement model for the high oxidation resistance of some Mg alloys micro-alloyed with Be. <i>Corrosion Science</i> , 2019 , 147, 357-371	6.8	17
70	A cost-effective Fe-rich compositionally complicated alloy with superior high-temperature oxidation resistance. <i>Corrosion Science</i> , 2021 , 180, 109190	6.8	17
69	Multi-view feature selection and classification for Alzheimer's Disease diagnosis. <i>Multimedia Tools and Applications</i> , 2017 , 76, 10761-10775	2.5	16
68	Evaluation of the influence of hydrogen on some commercial DP, Q&P and TWIP advanced high-strength steels during automobile service. <i>Engineering Failure Analysis</i> , 2018 , 94, 249-273	3.2	15
67	Evaluating the orientation relationship of prismatic precipitates generated by detwinning in Mg alloys. <i>Acta Materialia</i> , 2020 , 195, 263-273	8.4	15
66	Recycling lithium cobalt oxide from its spent batteries: An electrochemical approach combining extraction and synthesis. <i>Journal of Hazardous Materials</i> , 2021 , 405, 124211	12.8	15
65	A novel strategy to additively manufacture 7075 aluminium alloy with selective laser melting. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 821, 141638	5.3	15
64	Effect of plastic strain damage on the hydrogen embrittlement of a dual-phase (DP) and a quenching and partitioning (Q&P) advanced high-strength steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 785, 139343	5.3	14
63	Conjugated fatty acid-rich oil from Gynostemma pentaphyllum seed can ameliorate lipid and glucose metabolism in type 2 diabetes mellitus mice. <i>Food and Function</i> , 2017 , 8, 3696-3706	6.1	13
62	Kinetics and Morphology of Isothermal Transformations at Intermediate Temperature in 15CrMnMoV Steel. <i>Materials Transactions</i> , 2009 , 50, 123-129	1.3	13
61	Recent understanding of the oxidation and burning of magnesium alloys. <i>Surface Innovations</i> , 2019 , 7, 71-92	1.9	12
60	Roles of Nd and Mn in a new creep-resistant magnesium alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 779, 139152	5.3	11
59	Equivalent Hydrogen Fugacity during Electrochemical Charging of 980DP Steel Determined by Thermal Desorption Spectroscopy. <i>Advanced Engineering Materials</i> , 2018 , 20, 1700469	3.5	11
58	Crystallographic study of grain refinement in low and medium carbon steels. <i>Philosophical Magazine</i> , 2016 , 96, 1556-1578	1.6	11
57	A Visible-Light-Induced Strategy To Construct Osmanaphthalynes, Osmaanthracene, and Osmaphenanthryne. <i>Chemistry - A European Journal</i> , 2018 , 24, 14891-14895	4.8	11
56	Crystallography of TiSi ₂ (C54) epitaxy on (111)Si and (001)Si surfaces. <i>Thin Solid Films</i> , 2008 , 516, 5498-5502		11
55	Uncovering the roles of LaB ₆ -nanoparticle inoculant in the AlSi10Mg alloy fabricated via selective laser melting. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 800, 140365	5.3	11

54	A comprehensive review of the development of magnesium anodes for primary batteries. <i>Journal of Materials Chemistry A</i> ,	13	11
53	Development of the slope cutting method for determining the residual stresses in roll formed products. <i>Measurement: Journal of the International Measurement Confederation</i> , 2017 , 100, 26-35	4.6	10
52	Discovery of plate-shaped athermal β phase forming pairs with β' martensite in a Ti-26 wt.% Cr Alloy. <i>Scripta Materialia</i> , 2013 , 69, 752-755	5.6	10
51	Grain refinement of Mg-Li-Al cast alloys by adding typical master alloys. <i>Progress in Natural Science: Materials International</i> , 2011 , 21, 236-239	3.6	10
50	Crystallography of self-assembled DySi ₂ nanowires on a Si substrate. <i>Applied Physics Letters</i> , 2009 , 94, 083105	3.4	10
49	L ₂ ,p-norm and sample constraint based feature selection and classification for AD diagnosis. <i>Neurocomputing</i> , 2016 , 195, 104-111	5.4	10
48	Diphenylamine-Substituted Osmanaphthalene Complexes: Structural, Bonding, and Redox Properties of Unusual Donor-Bridge-Acceptor Systems. <i>Chemistry - A European Journal</i> , 2018 , 24, 18998-19009	4.8	10
47	A New Grain Refiner for Ferritic Steels. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2017 , 48, 2902-2912	2.5	9
46	Effect of Solute on Grain Refinement of As-Cast Fe-4Si Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018 , 49, 2235-2247	2.3	9
45	Evaluation of automobile service performance using laboratory testing. <i>Materials Science and Technology</i> , 2018 , 34, 1893-1909	1.5	9
44	Stress-Relaxation Behavior of Magnesium-3Gadolinium-2Calcium-Based Alloys at Elevated Temperatures. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017 , 48, 5710-5716	2.3	9
43	Eutectic modification of Fe-enriched high-entropy alloys through minor addition of boron. <i>Journal of Materials Science</i> , 2020 , 55, 14571-14587	4.3	9
42	Anodic electrochemistry of mono- and dinuclear aminophenylferrocene and diphenylaminoferrocene complexes. <i>Dalton Transactions</i> , 2018 , 47, 6112-6123	4.3	8
41	Effect of Ce addition on microstructure of Mg ₉₂ Li alloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2013 , 23, 1936-1941	3.3	8
40	New insights into the growth mechanism of 3D-printed Al ₂ O ₃ /3Al ₅ O ₁₂ binary eutectic composites. <i>Scripta Materialia</i> , 2020 , 178, 274-280	5.6	8
39	Refinement of primary carbides in hypereutectic high-chromium cast irons: a review. <i>Journal of Materials Science</i> , 2021 , 56, 999-1038	4.3	8
38	Crystallography of surface precipitates associated with shape change in a Ti-26wt.% Cr alloy. <i>Acta Materialia</i> , 2013 , 61, 7624-7638	8.4	7
37	The effect of addition of cerium on the grain refinement of Mg ₉₂ Al ₇ Zn cast alloy. <i>Journal of Materials Research</i> , 2013 , 28, 2694-2700	2.5	7

36	Effect of cooling rate on microstructure and mechanical properties of a low-carbon low-alloy steel. <i>Journal of Materials Science</i> , 2021 , 56, 3995-4005	4.3	7
35	The interfacial structure of self-assembled DySi ₂ nanostructures grown on Si(001). <i>Scripta Materialia</i> , 2009 , 60, 787-790	5.6	5
34	Laser additive manufacturing of steels. <i>International Materials Reviews</i> , 1-87	16.1	5
33	Study of Gold Leaching Behavior in the Chlorination Process from Waste Printed Circuit Boards. <i>ACS Sustainable Chemistry and Engineering</i> , 2021 , 9, 284-290	8.3	4
32	Hydrogen fracture maps for sheared-edge-controlled hydrogen-delayed fracture of 1180 MPa advanced high-strength steels. <i>Corrosion Science</i> , 2021 , 184, 109360	6.8	4
31	Crystallography of phase transformation in the self-inclined InAs nanowires grown on GaAs{111}. <i>Scripta Materialia</i> , 2016 , 121, 79-83	5.6	4
30	Hashing with Inductive Supervised Learning. <i>Lecture Notes in Computer Science</i> , 2015 , 447-455	0.9	3
29	Strain rate dependence in the nanoindentation-induced deformation of Mg-Al intermetallic compounds produced by packed powder diffusion coating. <i>Metals and Materials International</i> , 2015 , 21, 793-798	2.4	3
28	Demonstrating the roles of solute and nucleant in grain refinement of additively manufactured aluminium alloys. <i>Additive Manufacturing</i> , 2022 , 49, 102516	6.1	3
27	Understanding the discharge behavior of an ultra-high-purity Mg anode for Mg air primary batteries. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 21387-21401	13	3
26	Hydrogen-induced fast fracture in notched 1500 and 1700 MPa class automotive martensitic advanced high-strength steel. <i>Corrosion Science</i> , 2021 , 188, 109550	6.8	3
25	Additive manufacturing of high strength copper alloy with heterogeneous grain structure through laser powder bed fusion. <i>Acta Materialia</i> , 2021 , 220, 117311	8.4	3
24	A simple and inclusive method to determine the habit plane in transmission electron microscope based on accurate measurement of foil thickness. <i>Materials Characterization</i> , 2014 , 94, 1-6	3.9	2
23	Novel approach to additively manufacture high-strength Al alloys by laser powder bed fusion through addition of hybrid grain refiners. <i>Additive Manufacturing</i> , 2021 , 48, 102400	6.1	2
22	Prediction of Mechanical Properties of Wrought Aluminium Alloys Using Feature Engineering Assisted Machine Learning Approach. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2021 , 52, 2873	2.3	2
21	Nucleophilic Reactions of Osmanaphthalynes with PMe and H O. <i>Chemistry - A European Journal</i> , 2021 , 27, 9328-9335	4.8	2
20	Hydrogen-induced delayed fracture of a 1180 MPa martensitic advanced high-strength steel under U-bend loading. <i>Materials Today Communications</i> , 2021 , 26, 101887	2.5	2
19	A Novel Surface Treatment Technique for Titanium Alloys. <i>Jom</i> , 2020 , 72, 4583-4593	2.1	1

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17	Effects of Mn and Zn Solutes on Grain Refinement of Commercial Pure Magnesium. <i>Minerals, Metals and Materials Series</i> , 2017 , 191-198	0.3	1
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15	The feasibility and limitation of urine as the electrolyte for primary Mg-air batteries. <i>Ionics</i> , 2021 , 27, 2733-2737	2.7	1
14	Synthesis and properties of 3-fold symmetrical hexabenzocoronene-bridged trinuclear alkynylgold(I) complexes. <i>Journal of Coordination Chemistry</i> , 2021 , 74, 1765-1780	1.6	1
13	Osmaindenes: Synthesis and Reversible Mechanochromism Characteristics. <i>Chemistry - A European Journal</i> , 2021 , 27, 14645-14652	4.8	1
12	The significant impact of grain refiner on TiAl intermetallic fabricated by laser-based additive manufacturing. <i>Additive Manufacturing</i> , 2021 , 46, 102172	6.1	1
11	Effect of shearing prestrain on the hydrogen embrittlement of 1180MPa grade martensitic advanced high-strength steel. <i>Corrosion Science</i> , 2022 , 199, 110170	6.8	1
10	Unveiling solidification mode transition and crystallographic characteristics in laser 3D-printed Al ₂ O ₃ -ZrO ₂ eutectic ceramics. <i>Scripta Materialia</i> , 2022 , 210, 114433	5.6	0
9	Influences of additives on crystal multiformity and composition in a CaO-Al ₂ O ₃ -MgO-SiO ₂ -Based glass-ceramics. <i>Advanced Composites and Hybrid Materials</i> , 2021 , 4, 614-628	8.7	0
8	Effect of TiB ₂ addition on microstructure and mechanical properties of a hypereutectic high chromium cast iron. <i>Journal of Materials Science</i> , 2021 , 56, 19047	4.3	0
7	Rationalization of brittleness and anisotropic mechanical properties of H13 steel fabricated by selective laser melting. <i>Scripta Materialia</i> , 2022 , 214, 114645	5.6	0
6	Effect of cold deformation on the hydrogen permeation in a dual-phase advanced high-strength steel. <i>Electrochimica Acta</i> , 2022 , 424, 140619	6.7	0
5	Effect of Solute Additions on the Microstructure and Mechanical Properties of Cast Mg-Al Based Alloys. <i>Minerals, Metals and Materials Series</i> , 2017 , 259-267	0.3	
4	A magnesium-based alloy with theoretical strength. <i>Science Bulletin</i> , 2017 , 62, 978-979	10.6	
3	Effect of solutes on the formation of primary carbides during solidification of hypereutectic high chromium cast irons through thermodynamic modeling. <i>Journal of Materials Science</i> , 2022 , 57, 1429	4.3	
2	Influence of CaO Grain Refiner Addition on the Microstructure and Mechanical Properties of As-Cast Mg Alloys. <i>Minerals, Metals and Materials Series</i> , 2017 , 93-98	0.3	
1	Effect of Ce on solute redistribution in liquid ahead of solid-liquid interface during solidification of Fe-4 wt.%Si alloy. <i>Journal of Iron and Steel Research International</i> , 2021 , 28, 1251-1258	1.2	

