

Philip B Prangnell

List of Publications by Year in descending order

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147
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24978

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Effect of build geometry on the $\hat{\Gamma}^2$ -grain structure and texture in additive manufacture of Ti6Al4V by selective electron beam melting. <i>Materials Characterization</i> , 2013, 84, 153-168.	1.9	578
2	Tensile-compressive yield asymmetries in high strength wrought magnesium alloys. <i>Scripta Metallurgica Et Materialia</i> , 1994, 31, 111-116.	1.0	471
3	XCT analysis of the influence of melt strategies on defect population in Ti-6Al-4V components manufactured by Selective Electron Beam Melting. <i>Materials Characterization</i> , 2015, 102, 47-61.	1.9	442
4	Grain structure formation during friction stir welding observed by the "stop action technique"™. <i>Acta Materialia</i> , 2005, 53, 3179-3192.	3.8	436
5	The effect of strain path on the development of deformation structures in severely deformed aluminium alloys processed by ECAE. <i>Acta Materialia</i> , 2000, 48, 1115-1130.	3.8	384
6	Developing stable fine-grain microstructures by large strain deformation. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 1999, 357, 1663-1681.	1.6	337
7	The solidification behaviour of dilute aluminium-scandium alloys. <i>Acta Materialia</i> , 1998, 46, 5715-5732.	3.8	300
8	Dispersoid precipitation and process modelling in zirconium containing commercial aluminium alloys. <i>Acta Materialia</i> , 2001, 49, 599-613.	3.8	282
9	Quantification of the influence of increased pre-stretching on microstructure-strength relationships in the Al-Cu-Li alloy AA2195. <i>Acta Materialia</i> , 2016, 108, 55-67.	3.8	265
10	Stability of nugget zone grain structures in high strength Al-alloy friction stir welds during solution treatment. <i>Acta Materialia</i> , 2003, 51, 1923-1936.	3.8	249
11	The effectiveness of combining rolling deformation with Wire-Arc Additive Manufacture on $\hat{\Gamma}^2$ -grain refinement and texture modification in Ti-6Al-4V. <i>Materials Characterization</i> , 2016, 114, 103-114.	1.9	245
12	Mechanisms of joint and microstructure formation in high power ultrasonic spot welding 6111 aluminium automotive sheet. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 527, 6320-6334.	2.6	227
13	The effect of coarse second-phase particles on the rate of grain refinement during severe deformation processing. <i>Acta Materialia</i> , 2003, 51, 2811-2822.	3.8	221
14	Analysis of the billet deformation behaviour in equal channel angular extrusion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2000, 287, 87-99.	2.6	217
15	Porosity regrowth during heat treatment of hot isostatically pressed additively manufactured titanium components. <i>Scripta Materialia</i> , 2016, 122, 72-76.	2.6	207
16	Production of ultra-fine grain microstructures in Al-Mg alloys by conventional rolling. <i>Acta Materialia</i> , 2002, 50, 4461-4476.	3.8	205
17	The Effectiveness of Hot Isostatic Pressing for Closing Porosity in Titanium Parts Manufactured by Selective Electron Beam Melting. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016, 47, 1939-1946.	1.1	203
18	Effect of welding parameters on nugget zone microstructure and properties in high strength aluminium alloy friction stir welds. <i>Science and Technology of Welding and Joining</i> , 2003, 8, 257-268.	1.5	196

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19	Finite element modelling of equal channel angular extrusion. <i>Scripta Materialia</i> , 1997, 37, 983-989.	2.6	186
20	On the origin of microstructural banding in Ti-6Al4V wire-arc based high deposition rate additive manufacturing. <i>Acta Materialia</i> , 2019, 166, 306-323.	3.8	181
21	Ultra-fine grain structures in aluminium alloys by severe deformation processing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 375-377, 178-185.	2.6	172
22	The effect of high strain rate deformation on intermetallic reaction during ultrasonic welding aluminium to magnesium. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 556, 31-42.	2.6	167
23	The effect of cooling rate on the morphology of primary Al ₃ Sc intermetallic particles in Al-Sc alloys. <i>Acta Materialia</i> , 2001, 49, 1327-1337.	3.8	163
24	The effect of dispersoids on the grain refinement mechanisms during deformation of aluminium alloys to ultra-high strains. <i>Acta Materialia</i> , 2005, 53, 499-511.	3.8	149
25	Modelling texture development during equal channel angular extrusion of aluminium. <i>Acta Materialia</i> , 2002, 50, 2121-2136.	3.8	147
26	The formation of nanograin structures and accelerated room-temperature theta precipitation in a severely deformed Al-4 wt.% Cu alloy. <i>Acta Materialia</i> , 2010, 58, 1643-1657.	3.8	143
27	Application of bulk deformation methods for microstructural and material property improvement and residual stress and distortion control in additively manufactured components. <i>Scripta Materialia</i> , 2017, 135, 111-118.	2.6	141
28	Making sustainable aluminum by recycling scrap: The science of "dirty" alloys. <i>Progress in Materials Science</i> , 2022, 128, 100947.	16.0	134
29	Extension of the N-model to predict competing homogeneous and heterogeneous precipitation in Al-Sc alloys. <i>Acta Materialia</i> , 2003, 51, 1453-1468.	3.8	127
30	The effect of silver on microstructural evolution in two 2xxx series Al-alloys with a high Cu:Mg ratio during ageing to a T8 temper. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 491, 214-223.	2.6	124
31	Effect of grain size on tensile behaviour of a submicron grained Al-3 wt.%Mg alloy produced by severe deformation. <i>Materials Science and Technology</i> , 2000, 16, 1259-1263.	0.8	122
32	Modelling Al ₃ Zr dispersoid precipitation in multicomponent aluminium alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 352, 240-250.	2.6	116
33	A combined approach to microstructure mapping of an Al-Li AA2199 friction stir weld. <i>Acta Materialia</i> , 2011, 59, 3002-3011.	3.8	115
34	Microstructure refinement and mechanical properties of severely deformed Al-Mg-Li alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002, 328, 87-97.	2.6	114
35	The effect of Mn and Zr dispersoid-forming additions on recrystallization resistance in Al-Cu-Li AA2198 sheet. <i>Acta Materialia</i> , 2014, 77, 1-16.	3.8	112
36	The effect of cryogenic temperature and change in deformation mode on the limiting grain size in a severely deformed dilute aluminium alloy. <i>Acta Materialia</i> , 2008, 56, 1619-1632.	3.8	108

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37	Ultrasonic spot welding of aluminium to steel for automotive applications—microstructure and optimisation. <i>Materials Science and Technology</i> , 2011, 27, 617-624.	0.8	107
38	HAZ development and accelerated post-weld natural ageing in ultrasonic spot welding aluminium 6111-T4 automotive sheet. <i>Acta Materialia</i> , 2012, 60, 2816-2828.	3.8	104
39	Fine-grained alloys by thermomechanical processing. <i>Current Opinion in Solid State and Materials Science</i> , 2001, 5, 15-21.	5.6	103
40	Material Interactions in a Novel Pinless Tool Approach to Friction Stir Spot Welding Thin Aluminum Sheet. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011, 42, 1266-1282.	1.1	101
41	Continuous recrystallisation of lamellar deformation structures produced by severe deformation. <i>Acta Materialia</i> , 2004, 52, 3193-3206.	3.8	98
42	Examination of the effect of Sc on 2000 and 7000 series aluminium alloy castings: for improvements in fusion welding. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 354, 188-198.	2.6	96
43	Microstructure and texture evolution during annealing a cryogenic-SPD processed Al-alloy with a nanoscale lamellar HAGB grain structure. <i>Acta Materialia</i> , 2009, 57, 3509-3521.	3.8	93
44	Dissimilar ultrasonic spot welding of aerospace aluminum alloy AA2139 to titanium alloy TiAl6V4. <i>Journal of Materials Processing Technology</i> , 2016, 231, 382-388.	3.1	90
45	The effect of particle distribution on damage formation in particulate reinforced metal matrix composites deformed in compression. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1996, 220, 41-56.	2.6	87
46	Global mechanical tensioning for the management of residual stresses in welds. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 489, 351-362.	2.6	85
47	Effect of reduced or zero pin length and anvil insulation on friction stir spot welding thin gauge 6111 automotive sheet. <i>Science and Technology of Welding and Joining</i> , 2009, 14, 443-456.	1.5	85
48	Stationary shoulder FSW for joining high strength aluminum alloys. <i>Journal of Materials Processing Technology</i> , 2015, 221, 187-196.	3.1	80
49	Effect of processing parameters on the densification, microstructure and crystallographic texture during the laser powder bed fusion of pure tungsten. <i>International Journal of Refractory Metals and Hard Materials</i> , 2019, 78, 254-263.	1.7	78
50	Comparison of residual stress distributions in conventional and stationary shoulder high-strength aluminum alloy friction stir welds. <i>Journal of Materials Processing Technology</i> , 2017, 242, 92-100.	3.1	77
51	Interactions between zirconium and manganese dispersoid-forming elements on their combined addition in Al–Cu–Li alloys. <i>Acta Materialia</i> , 2012, 60, 5245-5259.	3.8	74
52	Microstructural characterization and mechanical properties of high power ultrasonic spot welded aluminum alloy AA6111–TiAl6V4 dissimilar joints. <i>Materials Characterization</i> , 2014, 97, 83-91.	1.9	70
53	Interface structure and bonding in abrasion circle friction stir spot welding: A novel approach for rapid welding aluminium alloy to steel automotive sheet. <i>Materials Chemistry and Physics</i> , 2012, 134, 459-463.	2.0	64
54	High Resolution EBSD Analysis of the Grain Structure in an AA2024 Friction Stir Weld. <i>Materials Science Forum</i> , 2000, 331-337, 1713-1718.	0.3	63

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55	The deformation of discontinuously reinforced MMCs. The initial yielding behaviour. <i>Acta Metallurgica Et Materialia</i> , 1994, 42, 3425-3436.	1.9	62
56	Effect of Interfacial Reaction on the Mechanical Performance of Steel to Aluminum Dissimilar Ultrasonic Spot Welds. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016, 47, 334-346.	1.1	61
57	Microstructural evolution during formation of ultrafine grain structures by severe deformation. <i>Materials Science and Technology</i> , 2000, 16, 1246-1250.	0.8	60
58	Microstructural parameters and flow stress in Al-0.13% Mg deformed by ECAE processing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 387-389, 235-239.	2.6	60
59	Continuous frictional angular extrusion and its application in the production of ultrafine-grained sheet metals. <i>Scripta Materialia</i> , 2007, 56, 333-336.	2.6	58
60	Predicting recrystallised volume fraction in aluminium alloy 7050 hot rolled plate. <i>Materials Science and Technology</i> , 2002, 18, 607-614.	0.8	57
61	Modelling intermetallic phase formation in dissimilar metal ultrasonic welding of aluminium and magnesium alloys. <i>Science and Technology of Welding and Joining</i> , 2012, 17, 447-453.	1.5	55
62	Efficacy of active cooling for controlling residual stresses in friction stir welds. <i>Science and Technology of Welding and Joining</i> , 2010, 15, 156-165.	1.5	53
63	Material interactions in laser polishing powder bed additive manufactured Ti6Al4V components. <i>Additive Manufacturing</i> , 2018, 20, 11-22.	1.7	51
64	Effect of Zinc Coatings on Joint Properties and Interfacial Reactions in Aluminum to Steel Ultrasonic Spot Welding. <i>Jom</i> , 2012, 64, 407-413.	0.9	48
65	The Effectiveness of Surface Coatings on Preventing Interfacial Reaction During Ultrasonic Welding of Aluminum to Magnesium. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013, 44, 5773-5781.	1.1	47
66	Interfacial Segregation of Alloying Elements During Dissimilar Ultrasonic Welding of AA6111 Aluminum and Ti6Al4V Titanium. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 5143-5152.	1.1	46
67	Modelling and visualisation of material flow in friction stir spot welding. <i>Journal of Materials Processing Technology</i> , 2015, 225, 473-484.	3.1	45
68	Texture Evolution and Grain Refinement in Al Deformed to Ultra-High Strains by Accumulative Roll Bonding (ARB). <i>Materials Science Forum</i> , 2002, 408-412, 733-738.	0.3	39
69	Orientation correlations in aluminium deformed by ECAE. <i>Scripta Materialia</i> , 2002, 47, 289-294.	2.6	38
70	Modeling of Intermetallic Compounds Growth Between Dissimilar Metals. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 4106-4114.	1.1	37
71	Effect of processing route and second phase particles on grain refinement during equal-channel angular extrusion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005, 410-411, 381-385.	2.6	35
72	Novel Approaches to Friction Spot Welding Thin Aluminium Automotive Sheet. <i>Materials Science Forum</i> , 0, 638-642, 1237-1242.	0.3	35

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73	Microstructure and performance of a biodegradable Mg ¹ Ca ² Zn ¹ TCP composite fabricated by combined solidification and deformation processing. <i>Materials Letters</i> , 2012, 82, 7-9.	1.3	35
74	The effect of shoulder coupling on the residual stress and hardness distribution in AA7050 friction stir butt welds. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 735, 218-227.	2.6	35
75	Hydrogen-assisted stable crack growth in iron-3 wt% silicon steel. <i>Acta Materialia</i> , 1996, 44, 3125-3140.	3.8	34
76	The significance of intermetallic compounds formed during interdiffusion in aluminum and magnesium dissimilar welds. <i>Materials Characterization</i> , 2017, 134, 84-95.	1.9	33
77	Investigation of residual stress distribution and texture evolution in AA7050 stationary shoulder friction stir welded joints. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 712, 531-538.	2.6	33
78	On the observation of annealing twins during simulating $\hat{\gamma}$ -grain refinement in Ti ⁶ Al ⁴ V high deposition rate AM with in-process deformation. <i>Acta Materialia</i> , 2020, 186, 229-241.	3.8	33
79	Effect of deposition strategies on fatigue crack growth behaviour of wire + arc additive manufactured titanium alloy Ti ⁶ Al ⁴ V. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 814, 141194.	2.6	33
80	Comparison of the Effect of Individual and Combined Zr and Mn Additions on the Fracture Behavior of Al-Cu-Li Alloy AA2198 Rolled Sheet. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014, 45, 1338-1351.	1.1	32
81	Microstructure simulation and ballistic behaviour of weld zones in friction stir welds in high strength aluminium 7xxx plate. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 3409-3422.	2.6	30
82	Thermal Modeling of Al-Al and Al-Steel Friction Stir Spot Welding. <i>Journal of Materials Engineering and Performance</i> , 2016, 25, 4089-4098.	1.2	30
83	Weld zone and residual stress development in AA7050 stationary shoulder friction stir T-joint weld. <i>Journal of Materials Processing Technology</i> , 2019, 263, 256-265.	3.1	30
84	Dissimilar metal laser spot joining of steel to aluminium in conduction mode. <i>International Journal of Advanced Manufacturing Technology</i> , 2014, 73, 365-373.	1.5	29
85	Processing to ultrafine grain structures by conventional routes. <i>Materials Science and Technology</i> , 2000, 16, 1251-1255.	0.8	28
86	Automated image mapping and quantification of microstructure heterogeneity in additive manufactured Ti6Al4V. <i>Materials Characterization</i> , 2019, 147, 131-145.	1.9	28
87	The deformation of discontinuously reinforced MMCs ^{II} . The elastic response. <i>Acta Metallurgica Et Materialia</i> , 1994, 42, 3437-3442.	1.9	26
88	The Effect of Small Scandium Additions to AA7050 on the As-Cast and Homogenized Microstructure. <i>Materials Science Forum</i> , 2002, 396-402, 757-762.	0.3	26
89	Mechanical performance and microstructural characterisation of titanium alloy-alloy composites built by wire-arc additive manufacture. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 765, 138289.	2.6	26
90	In-situ observation of single variant $\hat{\alpha}$ colony formation in Ti-6Al-4V. <i>Acta Materialia</i> , 2021, 220, 117315.	3.8	26

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91	Development of new high strength Al–Sc filler wires for fusion welding 7000 series aluminium aerospace alloys. <i>Science and Technology of Welding and Joining</i> , 2003, 8, 235-245.	1.5	25
92	Grain refinement response during twist extrusion of an Al-0.13% Mg alloy. <i>International Journal of Materials Research</i> , 2007, 98, 200-204.	0.1	25
93	Structure and mechanical behaviour of an Al-Mg alloy after equal channel angular extrusion. <i>Scripta Materialia</i> , 1999, 12, 839-842.	0.5	24
94	Grain structure and homogeneity of pulsed laser treated surfaces on Al-aerospace alloys and FSWs. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 479, 65-75.	2.6	24
95	The effect of a paint bake treatment on joint performance in friction stir spot welding AA6111-T4 sheet using a pinless tool. <i>Materials Chemistry and Physics</i> , 2013, 141, 768-775.	2.0	24
96	The Influence of Grain Structure on Intermetallic Compound Layer Growth Rates in Fe-Al Dissimilar Welds. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 515-526.	1.1	24
97	Effect of Wall Thickness Transitions on Texture and Grain Structure in Additive Layer Manufacture (ALM) of Ti-6Al-4V. <i>Materials Science Forum</i> , 0, 706-709, 205-210.	0.3	23
98	An examination of the mean stress contribution to the Bauschinger effect by neutron diffraction. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1995, 197, 215-221.	2.6	22
99	The influence of temperature on microstructural damage during uniaxial compression of aluminium matrix composites. <i>Scripta Metallurgica Et Materialia</i> , 1995, 33, 323-329.	1.0	22
100	Modeling of the Thermal Field in Dissimilar Alloy Ultrasonic Welding. <i>Journal of Materials Engineering and Performance</i> , 2015, 24, 799-807.	1.2	22
101	Evaluation of Zn-rich coatings for IMC reaction control in aluminum-magnesium dissimilar welds. <i>Materials Characterization</i> , 2018, 139, 100-110.	1.9	21
102	The effect of processing parameters on rapid-heating $\hat{\tau}^2$ recrystallization in inter-pass deformed Ti-6Al-4V wire-arc additive manufacturing. <i>Materials Characterization</i> , 2020, 163, 110298.	1.9	20
103	The effect of loading direction on strain localisation in wire arc additively manufactured Ti-6Al-4V. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 788, 139608.	2.6	20
104	Quantification of strain fields and grain refinement in Ti-6Al-4V inter-pass rolled wire-arc AM by EBSD misorientation analysis. <i>Materials Characterization</i> , 2020, 170, 110673.	1.9	18
105	The Effectiveness of Al-Si Coatings for Preventing Interfacial Reaction in Al-Mg Dissimilar Metal Welding. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 162-176.	1.1	17
106	Understanding the environmentally assisted cracking (EAC) initiation and propagation of new generation 7xxx alloys using slow strain rate testing. <i>Corrosion Science</i> , 2022, 199, 110161.	3.0	17
107	Discontinuous precipitation in high Li content Al–Li–Zr alloys. <i>Acta Metallurgica Et Materialia</i> , 1994, 42, 419-433.	1.9	16
108	Through Thickness Microstructural Gradients in 7475 and 2022 Creep - Ageformed Bend Coupons. <i>Materials Science Forum</i> , 2006, 519-521, 407-412.	0.3	16

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109	Effect of microstructure on the tensile strength of Ti6Al4V specimens manufactured using additive manufacturing electron beam process. Powder Metallurgy, 2016, 59, 41-50.	0.9	16
110	Tailoring equiaxed $\hat{\Gamma}^2$ -grain structures in Ti-6Al-4V coaxial electron beam wire additive manufacturing. Materialia, 2021, 20, 101202.	1.3	16
111	Characterisation of thin silica films deposited on carbon fibre by an atmospheric pressure non-equilibrium plasma (APNEP). Composites Part A: Applied Science and Manufacturing, 2002, 33, 1403-1408.	3.8	15
112	Mechanisms of Formation of Submicron Grain Structures by Severe Deformation. Materials Science Forum, 2007, 550, 159-168.	0.3	15
113	Control of weld composition when welding high strength aluminium alloy using the tandem process. Science and Technology of Welding and Joining, 2009, 14, 734-739.	1.5	15
114	Control of weld composition when arc welding high strength aluminium alloys using multiple filler wires. Science and Technology of Welding and Joining, 2010, 15, 491-496.	1.5	15
115	Grain Refinement and Texture Evolution during the Deformation of Al to Ultra-High Strains by Accumulative Roll Bonding (ARB). Materials Science Forum, 2002, 396-402, 429-434.	0.3	13
116	Effects of Combined Zr and Mn Additions on Dispersoid Formation and Recrystallisation Behaviour of AA2198 Sheet. Advanced Materials Research, 0, 89-91, 568-573.	0.3	13
117	The potential for grain refinement of Wire-Arc Additive Manufactured (WAAM) Ti-6Al-4V by ZrN and TiN inoculation. Additive Manufacturing, 2021, 40, 101928.	1.7	13
118	Mechanical and Microstructural Characterization of Percussive Arc Welded Hyper-Pins for Titanium to Composite Metal Joining. Materials Science Forum, 2013, 765, 771-775.	0.3	11
119	Microstructural Evolution of the Deformed State during Severe Deformation of an ECAE Processed Al-0.13%Mg Alloy. Materials Science Forum, 2000, 331-337, 545-550.	0.3	10
120	Novel processing routes to ultrafine grained steel. Ironmaking and Steelmaking, 2001, 28, 203-208.	1.1	10
121	Stability of Ultra-Fine $\hat{\Gamma}^2$ -Grain Structures TM Produced by Severe Deformation. Materials Science Forum, 2004, 467-470, 1261-1270.	0.3	10
122	$\hat{\Gamma}^2$ Grain refinement by yttrium addition in Ti-6Al-4V Wire-Arc Additive Manufacturing. Journal of Alloys and Compounds, 2022, 895, 162735.	2.8	10
123	Cast microstructure and dispersoid formation in spray deposited Al $\hat{\Gamma}^2$ -Li alloys. Materials Science and Technology, 1999, 15, 328-336.	0.8	9
124	The effect of cryogenic deformation on the limiting grain size in an SMG Al-alloy. Journal of Materials Science, 2008, 43, 7280-7285.	1.7	9
125	Microstructure transition gradients in titanium dissimilar alloy (Ti-5Al-5V-5Mo-3Cr/Ti-6Al-4V) tailored wire-arc additively manufactured components. Materials Characterization, 2021, 182, 111577.	1.9	9
126	Confirmation of rapid-heating $\hat{\Gamma}^2$ recrystallization in wire-arc additively manufactured Ti-6Al-4V. Materialia, 2020, 13, 100857.	1.3	8

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127	Ultrafine grain structures formed by thermomechanical processing of spray cast Al–Li alloys. <i>Materials Science and Technology</i> , 1999, 15, 605-615.	0.8	6
128	Forging of Al^{TM} sections from aluminium metal matrix composite bars, modelled using the finite element method. <i>Journal of Materials Processing Technology</i> , 1994, 45, 421-428.	3.1	5
129	Ultrafine-Grain Structures Produced by Severe Deformation Processing. <i>Materials Science Forum</i> , 2004, 447-448, 423-428.	0.3	5
130	The Effect of Dispersoids and Processing Variables on Grain Refinement of Aluminium Alloys Deformed by ECAE. <i>Solid State Phenomena</i> , 2006, 114, 151-158.	0.3	4
131	Room temperature instability of an Al-4%Cu super saturated solid solution in a nano-crystalline alloy produced by SPD. <i>Journal of Materials Science</i> , 2010, 45, 4851-4857.	1.7	4
132	Controlling Interfacial Reaction during Dissimilar Metal Welding of Aluminium Alloys. <i>Materials Science Forum</i> , 0, 794-796, 416-421.	0.3	4
133	Systematic Evaluation of the Advantages of Static Shoulder FSW for Joining Aluminium. <i>Materials Science Forum</i> , 0, 794-796, 407-412.	0.3	4
134	Precipitation Behaviors in MMCs. , 2000, , 61-90.		3
135	Analysis of the Homogeneity of Particle Refinement in Friction Stir Processing Al-Si Alloys. <i>Advanced Materials Research</i> , 0, 89-91, 85-90.	0.3	3
136	The evolution of abnormally coarse grain structures in beta-annealed Ti-6Al-4V% rolled plates, observed by in-situ investigation. <i>Acta Materialia</i> , 2021, 221, 117362.	3.8	3
137	Deformation Processing of Sheet Metals by Continuous Frictional Angular Extrusion. <i>Materials Science Forum</i> , 2007, 550, 241-246.	0.3	2
138	Ultra-Fine Grained High Carbon Steel by Innovative Deformation. <i>Materials Science Forum</i> , 0, 550, 301-306.	0.3	2
139	Decomposition of the supersaturated solid solution in a rapidly solidified hypereutectic Al–Cu alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1994, 179-180, 327-333.	2.6	1
140	3D inspection of fabrication and degradation processes from X-ray (micro) tomography images using a hole closing algorithm. , 2010, , .		1
141	Loss of High Angle Boundary Area during Annealing a Cryo-SPD Processed Al-Alloy with a Nano-Scale Lamellar Grain Structure. <i>Materials Science Forum</i> , 2012, 715-716, 219-226.	0.3	1
142	Influence of Galvanized Coatings on Abrasion Circle Friction Stir Spot Welding Aluminium to Steel for Automotive Applications. <i>Materials Science Forum</i> , 0, 783-786, 1741-1746.	0.3	1
143	Isomorphic grain inoculation in Ti-6Al-4V during additive manufacturing. <i>Materials Letters: X</i> , 2020, 8, 100057.	0.3	1
144	Modelling of friction stir welded AA2139 aluminium alloy panels in tension and blast. <i>International Journal of Impact Engineering</i> , 2022, 163, 104163.	2.4	1

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145	Modelling the Precipitation of Al ₃ X Dispersoids in Aluminium Alloys and their Effect on Recrystallization. Materials Science Forum, 2007, 550, 45-54.	0.3	0
146	Assessment of the Advantages of Static Shoulder FSW for Joining Aluminium Aerospace Alloys. Materials Science Forum, 0, 783-786, 1770-1775.	0.3	0
147	Coating Design for Controlling β^2 Phase IMC Formation in Dissimilar Al-Mg Metal Welding. , 2015, , 171-179.		0