

David Graham McCartney

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.

168 papers	6,645 citations	45 h-index	76 g-index
169 ext. papers	7,324 ext. citations	3.8 avg, IF	5.99 L-index

#	Paper	IF	Citations
168	Grain refining of aluminium and its alloys using inoculants. <i>International Materials Reviews</i> , 1989 , 34, 247-260	16.1	510
167	Abrasive wear behaviour of conventional and nanocomposite HVOF-sprayed WC ₁₂ O coatings. <i>Wear</i> , 1999 , 225-229, 789-798	3.5	311
166	Microstructural evolution in thermally sprayed WC ₁₂ O coatings: comparison between nanocomposite and conventional starting powders. <i>Acta Materialia</i> , 2000 , 48, 1593-1604	8.4	267
165	Bonding Mechanisms in Cold Spraying: The Contributions of Metallurgical and Mechanical Components. <i>Journal of Thermal Spray Technology</i> , 2009 , 18, 364-379	2.5	224
164	A review of friction stir welding of aluminium matrix composites. <i>Materials and Design</i> , 2015 , 86, 61-71	8.1	193
163	Measurements of cell and primary dendrite arm spacings in directionally solidified aluminium alloys. <i>Acta Metallurgica</i> , 1981 , 29, 1851-1863		182
162	Sliding wear behaviour of conventional and nanostructured HVOF sprayed WC ₁₂ O coatings. <i>Wear</i> , 2005 , 259, 820-827	3.5	177
161	Carbon nanotube reinforced aluminum composite coating via cold spraying. <i>Surface and Coatings Technology</i> , 2008 , 202, 5162-5169	4.4	175
160	Laser cladding of Inconel 625 wire for corrosion protection. <i>Journal of Materials Processing Technology</i> , 2015 , 217, 232-240	5.3	170
159	Growth and characterization of iron oxide nanorods/nanobelts prepared by a simple iron-water reaction. <i>Small</i> , 2006 , 2, 422-7	11	132
158	A new criterion for evaluating the glass-forming ability of bulk metallic glasses. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006 , 433, 155-160	5.3	130
157	Influence of heat treatment on the abrasive wear behaviour of HVOF sprayed WC ₁₂ O coatings. <i>Surface and Coatings Technology</i> , 1998 , 105, 13-24	4.4	125
156	The effect of electromagnetic stirring during solidification on the structure of Al-Si alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1996 , 216, 47-60	5.3	117
155	Production of titanium deposits by cold-gas dynamic spray: Numerical modeling and experimental characterization. <i>Journal of Thermal Spray Technology</i> , 2006 , 15, 263-272	2.5	110
154	Review on the influence of process parameters in incremental sheet forming. <i>International Journal of Advanced Manufacturing Technology</i> , 2016 , 87, 479-499	3.2	110
153	Microstructure formation and corrosion behaviour in HVOF-sprayed Inconel 625 coatings. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003 , 344, 45-56	5.3	102
152	Cold gas dynamic spraying of aluminum: The role of substrate characteristics in deposit formation. <i>Journal of Thermal Spray Technology</i> , 2005 , 14, 109-116	2.5	93

151	Sliding wear behaviour of HVOF sprayed WC ₁₂ Co coatings deposited with both gas-fuelled and liquid-fuelled systems. <i>Wear</i> , 2003 , 255, 943-949	3.5	92
150	The Effect of Heat Treatment on the Oxidation Behavior of HVOF and VPS CoNiCrAlY Coatings. <i>Journal of Thermal Spray Technology</i> , 2009 , 18, 209-216	2.5	83
149	The structures expected in a simple ternary eutectic system: Part 1. Theory. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , 1980 , 11, 1243-1249		81
148	Effect of cold spray deposition of a titanium coating on fatigue behavior of a titanium alloy. <i>Journal of Thermal Spray Technology</i> , 2006 , 15, 507-512	2.5	79
147	Microstructural characterisation of a Ni-Cr-B-C based alloy coating produced by high velocity oxy-fuel thermal spraying. <i>Surface and Coatings Technology</i> , 2001 , 139, 244-250	4.4	78
146	A comparison of the abrasive wear behaviour of HVOF sprayed titanium carbide- and titanium boride-based cermet coatings. <i>Wear</i> , 2001 , 251, 1009-1016	3.5	75
145	The influence of HVOF powder feedstock characteristics on the abrasive wear behaviour of CrxCyNiCr coatings. <i>Wear</i> , 2001 , 249, 829-837	3.5	73
144	Alloys-by-design: Application to new superalloys for additive manufacturing. <i>Acta Materialia</i> , 2021 , 202, 417-436	8.4	72
143	Microstructure and abrasive wear behaviour of shielded metal arc welding hardfacings used in the sugarcane industry. <i>Wear</i> , 2007 , 263, 99-110	3.5	70
142	Low-Temperature Magnetic Properties of Hematite Nanorods. <i>Chemistry of Materials</i> , 2007 , 19, 916-921	9.6	70
141	Crystallization kinetics of a bulk amorphous Cu ₄₀ Ti ₄₀ Zr ₁₀ Ni alloy investigated by differential scanning calorimetry. <i>Journal of Alloys and Compounds</i> , 2006 , 415, 106-110	5.7	67
140	Corrosion Behavior of Cold Sprayed Titanium Coatings and Free Standing Deposits. <i>Journal of Thermal Spray Technology</i> , 2011 , 20, 260-274	2.5	62
139	A Method for Characterizing the Degree of Inter-particle Bond Formation in Cold Sprayed Coatings. <i>Journal of Thermal Spray Technology</i> , 2007 , 16, 566-570	2.5	60
138	The effects of microstructural features on the performance gap in corrosion resistance between bulk and HVOF sprayed Inconel 625. <i>Surface and Coatings Technology</i> , 2010 , 204, 2294-2301	4.4	58
137	Corrosion Performance of Laser Posttreated Cold Sprayed Titanium Coatings. <i>Journal of Thermal Spray Technology</i> , 2011 , 20, 909-917	2.5	54
136	Conversion of carbon nanotubes to diamond by spark plasma sintering. <i>Carbon</i> , 2005 , 43, 1254-1258	10.4	54
135	Mechanical Properties and Microstructure of VPS and HVOF CoNiCrAlY Coatings. <i>Journal of Thermal Spray Technology</i> , 2011 , 20, 1231-1243	2.5	52
134	Microstructure evolution and thermal stability of an Fe-based amorphous alloy powder and thermally sprayed coatings. <i>Journal of Alloys and Compounds</i> , 2009 , 480, 351-359	5.7	52

133	A comparison of the abrasive wear behaviour of iron-chromium based hardfaced coatings deposited by SMAW and electric arc spraying. <i>Wear</i> , 2008 , 264, 542-549	3.5	52
132	Effect of carbide dissolution on the corrosion performance of tungsten carbide reinforced Inconel 625 wire laser coating. <i>Journal of Materials Processing Technology</i> , 2016 , 231, 89-99	5.3	51
131	Study on Process Optimization of Cold Gas Spraying. <i>Journal of Thermal Spray Technology</i> , 2011 , 20, 608-620	4.3	51
130	The structures expected in a simple ternary eutectic system: Part II. The Al-Ag-Cu ternary system. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , 1980 , 11, 1251-1257		50
129	Application of small punch creep testing to a thermally sprayed CoNiCrAlY bond coat. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 585, 205-213	5.3	48
128	Thermally sprayed Ni(Cr)TiB ₂ coatings using powder produced by self-propagating high temperature synthesis: microstructure and abrasive wear behaviour. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002 , 336, 88-98	5.3	47
127	A comparative study of solidification features in nickel-base superalloys: microstructural evolution and microsegregation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1991 , 145, 223-232	5.3	47
126	Corrosion behaviour of crystalline and amorphous forms of the glass forming alloy Fe ₄₃ Cr ₁₆ Mo ₁₆ C ₁₅ B ₁₀ . <i>Journal of Alloys and Compounds</i> , 2012 , 527, 210-218	5.7	46
125	Particle motion and modes of wear in the dry sand/rubber wheel abrasion test. <i>Wear</i> , 2009 , 267, 2083-2093	3.5	46
124	Influence of microstructure on grain refining performance of AlTiB master alloys. <i>Materials Science and Technology</i> , 1993 , 9, 97-103	1.5	46
123	Microstructure and wear properties of aluminum/aluminum-silicon composite coatings prepared by cold spraying. <i>Surface and Coatings Technology</i> , 2009 , 204, 503-510	4.4	44
122	Microstructure and abrasive wear behaviour of FeCrTiC coatings deposited by HVOF spraying of SHS powders. <i>Wear</i> , 2001 , 249, 246-253	3.5	44
121	Computational fluid dynamic modeling of gas flow characteristics in a high-velocity oxy-fuel thermal spray system. <i>Journal of Thermal Spray Technology</i> , 2001 , 10, 461-469	2.5	43
120	Glass-Forming Ability of an Iron-Based Alloy Enhanced by Co Addition and Evaluated by a New Criterion. <i>Chinese Physics Letters</i> , 2005 , 22, 1736-1738	1.8	42
119	Effect of deposition conditions on the properties and annealing behavior of cold-sprayed copper. <i>Journal of Thermal Spray Technology</i> , 2006 , 15, 255-262	2.5	41
118	Modelling of ductile fracture in single point incremental forming using a modified GTN model. <i>Engineering Fracture Mechanics</i> , 2017 , 186, 59-79	4.2	40
117	Abrasive wear behaviour of Ni(Cr)TiB ₂ coatings deposited by HVOF spraying of SHS-derived cermet powders. <i>Wear</i> , 2003 , 254, 340-349	3.5	40
116	Microstructure formation in high velocity oxy-fuel thermally sprayed NiCrMoB alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2000 , 283, 242-250	5.3	39

115	Numerical finite difference model for steady state cellular array growth. <i>Acta Metallurgica</i> , 1987 , 35, 89-99		39
114	The measurement of atomic number and composition in an SEM using backscattered detectors. <i>Journal of Microscopy</i> , 1981 , 124, 57-68	1.9	39
113	High-temperature oxidation of HVOF thermally sprayed NiCrAl ₂ C ₂ coatings: microstructure and kinetics. <i>Journal of Materials Science</i> , 2015 , 50, 6808-6821	4.3	38
112	The corrosion behavior and microstructure of high-velocity oxy-fuel sprayed nickel-base amorphous/nanocrystalline coatings. <i>Journal of Thermal Spray Technology</i> , 1999 , 8, 399-404	2.5	38
111	Deformation and damage mechanisms of multiwalled carbon nanotubes under high-velocity impact. <i>Scripta Materialia</i> , 2008 , 59, 499-502	5.6	37
110	Microstructure formation in Waspaloy multilayer builds following direct metal deposition with laser and wire. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 497, 260-269	5.3	36
109	A Numerical Finite Difference Model of Steady State Cellular and Dendritic Growth. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1984 , 15, 983-994	2.3	35
108	Investigating nano-precipitation in a V-containing HSLA steel using small angle neutron scattering. <i>Acta Materialia</i> , 2018 , 145, 84-96	8.4	32
107	Bonding between aluminium and copper in cold spraying: story of asymmetry. <i>Materials Science and Technology</i> , 2012 , 28, 1371-1378	1.5	31
106	The effect of electromagnetic stirring on macrostructure and macrosegregation in the aluminium alloy 7150. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1997 , 222, 140-148	5.3	31
105	Enhanced glass forming ability of FeCoZrMoWB alloys with Ni addition. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 402, 188-192	5.3	29
104	Two-dimensional tungsten oxide nanowire networks. <i>Applied Physics Letters</i> , 2006 , 89, 133116	3.4	27
103	Microstructure and properties of thermally sprayed Al-Sn-based alloys for plain bearing applications. <i>Journal of Thermal Spray Technology</i> , 2006 , 15, 634-639	2.5	27
102	Deformation and fracture characteristics of Al6092/SiC/17.5p metal matrix composite sheets due to heat treatments. <i>Materials Characterization</i> , 2018 , 142, 365-376	3.9	27
101	Impact phenomena in cold-spraying of titanium onto various ferrous alloys. <i>Surface and Coatings Technology</i> , 2011 , 205, 5021-5027	4.4	26
100	Superplastic formability of a ZrTiNiCuBe bulk metallic glass. <i>Journal of Alloys and Compounds</i> , 2006 , 415, 198-203	5.7	26
99	An analytical approach to the ϵ -phase coarsening behaviour in a thermally sprayed CoNiCrAlY bond coat alloy. <i>Journal of Alloys and Compounds</i> , 2017 , 704, 359-365	5.7	25
98	Computational modelling of titanium particles in warm spray. <i>Computers and Fluids</i> , 2011 , 44, 358-368	2.8	25

97	Characterization and solderability of cold sprayed SnCu coatings on Al and Cu substrates. <i>Surface and Coatings Technology</i> , 2010 , 204, 1395-1404	4.4	25
96	Observations on the microstructure and performance of an Al ₃ Ti ₂ C grain-refining master alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1994 , 188, 283-290	5.3	25
95	Some aspects on modelling of the ϵ phase depletion behaviour under different oxide growth kinetics in HVOF CoNiCrAlY coatings. <i>Surface and Coatings Technology</i> , 2017 , 313, 107-114	4.4	23
94	Modelling and experimental study on ϵ phase depletion behaviour of HVOF sprayed free-standing CoNiCrAlY coatings during oxidation. <i>Surface and Coatings Technology</i> , 2016 , 291, 34-42	4.4	23
93	X-ray photoelectron spectroscopy study of the passive films formed on thermally sprayed and wrought Inconel 625. <i>Applied Surface Science</i> , 2010 , 257, 786-794	6.7	23
92	Microstructural characterisation of high velocity oxyfuel thermally sprayed Stellite 6. <i>Materials Science and Technology</i> , 2003 , 19, 1003-1011	1.5	23
91	Concurrent Inconel 625 wire and WC powder laser cladding: process stability and microstructural characterisation. <i>Surface Engineering</i> , 2013 , 29, 647-653	2.6	22
90	Investigation into the effect of beam shape on melt pool characteristics using analytical modelling. <i>Optics and Lasers in Engineering</i> , 2010 , 48, 548-554	4.6	22
89	The microstructures of a thermally sprayed and heat treated Al ₂₀ wt.%Sn ₃ wt.%Si alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 403, 205-214	5.3	21
88	Amorphous layer formation in Al _{86.0} Co _{7.6} Ce _{6.4} glass-forming alloy by large-area electron beam irradiation. <i>Applied Surface Science</i> , 2013 , 280, 431-438	6.7	20
87	Spark plasma sintering assisted diamond formation from carbon nanotubes at very low pressure. <i>Nanotechnology</i> , 2006 , 17, 2187-2191	3.4	20
86	Numerical modeling of in-flight characteristics of inconel 625 particles during high-velocity oxy-fuel thermal spraying. <i>Journal of Thermal Spray Technology</i> , 2004 , 13, 200-213	2.5	20
85	Microstructural and magnetization studies of sintered and melt-textured Y-Ba-Cu-O. <i>Journal of Applied Physics</i> , 1989 , 66, 5930-5934	2.5	20
84	Direct synthesis of diamond from low purity carbon nanotubes. <i>Carbon</i> , 2006 , 44, 3136-3138	10.4	19
83	The effect of heating rate variations on secondary phases in YBa ₂ Cu ₃ O _{7-x} . <i>Materials Letters</i> , 1992 , 13, 357-362	3.3	19
82	Microstructural characterization of CO ₂ laser welds in the Al-Li based alloy 8090. <i>Journal of Materials Science</i> , 1993 , 28, 5469-5478	4.3	19
81	Finite element-based analysis of experimentally identified parametric envelopes for stable keyhole plasma arc welding of a titanium alloy. <i>Journal of Strain Analysis for Engineering Design</i> , 2012 , 47, 266-275	1.3	18
80	SOLIDIFICATION MICROSTRUCTURES AND CALCULATED PHASE EQUILIBRIA IN THE Ti-Al-Mn SYSTEM. <i>Acta Materialia</i> , 1997 , 45, 2931-2947	8.4	18

79	Growth of quasi-single crystal superconducting Y1Ba2Cu3O7-x rods by melt processing. <i>Superconductor Science and Technology</i> , 1989 , 2, 169-172	3.1	17
78	Evaluation of formability and fracture of pure titanium in incremental sheet forming. <i>International Journal of Advanced Manufacturing Technology</i> , 2018 , 95, 625-641	3.2	16
77	The effect of laser transformation notching on the controlled fracture of a high carbon (C70S6) steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 489, 273-284	5.3	16
76	The influence of microstructure on the ductile to brittle transition and fracture behaviour of HVOF NiCoCrAlY coatings determined via small punch tensile testing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 754, 479-490	5.3	15
75	An experimental study of phase transformations and a comparison with calculated phase equilibria in Ti-Al-Mn alloys. <i>Acta Materialia</i> , 1998 , 46, 1875-1886	8.4	15
74	High-velocity oxyfuel reactive spraying of mechanically alloyed Ni-Ti-C powders. <i>Journal of Thermal Spray Technology</i> , 2005 , 14, 77-84	2.5	15
73	Production of Ultrafine Microstructures in Al-Sn, Al-Sn-Cu and Al-Sn-Cu-Si Alloys for Use in Tribological Applications. <i>Materials Science Forum</i> , 2000 , 331-337, 519-526	0.4	15
72	Development of solidification microstructures in a fibre reinforced alloy. <i>Journal of Materials Science</i> , 1991 , 26, 3565-3574	4.3	15
71	Investigation of the effect of forming parameters in incremental sheet forming using a micromechanics based damage model. <i>International Journal of Material Forming</i> , 2019 , 12, 553-574	2	14
70	Effects of particle crushing in abrasion testing of steels with ash from biomass-fired powerplants. <i>Wear</i> , 2009 , 267, 34-42	3.5	13
69	Finite-element-based parametric study on welding-induced distortion of TIG-welded stainless steel 304 sheets. <i>Journal of Strain Analysis for Engineering Design</i> , 2011 , 46, 267-279	1.3	13
68	Combined Butt Joint Welding and Post Weld Heat Treatment Simulation Using SYSWELD and ABAQUS. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , 2011 , 225, 1-10	1.3	13
67	Critical current density and related microstructure of textured YBaCuO rods produced by a melt growth process. <i>Superconductor Science and Technology</i> , 1991 , 4, 701-706	3.1	13
66	Effect of surface conditions on internal oxidation and nitridation of HVOF MCrAlY coatings. <i>Materials at High Temperatures</i> , 2015 , 32, 215-220	1.1	12
65	Enhanced thermal stability by pre-charged hydrogen of a Zr-based bulk metallic glass. <i>Journal of Alloys and Compounds</i> , 2005 , 400, 197-201	5.7	12
64	The microstructure of CO2 laser welds in an Al-Fe-V-Si alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1995 , 196, 155-163	5.3	12
63	Quantitative evaluation of fiber distributions in a continuously reinforced aluminium alloy using automatic image analysis. <i>Materials Characterization</i> , 1992 , 28, 189-203	3.9	12
62	Characterising precipitate evolution in multi-component cast aluminium alloys using small-angle X-ray scattering. <i>Journal of Alloys and Compounds</i> , 2017 , 703, 344-353	5.7	11

61	The influence of bulk liquid natural convection on the formation of the equiaxed regions in Al?Cu and Al?Si alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1996 , 205, 31-39	5.3	11
60	On the microstructural evolution of sintered Bi-Sr-Ca-Cu-O high-T _c superconductors. <i>Superconductor Science and Technology</i> , 1990 , 3, 185-190	3.1	11
59	A study on the evolution of the contact angle of small punch creep test of ductile materials. <i>International Journal of Pressure Vessels and Piping</i> , 2016 , 145, 60-74	2.4	10
58	Small-angle neutron scattering reveals the effect of Mo on interphase nano-precipitation in Ti-Mo micro-alloyed steels. <i>Scripta Materialia</i> , 2020 , 174, 24-28	5.6	10
57	Time-Resolved Tomographic Quantification of the Microstructural Evolution of Ice Cream. <i>Materials</i> , 2018 , 11,	3.5	10
56	Analysis of microstructure formation in gas-atomised Al?2 wt.% Sn? wt.% Cu alloy powder. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007 , 454-455, 252-259	5.3	9
55	Growth and characterization of Cu-catalyzed ZnO nanowires. <i>Journal of Physics: Conference Series</i> , 2007 , 61, 703-707	0.3	9
54	Phase transformations and phase equilibria in a Ti?7% Al?0% Mn alloy. <i>Intermetallics</i> , 1999 , 7, 663-669	3.5	9
53	The influence of oxygen vacancies on flux pinning in (RE)BA ₂ Cu ₃ O _{7-δ} <i>Physica C: Superconductivity and Its Applications</i> , 1991 , 185-189, 2159-2160	1.3	9
52	Microstructure and complex magnetic permeability of thermally sprayed NiZn ferrite coatings for electromagnetic wave absorbers. <i>Surface Engineering</i> , 2010 , 26, 484-490	2.6	8
51	Nucleation of an Al alloy in a fibre reinforced Al alloy metal-matrix composite (MMC). <i>Journal of Materials Processing Technology</i> , 1995 , 51, 235-243	5.3	8
50	Very high critical current in a long YBa ₂ Cu ₃ O _{7-δ} single crystalline rod. <i>Journal of Applied Physics</i> , 1991 , 69, 8261-8264	2.5	8
49	Influence of nozzle orifice diameter in keyhole plasma arc welding. <i>Science and Technology of Welding and Joining</i> , 2011 , 16, 446-452	3.7	7
48	The control of growth orientation during the production of melt-textured YBCO quasi-single crystals. <i>Superconductor Science and Technology</i> , 1996 , 9, 1092-1098	3.1	7
47	Solidification macrostructures and macrosegregation in aluminum alloys cooled from above. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1994 , 25, 1097-1102	2.3	7
46	A finite element model of alloy solidification incorporating velocity-dependent growth temperatures. <i>Applied Mathematical Modelling</i> , 1988 , 12, 354-361	4.5	7
45	The Application of the Small Punch Tensile Test to Evaluate the Ductile to Brittle Transition of a Thermally Sprayed CoNiCrAlY Coating. <i>Key Engineering Materials</i> , 2017 , 734, 144-155	0.4	6
44	Ice Crystal Coarsening in Ice Cream during Cooling: A Comparison of Theory and Experiment. <i>Crystals</i> , 2019 , 9, 321	2.3	6

43	Corrosion behaviour of a rapidly solidified Al 87.4 Co 7.9 Ce 4.7 layer prepared by large area electron beam irradiation. <i>Applied Surface Science</i> , 2014 , 320, 581-590	6.7	6
42	Numerical simulation and experimental investigation of ductile fracture in SPIF using modified GTN model. <i>MATEC Web of Conferences</i> , 2015 , 21, 04013	0.3	6
41	Coagulation equations with mass loss. <i>Journal of Engineering Mathematics</i> , 2004 , 49, 113-131	1.2	6
40	The influence of oxygen vacancies on flux pinning in (RE)Ba ₂ Cu ₃ O _{7-δ} . <i>Superconductor Science and Technology</i> , 1992 , 5, S165-S168	3.1	6
39	Modelling of dendritic solidification using finite element method. <i>Materials Science and Technology</i> , 1992 , 8, 114-122	1.5	6
38	Discussion of the role of boron in the grain refinement of aluminum with titanium. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , 1988 , 19, 385-387		6
37	Effect of prior laser microstructural refinement on the formation of amorphous layer in an Al ₈₆ Co _{7.6} Ce _{6.4} alloy. <i>Applied Surface Science</i> , 2014 , 289, 230-236	6.7	5
36	A review of reinforcement distribution and its measurement in metal matrix composites. <i>Journal of Materials Processing Technology</i> , 1994 , 41, 249-262	5.3	5
35	Fracture of bead-on-plate CO ₂ laser welds in the Al/Li alloy 8090. <i>Scripta Metallurgica Et Materialia</i> , 1994 , 31, 1717-1722		5
34	Macrostructural development in aluminium alloys solidified vertically downwards. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1993 , 173, 123-127	5.3	5
33	The High Temperature Creep Properties of a Thermally Sprayed CoNiCrAlY Coating via Small Punch Creep Testing. <i>Key Engineering Materials</i> , 2017 , 734, 37-48	0.4	4
32	Residual stress distribution in a Ti/Al/V T-joint weld measured using synchrotron X-ray diffraction. <i>Journal of Strain Analysis for Engineering Design</i> , 2015 , 50, 445-454	1.3	4
31	Corrosion behaviour of Al _{86.0} Co _{7.6} Ce _{6.4} glass forming alloy with different microstructures. <i>Applied Surface Science</i> , 2016 , 384, 116-124	6.7	4
30	An evaluation of the capability of data conversion of impression creep test. <i>Materials at High Temperatures</i> , 2017 , 34, 415-424	1.1	4
29	TEM assessment of HVOLF thermally sprayed Al ₈₂ wt.% Sn ₁ wt.% Cu alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 375-377, 595-598	5.3	4
28	The growth of melt-textured superconductors. <i>Superconductor Science and Technology</i> , 1998 , 11, 541-549	3.1	4
27	Electrical and magnetic properties of high T _c melt growth processed YBaCuO rods. <i>Superconductor Science and Technology</i> , 1992 , 5, S296-S299	3.1	4
26	Process modelling and optimization of keyhole plasma arc welding of thin Ti-6Al-4V. <i>Journal of Strain Analysis for Engineering Design</i> , 2014 , 49, 410-420	1.3	3

25	Measurements on fibre distribution in a fibre-reinforced Al metal-matrix composite (MMC) (matrix intercept-length measurements). <i>Journal of Materials Processing Technology</i> , 1995 , 51, 244-254	5.3	3
24	Numerical finite difference model for steady state array growth. <i>Flow, Turbulence and Combustion</i> , 1987 , 44, 9-26		3
23	Correlation and capability of using site inspection data and small specimen creep testing for a service-exposed CrMoV pipe section. <i>Materials at High Temperatures</i> , 2019 , 36, 173-186	1.1	2
22	Supplementary Microstructural Features Induced During Laser Surface Melting of Thermally Sprayed Inconel 625 Coatings. <i>Journal of Thermal Spray Technology</i> , 2014 , 23, 402-409	2.5	2
21	Modelling Chemical and Microstructural Evolution Across Dissimilar Interfaces in Power Plants 2014 ,		2
20	Quantitatively Evaluating the Effect of Oxygen/Fuel Ratio on Fe ₂₊ Content in HVOF-Sprayed Ni-Zn Ferrite Coatings. <i>Journal of Thermal Spray Technology</i> , 2009 , 18, 343-352	2.5	2
19	Laser and arc weld methods for direct metal deposition of Waspaloy. <i>International Journal of Manufacturing Technology and Management</i> , 2009 , 17, 419	0.4	2
18	Influence of High Velocity Spraying Conditions on the Microstructure and Properties of an Al-12wt%Sn-1wt%Cu Alloys. <i>Materials Science Forum</i> , 2002 , 396-402, 1133-1138	0.4	2
17	On the Influence of Alloy Composition on the Additive Manufacturability of Ni-Based Superalloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2022 , 53, 962-983	2.3	2
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