Patrick Grant

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/6196417/patrick-grant-publications-by-year.pdf
Version: 2024-04-09

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

201 papers	6,164 citations	41 h-index	71 g-index
211 ext. papers	7,025 ext. citations	6.2 avg, IF	6.22 L-index

#	Paper	IF	Citations
201	Modelling the Impedance Response of Graded LiFePO4 Cathodes for Li-Ion Batteries. *Journal of the Electrochemical Society*, **2022**, 169, 010528	3.9	0
200	Investigating Metal Solidification with X-ray Imaging. *Metals*, **2022**, 12, 395	2.3	0
199	Interfaces between Ceramic and Polymer Electrolytes: A Comparison of Oxide and Sulfide Solid Electrolytes for Hybrid Solid-State Batteries. *Inorganics*, **2022**, 10, 60	2.9	1
198	Joining and cycling performance of ultra-thick tungsten coatings on patterned steel substrates for fusion armour applications. *Materials and Design*, **2021**, 212, 110250	8.1	0
197	Nucleation bursts of primary intermetallic crystals in a liquid Al alloy studied using in situ synchrotron X-ray radiography. *Acta Materialia*, **2021**, 221, 117389	8.4	1
196	The effects of irradiation on CrMnFeCoNi high-entropy alloy and its derivatives. *Progress in Materials Science*, **2021**, 100807	42.2	4
195	Multi-layered composite electrodes of high power Li4Ti5O12 and high capacity SnO2 for smart lithium ion storage. *Energy Storage Materials*, **2021**, 38, 70-79	19.4	10
194	New nanoscale artificial pinning centres for NbTi superconductors. *Materials and Design*, **2021**, 198, 109285	8.4	1
193	A Solid-State Battery Cathode with a Polymer Composite Electrolyte and Low Tortuosity Microstructure by Directional Freezing and Polymerization. *Advanced Energy Materials*, **2021**, 11, 2002387	21.8	23
192	Capacitors **2021**, 205-248		
191	Amorphization in extreme deformation of the CrMnFeCoNi high-entropy alloy. *Science Advances*, **2021**, 7,	14.3	45
190	Design of Scalable, Next-Generation Thick Electrodes: Opportunities and Challenges. *ACS Nano*, **2021**,	16.7	8
189	Evaluation of the Laguerre-Gaussian mode purity produced by three-dimensional-printed microwave spiral phase plates. *Royal Society Open Science*, **2020**, 7, 200493	3.3	7
188	Scalable Multilayer Printing of Graphene Interfacial Layers for Ultrahigh Power Lithium-Ion Storage. *Energy Technology*, **2020**, 8, 2000253	3.5	0
187	In-situ X-ray radiography of primary Fe-rich intermetallic compound formation. *Acta Materialia*, **2020**, 196, 759-769	8.4	17
186	Design and characterisation of ex situ bulk MgB2 superconductors containing a nanoscale dispersion of artificial pinning centres. *Superconductor Science and Technology*, **2020**, 33, 034006	3.1	7
185	2020 roadmap on solid-state batteries. *JPhys Energy*, **2020**, 2, 032008	4.9	31

184	Combining composition graded positive and negative electrodes for higher performance Li-ion batteries. *Journal of Power Sources*, **2020**, 448, 227376	8.9	9
183	In-line measurement of the dielectric permittivity of materials during additive manufacturing and 3D data reconstruction. *Additive Manufacturing*, **2020**, 32, 101010	6.1	2
182	High energy lithium ion capacitors using hybrid cathodes comprising electrical double layer and intercalation host multi-layers. *Energy Storage Materials*, **2020**, 33, 408-415	19.4	7
181	In situ mapping of chemical segregation using synchrotron x-ray imaging. *MRS Bulletin*, **2020**, 45, 934-942	3.2	8
180	4D Bragg Edge Tomography of Directional Ice Templated Graphite Electrodes. *Journal of Imaging*, **2020**, 6,	3.1	4
179	In-situ X-ray radiography of twinned crystal growth of primary Al13Fe4. *Scripta Materialia*, **2020**, 184, 57-62	5.6	11
178	Low-tortuosity and graded lithium ion battery cathodes by ice templating. *Journal of Materials Chemistry A*, **2019**, 7, 21421-21431	13	36
177	Scalable, Large-Area Printing of Pore-Array Electrodes for Ultrahigh Power Electrochemical Energy Storage. *ACS Applied Materials & Interfaces*, **2019**, 11, 37859-37866	9.5	7
176	The Role of Grain Refiner in the Nucleation of AlFeSi Intermetallic Phases During Solidification of a 6xxx Aluminum Alloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2019**, 50, 5242-5252	2.3	12
175	Ultrasonic liquid metal processing: The essential role of cavitation bubbles in controlling acoustic streaming. *Ultrasonics Sonochemistry*, **2019**, 55, 243-255	8.9	39
174	Single-operation, multi-phase additive manufacture of electro-chemical double layer capacitor devices. *Additive Manufacturing*, **2019**, 28, 344-353	6.1	14
173	Overcoming diffusion limitations in supercapacitors using layered electrodes. *Journal of Power Sources*, **2019**, 433, 126579	8.9	9
172	Layer-by-layer printing of multi-layered heterostructures using Li4Ti5O12 and Si for high power Li-ion storage. *Nano Energy*, **2019**, 61, 96-103	17.1	18
171	Co-spray printing of LiFePO4 and PEO-Li1.5Al0.5Ge1.5(PO4)3 hybrid electrodes for all-solid-state Li-ion battery applications. *Journal of Materials Chemistry A*, **2019**, 7, 19094-19103	13	12
170	Single-Step Spray Printing of Symmetric All-Organic Solid-State Batteries Based on Porous Textile Dye Electrodes. *Advanced Energy Materials*, **2019**, 9, 1901418	21.8	13
169	Experimental evaluation of 3D printed spiral phase plates for enabling an orbital angular momentum multiplexed radio system. *Royal Society Open Science*, **2019**, 6, 191419	3.3	6
168	Micro-scale graded electrodes for improved dynamic and cycling performance of Li-ion batteries. *Journal of Power Sources*, **2019**, 413, 59-67	8.9	22
167	Spray-Printed and Self-Assembled Honeycomb Electrodes of Silicon-Decorated Carbon Nanofibers for Li-Ion Batteries. *ACS Applied Materials & Interfaces*, **2019**, 11, 603-612	9.5	12

166	Multiscale Engineered Si/SiO Nanocomposite Electrodes for Lithium-Ion Batteries Using Layer-by-Layer Spray Deposition. *ACS Applied Materials & Interfaces*, **2018**, 10, 15624-15633	9.5	33
165	Crystal nucleation in metallic alloys using x-ray radiography and machine learning. *Science Advances*, **2018**, 4, eaar4004	14.3	55
164	An in-situ method to estimate the tip temperature and phase selection of secondary Fe-rich intermetallics using synchrotron X-ray radiography. *Scripta Materialia*, **2018**, 149, 44-48	5.6	12
163	Development of a Novel Melt Spinning-Based Processing Route for Oxide Dispersion-Strengthened Steels. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2018**, 49, 604-612	2.3	2
162	Spray printing of self-assembled porous structures for high power battery electrodes. *Journal of Materials Chemistry A*, **2018**, 6, 13133-13141	13	23
161	3D-printed ⍏4 phase plate for broadband microwave applications. *Optics Express*, **2018**, 26, 29068-29073	3.3	4
160	Spray printing and optimization of anodes and cathodes for high performance Li-Ion batteries. *Electrochimica Acta*, **2018**, 292, 546-557	6.7	17
159	Modelling and neutron diffraction characterization of the interfacial bonding of spray formed dissimilar steels. *Acta Materialia*, **2018**, 155, 318-330	8.4	7
158	Microstructural and mechanical characterisation of Fe-14Cr-0.22Hf alloy fabricated by spark plasma sintering. *Journal of Alloys and Compounds*, **2018**, 762, 678-687	5.7	8
157	Coral-like directional porosity lithium ion battery cathodes by ice templating. *Journal of Materials Chemistry A*, **2018**, 6, 14689-14699	13	64
156	Microstructural comparison of effects of hafnium and titanium additions in spark-plasma-sintered Fe-based oxide-dispersion strengthened alloys. *Journal of Nuclear Materials*, **2017**, 487, 433-442	3.3	12
155	Numerical and physical simulation of rapid microstructural evolution of gas atomised Ni superalloy powders. *Materials and Design*, **2017**, 117, 157-167	8.1	3
154	Microstructural Evolution in Spray Forming **2017**, 265-295		
153	Generalized Maxwell Fish-Eye Lens as a Beam Splitter: A Case Study in Realizing All-Dielectric Devices From Transformation Electromagnetics. *IEEE Transactions on Microwave Theory and Techniques*, **2017**, 65, 4823-4835	4.1	9
152	A Split Ring Resonator Dielectric Probe for Near-Field Dielectric Imaging. *Scientific Reports*, **2017**, 7, 2038	4.9	19
151	A two layer electrode structure for improved Li Ion diffusion and volumetric capacity in Li Ion batteries. *Nano Energy*, **2017**, 31, 377-385	17.1	40
150	Fabrication of Composite Filaments with High Dielectric Permittivity for Fused Deposition 3D Printing. *Materials*, **2017**, 10,	3.5	48
149	Alternative Fabrication Routes toward Oxide-Dispersion-Strengthened Steels and Model Alloys. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2016**, 47, 5313-5324	2.3	25

148	3D-Printed High Dielectric Contrast Gradient Index Flat Lens for a Directive Antenna with Reduced Dimensions. *Advanced Materials Technologies*, **2016**, 1, 1600072	6.8	32
147	Solid-state supercapacitors with rationally designed heterogeneous electrodes fabricated by large area spray processing for wearable energy storage applications. *Scientific Reports*, **2016**, 6, 25684	4.9	52
146	Microwave dielectric characterisation of 3D-printed BaTiO3/ABS polymer composites. *Scientific Reports*, **2016**, 6, 22714	4.9	114
145	Evolution of Fe Bearing Intermetallics During DC Casting and Homogenization of an Al-Mg-Si Al Alloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2016**, 47, 3000-3014	2.3	28
144	3D printed anisotropic dielectric composite with meta-material features. *Materials and Design*, **2016** , 93, 423-430	8.1	99
143	Production of hollow and porous Fe2O3 from industrial mill scale and its potential for large-scale electrochemical energy storage applications. *Journal of Materials Chemistry A*, **2016**, 4, 2597-2604	13	61
142	. *IEEE Transactions on Microwave Theory and Techniques*, **2016**, 1-7	4.1	8
141	Preparation, microstructure and microwave dielectric properties of sprayed PFA/barium titanate composite films. *Composites Science and Technology*, **2016**, 129, 198-204	8.6	11
140	The spatial and temporal distribution of dendrite fragmentation in solidifying Al-Cu alloys under different conditions. *Acta Materialia*, **2016**, 121, 384-395	8.4	47
139	Engineering the Membrane/Electrode Interface To Improve the Performance of Solid-State Supercapacitors. *ACS Applied Materials & Interfaces*, **2016**, 8, 20756-65	9.5	22
138	Manufacture of electrical and magnetic graded and anisotropic materials for novel manipulations of microwaves. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2015**, 373,	3	24
137	Scalable polymer-based ferrite composites with matching permeability and permittivity for high-frequency applications. *Applied Physics A: Materials Science and Processing*, **2015**, 120, 609-614	2.6	4
136	Toward Low-Cost Grid Scale Energy Storage: Supercapacitors Based on Up-Cycled Industrial Mill Scale Waste. *ACS Sustainable Chemistry and Engineering*, **2015**, 3, 2831-2838	8.3	19
135	Processing and microstructure characterisation of oxide dispersion strengthened Fe14Cr0.4Ti0.25Y2O3 ferritic steels fabricated by spark plasma sintering. *Journal of Nuclear Materials*, **2015**, 464, 61-68	3.3	49
134	Engineering the nanostructure of a polymer-nanocomposite film containing Ti-based core-shell particles to enhance dielectric response. *Nanoscale*, **2015**, 7, 15727-33	7.7	3
133	Enhancing the supercapacitor behaviour of novel Fe3O4/FeOOH nanowire hybrid electrodes in aqueous electrolytes. *Journal of Power Sources*, **2015**, 274, 907-915	8.9	75
132	3D Printing of NiZn ferrite/ABS Magnetic Composites for Electromagnetic Devices. *Materials Research Society Symposia Proceedings*, **2015**, 1788, 29-35		34
131	Spatial transformations: from fundamentals to applications. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2015**, 373,	3	1

130	Mapping of multi-elements during melting and solidification using synchrotron X-rays and pixel-based spectroscopy. *Scientific Reports*, **2015**, 5, 15988	4.9	14
129	Real-time synchrotron x-ray observations of equiaxed solidification of aluminium alloys and implications for modelling. *IOP Conference Series: Materials Science and Engineering*, **2015**, 84, 012014	0.4	15
128	Fe3O4/carbon nanofibres with necklace architecture for enhanced electrochemical energy storage. *Journal of Materials Chemistry A*, **2015**, 3, 14245-14253	13	77
127	Characterization of the residual stresses in spray-formed steels using neutron diffraction. *Scripta Materialia*, **2015**, 100, 82-85	5.6	7
126	The structural changes of Y2O3 in ferritic ODS alloys during milling. *Journal of Nuclear Materials*, **2014**, 447, 242-247	3.3	33
125	An in situ powder neutron diffraction study of nano-precipitate formation during processing of oxide-dispersion-strengthened ferritic steels. *Journal of Alloys and Compounds*, **2014**, 582, 769-773	5.7	20
124	Spray processing of TiO2 nanoparticle/ionomer coatings on carbon nanotube scaffolds for solid-state supercapacitors. *Journal of Materials Chemistry A*, **2014**, 2, 11022	13	42
123	Electron microscopy of multi-layered polymer-nanocomposite based dielectrics. *Journal of Physics: Conference Series*, **2014**, 522, 012041	0.3	1
122	Phase field study of the tip operating state of a freely growing dendrite against convection using a novel parallel multigrid approach. *Journal of Computational Physics*, **2014**, 257, 278-297	4.1	30
121	Microstructural evolution at Cu/SnAgCu/Cu and Cu/SnAgCu/NiAu ball grid array interfaces during thermal ageing. *Journal of Alloys and Compounds*, **2014**, 613, 387-394	5.7	15
120	Core-shell nanoparticles and enhanced polarization in polymer based nanocomposite dielectrics. *Nanotechnology*, **2014**, 25, 475706	3.4	3
119	NiZn ferrite/Fe hybrid epoxy-based composites: extending magnetic properties to high frequency. *Applied Physics A: Materials Science and Processing*, **2014**, 117, 477-483	2.6	10
118	A hybrid arc spray forming technique for the manufacture of nickel superalloy IN617. *Materialwissenschaft Und Werkstofftechnik*, **2014**, 45, 758-764	0.9	1
117	A synchrotron X-ray radiography study of dendrite fragmentation induced by a pulsed electromagnetic field in an Al15Cu alloy. *Acta Materialia*, **2014**, 70, 228-239	8.4	137
116	Influence of cooling rate on the Fe intermetallic formation in an AA6063 Al alloy. *Journal of Alloys and Compounds*, **2013**, 555, 274-282	5.7	50
115	Phase Field Simulation of Binary Alloy Dendrite Growth Under Thermal- and Forced-Flow Fields: An Implementation of the Parallel Multigrid Approach. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2013**, 44, 924-937	2.5	41
114	Nanomechanical characterization of SnAgCu/Cu joints Part 1: Young's modulus, hardness and deformation mechanisms as a function of temperature. *Acta Materialia*, **2013**, 61, 2460-2470	8.4	56
113	Layer-by-layer spray deposition and unzipping of single-wall carbon nanotube-based thin film electrodes for electrochemical capacitors. *Carbon*, **2013**, 61, 525-536	10.4	34

112	Charge storage properties of a MoO3/carboxyl-functionalized single-walled carbon nanotube composite electrode in a Li ion electrolyte. *Electrochimica Acta*, **2013**, 98, 294-302	6.7	28
111	An electrochemical microactuator based on highly textured LiCoO2. *Sensors and Actuators B: Chemical*, **2013**, 176, 52-57	8.5	10
110	Nanomechanical characterization of SnAgCu/Cu joints Part 2: Nanoindentation creep and its relationship with uniaxial creep as a function of temperature. *Acta Materialia*, **2013**, 61, 2471-2480	8.4	44
109	One-step spray processing of high power all-solid-state supercapacitors. *Scientific Reports*, **2013**, 3, 2393	4.9	62
108	Scaleable ultra-thin and high power density graphene electrochemical capacitor electrodes manufactured by aqueous exfoliation and spray deposition. *Carbon*, **2013**, 52, 337-346	10.4	45
107	An investigation of nanostructured thin film MoO3 based supercapacitor electrodes in an aqueous electrolyte. *Electrochimica Acta*, **2013**, 91, 253-260	6.7	140
106	A Synchrotron X-Ray Radiography Investigation of Induced Dendrite Fragmentation in Al-15wt%Cu. *Materials Science Forum*, **2013**, 765, 210-214	0.4	4
105	Heavily loaded ferrite-polymer composites to produce high refractive index materials at centimetre wavelengths. *APL Materials*, **2013**, 1, 042108	5.7	8
104	An implicit parallel multigrid computing scheme to solve coupled thermal-solute phase-field equations for dendrite evolution. *Journal of Computational Physics*, **2012**, 231, 1781-1796	4.1	27
103	Fe Bearing Intermetallic Phase Formation in a Wrought AlMgSi Alloy. *Transactions of the Indian Institute of Metals*, **2012**, 65, 553-557	1.2	10
102	A High-Speed Imaging and Modeling Study of Dendrite Fragmentation Caused by Ultrasonic Cavitation. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2012**, 43, 3755-3766	2.3	95
101	Phase field simulation of multi-dendrite growth in a coupled thermal-solute-convective environment. *IOP Conference Series: Materials Science and Engineering*, **2012**, 33, 012101	0.4	4
100	Vacuum-deposited planar heterojunction polymer solar cells. *ACS Applied Materials & Interfaces*, **2011**, 3, 11-5	9.5	22
99	The role of nanomaterials in redox-based supercapacitors for next generation energy storage devices. *Nanoscale*, **2011**, 3, 839-55	7.7	681
98	An AlSiTi hierarchical metalmetal composite manufactured by co-spray forming. *Journal of Materials Processing Technology*, **2011**, 211, 2045-2049	5.3	3
97	A quantitative study of solute diffusion field effects on heterogeneous nucleation and the grain size of alloys. *Acta Materialia*, **2011**, 59, 2135-2144	8.4	122
96	Fabrication and Electrical Properties of Bulk Textured LiCoO2. *Journal of the American Ceramic Society*, **2010**, 93, 1856	3.8	8
95	Refinement of TiB2 in Al-Ti-B Grain Refiner Alloys by Ultrasound and the Effect on Al Grain Size. *Materials Science Forum*, **2010**, 654-656, 958-961	0.4	8

94	Phase Field Modelling of Dendrite Fragmentation during Thermal Shock. *Materials Science Forum*, **2010**, 654-656, 1524-1527	0.4	
93	Modelling and Experiments Concerning Dendrite Re-Melting and Its Role in Microstructural Evolution in Spray Formed Ni Superalloys. *Materials Science Forum*, **2010**, 654-656, 1363-1366	0.4	1
92	Colloidal synthesis of lead oxide nanocrystals for photovoltaics. *Chemical Communications*, **2010**, 46, 2802-4	5.8	32
91	SnS/PbS nanocrystal heterojunction photovoltaics. *Nanotechnology*, **2010**, 21, 185202	3.4	57
90	Printable magnetite and pyrrole treated magnetite based electrodes for supercapacitors. *Journal of Materials Chemistry*, **2010**, 20, 7637		96
89	**2010**,		2
88	Spray Forming of Bulk Ultrafine-Grained Al-Fe-Cr-Ti. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2010**, 41, 3208-3215	2.3	9
87	Modeling the Deposition Dynamics of a Twin-Atomizer Spray Forming System. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2010**, 41, 303-307	2.5	3
86	Microstructure and property development in spray formed and extruded Al-Mg-Li-Zr alloys for aerospace and autosport applications. *Materialwissenschaft Und Werkstofftechnik*, **2010**, 41, 562-567	0.9	2
85	Arc Sprayed Steel: Microstructure in Severe Substrate Features. *Journal of Thermal Spray Technology*, **2009**, 18, 256-271	2.5	10
84	Spray deposited fluoropolymer/multi-walled carbon nanotube composite films with high dielectric permittivity at low percolation threshold. *Carbon*, **2009**, 47, 561-569	10.4	64
83	A novel hybrid supercapacitor with a carbon nanotube cathode and an iron oxide/carbon nanotube composite anode. *Journal of Materials Chemistry*, **2009**, 19, 8755		249
82	Spray deposition of steam treated and functionalized single-walled and multi-walled carbon nanotube films for supercapacitors. *Nanotechnology*, **2009**, 20, 065605	3.4	92
81	Pitting corrosion of spray formed Al–Li–Mg alloys. *Corrosion Science*, **2008**, 50, 3221-3226	6.8	36
80	An electrochemical study of repassivation of aluminium alloys with SEM examination of the pit interiors using resin replicas. *Corrosion Science*, **2008**, 50, 3233-3240	6.8	36
79	Nanoindentation of Lead Free Solders for Harsh Environments. *Materials Research Society Symposia Proceedings*, **2008**, 1079, 1		2
78	Modelling the shape and thermal dynamics of Ni superalloy rings during spray forming Part 1: Shape modelling – Droplet deposition, splashing and redeposition. *Acta Materialia*, **2008**, 56, 1588-1596	8.4	35
77	Modelling the shape and thermal dynamics of Ni superalloy rings during spray forming. Part 2: Thermal modelling – Heat flow and solidification. *Acta Materialia*, **2008**, 56, 1597-1608	8.4	29

76	Spray deposition of polymer nanocomposite films for dielectric applications. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2008**, 151, 140-145	3.1	36
75	Interface topography and residual stress distributions in W coatings for fusion armour applications. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2008**, 477, 35-42	5.3	20
74	Multiphysics modelling of the spray forming process. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2008**, 477, 2-8	5.3	27
73	Spray Casting **2008**, 382-385		
72	Optimal Robot Path for Minimizing Thermal Variations in a Spray Deposition Process. *IEEE Transactions on Control Systems Technology*, **2007**, 15, 1-11	4.8	13
71	Processing, microstructure and property aspects of a spraycast Al□Mg□Li□Zr alloy. *Acta Materialia*, **2007**, 55, 1885-1894	8.4	41
70	Evolution of percolation properties in nanocomposite films during particle clustering. *Scripta Materialia*, **2007**, 56, 425-428	5.6	5
69	Solidification in Spray Forming. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2007**, 38, 1520-1529	2.3	90
68	Numerical Modelling of Spray Formed Grain Size Evolution. *Materials Science Forum*, **2007**, 561-565, 1991-1994	0.4	1
67	Optimisation of Spray Forming Ni Superalloys via Process Modelling and On-Line Monitoring. *Materials Science Forum*, **2007**, 546-549, 1327-1332	0.4	3
66	Spray Forming of Al-Fe-Cr-Ti and Al-Si-Li Alloys. *Materials Science Forum*, **2007**, 561-565, 1075-1078	0.4	4
65	Modeling the heat flow in spray formed steel shells for tooling applications. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2006**, 37, 1037-1047	2.5	4
64	Microstructural characterisation of spray formed Si□0Al for thermal management applications. *Scripta Materialia*, **2006**, 55, 111-114	5.6	79
63	An Investigation of Novel Spraycast Al-Mg-Li-Zr-(Sc) Alloys. *Materials Science Forum*, **2006**, 519-521, 1629-1634	0.4	6
62	The effect of inhomogeneities in particle distribution on the dielectric properties of composite films. *Journal Physics D: Applied Physics*, **2006**, 39, 1305-1311	3	26
61	Applied periodic l□control: Presenting prototype designs for a real sprayform tooling process. *Control Engineering Practice*, **2006**, 14, 1477-1493	3.9	0
60	Oxidation during electric arc spray forming of steel. *Journal of Materials Processing Technology*, **2006**, 178, 259-269	5.3	46
59	Microstructure evolution of vacuum plasma sprayed CoNiCrAlY coatings after heat treatment and isothermal oxidation. *Surface and Coatings Technology*, **2006**, 201, 2887-2896	4.4	52

58	Scientific, technological, and economic aspects of rapid tooling by electric arc spray forming. *Journal of Thermal Spray Technology*, **2006**, 15, 796-801	2.5	7
57	MODELLING FOR THERMAL CONTROL OF VACUUM PLASMA SPRAYING. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2005**, 38, 189-194		2
56	The velocity and temperature of steel droplets during electric arc spraying. *Surface and Coatings Technology*, **2005**, 195, 91-101	4.4	75
55	Dynamic densification of metal matrix-coated fibre composites: modelling and processing. *Acta Materialia*, **2005**, 53, 617-628	8.4	9
54	Numerical Heat Transfer Modelling in Spray Formed IN718 Billets. *Materials Science Forum*, **2005**, 475-479, 2803-2806	0.4	2
53	Modelling Shape Evolution and Heat Flow of Spray-Formed Ring Preforms. *Materials Science Forum*, **2005**, 475-479, 2807-2810	0.4	4
52	Non-equilibrium microstructure and thermal stability of plasma-sprayed AlSi coatings. *Journal of Materials Research*, **2005**, 20, 2038-2045	2.5	8
51	A Unified Computer Model of the Spray Forming Process of Inconel 718 Rings **2005**,		2
50	A particle image velocimetry investigation of in-flight and deposition behaviour of steel droplets during electric arc sprayforming. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2004**, 383, 137-145	5.3	24
49	Oxide formation in the Sprayform Tool Process. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2004**, 383, 50-57	5.3	10
48	Phase transformations and control of residual stresses in thick spray-formed steel shells. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2004**, 35, 1113-1122	2.5	7
47	The equiaxed-banded microstructural transition during low pressure plasma spraying. *Acta Materialia*, **2004**, 52, 199-208	8.4	30
46	Microstructure, Macrostructure, and Modelling of the Centrifugal Spray Deposition of Large Diameter Ni Superalloy Preforms **2004**,		3
45	Large arc voltage fluctuations and droplet formation in electric arc wire spraying. *Powder Metallurgy*, **2003**, 46, 229-235	1.9	18
44	An inverse problem in modelling liquid metal spraying. *Applied Mathematical Modelling*, **2003**, 27, 379-396	4.5	11
43	Fibre re-arrangement and matrix softening phenomena in matrix-coated fibre (MCF) composites during vacuum hot pressing consolidation. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2003**, 346, 246-253	5.3	13
42	Low pressure plasma-sprayed Al2O3 and Al2O3/SiC nanocomposite coatings from different feedstock powders. *Journal of the European Ceramic Society*, **2003**, 23, 961-976	6	34
41	Control of temperature profile for a spray deposition process. *IEEE Transactions on Control Systems Technology*, **2003**, 11, 656-667	4.8	31

40	Characterisation of electric arc spray formed Ni superalloy IN718. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2002**, 326, 79-91	5.3	17
39	Interface effects during consolidation in titanium alloy components locally reinforced with matrix-coated fibre composite. *Acta Materialia*, **2002**, 50, 4981-4993	8.4	15
38	Isothermal grain coarsening of spray formed alloys in the semi-solid state. *Acta Materialia*, **2002**, 50, 2517-2535	8.4	114
37	Semiempirical method for process analysis on electric arc spray forming of Fe-0.06%C steel rings. *Powder Metallurgy*, **2002**, 45, 139-145	1.9	1
36	Strength degradation of SiC fiber during manufacture of titanium matrix composites by plasma spraying and hot pressing. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2001**, 32, 3133-3142	2.3	6
35	Process study, microstructure, and matrix cracking of SiC fiber reinforced MoSi2 based composites. *Journal of Thermal Spray Technology*, **2001**, 10, 584-591	2.5	7
34	Ink-Jet Printing of Wax-Based Alumina Suspensions. *Journal of the American Ceramic Society*, **2001**, 84, 2514-2520	3.8	179
33	Two-dimensional simulation of liquid metal spray deposition onto a complex surface: II. Splashing and redeposition. *Modelling and Simulation in Materials Science and Engineering*, **2001**, 9, 111-127	2	22
32	Chemical interaction between sigma 1140+ SiC fibre and Ti-6Al-4V. *Scripta Materialia*, **2001**, 44, 607-612	5.6	10
31	Freeform Fabrication of Ceramics by Hot-Melt Ink-Jet Printing. *Materials Research Society Symposia Proceedings*, **2000**, 625, 195		12
30	Droplet splashing during arc spraying of steel and the effect on deposit microstructure. *Journal of Thermal Spray Technology*, **2000**, 9, 250-258	2.5	39
29	Modelling and experimental analysis of vacuum plasma spraying. Part I: prediction of initial plasma properties at plasma gun exit. *Modelling and Simulation in Materials Science and Engineering*, **2000**, 8, 497-513	2	11
28	Modelling and experimental analysis of vacuum plasma spraying. Part II: prediction of temperatures and velocities of plasma gases and Ti particles in a plasma jet. *Modelling and Simulation in Materials Science and Engineering*, **2000**, 8, 515-540	2	7
27	Two-dimensional simulation of liquid metal spray deposition onto a complex surface. *Modelling and Simulation in Materials Science and Engineering*, **1999**, 7, 553-571	2	21
26	Preliminary characterisation of a plasma sprayed MoSi2/Sigma SiC fibre monotape. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **1999**, 261, 196-203	5.3	3
25	Microstructural evaluation of monolithic and continuous fibre reinforced Al-12wt.%Si produced by low pressure plasma spraying. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **1999**, 265, 77-86	5.3	23
24	The response of SiC fibres to vacuum plasma spraying and vacuum hot pressing during the fabrication of titanium matrix composites. *Journal of Microscopy*, **1999**, 196, 162-74	1.9	17
23	Direct Ink-Jet Deposition of Ceramic Green Bodies: I - Formulation of Build Materials. *Materials Research Society Symposia Proceedings*, **1998**, 542, 141		8

22	The Electric Arc Spray Manufacture of Rapid Production Tooling: A Case Study **1998**,		3
21	Hydrogen incorporation in Ti-based metal matrix composites fabricated by vacuum plasma spraying and vacuum hot pressing. *Journal of Microscopy*, **1997**, 185, 132-145	1.9	4
20	Development of microstructure in spray formed alloys. *Progress in Materials Science*, **1997**, 42, 373-392	42.2	29
19	Manufacture of Hoop Reinforced Ti-MMC Rings by Spray/Wind Process. *Key Engineering Materials*, **1996**, 127-131, 335-342	0.4	9
18	The Manufacture of Squeeze Cast and Spray Formed Al MMCs. *Key Engineering Materials*, **1995**, 104-107, 155-174	0.4	3
17	Transmission electron microscopy study of Ti/SiCf composites fabricated by vacuum plasma spraying and vacuum hot-pressing. *Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties*, **1995**, 72, 707-721		1
16	Modelling of droplet dynamic and thermal histories during spray forming II. Analysis of spray solid fraction. *Acta Metallurgica Et Materialia*, **1995**, 43, 913-921		28
15	Spray forming of Al/SiC metal matrix composites. *Journal of Microscopy*, **1995**, 177, 337-346	1.9	11
14	Ion microprobe studies of reactions in squeeze-cast aluminium alloy matrix composites. *Journal of Microscopy*, **1995**, 177, 414-423	1.9	5
13	Spray Processing of Ti Metal Matrix Composites **1995**, 109-121		
12	Spray forming. *Progress in Materials Science*, **1995**, 39, 497-545	42.2	283
11	Heat flow in spray-formed Al?4Cu. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **1994**, 179-180, 72-76	5.3	8
10	Interface microstructures in Ti-based composites using TiB2/C-coated and uncoated SiCf after short-term thermal exposure. *Composites*, **1994**, 25, 887-890		16
9	Modelling of droplet dynamic and thermal histories during spray forming I individual droplet behaviour. *Acta Metallurgica Et Materialia*, **1993**, 41, 3097-3108		142
8	The microstructure of spray-formed Ti-6Al-4V/SiCf metal-matrix composites. *Journal of Microscopy*, **1993**, 169, 263-267	1.9	19
7	Modelling of droplet dynamic and thermal histories during spray forming I. Effect of process parameters. *Acta Metallurgica Et Materialia*, **1993**, 41, 3109-3118		76
6	Microstructure of spray-formed Al alloy 2618. *Materials & Design*, **1993**, 14, 45-47		18
5	Spray forming of aluminium-copper alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **1991**, 134, 1111-1114	5.3	42

4	Modelling of Spray Forming. *Cast Metals*, **1991**, 4, 140-151		23
3	A Computer Model for Trajectories and Thermal Profiles of Atomised Droplets in Spray Forming. *Cast Metals*, **1990**, 3, 227-232		17
2	Infrared Thermal Imaging Measurement of Deposit Surface Temperatures During Spray Deposition. *Powder Metallurgy*, **1990**, 33, 144-146	1.9	14
1	The monitoring of deposit surface temperatures during spray-forming by infrared thermal-imaging. *Scripta Metallurgica*, **1989**, 23, 1651-1656		35