

Patrick Grant

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6196417/publications.pdf>

Version: 2024-02-01

209
papers

7,903
citations

53794

45
h-index

62596

80
g-index

211
all docs

211
docs citations

211
times ranked

7948
citing authors

#	ARTICLE	IF	CITATIONS
1	The effects of irradiation on CrMnFeCoNi high-entropy alloy and its derivatives. Progress in Materials Science, 2022, 123, 100807.	32.8	56
2	Modelling the Impedance Response of Graded LiFePO ₄ Cathodes for Li-Ion Batteries. Journal of the Electrochemical Society, 2022, 169, 010528.	2.9	9
3	X-ray Imaging of Alloy Solidification: Crystal Formation, Growth, Instability and Defects. Materials, 2022, 15, 1319.	2.9	6
4	Investigating Metal Solidification with X-ray Imaging. Metals, 2022, 12, 395.	2.3	6
5	Interfaces between Ceramic and Polymer Electrolytes: A Comparison of Oxide and Sulfide Solid Electrolytes for Hybrid Solid-State Batteries. Inorganics, 2022, 10, 60.	2.7	4
6	Extending the energy-power balance of Li-ion batteries using graded electrodes with precise spatial control of local composition. Journal of Power Sources, 2022, 542, 231758.	7.8	3
7	New nanoscale artificial pinning centres for NbTi superconductors. Materials and Design, 2021, 198, 109285.	7.0	5
8	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.	19.5	38
9	Multi-layered composite electrodes of high power Li ₄ Ti ₅ O ₁₂ and high capacity SnO ₂ for smart lithium ion storage. Energy Storage Materials, 2021, 38, 70-79.	18.0	29
10	Amorphization in extreme deformation of the CrMnFeCoNi high-entropy alloy. Science Advances, 2021, 7, .	10.3	140
11	Nucleation bursts of primary intermetallic crystals in a liquid Al alloy studied using in situ synchrotron X-ray radiography. Acta Materialia, 2021, 221, 117389.	7.9	7
12	Joining and cycling performance of ultra-thick tungsten coatings on patterned steel substrates for fusion armour applications. Materials and Design, 2021, 212, 110250.	7.0	5
13	Design of Scalable, Next-Generation Thick Electrodes: Opportunities and Challenges. ACS Nano, 2021, 15, 18624-18632.	14.6	54
14	Combining composition graded positive and negative electrodes for higher performance Li-ion batteries. Journal of Power Sources, 2020, 448, 227376.	7.8	22
15	In-line measurement of the dielectric permittivity of materials during additive manufacturing and 3D data reconstruction. Additive Manufacturing, 2020, 32, 101010.	3.0	8
16	High energy lithium ion capacitors using hybrid cathodes comprising electrical double layer and intercalation host multi-layers. Energy Storage Materials, 2020, 33, 408-415.	18.0	18
17	<i>In situ</i> mapping of chemical segregation using synchrotron x-ray imaging. MRS Bulletin, 2020, 45, 934-942.	3.5	14
18	4D Bragg Edge Tomography of Directional Ice Templated Graphite Electrodes. Journal of Imaging, 2020, 6, 136.	3.0	8

#	ARTICLE	IF	CITATIONS
19	Evaluation of the Laguerreâ€‘Gaussian mode purity produced by three-dimensional-printed microwave spiral phase plates. <i>Royal Society Open Science</i> , 2020, 7, 200493.	2.4	14
20	Scalable Multilayer Printing of Graphene Interfacial Layers for Ultrahigh Power Lithiumâ€‘ion Storage. <i>Energy Technology</i> , 2020, 8, 2000253.	3.8	4
21	In-situ X-ray radiography of primary Fe-rich intermetallic compound formation. <i>Acta Materialia</i> , 2020, 196, 759-769.	7.9	32
22	Design and characterisation of ex situ bulk MgB ₂ superconductors containing a nanoscale dispersion of artificial pinning centres. <i>Superconductor Science and Technology</i> , 2020, 33, 034006.	3.5	9
23	In-situ X-ray radiography of twinned crystal growth of primary Al ₁₃ Fe ₄ . <i>Scripta Materialia</i> , 2020, 184, 57-62.	5.2	21
24	2020 roadmap on solid-state batteries. <i>JPhys Energy</i> , 2020, 2, 032008.	5.3	74
25	Co-spray printing of LiFePO ₄ and PEO-Li _{1.5} Al _{0.5} Ge _{1.5} (PO ₄) ₃ hybrid electrodes for all-solid-state Li-ion battery applications. <i>Journal of Materials Chemistry A</i> , 2019, 7, 19094-19103.	10.3	25
26	Singleâ€‘Step Spray Printing of Symmetric Allâ€‘Organic Solidâ€‘State Batteries Based on Porous Textile Dye Electrodes. <i>Advanced Energy Materials</i> , 2019, 9, 1901418.	19.5	23
27	Low-tortuosity and graded lithium ion battery cathodes by ice templating. <i>Journal of Materials Chemistry A</i> , 2019, 7, 21421-21431.	10.3	77
28	Scalable, Large-Area Printing of Pore-Array Electrodes for Ultrahigh Power Electrochemical Energy Storage. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 37859-37866.	8.0	14
29	The Role of Grain Refiner in the Nucleation of AlFeSi Intermetallic Phases During Solidification of a 6xxx Aluminum Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 5242-5252.	2.2	21
30	Ultrasonic liquid metal processing: The essential role of cavitation bubbles in controlling acoustic streaming. <i>Ultrasonics Sonochemistry</i> , 2019, 55, 243-255.	8.2	64
31	Single-operation, multi-phase additive manufacture of electro-chemical double layer capacitor devices. <i>Additive Manufacturing</i> , 2019, 28, 344-353.	3.0	18
32	Overcoming diffusion limitations in supercapacitors using layered electrodes. <i>Journal of Power Sources</i> , 2019, 433, 126579.	7.8	30
33	Layer-by-layer printing of multi-layered heterostructures using Li ₄ Ti ₅ O ₁₂ and Si for high power Li-ion storage. <i>Nano Energy</i> , 2019, 61, 96-103.	16.0	30
34	3D Printed Modular Origami Inspired Dielectrics for Frequency Tunable Antennas. , 2019, , .		3
35	Experimental evaluation of 3D printed spiral phase plates for enabling an orbital angular momentum multiplexed radio system. <i>Royal Society Open Science</i> , 2019, 6, 191419.	2.4	11
36	Micro-scale graded electrodes for improved dynamic and cycling performance of Li-ion batteries. <i>Journal of Power Sources</i> , 2019, 413, 59-67.	7.8	36

#	ARTICLE	IF	CITATIONS
37	Spray-Printed and Self-Assembled Honeycomb Electrodes of Silicon-Decorated Carbon Nanofibers for Li-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 603-612.	8.0	19
38	Multiscale Engineered Si/SiO ₂ Nanocomposite Electrodes for Lithium-Ion Batteries Using Layer-by-Layer Spray Deposition. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 15624-15633.	8.0	44
39	Crystal nucleation in metallic alloys using x-ray radiography and machine learning. <i>Science Advances</i> , 2018, 4, eaar4004.	10.3	74
40	An in-situ method to estimate the tip temperature and phase selection of secondary Fe-rich intermetallics using synchrotron X-ray radiography. <i>Scripta Materialia</i> , 2018, 149, 44-48.	5.2	21
41	Development of a Novel Melt Spinning-Based Processing Route for Oxide Dispersion-Strengthened Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 604-612.	2.2	3
42	Spray printing and optimization of anodes and cathodes for high performance Li-Ion batteries. <i>Electrochimica Acta</i> , 2018, 292, 546-557.	5.2	32
43	Modelling and neutron diffraction characterization of the interfacial bonding of spray formed dissimilar steels. <i>Acta Materialia</i> , 2018, 155, 318-330.	7.9	10
44	Microstructural and mechanical characterisation of Fe-14Cr-0.22Hf alloy fabricated by spark plasma sintering. <i>Journal of Alloys and Compounds</i> , 2018, 762, 678-687.	5.5	10
45	Coral-like directional porosity lithium ion battery cathodes by ice templating. <i>Journal of Materials Chemistry A</i> , 2018, 6, 14689-14699.	10.3	101
46	Spray printing of self-assembled porous structures for high power battery electrodes. <i>Journal of Materials Chemistry A</i> , 2018, 6, 13133-13141.	10.3	33
47	3D-printed $\lambda/4$ phase plate for broadband microwave applications. <i>Optics Express</i> , 2018, 26, 29068.	3.4	9
48	Microstructural comparison of effects of hafnium and titanium additions in spark-plasma-sintered Fe-based oxide-dispersion strengthened alloys. <i>Journal of Nuclear Materials</i> , 2017, 487, 433-442.	2.7	15
49	Numerical and physical simulation of rapid microstructural evolution of gas atomised Ni superalloy powders. <i>Materials and Design</i> , 2017, 117, 157-167.	7.0	4
50	Microstructural Evolution in Spray Forming. , 2017, , 265-295.		0
51	Generalized Maxwell Fish-Eye Lens as a Beam Splitter: A Case Study in Realizing All-Dielectric Devices From Transformation Electromagnetics. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2017, 65, 4823-4835.	4.6	12
52	A Split Ring Resonator Dielectric Probe for Near-Field Dielectric Imaging. <i>Scientific Reports</i> , 2017, 7, 2038.	3.3	27
53	A two layer electrode structure for improved Li Ion diffusion and volumetric capacity in Li Ion batteries. <i>Nano Energy</i> , 2017, 31, 377-385.	16.0	60
54	Fabrication of Composite Filaments with High Dielectric Permittivity for Fused Deposition 3D Printing. <i>Materials</i> , 2017, 10, 1218.	2.9	70

#	ARTICLE	IF	CITATIONS
55	Preparation, microstructure and microwave dielectric properties of sprayed PFA/barium titanate composite films. <i>Composites Science and Technology</i> , 2016, 129, 198-204.	7.8	14
56	The spatial and temporal distribution of dendrite fragmentation in solidifying Al-Cu alloys under different conditions. <i>Acta Materialia</i> , 2016, 121, 384-395.	7.9	69
57	Engineering the Membrane/Electrode Interface To Improve the Performance of Solid-State Supercapacitors. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 20756-20765.	8.0	30
58	Alternative Fabrication Routes toward Oxide-Dispersion-Strengthened Steels and Model Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016, 47, 5313-5324.	2.2	37
59	3D-Printed High Dielectric Contrast Gradient Index Flat Lens for a Directive Antenna with Reduced Dimensions. <i>Advanced Materials Technologies</i> , 2016, 1, 1600072.	5.8	49
60	Solid-state supercapacitors with rationally designed heterogeneous electrodes fabricated by large area spray processing for wearable energy storage applications. <i>Scientific Reports</i> , 2016, 6, 25684.	3.3	68
61	Microwave dielectric characterisation of 3D-printed BaTiO ₃ /ABS polymer composites. <i>Scientific Reports</i> , 2016, 6, 22714.	3.3	174
62	Evolution of Fe Bearing Intermetallics During DC Casting and Homogenization of an Al-Mg-Si Al Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016, 47, 3000-3014.	2.2	37
63	3D printed anisotropic dielectric composite with meta-material features. <i>Materials and Design</i> , 2016, 93, 423-430.	7.0	130
64	Production of hollow and porous Fe ₂ O ₃ from industrial mill scale and its potential for large-scale electrochemical energy storage applications. <i>Journal of Materials Chemistry A</i> , 2016, 4, 2597-2604.	10.3	68
65	Gap-Corrected Thin-Film Permittivity and Permeability Measurement With a Broadband Coaxial Line Technique. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2016, , 1-7.	4.6	9
66	3D Printing of NiZn ferrite/ABS Magnetic Composites for Electromagnetic Devices. <i>Materials Research Society Symposia Proceedings</i> , 2015, 1788, 29-35.	0.1	44
67	Spatial transformations: from fundamentals to applications. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2015, 373, 20140365.	3.4	2
68	Mapping of multi-elements during melting and solidification using synchrotron X-rays and pixel-based spectroscopy. <i>Scientific Reports</i> , 2015, 5, 15988.	3.3	17
69	Real-time synchrotron x-ray observations of equiaxed solidification of aluminium alloys and implications for modelling. <i>IOP Conference Series: Materials Science and Engineering</i> , 2015, 84, 012014.	0.6	16
70	Fe ₃ O ₄ /carbon nanofibres with necklace architecture for enhanced electrochemical energy storage. <i>Journal of Materials Chemistry A</i> , 2015, 3, 14245-14253.	10.3	87
71	Characterization of the residual stresses in spray-formed steels using neutron diffraction. <i>Scripta Materialia</i> , 2015, 100, 82-85.	5.2	8
72	Manufacture of electrical and magnetic graded and anisotropic materials for novel manipulations of microwaves. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2015, 373, 20140353.	3.4	32

#	ARTICLE	IF	CITATIONS
73	Scalable polymer-based ferrite composites with matching permeability and permittivity for high-frequency applications. <i>Applied Physics A: Materials Science and Processing</i> , 2015, 120, 609-614.	2.3	5
74	Toward Low-Cost Grid Scale Energy Storage: Supercapacitors Based on Up-Cycled Industrial Mill Scale Waste. <i>ACS Sustainable Chemistry and Engineering</i> , 2015, 3, 2831-2838.	6.7	22
75	Processing and microstructure characterisation of oxide dispersion strengthened Fe ¹⁴ Cr ^{0.4} Ti ^{0.25} Y ₂ O ₃ ferritic steels fabricated by spark plasma sintering. <i>Journal of Nuclear Materials</i> , 2015, 464, 61-68.	2.7	65
76	Engineering the nanostructure of a polymer-nanocomposite film containing Ti-based core-shell particles to enhance dielectric response. <i>Nanoscale</i> , 2015, 7, 15727-15733.	5.6	6
77	Enhancing the supercapacitor behaviour of novel Fe ₃ O ₄ /FeOOH nanowire hybrid electrodes in aqueous electrolytes. <i>Journal of Power Sources</i> , 2015, 274, 907-915.	7.8	86
78	Core-shell nanoparticles and enhanced polarization in polymer based nanocomposite dielectrics. <i>Nanotechnology</i> , 2014, 25, 475706.	2.6	6
79	NiZn ferrite/Fe hybrid epoxy-based composites: extending magnetic properties to high frequency. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 117, 477-483.	2.3	11
80	A hybrid arc spray forming technique for the manufacture of nickel superalloy IN617. <i>Materialwissenschaft Und Werkstofftechnik</i> , 2014, 45, 758-764.	0.9	1
81	A synchrotron X-ray radiography study of dendrite fragmentation induced by a pulsed electromagnetic field in an Al ¹⁵ Cu alloy. <i>Acta Materialia</i> , 2014, 70, 228-239.	7.9	174
82	The structural changes of Y ₂ O ₃ in ferritic ODS alloys during milling. <i>Journal of Nuclear Materials</i> , 2014, 447, 242-247.	2.7	35
83	An in situ powder neutron diffraction study of nano-precipitate formation during processing of oxide-dispersion-strengthened ferritic steels. <i>Journal of Alloys and Compounds</i> , 2014, 582, 769-773.	5.5	22
84	Spray processing of TiO ₂ nanoparticle/ionomer coatings on carbon nanotube scaffolds for solid-state supercapacitors. <i>Journal of Materials Chemistry A</i> , 2014, 2, 11022.	10.3	48
85	Electron microscopy of multi-layered polymer-nanocomposite based dielectrics. <i>Journal of Physics: Conference Series</i> , 2014, 522, 012041.	0.4	4
86	Phase field study of the tip operating state of a freely growing dendrite against convection using a novel parallel multigrid approach. <i>Journal of Computational Physics</i> , 2014, 257, 278-297.	3.8	35
87	Microstructural evolution at Cu/Sn ^{Ag} /Cu/Cu and Cu/Sn ^{Ag} /Cu/Ni ^{Au} ball grid array interfaces during thermal ageing. <i>Journal of Alloys and Compounds</i> , 2014, 613, 387-394.	5.5	23
88	Influence of cooling rate on the Fe intermetallic formation in an AA6063 Al alloy. <i>Journal of Alloys and Compounds</i> , 2013, 555, 274-282.	5.5	71
89	Phase Field Simulation of Binary Alloy Dendrite Growth Under Thermal- and Forced-Flow Fields: An Implementation of the Parallel Multigrid Approach. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2013, 44, 924-937.	2.1	47
90	Nanomechanical characterization of Sn ^{Ag} /Cu/Cu joints Part 1: Young's modulus, hardness and deformation mechanisms as a function of temperature. <i>Acta Materialia</i> , 2013, 61, 2460-2470.	7.9	78

#	ARTICLE	IF	CITATIONS
91	Layer-by-layer spray deposition and unzipping of single-wall carbon nanotube-based thin film electrodes for electrochemical capacitors. <i>Carbon</i> , 2013, 61, 525-536.	10.3	38
92	Charge storage properties of a Li-MoO_3 /carboxyl-functionalized single-walled carbon nanotube composite electrode in a Li ion electrolyte. <i>Electrochimica Acta</i> , 2013, 98, 294-302.	5.2	33
93	An electrochemical microactuator based on highly textured LiCoO_2 . <i>Sensors and Actuators B: Chemical</i> , 2013, 176, 52-57.	7.8	13
94	Nanomechanical characterization of Sn-Ag-Cu/Cu joints"Part 2: Nanoindentation creep and its relationship with uniaxial creep as a function of temperature. <i>Acta Materialia</i> , 2013, 61, 2471-2480.	7.9	57
95	One-step spray processing of high power all-solid-state supercapacitors. <i>Scientific Reports</i> , 2013, 3, 2393.	3.3	69
96	Scaleable ultra-thin and high power density graphene electrochemical capacitor electrodes manufactured by aqueous exfoliation and spray deposition. <i>Carbon</i> , 2013, 52, 337-346.	10.3	47
97	An investigation of nanostructured thin film Li-MoO_3 based supercapacitor electrodes in an aqueous electrolyte. <i>Electrochimica Acta</i> , 2013, 91, 253-260.	5.2	177
98	Heavily loaded ferrite-polymer composites to produce high refractive index materials at centimetre wavelengths. <i>APL Materials</i> , 2013, 1, .	5.1	9
99	Phase field simulation of multi-dendrite growth in a coupled thermal-solute-convective environment. <i>IOP Conference Series: Materials Science and Engineering</i> , 2012, 33, 012101.	0.6	5
100	Fe Bearing Intermetallic Phase Formation in a Wrought Al-Mg-Si Alloy. <i>Transactions of the Indian Institute of Metals</i> , 2012, 65, 553-557.	1.5	15
101	A High-Speed Imaging and Modeling Study of Dendrite Fragmentation Caused by Ultrasonic Cavitation. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012, 43, 3755-3766.	2.2	118
102	An Investigation of Nanostructured Thin Film Li-MoO_3 Based Supercapacitor Electrodes in an Aqueous Electrolyte. <i>ECS Meeting Abstracts</i> , 2012, , .	0.0	0
103	An implicit parallel multigrid computing scheme to solve coupled thermal-solute phase-field equations for dendrite evolution. <i>Journal of Computational Physics</i> , 2012, 231, 1781-1796.	3.8	35
104	Vacuum-Deposited Planar Heterojunction Polymer Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 11-15.	8.0	27
105	The role of nanomaterials in redox-based supercapacitors for next generation energy storage devices. <i>Nanoscale</i> , 2011, 3, 839.	5.6	778
106	Thin Film Graphene Supercapacitor Electrodes Produced by Aqueous Exfoliation and Spray Deposition. <i>ECS Meeting Abstracts</i> , 2011, , .	0.0	0
107	Li-EXAFS and Li-XRD study of selected regions of a Al-Fe-Cr-Ti complex alloy. <i>Diamond Light Source Proceedings</i> , 2011, 1, .	0.1	0
108	High-resolution synchrotron X-ray diffraction studies of size and strain effects in a complex Al-Fe-Cr-Ti alloy. <i>Diamond Light Source Proceedings</i> , 2011, 1, .	0.1	0

#	ARTICLE	IF	CITATIONS
109	An Al-Si-Ti hierarchical metal-metal composite manufactured by co-spray forming. Journal of Materials Processing Technology, 2011, 211, 2045-2049.	6.3	3
110	A quantitative study of solute diffusion field effects on heterogeneous nucleation and the grain size of alloys. Acta Materialia, 2011, 59, 2135-2144.	7.9	166
111	Spray Forming of Bulk Ultrafine-Grained Al-Fe-Cr-Ti. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 3208-3215.	2.2	11
112	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.	2.1	4
113	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	3
114	Fabrication and Electrical Properties of Bulk Textured LiCoO ₂ . Journal of the American Ceramic Society, 2010, 93, 1856-1859.	3.8	12
115	Phase Field Modelling of Dendrite Fragmentation during Thermal Shock. Materials Science Forum, 2010, 654-656, 1524-1527.	0.3	0
116	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.	0.3	1
117	Colloidal synthesis of lead oxide nanocrystals for photovoltaics. Chemical Communications, 2010, 46, 2802.	4.1	39
118	SnS/PbS nanocrystal heterojunction photovoltaics. Nanotechnology, 2010, 21, 185202.	2.6	61
119	Printable magnetite and pyrrole treated magnetite based electrodes for supercapacitors. Journal of Materials Chemistry, 2010, 20, 7637.	6.7	102
120	Understanding die attach materials performance in electronic packages under harsh environments. , 2010, , .		3
121	Arc Sprayed Steel: Microstructure in Severe Substrate Features. Journal of Thermal Spray Technology, 2009, 18, 256-271.	3.1	12
122	Spray deposited fluoropolymer/multi-walled carbon nanotube composite films with high dielectric permittivity at low percolation threshold. Carbon, 2009, 47, 561-569.	10.3	68
123	A novel hybrid supercapacitor with a carbon nanotube cathode and an iron oxide/carbon nanotube composite anode. Journal of Materials Chemistry, 2009, 19, 8755.	6.7	278
124	Spray deposition of steam treated and functionalized single-walled and multi-walled carbon nanotube films for supercapacitors. Nanotechnology, 2009, 20, 065605.	2.6	93
125	Two-Dimensional Mapping of the Mechanical Properties of Pb-Free Solders for Reliability Optimization. Journal of Microelectronics and Electronic Packaging, 2009, 6, 182-185.	0.7	1
126	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.	7.9	38

#	ARTICLE	IF	CITATIONS
127	Modelling the shape and thermal dynamics of Ni superalloy rings during spray forming. Part 2: Thermal modelling of Heat flow and solidification. <i>Acta Materialia</i> , 2008, 56, 1597-1608.	7.9	33
128	Spray deposition of polymer nanocomposite films for dielectric applications. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2008, 151, 140-145.	3.5	40
129	Interface topography and residual stress distributions in W coatings for fusion armour applications. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 477, 35-42.	5.6	21
130	Multiphysics modelling of the spray forming process. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 477, 2-8.	5.6	28
131	Pitting corrosion of spray formed Al-Mg alloys. <i>Corrosion Science</i> , 2008, 50, 3221-3226.	6.6	41
132	An electrochemical study of repassivation of aluminium alloys with SEM examination of the pit interiors using resin replicas. <i>Corrosion Science</i> , 2008, 50, 3233-3240.	6.6	44
133	Nanoindentation of Lead Free Solders for Harsh Environments. <i>Materials Research Society Symposia Proceedings</i> , 2008, 1079, 1.	0.1	2
134	Spray Casting, , 2008, , 382-385.		0
135	Numerical Modelling of Spray Formed Grain Size Evolution. <i>Materials Science Forum</i> , 2007, 561-565, 1991-1994.	0.3	1
136	Optimisation of Spray Forming Ni Superalloys via Process Modelling and On-Line Monitoring. <i>Materials Science Forum</i> , 2007, 546-549, 1327-1332.	0.3	3
137	Spray Forming of Al-Fe-Cr-Ti and Al-Si-Li Alloys. <i>Materials Science Forum</i> , 2007, 561-565, 1075-1078.	0.3	6
138	Optimal Robot Path for Minimizing Thermal Variations in a Spray Deposition Process. <i>IEEE Transactions on Control Systems Technology</i> , 2007, 15, 1-11.	5.2	16
139	Processing, microstructure and property aspects of a spraycast Al-Mg-Zr alloy. <i>Acta Materialia</i> , 2007, 55, 1885-1894.	7.9	43
140	Evolution of percolation properties in nanocomposite films during particle clustering. <i>Scripta Materialia</i> , 2007, 56, 425-428.	5.2	5
141	Solidification in Spray Forming. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2007, 38, 1520-1529.	2.2	102
142	Applied periodic control: Presenting prototype designs for a real sprayform tooling process. <i>Control Engineering Practice</i> , 2006, 14, 1477-1493.	5.5	1
143	Oxidation during electric arc spray forming of steel. <i>Journal of Materials Processing Technology</i> , 2006, 178, 259-269.	6.3	58
144	Microstructure evolution of vacuum plasma sprayed CoNiCrAlY coatings after heat treatment and isothermal oxidation. <i>Surface and Coatings Technology</i> , 2006, 201, 2887-2896.	4.8	59

#	ARTICLE	IF	CITATIONS
145	Scientific, Technological, and Economic Aspects of Rapid Tooling by Electric Arc Spray Forming. Journal of Thermal Spray Technology, 2006, 15, 796-801.	3.1	7
146	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.	2.1	5
147	Microstructural characterisation of spray formed Si-30Al for thermal management applications. Scripta Materialia, 2006, 55, 111-114.	5.2	92
148	An Investigation of Novel Spraycast Al-Mg-Li-Zr-(Sc) Alloys. Materials Science Forum, 2006, 519-521, 1629-1634.	0.3	6
149	The effect of inhomogeneities in particle distribution on the dielectric properties of composite films. Journal Physics D: Applied Physics, 2006, 39, 1305-1311.	2.8	30
150	MODELLING FOR THERMAL CONTROL OF VACUUM PLASMA SPRAYING. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 189-194.	0.4	2
151	The velocity and temperature of steel droplets during electric arc spraying. Surface and Coatings Technology, 2005, 195, 91-101.	4.8	89
152	Dynamic densification of metal matrix-coated fibre composites: modelling and processing. Acta Materialia, 2005, 53, 617-628.	7.9	12
153	Numerical Heat Transfer Modelling in Spray Formed IN718 Billets. Materials Science Forum, 2005, 475-479, 2803-2806.	0.3	3
154	Modelling Shape Evolution and Heat Flow of Spray-Formed Ring Preforms. Materials Science Forum, 2005, 475-479, 2807-2810.	0.3	5
155	Non-equilibrium Microstructure and Thermal Stability of Plasma-sprayed Al-Si Coatings. Journal of Materials Research, 2005, 20, 2038-2045.	2.6	9
156	A Unified Computer Model of the Spray Forming Process of Inconel 718 Rings. , 2005, , .		2
157	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.	5.6	28
158	Oxide formation in the Sprayform Tool Process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 383, 50-57.	5.6	10
159	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.	2.1	11
160	The equiaxed-banded microstructural transition during low pressure plasma spraying. Acta Materialia, 2004, 52, 199-208.	7.9	33
161	Microstructure, Macrostructure, and Modelling of the Centrifugal Spray Deposition of Large Diameter Ni Superalloy Preforms. , 2004, , .		3
162	An inverse problem in modelling liquid metal spraying. Applied Mathematical Modelling, 2003, 27, 379-396.	4.2	12

#	ARTICLE	IF	CITATIONS
163	Fibre re-arrangement and matrix softening phenomena in matrix-coated fibre (MCF) composites during vacuum hot pressing consolidation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 346, 246-253.	5.6	14
164	Low pressure plasma-sprayed Al ₂ O ₃ and Al ₂ O ₃ /SiC nanocomposite coatings from different feedstock powders. <i>Journal of the European Ceramic Society</i> , 2003, 23, 961-976.	5.7	37
165	Control of temperature profile for a spray deposition process. <i>IEEE Transactions on Control Systems Technology</i> , 2003, 11, 656-667.	5.2	35
166	Large arc voltage fluctuations and droplet formation in electric arc wire spraying. <i>Powder Metallurgy</i> , 2003, 46, 229-235.	1.7	22
167	Semiempirical method for process analysis on electric arc spray forming of Fe-0.06%C steel rings. <i>Powder Metallurgy</i> , 2002, 45, 139-145.	1.7	1
168	Characterisation of electric arc spray formed Ni superalloy IN718. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002, 326, 79-91.	5.6	22
169	Interface effects during consolidation in titanium alloy components locally reinforced with matrix-coated fibre composite. <i>Acta Materialia</i> , 2002, 50, 4981-4993.	7.9	17
170	Isothermal grain coarsening of spray formed alloys in the semi-solid state. <i>Acta Materialia</i> , 2002, 50, 2517-2535.	7.9	135
171	Chemical interaction between sigma 1140+ SiC fibre and Ti-6Al-4V. <i>Scripta Materialia</i> , 2001, 44, 607-612.	5.2	10
172	Strength degradation of SiC fiber during manufacture of titanium matrix composites by plasma spraying and hot pressing. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2001, 32, 3133-3142.	2.2	6
173	Process Study, Microstructure, and Matrix Cracking of SiC Fiber Reinforced MoSi ₂ Based Composites. <i>Journal of Thermal Spray Technology</i> , 2001, 10, 584-591.	3.1	7
174	Ink-Jet Printing of Wax-Based Alumina Suspensions. <i>Journal of the American Ceramic Society</i> , 2001, 84, 2514-2520.	3.8	207
175	Two-dimensional simulation of liquid metal spray deposition onto a complex surface: II. Splashing and redeposition. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2001, 9, 111-127.	2.0	29
176	Freeform Fabrication of Ceramics by Hot-Melt Ink-Jet Printing. <i>Materials Research Society Symposia Proceedings</i> , 2000, 625, 195.	0.1	13
177	Droplet Splashing during Arc Spraying of Steel and the Effect on Deposit Microstructure. <i>Journal of Thermal Spray Technology</i> , 2000, 9, 250-258.	3.1	41
178	Modelling and experimental analysis of vacuum plasma spraying. Part I: prediction of initial plasma properties at plasma gun exit. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2000, 8, 497-513.	2.0	13
179	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. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2000, 8, 515-540.	2.0	7
180	Two-dimensional simulation of liquid metal spray deposition onto a complex surface. <i>Modelling and Simulation in Materials Science and Engineering</i> , 1999, 7, 553-571.	2.0	27

#	ARTICLE	IF	CITATIONS
181	Preliminary characterisation of a plasma sprayed MoSi ₂ /Sigma SiC fibre monotape. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1999, 261, 196-203.	5.6	5
182	Microstructural evaluation of monolithic and continuous fibre reinforced Al-12wt.%Si produced by low pressure plasma spraying. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1999, 265, 77-86.	5.6	24
183	The response of SiC fibres to vacuum plasma spraying and vacuum hot pressing during the fabrication of titanium matrix composites. <i>Journal of Microscopy</i> , 1999, 196, 162-174.	1.8	19
184	Direct Ink-Jet Deposition of Ceramic Green Bodies: I - Formulation of Build Materials. <i>Materials Research Society Symposia Proceedings</i> , 1998, 542, 141.	0.1	11
185	The Electric Arc Spray Manufacture of Rapid Production Tooling: A Case Study. , 1998, , .		3
186	Manufacture of Hoop Reinforced Ti-MMC Rings by Spray/Wind Process. <i>Key Engineering Materials</i> , 1997, 127-131, 335-342.	0.4	10
187	Hydrogen incorporation in Ti-based metal matrix composites fabricated by vacuum plasma spraying and vacuum hot pressing. <i>Journal of Microscopy</i> , 1997, 185, 132-145.	1.8	4
188	Development of microstructure in spray formed alloys. <i>Progress in Materials Science</i> , 1997, 42, 373-392.	32.8	33
189	Spray forming. <i>Progress in Materials Science</i> , 1995, 39, 497-545.	32.8	329
190	The Manufacture of Squeeze Cast and Spray Formed Al MMCs. <i>Key Engineering Materials</i> , 1995, 104-107, 155-174.	0.4	4
191	Transmission electron microscopy study of Ti/SiC composites fabricated by vacuum plasma spraying and vacuum hot-pressing. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1995, 72, 707-721.	0.6	2
192	Modelling of droplet dynamic and thermal histories during spray forming III. Analysis of spray solid fraction. <i>Acta Metallurgica Et Materialia</i> , 1995, 43, 913-921.	1.8	30
193	Spray forming of Al/SiC metal matrix composites. <i>Journal of Microscopy</i> , 1995, 177, 337-346.	1.8	13
194	Ion microprobe studies of reactions in squeeze cast aluminium alloy matrix composites. <i>Journal of Microscopy</i> , 1995, 177, 414-423.	1.8	6
195	Spray Processing of Ti Metal Matrix Composites. , 1995, , 109-121.		2
196	Heat flow in spray-formed Al-4Cu. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1994, 179-180, 72-76.	5.6	9
197	Interface microstructures in Ti-based composites using TiB ₂ /C-coated and uncoated SiCf after short-term thermal exposure. <i>Composites</i> , 1994, 25, 887-890.	0.7	17
198	Microstructure of spray-formed Al alloy 2618. <i>Materials & Design</i> , 1993, 14, 45-47.	5.1	23

#	ARTICLE	IF	CITATIONS
199	Modelling of droplet dynamic and thermal histories during spray formingâ€™I. individual droplet behaviour. Acta Metallurgica Et Materialia, 1993, 41, 3097-3108.	1.8	163
200	The microstructure of spray-formed Ti-6Al-4V/SiCf metal-matrix composites. Journal of Microscopy, 1993, 169, 263-267.	1.8	23
201	Modelling of droplet dynamic and thermal histories during spray formingâ€™II. Effect of process parameters. Acta Metallurgica Et Materialia, 1993, 41, 3109-3118.	1.8	88
202	Fabrication of Ti/SiCf metal matrix composites by vacuum plasma spraying. European Physical Journal Special Topics, 1993, 03, C7-1685-C7-1691.	0.2	1
203	Modelling of Spray Forming. Cast Metals, 1991, 4, 140-151.	0.4	24
204	Spray forming of aluminium-copper alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1991, 134, 1111-1114.	5.6	45
205	A Computer Model for Trajectories and Thermal Profiles of Atomised Droplets in Spray Forming. Cast Metals, 1990, 3, 227-232.	0.4	18
206	Infrared Thermal Imaging Measurement of Deposit Surface Temperatures During Spray Deposition. Powder Metallurgy, 1990, 33, 144-146.	1.7	14
207	The monitoring of deposit surface temperatures during spray-forming by infrared thermal-imaging. Scripta Metallurgica, 1989, 23, 1651-1656.	1.2	36
208	Refinement of TiB₂ in Al-Ti-B Grain Refiner Alloys by Ultrasound and the Effect on Al Grain Size. Materials Science Forum, 0, 654-656, 958-961.	0.3	8
209	A Synchrotron X-Ray Radiography Investigation of Induced Dendrite Fragmentation in Al-15wt%Cu. Materials Science Forum, 0, 765, 210-214.	0.3	5