Brian Derby

List of Publications by Citations

Source: https://exaly.com/author-pdf/360325/brian-derby-publications-by-citations.pdf

Version: 2024-04-20

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.

13,076 56 109 293 h-index g-index citations papers 14,632 7.17 304 5.9 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
293	Inkjet Printing of Functional and Structural Materials: Fluid Property Requirements, Feature Stability, and Resolution. <i>Annual Review of Materials Research</i> , 2010 , 40, 395-414	12.8	1119
292	Printing and prototyping of tissues and scaffolds. <i>Science</i> , 2012 , 338, 921-6	33.3	816
291	Biofabrication: reappraising the definition of an evolving field. <i>Biofabrication</i> , 2016 , 8, 013001	10.5	387
2 90	Delivery of human fibroblast cells by piezoelectric drop-on-demand inkjet printing. <i>Biomaterials</i> , 2008 , 29, 193-203	15.6	374
289	Biofabrication: A Guide to Technology and Terminology. <i>Trends in Biotechnology</i> , 2018 , 36, 384-402	15.1	309
288	The dependence of grain size on stress during dynamic recrystallisation. <i>Acta Metallurgica Et Materialia</i> , 1991 , 39, 955-962		307
287	Novel collagen scaffolds with predefined internal morphology made by solid freeform fabrication. <i>Biomaterials</i> , 2003 , 24, 1487-97	15.6	292
286	A definition of bioinks and their distinction from biomaterial inks. <i>Biofabrication</i> , 2018 , 11, 013001	10.5	273
285	A Low Curing Temperature Silver Ink for Use in Ink-Jet Printing and Subsequent Production of Conductive Tracks. <i>Macromolecular Rapid Communications</i> , 2005 , 26, 315-318	4.8	2 60
284	Vinculin regulates the recruitment and release of core focal adhesion proteins in a force-dependent manner. <i>Current Biology</i> , 2013 , 23, 271-81	6.3	258
283	Bioprinting: inkjet printing proteins and hybrid cell-containing materials and structures. <i>Journal of Materials Chemistry</i> , 2008 , 18, 5717		242
282	Review: bioprinting: a beginning. <i>Tissue Engineering</i> , 2006 , 12, 631-4		239
281	Inkjet printing ceramics: From drops to solid. <i>Journal of the European Ceramic Society</i> , 2011 , 31, 2543-2	550	226
280	Ink-jet delivery of particle suspensions by piezoelectric droplet ejectors. <i>Journal of Applied Physics</i> , 2005 , 97, 094903	2.5	225
279	On dynamic recrystallisation. <i>Scripta Metallurgica</i> , 1987 , 21, 879-884		221
278	Direct ink-jet printing and low temperature conversion of conductive silver patterns. <i>Journal of Materials Science</i> , 2006 , 41, 4153-4158	4.3	218
277	Inkjet Printing of Highly Loaded Particulate Suspensions. MRS Bulletin, 2003, 28, 815-818	3.2	209

(2018-2014)

276	Inkjet printing biomaterials for tissue engineering: bioprinting. <i>International Materials Reviews</i> , 2014 , 59, 430-448	16.1	193	
275	Tin(II) Sulfide (SnS) Nanosheets by Liquid-Phase Exfoliation of Herzenbergite: IV-VI Main Group Two-Dimensional Atomic Crystals. <i>Journal of the American Chemical Society</i> , 2015 , 137, 12689-96	16.4	187	
274	Characterizing the elastic properties of tissues. <i>Materials Today</i> , 2011 , 14, 96-105	21.8	184	
273	Formation and stability of lines produced by inkjet printing. <i>Langmuir</i> , 2010 , 26, 10365-72	4	181	
272	Ink-Jet Printing of Wax-Based Alumina Suspensions. <i>Journal of the American Ceramic Society</i> , 2001 , 84, 2514-2520	3.8	179	
271	Theoretical model for diffusion bonding. <i>Metal Science</i> , 1982 , 16, 49-56		164	
270	Mechanical properties of porous ceramic scaffolds: Influence of internal dimensions. <i>Ceramics International</i> , 2015 , 41, 8425-8432	5.1	140	
269	Two-Step Electrochemical Intercalation and Oxidation of Graphite for the Mass Production of Graphene Oxide. <i>Journal of the American Chemical Society</i> , 2017 , 139, 17446-17456	16.4	135	
268	Limits to feature size and resolution in ink jet printing. <i>Journal of the European Ceramic Society</i> , 2009 , 29, 913-918	6	134	
267	Ink Jet Deposition of Ceramic Suspensions: Modeling and Experiments of Droplet Formation. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 625, 117		132	
266	Additive Manufacture of Ceramics Components by Inkjet Printing. <i>Engineering</i> , 2015 , 1, 113-123	9.7	123	
265	A universal scaling law for the strength of metal micropillars and nanowires. <i>Scripta Materialia</i> , 2009 , 61, 524-527	5.6	112	
264	Wetting behaviour in the Al-Si/SiC system: interface reactions and solubility effects. <i>Acta Metallurgica Et Materialia</i> , 1995 , 43, 3061-3073		112	
263	Wetting of titanium nitride and titanium carbide by liquid metals. <i>Acta Materialia</i> , 1996 , 44, 307-314	8.4	109	
262	Silicon carbide particle size effects in alumina-based nanocomposites. <i>Acta Materialia</i> , 1996 , 44, 4543-4	15824	104	
261	Acoustic emission from particulate-reinforced metal matrix composites. <i>Acta Metallurgica Et Materialia</i> , 1993 , 41, 1431-1445		103	
260	Wide-Area Strain Sensors based upon Graphene-Polymer Composite Coatings Probed by Raman Spectroscopy. <i>Advanced Functional Materials</i> , 2014 , 24, 2865-2874	15.6	102	
259	Fully printed high performance humidity sensors based on two-dimensional materials. <i>Nanoscale</i> , 2018 , 10, 5599-5606	7.7	101	

Pristine Graphene Aerogels by Room-Temperature Freeze Gelation. Advanced Materials, 2016, 28, 7993-8000 100 258 A criterion for the determination of monotectic structure. Acta Metallurgica, 1983, 31, 1123-1130 257 97 Growth differentiation factor 6 and transforming growth factor-beta differentially mediate mesenchymal stem cell differentiation, composition, and micromechanical properties of nucleus 256 92 5.7 pulposus constructs. Arthritis Research and Therapy, 2014, 16, R67 Screen-Printing of a Highly Conductive Graphene Ink for Flexible Printed Electronics. ACS Applied 86 255 9.5 Materials & amp; Interfaces, 2019, 11, 32225-32234 The influence of microstructure on the fracture behaviour of particulate metal matrix composites. Materials Science & Digineering A: Structural Materials: Properties, Microstructure and Processing 85 254 5.3 , **1991**, 135, 221-224 Diffusion bonding: development of theoretical model. Metal Science, 1984, 18, 427-431 253 85 Ink-Jet Printing and Sintering of PZT. Journal of the American Ceramic Society, 2005, 88, 2053-2058 3.8 82 252 The strength of Al2O3/SiC nanocomposites after grinding and annealing. Acta Materialia, 1998, 46, 383983848 79 251 Oil-in-water separation with graphene-based nanocomposite membranes for produced water 9.6 76 250 treatment. Journal of Membrane Science, 2020, 603, 118007 Solid-state fabrication and interfaces of fibre reinforced metal matrix composites. Progress in 249 42.2 71 Materials Science, 1995, 39, 411-495 The deformation of particle reinforced metal matrix composites during temperature cycling. Acta 248 69 Metallurgica Et Materialia, 1990, 38, 2537-2552 Nanoindentation of histological specimens: Mapping the elastic properties of soft tissues. Journal 2.5 67 247 of Materials Research, **2009**, 24, 638-646 Dynamic recrystallisation: The steady state grain size. Scripta Metallurgica Et Materialia, 1992, 27, 1581-1585 67 246 Experimental study of the parameters for stable drop-on-demand inkjet performance. Physics of 65 245 4.4 Fluids, 2019, 31, 032004 Alumina/Silicon Carbide Nanocomposites by Hybrid Polymer/Powder Processing: Microstructures 3.8 65 244 and Mechanical Properties. Journal of the American Ceramic Society, 2005, 81, 41-48 Freeform fabrication by controlled droplet deposition of powder filled melts. Journal of Materials 60 243 4.3 Science, 2002, 37, 3155-3161 Fracture of metal/ceramic laminates II Transition from single to multiple cracking. Acta Materialia, 242 8.4 60 **1999**, 47, 529-543 Fracture of metal/ceramic laminates II. Crack growth resistance and toughness. Acta Materialia, 8.4 60 **1999**, 47, 545-563

240	Inkjet printing and cell seeding thermoreversible photocurable gel structures. Soft Matter, 2011, 7, 2639	3.6	58
239	Accurate determination of Young® modulus and Poisson® ratio of thin films by a combination of acoustic microscopy and nanoindentation. <i>Thin Solid Films</i> , 2001 , 398-399, 299-305	2.2	58
238	Residual stress and subsurface damage in machined alumina and alumina/silicon carbide nanocomposite ceramics. <i>Acta Materialia</i> , 2001 , 49, 507-517	8.4	56
237	Solution processing of two-dimensional black phosphorus. <i>Chemical Communications</i> , 2017 , 53, 1445-145	5,8 8	55
236	Surface mechanical properties of alumina matrix nanocomposites. <i>Acta Materialia</i> , 1997 , 45, 3963-3973	8.4	54
235	Ink Jet Deposition of Ceramic Suspensions: Modeling and Experiments of Droplet Formation. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 624, 65		54
234	Ink Jet Printing of PZT Aqueous Ceramic Suspensions. <i>Journal of Materials Science Letters</i> , 1999 , 18, 87-9	0	54
233	Formation of coffee stains on porous surfaces. <i>Langmuir</i> , 2012 , 28, 5331-8	4	53
232	Ink-Jet Printing of Zirconia: Coffee Staining and Line Stability. <i>Journal of the American Ceramic Society</i> , 2011 , 94, 3787-3792	3.8	53
231	The strength of gold nanowire forests. <i>Scripta Materialia</i> , 2008 , 59, 151-154	5.6	53
230	Manufacture of biomaterials by a novel printing process. <i>Journal of Materials Science: Materials in Medicine</i> , 2002 , 13, 1163-6	4.5	50
229	Controlling Coffee Ring Formation during Drying of Inkjet Printed 2D Inks. <i>Advanced Materials Interfaces</i> , 2017 , 4, 1700944	4.6	49
228	Influence of gas phase equilibria on the chemical vapor deposition of graphene. ACS Nano, 2013, 7, 3104	1677	49
227	Biomechanical properties of human corneas following low- and high-intensity collagen cross-linking determined with scanning acoustic microscopy 2013 , 54, 5273-80		46
226	Deformation mechanisms in gold nanowires and nanoporous gold. <i>Philosophical Magazine</i> , 2011 , 91, 1070-1083	1.6	46
225	A Microstructural model for primary creep. <i>Acta Metallurgica</i> , 1987 , 35, 1349-1353		46
224	An analysis of thermal residual stresses in Ti-6-4 alloy reinforced with SiC and Al2O3 fibres. <i>Acta Metallurgica Et Materialia</i> , 1994 , 42, 1525-1534		45
223	Inkjet printing ultra-large graphene oxide flakes. 2D Materials, 2017 , 4, 021021	5.9	42

222	Viscosity and Acoustic Behavior of Ceramic Suspensions Optimized for Phase-Change Ink-Jet Printing. <i>Journal of the American Ceramic Society</i> , 2005 , 88, 802-808	3.8	40
221	The role of enhanced matrix dislocation density in strengthening metal matrix composites. <i>Scripta Metallurgica</i> , 1988 , 22, 529-532		40
220	Localised micro-mechanical stiffening in the ageing aorta. <i>Mechanisms of Ageing and Development</i> , 2011 , 132, 459-67	5.6	39
219	Supercapacitor Electrodes from the in Situ Reaction between Two-Dimensional Sheets of Black Phosphorus and Graphene Oxide. <i>ACS Applied Materials & District Materials & District</i>	9.5	38
218	Thermal stress induced microcracking in alumina 20% SiCp composites. <i>Acta Materialia</i> , 2004 , 52, 1621-7	l 6 2.p	38
217	Residual stress distributions around indentations and scratches in polycrystalline Al2O3 and Al2O3/SiC nanocomposites measured using fluorescence probes. <i>Acta Materialia</i> , 2008 , 56, 140-149	8.4	35
216	Combining AFM and acoustic probes to reveal changes in the elastic stiffness tensor of living cells. Biophysical Journal, 2014 , 107, 1502-12	2.9	33
215	High-strength nanoporous silver produced by inkjet printing. Scripta Materialia, 2010, 63, 308-311	5.6	33
214	The formation of TiC/Al2O3 microstructures by a self-propagating high-temperature synthesis reaction. <i>Journal of Materials Science</i> , 1996 , 31, 3791-3803	4.3	33
213	Non-destructive testing and acoustic microscopy of diffusion bonds. <i>Journal of Materials Science</i> , 1983 , 18, 2345-2353	4.3	32
212	Preparation of PZT suspensions for direct ink jet printing. <i>Journal of the European Ceramic Society</i> , 2004 , 24, 1069-1072	6	31
211	Evaluation of the efficiency of TiB2 and TiC as protective coatings for SiC monofilament in titanium-based composites. <i>Journal of Materials Science</i> , 1994 , 29, 3774-3780	4.3	31
210	Diffusion bonds in copper. <i>Journal of Materials Science</i> , 1984 , 19, 3140-3148	4.3	31
209	Wetting of silicon carbide by chromium containing alloys. <i>Acta Materialia</i> , 1998 , 46, 3491-3499	8.4	30
208	Numerical and experimental comparisons of mass transport rate in a piezoelectric drop-on-demand inkjet print head. <i>International Journal of Mechanical Sciences</i> , 2004 , 46, 181-199	5.5	30
207	Photopolymerization of Pluronic F127 diacrylate: a colloid-templated polymerization. <i>Soft Matter</i> , 2011 , 7, 4928	3.6	29
206	Ceramic nanocomposites: mechanical properties. <i>Current Opinion in Solid State and Materials Science</i> , 1998 , 3, 490-495	12	29
205	Comparison of interfaces in Ti composites reinforced with uncoated and TiB2/C-coated SiC fibres. Journal of Microscopy, 1993 , 169, 279-287	1.9	28

204	TEM study of silicon carbide whisker microstructures. <i>Journal of Materials Science</i> , 1991 , 26, 6207-6217	4.3	28
203	Strain rate dependence of failure in 2124 Al/SiC whisker composite. <i>Scripta Metallurgica</i> , 1988 , 22, 601-	606	28
202	Yttrium Silicate Powders Produced by the Sol © el Method, Structural and Thermal Characterization. <i>Journal of the American Ceramic Society</i> , 2003 , 86, 1595-1597	3.8	27
201	Matrix flow and densification during the consolidation of matrix coated fibres. <i>Acta Materialia</i> , 2000 , 48, 1247-1258	8.4	27
200	Influence of specimen thickness on the nanoindentation of hydrogels: measuring the mechanical properties of soft contact lenses. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014 , 35, 144-56	4.1	25
199	Inkjet delivery of glucose oxidase. <i>Chemical Communications</i> , 2010 , 46, 5452-4	5.8	25
198	Effect of TiB2, TiC and TiN protective coatings on tensile strength and fracture behaviour of SiC monofilament fibres. <i>Composites</i> , 1995 , 26, 531-539		24
197	Oscillatory limited compressible fluid flow induced by the radial motion of a thick-walled piezoelectric tube. <i>Journal of the Acoustical Society of America</i> , 2003 , 114, 1314-21	2.2	23
196	Damage assessment in particle-reinforced metal matrix composites using x-ray microtomography. <i>Scripta Metallurgica Et Materialia</i> , 1993 , 29, 1457-1462		23
195	Diffusion bonding of nickel and zirconia: Mechanical properties and interfacial microstructures. Journal of Materials Research, 1992 , 7, 1480-1488	2.5	23
194	Black phosphorus with near-superhydrophobic properties and long-term stability in aqueous media. <i>Chemical Communications</i> , 2018 , 54, 3831-3834	5.8	22
193	The mechanical properties of float glass surfaces measured by nanoindentation and acoustic microscopy. <i>Acta Materialia</i> , 2011 , 59, 1790-1799	8.4	22
192	X-ray microtomographic studies of metal matrix composites using laboratory X-ray sources. <i>Journal of Microscopy</i> , 1995 , 177, 399-406	1.9	22
191	Scanning acoustic microscopy for mapping the microelastic properties of human corneal tissue. <i>Current Eye Research</i> , 2013 , 38, 437-44	2.9	21
190	Gel-cast glass-ceramic tissue scaffolds of controlled architecture produced via stereolithography of moulds. <i>Biofabrication</i> , 2012 , 4, 045002	10.5	21
189	Multi-layer phase analysis: quantifying the elastic properties of soft tissues and live cells with ultra-high-frequency scanning acoustic microscopy. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2012 , 59, 610-20	3.2	21
188	Alumina/Aluminum Composites Formed by the Directed Oxidation of Aluminum Using Magnesia as a Surface Dopant. <i>Journal of the American Ceramic Society</i> , 1994 , 77, 1761-1770	3.8	21
187	Power-laws, and the A?n correlation in creep. <i>Scripta Metallurgica</i> , 1984 , 18, 1079-1084		21

Localized micro- and nano-scale remodelling in the diabetic aorta. Acta Biomaterialia, 2014, 10, 4843-48510.8 186 Rising to the challenge: applying biofabrication approaches for better drug and chemical product 185 10.5 20 development. Biofabrication, 2017, 9, 033001 Creep and Thermal Cycling 1993, 191-214 184 20 Diffusion bonding of a nickel (chromium) alloy to zirconia: Mechanical properties and interface 183 4.3 20 microstructures. Journal of Materials Science, 1993, 28, 4366-4374 Internal stress superplasticity in metal matrix composites. Scripta Metallurgica, 1985, 19, 703-707 182 20 Tetragonal to Cubic Transformation of SiO-Stabilized ZrO Polymorph through Dysprosium 181 5.1 19 Substitutions. Inorganic Chemistry, 2017, 56, 1273-1281 Inkjet printed carbon nanotube networks: the influence of drop spacing and drying on electrical 180 3 19 properties. Journal Physics D: Applied Physics, 2012, 45, 315304 In situ scanning electron microscope studies of fracture in particulate-reinforced metal-matrix 179 19 4.3 composites. Journal of Materials Science, 1994, 29, 5615-5624 Adhesion testing of glass-ceramic thick films on metal substrates. Journal of Materials Science, 1993 178 4.3 19 , 28, 2989-2998 Correlations for single-crystal elastic constants of compound semiconductors and their 18 3.3 177 representation in isomechanical groups. Physical Review B, 2007, 76, Multilayer nitride coatings by closed field unbalanced magnetron sputter ion plating. Surface and 176 4.4 18 Coatings Technology, 2003, 162, 276-287 Finite-difference modelling of self-propagating high-temperature synthesis of materials. Acta 18 175 Metallurgica Et Materialia, **1995**, 43, 3903-3913 Microstructural characterization in diffusion-bonded SiC/TiBAlaV composites. Journal of 18 1.9 Microscopy, 1993, 169, 269-277 Acoustic Emissions During Indentation Tests. Materials Research Society Symposia Proceedings, 1991 18 173 , 239, 361 High throughput cryopreservation of cells by rapid freezing of sub-Odrops using inkjet 172 7.2 17 printing--cryoprinting. Lab on A Chip, 2015, 15, 3503-13 Biomechanical changes after repeated collagen cross-linking on human corneas assessed in vitro 171 17 using scanning acoustic microscopy 2014, 55, 1549-54 Creep behaviour of a SiC particulate reinforced Al-2618 metal matrix composite. Acta Materialia, 170 8.4 17 **1997**, 45, 41-49 Oscillatory Incompressible Fluid Flow in a Tapered Tube With a Free Surface in an Inkjet Print Head. 169 2.1 17 Journal of Fluids Engineering, Transactions of the ASME, 2005, 127, 98-109

168	Characterization of microstructural damage during plastic strain of a particulate-reinforced metal matrix composite at elevated temperature. <i>Journal of Materials Science</i> , 1996 , 31, 297-303	4.3	17	
167	Theoretical model for solid-state consolidation of long-fibre reinforced metal-matrix composites. <i>Acta Metallurgica Et Materialia</i> , 1994 , 42, 461-473		17	
166	Dynamic recrystallization and grain size 1990 , 354-364		17	
165	Manufacture of 3-dimensional objects by reactive inkjet printing. <i>Soft Matter</i> , 2008 , 4, 2513	3.6	16	
164	Alumina/Aluminum Composites Formed by the Directed Oxidation of Aluminum Using Sodium Hydroxide as a Surface Dopant. <i>Journal of the American Ceramic Society</i> , 1994 , 77, 1771-1776	3.8	16	
163	Interface microstructures in Ti-based composites using TiB2/C-coated and uncoated SiCf after short-term thermal exposure. <i>Composites</i> , 1994 , 25, 887-890		16	
162	Interfaces in Ti3Al composites reinforced with sigma SiC fibres. <i>Scripta Metallurgica Et Materialia</i> , 1994 , 30, 89-94		16	
161	Nanoindentation of Molecular Crystals: Lessons Learned from Aspirin. <i>Crystal Growth and Design</i> , 2020 , 20, 5956-5966	3.5	16	
160	Stabilization of a t-ZrO polymorph in a glassy SiO matrix at elevated temperatures accomplished by ceria additions. <i>Dalton Transactions</i> , 2017 , 46, 6884-6893	4.3	15	
159	Peptide hydrogel in vitro non-inflammatory potential. <i>Journal of Peptide Science</i> , 2017 , 23, 148-154	2.1	15	
158	Intermediate Phases in Mullite Synthesis Via Aluminum- and Alumina-Filled Polymethylsiloxane. Journal of the American Ceramic Society, 2005 , 88, 2085-2091	3.8	15	
157	Stiffness of particulate reinforced metal matrix composites with damaged reinforcements. <i>Materials Science and Technology</i> , 1999 , 15, 827-832	1.5	15	
156	The compatibility of TiB2 protective coatings with SiC fibre and Ti-6Al-4V. <i>Journal of Microscopy</i> , 1993 , 169, 289-295	1.9	15	
155	Strain gradients and the strength of nanoporous gold. <i>Journal of Materials Research</i> , 2010 , 25, 746-753	2.5	14	
154	The deformation characteristics of SiC particulate-reinforced aluminium alloy 6061. <i>Materials Science & Microstructure and Processing</i> , 1995 , 197, 11-18	5.3	14	
153	Frequency-modulated atomic force microscopy localises viscoelastic remodelling in the ageing sheep aorta. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016 , 64, 10-7	4.1	14	
152	The effect of focused ion beam machining on residual stress and crack morphologies in alumina. <i>Journal of Physics: Conference Series</i> , 2006 , 26, 219-222	0.3	13	
151	Direct Inkjet Deposition of Ceramic Green Bodies: II - Jet Behaviour and Deposit Formation. Materials Research Society Symposia Proceedings, 1998, 542, 147		13	

150	Palladium-zirconia diffusion bonds: Mechanical properties and interface reactions. <i>Acta Metallurgica Et Materialia</i> , 1992 , 40, 925-938		13
149	The influence of microstructure on internal stress superplasticity in polycrystalline zinc. <i>Scripta Metallurgica Et Materialia</i> , 1991 , 25, 467-472		13
148	Direct 3D printing of graphene using capillary suspensions. <i>Nanoscale</i> , 2020 , 12, 11440-11447	7.7	13
147	Probing Ink-Powder Interactions during 3D Binder Jet Printing Using Time-Resolved X-ray Imaging. <i>ACS Applied Materials & Discrete Mate</i>	9.5	12
146	Freeform Fabrication of Ceramics by Hot-Melt Ink-Jet Printing. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 625, 195		12
145	Fibre uniformity and cavitation during the consolidation of metal-matrix composite via fibre-mat and matrix-foil diffusion bonding. <i>Acta Metallurgica Et Materialia</i> , 1993 , 41, 3257-3266		12
144	Diffusion bonds in iron and a low-alloy steel. <i>Journal of Materials Science</i> , 1984 , 19, 3149-3158	4.3	12
143	Water-based highly conductive graphene inks for fully printed humidity sensors. <i>Journal Physics D: Applied Physics</i> , 2020 , 53, 455304	3	12
142	Measured Anisotropy of Alumina Components Produced by Direct Ink-Jet Printing. <i>Key Engineering Materials</i> , 2004 , 264-268, 693-696	0.4	11
141	The wetting of silicon nitride by chromium-containing alloys. <i>Journal of Materials Science</i> , 1995 , 30, 591	545922	2 11
140	The behaviour of metal matrix composites during temperature cycling. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1991 , 135, 213-216	5.3	11
139	Monotectic microstructure at high growth rates. <i>Scripta Metallurgica</i> , 1984 , 18, 169-172		11
138	Joining methods in space: A theoretical model for diffusion bonding. <i>Acta Astronautica</i> , 1980 , 7, 685-69	98 2.9	11
137	Fabrication of microvascular constructs using high resolution electrohydrodynamic inkjet printing. <i>Biofabrication</i> , 2020 ,	10.5	11
136	A pilot study of scanning acoustic microscopy as a tool for measuring arterial stiffness in aortic biopsies. <i>Artery Research</i> , 2016 , 13, 1-5	2.2	11
135	Continuous Deposition of a Liquid Thread onto a Moving Substrate. Numerical Analysis and Comparison With Experiments. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2012 , 134,	2.1	10
134	Fabrication of a Glucose Biosensor by Piezoelectric Inkjet Printing 2009,		10
133	Mullite formation from the pyrolysis of aluminium-loaded polymethylsiloxanes: The influence of aluminium powder characteristics. <i>Journal of the European Ceramic Society</i> , 2006 , 26, 1107-1119	6	10

132	The effect of temporary hydrogenation on the processing and interface of titanium composites. <i>Composites</i> , 1994 , 25, 881-886		10
131	Chemistry effects on interface microstructure and reaction in titanium-based composites. <i>Composites</i> , 1994 , 25, 630-636		10
130	The size dependent strength of Fe, Nb and V micropillars at room and low temperature. <i>Materialia</i> , 2019 , 7, 100424	3.2	9
129	Interdependence of Resistance and Optical Transmission in Conductive Nanowire Networks. Advanced Theory and Simulations, 2018 , 1, 1700011	3.5	9
128	Processing and microstructural characterisation of RBSiC-TaSi2 composites. <i>Journal of Materials Science</i> , 1998 , 33, 5557-5568	4.3	9
127	A finite element model for consolidation of vacuum plasma spray-formed metal matrix composites. Acta Materialia, 1998 , 46, 4339-4350	3.4	9
126	Mapping the Micromechanical Properties of Cryo-sectioned Aortic Tissue with Scanning Acoustic Microscopy. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1132E, ukpmcpa27262		9
125	Characterisation of void and reinforcement distributions in a metal matrix composite by X-ray edge-contrast microtomography. <i>Scripta Materialia</i> , 2003 , 48, 1259-1264	5 .6	9
124	Temperature gradient and growth velocity effects on the irregular monotectic structure. <i>Journal of Crystal Growth</i> , 1983 , 65, 280-285	1.6	9
123	Texture change in Ni and Cu foils on diffusion bonding to zirconia. <i>Scripta Materialia</i> , 1997 , 36, 1-6	5 .6	8
122	Neutron reflection studies of titanium segregation to metalderamic interfaces. <i>Physica B:</i> Condensed Matter, 1998 , 248, 304-309	2.8	8
121	Duplication and plagiarism increasing among students. <i>Nature</i> , 2008 , 452, 29	50.4	8
120	In Situ Characterization of Interfaces between Liquid Tin Vanadium Alloys and Alumina by Neutron Reflection Spectroscopy. <i>Journal of the American Ceramic Society</i> , 2004 , 87, 279-285	3.8	8
119	Direct Ink-Jet Deposition of Ceramic Green Bodies: I - Formulation of Build Materials. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 542, 141		8
118	Fabrication of reaction-bonded Cr2O3 ceramics. <i>Journal of the European Ceramic Society</i> , 1999 , 19, 1651	1664	8
117	Sintering of Cr2O3 in H2/H2O Gas Mixtures. <i>Journal of the European Ceramic Society</i> , 1999 , 19, 399-405 <i>6</i>	5	8
116	Differential thermal analysis of ignition temperatures in a self-propagating high-temperature synthesis reaction. <i>Journal of Thermal Analysis</i> , 1994 , 42, 713-719		8
115	Microstructure Evolution and Hardness of an Ultra-High Strength Cu-Ni-Si Alloy During Thermo-mechanical Processing. <i>Journal of Materials Engineering and Performance</i> , 2016 , 25, 2615-2625	1.6	8

114	An ex vivo porcine skin model to evaluate pressure-reducing devices of different mechanical properties used for pressure ulcer prevention. <i>Wound Repair and Regeneration</i> , 2016 , 24, 1089-1096	3.6	8
113	Synthetic 2-D lead tin sulfide nanosheets with tuneable optoelectronic properties from a potentially scalable reaction pathway. <i>Chemical Science</i> , 2019 , 10, 1035-1045	9.4	7
112	The characterization of metal/ceramic interfaces using specular neutron reflection. <i>Acta Materialia</i> , 1997 , 45, 273-279	8.4	7
111	Thermal and Residual Stress Modelling of the Selective Laser Sintering Process. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 758, 181		7
110	Uniaxial creep of long fibre reinforced metal matrix composites. <i>Composites Part B: Engineering</i> , 1994 , 4, 1241-1255		7
109	Metal-ceramic interfaces: Sources and sinks for mass transfer. <i>Acta Metallurgica Et Materialia</i> , 1992 , 40, S53-S58		7
108	The formation mechanism of hexagonal MoC defects in CVD graphene grown on liquid copper. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 2176-2180	3.6	7
107	Geometrical constraints on the bending deformation of Penta-twinned silver nanowires. <i>Acta Materialia</i> , 2020 , 185, 110-118	8.4	7
106	The systemic influence of chronic smoking on skin structure and mechanical function. <i>Journal of Pathology</i> , 2020 , 251, 420-428	9.4	6
105	Structural, Mechanical, Imaging and in Vitro Evaluation of the Combined Effect of Gd and Dy in the ZrO-SiO Binary System. <i>Inorganic Chemistry</i> , 2018 , 57, 4602-4612	5.1	6
104	Angiogenesis and tissue formation driven by an arteriovenous loop in the mouse. <i>Scientific Reports</i> , 2019 , 9, 10478	4.9	6
103	Conical tungsten stamps for the replication of pore arrays in anodic aluminium oxide films. <i>Nanotechnology</i> , 2009 , 20, 245304	3.4	6
102	Characterisation of liquid metal/solid ceramic interfaces by neutron reflection. <i>Acta Materialia</i> , 1998 , 46, 2387-2392	8.4	6
101	Microstructure and fracture behaviour of particle-reinforced metalhatrix composites. <i>Journal of Microscopy</i> , 1995 , 177, 357-368	1.9	6
100	Modelling Consolidation of Ti-6Al-4V / SiC Matrix-Coated Fibre Metal Matrix Composites. <i>Key Engineering Materials</i> , 1996 , 127-131, 351-358	0.4	6
99	Diffusion Bonds between a Stainless Steel and Zirconia. <i>Journal of the American Ceramic Society</i> , 1993 , 76, 232-234	3.8	6
98	Biomechanical Changes of Collagen Cross-Linking on Human Keratoconic Corneas Using Scanning Acoustic Microscopy. <i>Current Eye Research</i> , 2016 , 41, 609-15	2.9	5
97	Tiled Monolayer Films of 2D Molybdenum Disulfide Nanoflakes Assembled at Liquid/Liquid Interfaces. <i>ACS Applied Materials & Damp; Interfaces</i> , 2020 , 12, 25125-25134	9.5	5

(1987-2020)

96	Size effects on strength and plasticity of ferrite and austenite pillars in a duplex stainless steel. <i>Materials Science & Discourse and Processing</i> , 2020 , 793, 139883	5.3	5
95	Implication of Free Fatty Acids in Thrombin Generation and Fibrinolysis in Vascular Inflammation in Zucker Rats and Evolution with Aging. <i>Frontiers in Physiology</i> , 2017 , 8, 949	4.6	5
94	Current concepts and advances in the application of tissue engineering in otorhinolaryngology and head and neck surgery. <i>Journal of Laryngology and Otology</i> , 2013 , 127, 114-20	1.8	5
93	High temperature neutron reflection spectroscopy of liquid metal/ceramic interfaces. <i>Physica B: Condensed Matter</i> , 1998 , 248, 316-321	2.8	5
92	Characterisation of Interfaces Between Liquid Tin and Alumina in the Presence of Titanium Alloy Additions. <i>Journal of Materials Science</i> , 2004 , 12, 29-37		5
91	Rapid Prototyping of Ceramic Casting Cores for Investment Casting. <i>Key Engineering Materials</i> , 2001 , 206-213, 297-300	0.4	5
90	Residual Stress Determination and Subsurface Microstructure in Ground and Polished Alumina/Silicon Carbide Nanocomposites and Monolithic Alumina Ceramics. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 581, 303		5
89	Analysis of neutron diffraction peak broadening caused by internal stresses in composite materials. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1995, 354, 139-144	1.2	5
88	Development of a micro-droplet technique for wettability studies: Application to the Al-Si/SiC system. <i>Scripta Metallurgica Et Materialia</i> , 1995 , 33, 837-842		5
87	Damage Nucleation and Growth in Particle Reinforced Aluminium Matrix Composites. <i>Key Engineering Materials</i> , 1996 , 127-131, 945-952	0.4	5
86	Fracture Behavior 1993 , 251-268		5
85	Analysis of interfacial defects in solid-state consolidated composites. <i>Composites</i> , 1994 , 25, 563-569		5
84	Acoustic Poration and Dynamic Healing of Mammalian Cell Membranes during Inkjet Printing. <i>ACS Biomaterials Science and Engineering</i> , 2020 , 6, 749-757	5.5	5
83	Isomechanical Groups in Molecular Crystals and Role of Aromatic Interactions. <i>Crystal Growth and Design</i> , 2020 , 20, 7516-7525	3.5	5
82	Fluid/Fiber Interactions and the Conductivity of Inkjet Printed Ag on Textile Substrates. <i>ACS Applied Materials & Acs Acs Acc Applied Materials & Acc Acc Applied Materials & Acc Acc Acc Acc Acc Acc Acc Acc Acc A</i>	9.5	5
81	Fatigue and the electrical resistance of silver nanowire networks. <i>Scripta Materialia</i> , 2020 , 181, 97-100	5.6	5
80	Stability of Lines with Zero Receding Contact Angle Produced by Inkjet Printing at Small Drop Volume. <i>Langmuir</i> , 2021 , 37, 26-34	4	5
79	The Influence of Surface Roughness on Interface Formation in Metal/Ceramic Diffusion Bonds 1987 , 319-328		5

78	The Effect of Type 1 Diabetes on the Structure and Function of Fibrillin Microfibrils. <i>Materials Research Society Symposia Proceedings</i> , 2010 , 1274, 1		4
77	Inkjet Printing of Catalyst-Inks on Si Wafers and the Subsequent Synthesis of Carbon Nanotubes by Chemical Vapour Deposition. <i>Key Engineering Materials</i> , 2010 , 442, 7-14	0.4	4
76	Inkjet Printing Glucose Oxidase for Biosensor Applications. ECS Transactions, 2009, 16, 15-20	1	4
75	Quantifying Micro-mechanical Properties of Soft Biological Tissues with Scanning Acoustic Microscopy. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1301, 181		4
74	Pyrolysis of aluminium loaded polymethylsiloxanes: the influence of Al/PMS ratio on mullite formation. <i>Journal of Materials Science</i> , 2010 , 45, 233-241	4.3	4
73	Grain growth and texture changes in a Ni foil during diffusion bonding to ZrO2. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1997 , 76, 289-30	5	4
72	Acoustic emission from a SiC reinforced Al-2618 metal matrix composite during straining. <i>Scripta Materialia</i> , 1997 , 37, 1045-1052	5.6	4
71	Stabilisation of TiBx-Coated SiC Fibres by Nitridation. <i>Scripta Materialia</i> , 1998 , 38, 1629-1634	5.6	4
70	Modelling of R-curve behaviour in ceramic thetal laminates. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing,</i> 2004 , 365, 196-201	5.3	4
69	High-temperature neutron reflectometry of liquid metal-ceramic interfaces. <i>Journal Physics D:</i> Applied Physics, 1999 , 32, 2319-2326	3	4
68	Characterization of glass-ceramic to metal bonds. <i>Journal of Materials Science</i> , 1994 , 29, 4436-4446	4.3	4
67	Impact of polymorphism on mechanical properties of molecular crystals: a study of p-amino and p-nitro benzoic acid with nanoindentation. <i>CrystEngComm</i> , 2021 , 23, 2027-2033	3.3	4
66	Chemical vapour deposition of graphene on copper-nickel alloys: the simulation of a thermodynamic and kinetic approach. <i>Nanoscale</i> , 2020 , 12, 15283-15294	7.7	3
65	Materials opportunities in layered manufacturing technology. <i>Journal of Materials Science</i> , 2002 , 37, 3091-3092	4.3	3
64	Diffusion bonded Mokum[Gane decorative metal laminates. <i>Materials Science and Technology</i> , 1998 , 14, 510-517	1.5	3
63	Crack Healing in an Alumina/Silicon Carbide Nanocomposite After Grinding and Annealing. Materials Research Society Symposia Proceedings, 1999 , 581, 327		3
62	Liquid phase bonding of siliconized silicon carbide. <i>Journal of Materials Science</i> , 1995 , 30, 6119-6135	4.3	3
61	In Situ Measurement of the Elastic Moduli of Glass-Ceramic Thick Films. <i>Journal of the American Ceramic Society</i> , 1992 , 75, 1284-1286	3.8	3

60	Al2O3/Al composites formed by the directed oxidation of an Al?Mg?Zn alloy. <i>Journal of the European Ceramic Society</i> , 1993 , 12, 185-195	6	3
59	Interfaces in Metal/Ceramic Diffusion Bonds 1991 , 224-231		3
58	Atmospheric Pressure Catalytic Vapor Deposition of Graphene on Liquid Sn and Cu-Sn Alloy Substrates. <i>Nanomaterials</i> , 2020 , 10,	5.4	2
57	Nanoindentation of Histological Specimens using an Extension of the Oliver and Pharr Method. <i>Materials Research Society Symposia Proceedings</i> , 2008 , 1097, 1		2
56	Ink Jet printing of mammalian primary cells for tissue engineering applications. <i>Materials Research Society Symposia Proceedings</i> , 2004 , 845, 71		2
55	A Process to Make Collagen Scaffolds with an Artificial Circulatory System using Rapid Prototyping. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 758, 531		2
54	Mechanical properties of pressureless sintered alumina containing alumina platelets. <i>Advances in Applied Ceramics</i> , 1999 , 98, 72-76		2
53	The CVD of Ceramic Protective Coatings on SiC Monofilaments for Use in Titanium Based Composites. <i>Materials and Manufacturing Processes</i> , 1994 , 9, 885-900	4.1	2
52	Nanomechanical Response of Materials and Thin Film Systems: Finite Element Simulation. <i>Materials Research Society Symposia Proceedings</i> , 1994 , 356, 681		2
51	The CVD of Ceramic Protective Coatings on SiC Monofilaments. <i>Materials Research Society Symposia Proceedings</i> , 1991 , 250, 257		2
50	Iosipescu in-plane shear tests of SiC-Pyrex composites. <i>Journal of Materials Science Letters</i> , 1990 , 9, 63-	66	2
49	Piezoelectric Inkjet Printing of Cells and Biomaterials 2010 , 35-50		2
48	THE INFLUENCE OF MAGNESIUM SEGREGATION ON THE FRACTURE OF SILICON CARBIDE PARTICLE-REINFORCED ALUMINIUM METAL MATRIX COMPOSITES 1991 , 175-178		2
47	Microstructure and fracture behaviour of SiCp/Al-2618 metal matrix composite. <i>European Physical Journal Special Topics</i> , 1993 , 03, C7-1861-C7-1866		2
46	Introduction: Aging and the Mechanical Properties of Tissues. <i>Engineering Materials and Processes</i> , 2015 , 1-6		2
45	Patterned, morphing composites via maskless photo-click lithography. <i>Soft Matter</i> , 2020 , 16, 1270-1278	3.6	2
44	Probing anisotropic mechanical behaviour in carbamazepine form III. CrystEngComm, 2021, 23, 5826-58	 3 § .3	2
43	Brittle Behavior in Aspirin Crystals: Evidence of Spalling Fracture. <i>Crystal Growth and Design</i> , 2021 , 21, 1786-1790	3.5	2

42	Aberrant Differentiation of Human Pluripotent Stem Cell-Derived Kidney Precursor Cells inside Mouse Vascularized Bioreactors. <i>Nephron</i> , 2020 , 144, 509-524	3.3	1
41	Inkjet Printing Graphene-Based Transparent Conductive Films. <i>Materials Research Society Symposia Proceedings</i> , 2014 , 1699, 36		1
40	Inkjet printing of Enzymes for Glucose Biosensors. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1191, 86		1
39	Diversity of funding sources and topics is key to survival. <i>Nature</i> , 2009 , 458, 281	50.4	1
38	Universal Scaled Strength Behaviour for Micropillars and Nanoporous Materials. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1185, 79		1
37	The Growth and Mechanical Properties of Gold Nanowires. <i>Materials Research Society Symposia Proceedings</i> , 2008 , 1086, 1		1
36	The Strength of Gold Nanowires and Nanoporous Gold. <i>Materials Research Society Symposia Proceedings</i> , 2008 , 1144, 1		1
35	Droplet Behaviour in Inkjet Printing. Materials Research Society Symposia Proceedings, 2004, 860, 13		1
34	Development of PZT Suspensions for Ceramic Ink-Jet Printing. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 758, 371		1
33	Direct Ink Jet Printing of Alumina Components. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 698, 441		1
32	Model for consolidation of Ti-6AI-4V/SiC fibre composite from plasma sprayed monotape. <i>Materials Science and Technology</i> , 1998 , 14, 933-938	1.5	1
31	The Mechanism of Internal Stress Superplasticity. <i>Materials Research Society Symposia Proceedings</i> , 1990 , 196, 115		1
30	Advanced alloys and metal/ceramic composites from lunar source materials. <i>Acta Astronautica</i> , 1982 , 9, 593-595	2.9	1
29	Estrogen mediates acute elastic fibre homeostasis in skin		1
28	Model for consolidation of Ti-6AI-4V/SiC fibre composite from plasma sprayed monotape. <i>Materials Science and Technology</i> , 1998 , 14, 933-938	1.5	1
27	High-Power Energy Storage from Carbon Electrodes Using Highly Acidic Electrolytes. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 20701-20711	3.8	1
26	Integrating Cell Sheets for Organ-on-a-chip Applications. <i>Procedia CIRP</i> , 2017 , 65, 127-130	1.8	0
25	Hot-Isostatic-Press Joining of Cemented Carbides. <i>Journal of the American Ceramic Society</i> , 2004 , 82, 3616-3618	3.8	O

24	Atmospheric Pressure Catalytic Vapor Deposition of Graphene on Liquid In and Cu-In Alloy Substrates. <i>Catalysts</i> , 2021 , 11, 1318	4	0
23	Influence of twin boundaries and sample dimensions on the mechanical behavior of Ag nanowires. <i>Materials Science & amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022 , 829, 142150	5.3	O
22	Chemical Vapor Deposition of Graphene on Cu-Ni Alloys: The Impact of Carbon Solubility. <i>Coatings</i> , 2021 , 11, 892	2.9	0
21	Scanning acoustic microscopy of biological cryosections: the effect of local thickness on apparent acoustic wave speed. <i>Materials Research Society Symposia Proceedings</i> , 2014 , 1621, 143-148		
20	Low Curing Temperature Silver Tracks from Soluble Inks. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1192, 21		
19	Novel Gelation System For Fabricating 3-D Structures via Ink Jet Printing. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1239, 1		
18	The Micromechanisms of Deformation in Nanoporous Gold. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1224, 1		
17	Ink-Jet Printing of Wax-Based PZT Suspensions. <i>Key Engineering Materials</i> , 2004 , 264-268, 697-700	0.4	
16	Perspectives on the European Patent System. <i>Journal of World Intellectual Property</i> , 2005 , 1, 949-962	0.7	
15	Characterisation of Collagen Scaffolds using X-ray Microtomography. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 758, 521		
14	The Internet Microscope. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 632, 1		
13	Analysis of Drop-On-Demand Ink Jet Print Head for Rapid Prototyping. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 698, 451		
12	Accurate Determination of the Elastic properties of Near Surface Regions and Thin Films Using Nanoindentation and Acoustic Microscopy. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 695, 1		
11	Faceted Voids and Grain Orientation at Solid State Diffusion Bonded Interfaces between Cu and Single Crystal Cubic ZrO2. <i>Materials Science Forum</i> , 1996 , 207-209, 253-256	0.4	
10	In Situ HREM Observation of the Oxidation of Nickel Thin Foils. <i>Materials Research Society Symposia Proceedings</i> , 1994 , 357, 225		
9	Compressive Stresses, Buckling And Spalling Of Tungsten Lpd Films. <i>Materials Research Society Symposia Proceedings</i> , 1990 , 188, 251		
8	Comments on: A rational method for calculating mechanism maps. <i>Scripta Metallurgica</i> , 1985 , 19, 1013	-1014	
7	THE FORMATION OF METAL/CERAMIC INTERFACES BY DIFFUSION BONDING 1990 , 161-167		

- 6 Characterization of Alumina/Silicon Carbide Ceramic Nanocomposites 1998, 551-558
- 5 When the Drop Hits the Substrate113-139
- 4 Bioprinting, Inkjet Deposition1
- Combined Nanoindentation and Acoustic Determination of the Elastic Properties of Float Glass

 Surface. Ceramic Transactions, 93-105

0.1

- Twist boundary defects in penta-twinned silver nanowires. *Microscopy and Microanalysis*, **2021**, 27, 2928-2930
- Ductile Deformation in Alumind/Silicon Carbide Nanocomposites. *Ceramic Engineering and Science Proceedings*,155-164

0.1