Russell Goodall

List of Publications by Year
in descending order

45 papers	1,481 citations	394421 19 h-index	315739 38 g-index
47 all docs	47 docs citations	47 times ranked	1812 citing authors

#	Article	IF	Citations
1	The corrosion behaviour of CoCrFeNi-x (xâ€¯=â€¯Cu, Al, Sn) high entropy alloy systems in chloride solution. Corrosion Science, 2020, 172, 108740.	6.6	127
2	On the reinforcement of cement mortars through 3D printed polymeric and metallic fibers. Composites Part B: Engineering, 2016, 90, 76-85.	12.0	123
3	Fabrication and Mechanical Characterisation of Titanium Lattices with Graded Porosity. Metals, 2014, 4, 401-409.	2.3	121
4	The effect of defects on the mechanical response of Ti-6Al-4V cubic lattice structures fabricated by electron beam melting. Acta Materialia, 2016, 108, 279-292.	7.9	108
5	Selective laser melting processed Ti6Al4V lattices with graded porosities for dental applications. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 90, 20-29.	3.1	96
6	Brazing filler metals. International Materials Reviews, 2020, 65, 257-285.	19.3	83
7	The effect of density and feature size on mechanical properties of isostructural metallic foams produced by additive manufacturing. Acta Materialia, 2015, 85, 387-395.	7.9	80
8	Structure of some CoCrFeNi and CoCrFeNiPd multicomponent HEA alloys by diffraction techniques. Journal of Alloys and Compounds, 2016, 681, 330-341.	5.5	74
9	Porous Titanium for Dental Implant Applications. Metals, 2015, 5, 1902-1920.	2.3	72
10	The Effect of Electronic Structure on the Phases Present in High Entropy Alloys. Scientific Reports, 2017, 7, 39803.	3.3	54
11	Processing of Magnesium Porous Structures by Infiltration Casting for Biomedical Applications. Advanced Engineering Materials, 2014, 16, 241-247.	3.5	45
12	Improving flexural strength and toughness of geopolymer mortars through additively manufactured metallic rebars. Composites Part B: Engineering, 2018, 145, 155-161.	12.0	38
13	Microstructure and mechanical properties of Cu joints soldered with a Sn-based composite solder, reinforced by metal foam. Journal of Alloys and Compounds, 2020, 845, 156240.	5.5	36
14	Design, microstructure and mechanical characterization of Ti6Al4V reinforcing elements for cement composites with fractal architecture. Materials and Design, 2019, 172, 107758.	7.0	32
15	The effect of oxygen pickup during selective laser melting on the microstructure and mechanical properties of Tiâ€“6Alâ€“4V lattices. Heliyon, 2019, 5, e02813.	3.2	32
16	Combined Atom Probe Tomography and TEM Investigations of CoCrFeNi, CoCrFeNi-Pd_x(x=0.5, 1.0, 1.5) and CoCrFeNi-Sn. Acta Physica Polonica A, 2015, 128, 557-561.	0.5	28
17	Prediction and validation of quaternary high entropy alloys using statistical approaches. Materials Science and Technology, 2015, 31, 1201-1206.	1.6	27
18	Metal Foams with Graded Pore Size for Heat Transfer Applications. Advanced Engineering Materials, 2013, 15, 123-128.	3.5	24

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19	Carbon uptake and distribution in Spark Plasma Sintering (SPS) processed Sm(Co, Fe, Cu, Zr) z. Materials Letters, 2016, 171, 14-17.	2.6	20
20	High Entropy Alloys as Filler Metals for Joining. Entropy, 2021, 23, 78.	2.2	19
21	Crystalline Structures of Some High Entropy Alloys Obtained by Neutron and X-Ray Diffraction. Acta Physica Polonica A, 2015, 128, 552-557.	0.5	19
22	Open pore titanium foams via metal injection molding of metal powder with a space holder. Metal Powder Report, 2016, 71, 450-455.	0.1	18
23	Diffusion reaction-induced microstructure and strength evolution of Cu joints bonded with Sn-based solder containing Ni-foam. Materials Letters, 2020, 281, 128642.	2.6	18
24	Metal foam regenerators; heat transfer and storage in porous metals. Journal of Materials Research, 2013, 28, 2474-2482.	2.6	15
25	Open Celled Porous Titanium. Advanced Engineering Materials, 2017, 19, 1600664.	3.5	15
26	X-ray Tomography Characterisation of Lattice Structures Processed by Selective Electron Beam Melting. Metals, 2017, 7, 300.	2.3	15
27	Control of Ni-Ti phase structure, solid-state transformation temperatures and enthalpies via control of L-PBF process parameters. Materials and Design, 2022, 218, 110715.	7.0	15
28	Development of a Novel Ni-Based Multi-principal Element Alloy Filler Metal, Using an Alternative Melting Point Depressant. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 2534-2548.	2.2	14
29	Data of the maximum solid solubility limits of binary systems of elements. Data in Brief, 2019, 26, 104515.	1.0	13
30	Casting Protocols for the Production of Open Cell Aluminum Foams by the Replication Technique and the Effect on Porosity. Journal of Visualized Experiments, 2014, , .	0.3	12
31	A new high entropy alloy brazing filler metal design for joining skutterudite thermoelectrics to copper. Journal of Alloys and Compounds, 2021, 858, 157750.	5.5	12
32	Incorporation of HA into porous titanium to form Ti-HA biocomposite foams. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 96, 193-203.	3.1	11
33	Improved Tribocorrosion Resistance by Addition of Sn to CrFeCoNi High Entropy Alloy. Metals, 2021, 11, 13.	2.3	11
34	Microporous Titanium through Metal Injection Moulding of Coarse Powder and Surface Modification by Plasma Oxidation. Applied Sciences (Switzerland), 2017, 7, 105.	2.5	10
35	Material and magnetic properties of Sm2(Co, Fe, Cu, Zr)17 permanent magnets processed by Spark Plasma Sintering. Journal of Alloys and Compounds, 2019, 770, 765-770.	5.5	8
36	Microstructure transformation and mechanical properties of Al alloy joints soldered with Ni-Cu foam/Sn-3.0Ag-0.5Cu (SAC305) composite solder. Journal of Alloys and Compounds, 2022, 922, 166135.	5.5	8

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37	Production and Digital Image Correlation Analysis of Titanium Foams with Different Pore Morphologies as a Bone-Substitute Material. Advances in Materials Science and Engineering, 2019, 2019, 1-14.	1.8	7
38	Structural dependency of some multiple principal component alloys with the Thomas-Fermi-Dirac electron density. Scripta Materialia, 2018, 146, 95-99.	5.2	4
39	Dilatational strain biplots against enthalpy of mixing for predicting high-entropy alloys and complex concentrated alloys phase stability. Materials Chemistry and Physics, 2021, 262, 124241.	4.0	3
40	Electron spin mediated distortion in metallic systems. Scripta Materialia, 2020, 185, 159-164.	5.2	3
41	In-Situ Alloying of CoCrFeNiX High Entropy Alloys by Selective Laser Melting. Metals, 2022, 12, 456.	2.3	3
42	Refining As-Cast Structures of Novel SixTiVCrZr High-Entropy Alloys Using Estimated Effective Solidification Temperature Obtained Using Chvorinovâ€™s Rule. Metals, 2020, 10, 317.	2.3	2
43	Successful prediction of the elastic properties of multiphase high entropy alloys in the AlTiVCr-Si system through a novel computational approach. Materialia, 2022, 21, 101365.	2.7	1
44	Theoretical critical metastability temperature to interpret phase formation in a lamellar-like-structured high entropy alloy. Journal of Materials Research and Technology, 2022, 18, 2519-2530.	5.8	1
45	Pairwise dilatational strain as a parametric model describing potential secondary phase formation and high-angle grain misorientation in as-cast high-entropy alloys. Intermetallics, 2022, 144, 107462.	3.9	0