

# Samuel A Mcdonald

## List of Publications by Year in descending order

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24  
papers

723  
citations

623734

14  
h-index

713466

21  
g-index

24  
all docs

24  
docs citations

24  
times ranked

1000  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tracking polycrystal evolution non-destructively in 3D by laboratory X-ray diffraction contrast tomography. <i>Materials Characterization</i> , 2021, 172, 110814.	4.4	16
2	Crystallographic tomography and molecular modelling of structured organic polycrystalline powders. <i>CrystEngComm</i> , 2021, 23, 2520-2531.	2.6	8
3	Tracking capsule activation and crack healing in a microcapsule-based self-healing polymer. <i>Scientific Reports</i> , 2019, 9, 17773.	3.3	22
4	Time-dependent in situ measurement of atmospheric corrosion rates of duplex stainless steel wires. <i>Npj Materials Degradation</i> , 2018, 2, .	5.8	34
5	Three-Dimensional In Situ XCT Characterisation and FE Modelling of Cracking in Concrete. <i>Complexity</i> , 2018, 2018, 1-11.	1.6	8
6	Microstructural evolution during sintering of copper particles studied by laboratory diffraction contrast tomography (LabDCT). <i>Scientific Reports</i> , 2017, 7, 5251.	3.3	58
7	A study of the progression of damage in an axially loaded Branta leucopsis femur using X-ray computed tomography and digital image correlation. <i>PeerJ</i> , 2017, 5, e3416.	2.0	2
8	Repeated crack healing in MAX-phase ceramics revealed by 4D in situ synchrotron X-ray tomographic microscopy. <i>Scientific Reports</i> , 2016, 6, 23040.	3.3	80
9	Application of a Quasi In Situ Experimental Approach to Estimate 3-D Pitting Corrosion Kinetics in Stainless Steel. <i>Journal of the Electrochemical Society</i> , 2016, 163, C745-C751.	2.9	23
10	Non-destructive mapping of grain orientations in 3D by laboratory X-ray microscopy. <i>Scientific Reports</i> , 2015, 5, 14665.	3.3	114
11	The production and characterization of topologically and mechanically gradient open-cell thermoplastic foams. <i>Smart Materials and Structures</i> , 2014, 23, 055016.	3.5	14
12	Combining X-ray microtomography and three-dimensional digital volume correlation to track microstructure evolution during sintering of copper powder. <i>Journal of Strain Analysis for Engineering Design</i> , 2014, 49, 257-269.	1.8	15
13	Correlative Tomography. <i>Scientific Reports</i> , 2014, 4, 4711.	3.3	124
14	In Situ Investigation and Image-Based Modelling of Aluminium Foam Compression Using Micro X-Ray Computed Tomography. <i>Augmented Vision and Reality</i> , 2014, , 189-197.	0.2	2
15	Piezomorphic Materials. <i>Macromolecular Materials and Engineering</i> , 2013, 298, 318-327.	3.6	27
16	Comparison of the Mechanical Behaviour of Standard and Auxetic Foams by X-ray Computed Tomography and Digital Volume Correlation. <i>Strain</i> , 2013, 49, 467-482.	2.4	41
17	Spallation response of Ti-6Al-4V: Rear surface velocimetry and X-ray tomography. <i>AIP Conference Proceedings</i> , 2012, , .	0.4	4
18	In-situ X-ray microtomography study of the movement of a granular material within a die. <i>International Journal of Materials Research</i> , 2012, 103, 162-169.	0.3	13

#	ARTICLE	IF	CITATIONS
19	<i>In situ</i> 3D X-ray microtomography study comparing auxetic and non-auxetic polymeric foams under tension. <i>Physica Status Solidi (B): Basic Research</i> , 2011, 248, 45-51.	1.5	53
20	Back Cover: <i>In situ</i> 3D X-ray microtomography study comparing auxetic and non-auxetic polymeric foams under tension ( <i>Phys. Status Solidi B</i> 1/2011). <i>Physica Status Solidi (B): Basic Research</i> , 2011, 248, .	1.5	0
21	SHOCK LOADING AND TAYLOR IMPACT OF Ti-6Al-4V. , 2008, , .		0
22	Characterization of the three-dimensional structure of a metallic foam during compressive deformation. <i>Journal of Microscopy</i> , 2006, 223, 150-158.	1.8	31
23	X-ray tomographic imaging of Ti/SiC composites. <i>Journal of Microscopy</i> , 2003, 209, 102-112.	1.8	34
24	Characterisation of Collagen Scaffolds using X-ray Microtomography. <i>Materials Research Society Symposia Proceedings</i> , 2002, 758, 521.	0.1	0