Phil Withers

List of Publications by Year
in descending order

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712	32,841	6250 80	9334 143
papers	citations	h-index	g-index

739	739	739	19738
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	In situ X-ray imaging of fatigue crack growth from multiple defects in additively manufactured AlSi10Mg alloy. International Journal of Fatigue, 2022, 155, 106616.	2.8	42
2	Damage Evaluation in 3D Woven Composites with Warp-way and Weft-way Binders. , 2022, , .		0
3	Improved thermal conductivity of graphite though infiltration with SiC and Si3N4 inclusions. Journal of the European Ceramic Society, 2022, 42, 1877-1883.	2.8	4
4	Tailoring the Microstructure of Lamellar Ti₃C₂T_x MXene Aerogel by Compressive Straining. ACS Nano, 2022, 16, 1896-1908.	7.3	10
5	The potency of defects on fatigue of additively manufactured metals. International Journal of Mechanical Sciences, 2022, 221, 107185.	3.6	72
6	4D imaging of void nucleation, growth, and coalescence from large and small inclusions in steel under tensile deformation. Journal of Materials Science and Technology, 2022, 123, 168-176.	5.6	25
7	Recovering the second moment of the strain distribution from neutron Bragg edge data. Applied Physics Letters, 2022, 120, 164102.	1.5	1
8	Characterisation of the crack tip plastic zone in fatigue via synchrotron Xâ€ray diffraction. Fatigue and Fracture of Engineering Materials and Structures, 2022, 45, 2086-2098.	1.7	3
9	Friction stir welding/processing of metals and alloys: A comprehensive review on microstructural evolution. Progress in Materials Science, 2021, 117, 100752.	16.0	436
10	Comparing Xe⁺pFIB and Ga⁺FIB for TEM sample preparation of Al alloys: Minimising FIBâ€induced artefacts. Journal of Microscopy, 2021, 282, 101-112.	0.8	29
11	Tracking polycrystal evolution non-destructively in 3D by laboratory X-ray diffraction contrast tomography. Materials Characterization, 2021, 172, 110814.	1.9	16
12	Realization of 3D epoxy resin/Ti₃C₂T _x MXene aerogel composites for low-voltage electrothermal heating. 2D Materials, 2021, 8, 025022.	2.0	17
13	Crystallographic tomography and molecular modelling of structured organic polycrystalline powders. CrystEngComm, 2021, 23, 2520-2531.	1.3	8
14	X-ray computed tomography. Nature Reviews Methods Primers, 2021, 1, .	11.8	305
15	A machine-learning fatigue life prediction approach of additively manufactured metals. Engineering Fracture Mechanics, 2021, 242, 107508.	2.0	149
16	Macro-, meso- and microstructural characterization of metallic lattice structures manufactured by additive manufacturing assisted investment casting. Scientific Reports, 2021, 11, 4974.	1.6	17
17	Corrosion fatigue lifetime assessment of high-speed railway axle EA4T steel with artificial scratch. Engineering Fracture Mechanics, 2021, 245, 107588.	2.0	86
18	Size segregation of irregular granular materials captured by time-resolved 3D imaging. Scientific Reports, 2021, 11, 8352.	1.6	12

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19	Generation of high-fidelity random fields from micro CT images and phase field-based mesoscale fracture modelling of concrete. Engineering Fracture Mechanics, 2021, 249, 107762.	2.0	21
20	Crystalline phase discriminating neutron tomography using advanced reconstruction methods. Journal Physics D: Applied Physics, 2021, 54, 325502.	1.3	10
21	Depth-profiling of residual stress and microstructure for austenitic stainless steel surface treated by cavitation, shot and laser peening. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 813, 141037.	2.6	36
22	Compaction, nesting and image based permeability analysis of multi-layer dry preforms by computed tomography (CT). Composite Structures, 2021, 263, 113676.	3.1	10
23	Assessing the efficacy of tomographic reconstruction methods through physical quantification techniques. Measurement Science and Technology, 2021, 32, 075404.	1.4	5
24	In-situ synchrotron X-ray tomography investigation of damage mechanism of an extruded magnesium alloy in uniaxial low-cycle fatigue with ratchetting. Acta Materialia, 2021, 211, 116881.	3.8	40
25	Correction of artefacts associated with large area EBSD. Ultramicroscopy, 2021, 226, 113315.	0.8	15
26	Core Imaging Library - Part I: a versatile Python framework for tomographic imaging. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200192.	1.6	29
27	Nanoscale orientation mapping made easy: a new sample preparation workflow for rapid, large-area TKD analysis. Microscopy and Microanalysis, 2021, 27, 1596-1598.	0.2	2
28	Core Imaging Library - Part II: multichannel reconstruction for dynamic and spectral tomography. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200193.	1.6	22
29	Fine equiaxed zone induced softening and failure behavior of 7050 aluminum alloy hybrid laser welds. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 821, 141597.	2.6	15
30	Unlocking secrets of inhalation blends through X-ray Computed Tomography and Microscopy. Microscopy and Microanalysis, 2021, 27, 292-295.	0.2	1
31	Correlative Tomography - Bridging the length-scales through correlative X-ray and Electron Imaging. Microscopy and Microanalysis, 2021, 27, 932-933.	0.2	2
32	Damage accumulation during high temperature fatigue of Ti/SiCf metal matrix composites under different stress amplitudes. Acta Materialia, 2021, 213, 116976.	3.8	7
33	A three-dimensional mechanistic study of the drivers of classical twin nucleation and variant selection in Mg alloys: A mesoscale modelling and experimental study. International Journal of Plasticity, 2021, 143, 103027.	4.1	26
34	Complementary time-lapse datasets of x-ray computed tomography and real-time strain mapping for an ex-situ study of non-crimp glass fibre composites under fatigue loading. Data in Brief, 2021, 37, 107157.	0.5	0
35	Morphological variability in the mucosal attachment site of Trichuris muris revealed by X-ray microcomputed tomography. International Journal for Parasitology, 2021, 51, 797-807.	1.3	3
36	Evolution of fibre deflection leading to kink-band formation in unidirectional glass fibre/epoxy composite under axial compression. Composites Science and Technology, 2021, 213, 108929.	3.8	22

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37	Exploiting Confinement to Study the Crystallization Pathway of Calcium Sulfate. Advanced Functional Materials, 2021, 31, 2107312.	7.8	11
38	Hot dwell-fatigue behaviour of additively manufactured AlSi10Mg alloy: Relaxation, cyclic softening and fracture mechanisms. International Journal of Fatigue, 2021, 151, 106408.	2.8	19
39	The effect of defect population on the anisotropic fatigue resistance of AlSi10Mg alloy fabricated by laser powder bed fusion. International Journal of Fatigue, 2021, 151, 106317.	2.8	144
40	X-ray computed tomographic and focused ion beam/electron microscopic investigation of coating defects in niobium-coated copper superconducting radio-frequency cavities. Materials Chemistry and Physics, 2021, 273, 125062.	2.0	3
41	Enhanced hyperspectral tomography for bioimaging by spatiospectral reconstruction. Scientific Reports, 2021, 11, 20818.	1.6	10
42	Tracking the calcium-magnesium-alumino-silicate (CMAS) infiltration into an air-plasma spray thermal barrier coating using X-ray imaging. Scripta Materialia, 2020, 176, 94-98.	2.6	20
43	The effect of anisotropic microstructure on the crack growth and fatigue overload behaviour of ultrafine-grained nickel. Acta Materialia, 2020, 184, 225-240.	3.8	13
44	Damage evolution in braided composite tubes under torsion studied by in-situ X-ray computed tomography. Composites Science and Technology, 2020, 188, 107976.	3.8	44
45	Redistribution of carbon caused by butterfly defects in bearing steels. Acta Materialia, 2020, 183, 390-397.	3.8	21
46	MXene Tunable Lamellae Architectures for Supercapacitor Electrodes. ACS Applied Energy Materials, 2020, 3, 411-422.	2.5	46
47	Following the effect of braid architecture on performance and damage of carbon fibre/epoxy composite tubes during torsional straining. Composites Science and Technology, 2020, 200, 108451.	3.8	17
48	Post-fatigue Investigation of SLM Ti64 Scaffolds by 3D Correlative Tomography. Microscopy and Microanalysis, 2020, 26, 424-425.	0.2	0
49	Observing the evolution of fatigue damage and associated strain fields in a correlative, multiscale 3D time-lapse study of quasi-unidirectional glass fibre composites. IOP Conference Series: Materials Science and Engineering, 2020, 942, 012039.	0.3	1
50	An in-situ method for protecting internal cracks/pores from ion beam damage and reducing curtaining for TEM sample preparation using FIB. Ultramicroscopy, 2020, 219, 113135.	0.8	13
51	Measuring the Particle Packing of <scp>l</scp>-Glutamic Acid Crystals through X-ray Computed Tomography for Understanding Powder Flow and Consolidation Behavior. Crystal Growth and Design, 2020, 20, 4252-4263.	1.4	16
52	A new approach to correlate the defect population with the fatigue life of selective laser melted Ti-6Al-4V alloy. International Journal of Fatigue, 2020, 136, 105584.	2.8	133
53	Defect evolution during high temperature tension-tension fatigue of SLM AlSi10Mg alloy by synchrotron tomography. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 792, 139809.	2.6	62
54	Environmentally induced crack (EIC) initiation, propagation, and failure: A 3D in-situ time-lapse study of AA5083 H131. Corrosion Science, 2020, 174, 108834.	3.0	13

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55	X-ray Micro-Computed Tomography: An Emerging Technology to Analyze Vascular Calcification in Animal Models. International Journal of Molecular Sciences, 2020, 21, 4538.	1.8	12
56	Role of SiC and Si3N4 reinforcing particles in the tribological performance of graphite-based composites. Wear, 2020, 456-457, 203399.	1.5	4
57	X-ray computed tomography in life sciences. BMC Biology, 2020, 18, 21.	1.7	95
58	A conformable high temperature nitride coating for Ti alloys. Acta Materialia, 2020, 189, 274-283.	3.8	30
59	The effect of grain size on the fatigue overload behaviour of nickel. Materials and Design, 2020, 189, 108526.	3.3	21
60	Additive manufacturing assisted investment casting: A low-cost method to fabricate periodic metallic cellular lattices. Additive Manufacturing, 2020, 33, 101085.	1.7	41
61	The influence of electrodeposited Ni-Co alloy coating microstructure on CO2 corrosion resistance on X65 steel. Corrosion Science, 2020, 167, 108485.	3.0	28
62	Industrial Gear Oils: Influence of Bulk Oil Temperature and Contact Pressure on Tribological Performance and Subsurface Changes. Tribology Letters, 2020, 68, 1.	1.2	7
63	Serial sectioning in the SEM for three dimensional materials science. Current Opinion in Solid State and Materials Science, 2020, 24, 100817.	5.6	51
64	3D characterisation of dry powder inhaler formulations: Developing X-ray micro computed tomography approaches. European Journal of Pharmaceutics and Biopharmaceutics, 2020, 151, 32-44.	2.0	22
65	Characterisation of cuticular inflation development and ultrastructure in Trichuris muris using correlative X-ray computed tomography and electron microscopy. Scientific Reports, 2020, 10, 5846.	1.6	12
66	Novel Methods for Recording Stress-Strain Curves in Proton Irradiated Material. Scientific Reports, 2020, 10, 5353.	1.6	2
67	Coupled Broad Ion Beamâ€“Scanning Electron Microscopy (BIBâ€“SEM) for polishing and three dimensional (3D) serial section tomography (SST). Ultramicroscopy, 2020, 214, 112989.	0.8	20
68	The effect of manufacturing defects on the fatigue life of selective laser melted Ti-6Al-4V structures. Materials and Design, 2020, 192, 108708.	3.3	209
69	pyCM: An open-source computational framework for residual stress analysis employing the Contour Method. SoftwareX, 2020, 11, 100458.	1.2	10
70	Multiscale image-based modelling of damage and fracture in carbon fibre reinforced polymer composites. Composites Science and Technology, 2020, 198, 108243.	3.8	20
71	Plasma FIB Spin Milling for Large Volume Serial Sectioning Tomography. Microscopy and Microanalysis, 2019, 25, 350-351.	0.2	4
72	On the Application of Xe+ Plasma FIB for Micro-fabrication of Small-scale Tensile Specimens. Experimental Mechanics, 2019, 59, 1113-1125.	1.1	9

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73	Anisotropic crack propagation and deformation in dentin observed by four-dimensional X-ray nano-computed tomography. Acta Biomaterialia, 2019, 96, 400-411.	4.1	27
74	MAR-M-247 creep assessment through a modified theta projection model. Materialia, 2019, 7, 100392.	1.3	5
75	Advances in Multi-Beam and Multi-Ion FIB-SEM for 3D Correlative Microscopy. Microscopy and Microanalysis, 2019, 25, 870-871.	0.2	3
76	Laminography in the lab: imaging planar objects using a conventional x-ray CT scanner. Measurement Science and Technology, 2019, 30, 035401.	1.4	25
77	Evolution of kink bands in a notched unidirectional carbon fibre-epoxy composite under four-point bending. Composites Science and Technology, 2019, 172, 143-152.	3.8	38
78	Estimation of the plastic zone in fatigue through the thickness based on synchrotron diffraction data. Procedia Structural Integrity, 2019, 17, 872-877.	0.3	1
79	Plasma FIB Spin Milling for 3D Residual Stress Measurements. Microscopy and Microanalysis, 2019, 25, 882-883.	0.2	1
80	Initiation and short crack growth behaviour of environmentally induced cracks in AA5083 H131 investigated across time and length scales. Corrosion Reviews, 2019, 37, 469-481.	1.0	12
81	Completing the picture through correlative characterization. Nature Materials, 2019, 18, 1041-1049.	13.3	73
82	Behavior of 316L stainless steel containing corrosion pits under cyclic loading. Materials and Corrosion - Werkstoffe Und Korrosion, 2019, 70, 2009-2019.	0.8	10
83	Soft body impact resistance of composite foam core sandwich panels with unidirectional corrugated and tubular reinforcements. International Journal of Impact Engineering, 2019, 132, 103320.	2.4	20
84	In situ through-thickness analysis of crack tip fields with synchrotron X-ray diffraction. International Journal of Fatigue, 2019, 127, 500-508.	2.8	10
85	In Situ Study of the Stress Relaxation During Aging of Nickel-Base Superalloy Forgings. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 3555-3565.	1.1	8
86	The heterogenous distribution of white etching matter (WEM) around subsurface cracks in bearing steels. Acta Materialia, 2019, 174, 300-309.	3.8	31
87	Determination of local residual stress in an air plasma spray thermal barrier coating (APS-TBC) by microscale ring coring using a picosecond laser. Scripta Materialia, 2019, 167, 126-130.	2.6	14
88	CCPi-Regularisation toolkit for computed tomographic image reconstruction with proximal splitting algorithms. SoftwareX, 2019, 9, 317-323.	1.2	17
89	Reliability of Algorithms Interpreting Topological and Geometric Properties of Porous Media for Pore Network Modelling. Transport in Porous Media, 2019, 128, 271-301.	1.2	53
90	Time-lapse imaging of particle invasion and deposition in porous media using in situ X-ray radiography. Journal of Petroleum Science and Engineering, 2019, 177, 384-391.	2.1	11

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91	Experimental steering of electron microscopy studies using prior X-ray computed tomography. Ultramicroscopy, 2019, 201, 58-67.	0.8	14
92	Effect of preheating on the thermal, microstructural and mechanical properties of selective electron beam melted Ti-6Al-4V components. Materials and Design, 2019, 174, 107792.	3.3	57
93	High temperature low cycle fatigue characterization of equiaxed MAR-M-247. International Journal of Fatigue, 2019, 123, 225-237.	2.8	2
94	Rich multi-dimensional correlative imaging. IOP Conference Series: Materials Science and Engineering, 2019, 580, 012014.	0.3	4
95	Tracking capsule activation and crack healing in a microcapsule-based self-healing polymer. Scientific Reports, 2019, 9, 17773.	1.6	22
96	Weld zone and residual stress development in AA7050 stationary shoulder friction stir T-joint weld. Journal of Materials Processing Technology, 2019, 263, 256-265.	3.1	30
97	The effect of powder oxidation on defect formation in laser additive manufacturing. Acta Materialia, 2019, 166, 294-305.	3.8	217
98	4D visualisation of in situ nano-compression of Li-ion cathode materials to mimic early stage calendering. Materials Horizons, 2019, 6, 612-617.	6.4	26
99	Time-lapse three-dimensional imaging of crack propagation in beetle cuticle. Acta Biomaterialia, 2019, 86, 109-116.	4.1	15
100	Multi-modal plasma focused ion beam serial section tomography of an organic paint coating. Ultramicroscopy, 2019, 197, 1-10.	0.8	10
101	Quantifying fatigue overload retardation mechanisms by energy dispersive X-ray diffraction. Journal of the Mechanics and Physics of Solids, 2019, 124, 392-410.	2.3	23
102	Versatile regularisation toolkit for iterative image reconstruction with proximal splitting algorithms. , 2019, , .		0
103	Time-dependent in situ measurement of atmospheric corrosion rates of duplex stainless steel wires. Npj Materials Degradation, 2018, 2, .	2.6	34
104	X-ray micro-computed tomography (Î¼CT): an emerging opportunity in parasite imaging. Parasitology, 2018, 145, 848-854.	0.7	34
105	Industrial Gear Oils: Tribological Performance and Subsurface Changes. Tribology Letters, 2018, 66, 65.	1.2	8
106	3D characterization of porosity in an air plasmaâ€sprayed thermal barrier coating and its effect on thermal conductivity. Journal of the American Ceramic Society, 2018, 101, 2482-2492.	1.9	34
107	Thermo â€“ mechanical properties of SPS produced self-healing thermal barrier coatings containing pure and alloyed MoSi2 particles. Journal of the European Ceramic Society, 2018, 38, 4268-4275.	2.8	25
108	Microstructural degradation of Electron Beam-Physical Vapour Deposition Thermal Barrier Coating during thermal cycling tracked by X-ray micro-computed tomography. Scripta Materialia, 2018, 152, 79-83.	2.6	5

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109	Effect of hydration and crack orientation on crack-tip strain, crack opening displacement and crack-tip shielding in elephant dentin. Dental Materials, 2018, 34, 1041-1053.	1.6	12
110	In situ X-ray imaging of defect and molten pool dynamics in laser additive manufacturing. Nature Communications, 2018, 9, 1355.	5.8	495
111	Joint image reconstruction method with correlative multi-channel prior for x-ray spectral computed tomography. Inverse Problems, 2018, 34, 064001.	1.0	35
112	Digital element simulation of aligned tows during compaction validated by computed tomography (CT). International Journal of Solids and Structures, 2018, 154, 78-87.	1.3	33
113	Time-lapse 3D imaging of calcite precipitation in a microporous column. Geochimica Et Cosmochimica Acta, 2018, 222, 156-170.	1.6	18
114	Residual stress control of multipass welds using low transformation temperature fillers. Materials Science and Technology, 2018, 34, 519-528.	0.8	18
115	The effect of shoulder coupling on the residual stress and hardness distribution in AA7050 friction stir butt welds. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 735, 218-227.	2.6	35
116	Investigation of residual stress distribution and texture evolution in AA7050 stationary shoulder friction stir welded joints. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 712, 531-538.	2.6	33
117	X-ray computed tomography of polymer composites. Composites Science and Technology, 2018, 156, 305-319.	3.8	455
118	Time-Lapse Correlative 3D Imaging Applied to the Corrosion Study of AZ31ÂMg Alloy in a Saline Environment. , 2018, , 165-177.		4
119	MicroCT imaging reveals differential 3D micro-scale remodelling of the murine aorta in ageing and Marfan syndrome. Theranostics, 2018, 8, 6038-6052.	4.6	17
120	3D Imaging of Indentation Damage in Bone. Materials, 2018, 11, 2533.	1.3	3
121	Time-Lapse Helical X-ray Computed Tomography (CT) Study of Tensile Fatigue Damage Formation in Composites for Wind Turbine Blades. Materials, 2018, 11, 2340.	1.3	16
122	Linking microstructure and processing defects to mechanical properties of selectively laser melted AlSi10Mg alloy. Theoretical and Applied Fracture Mechanics, 2018, 98, 123-133.	2.1	92
123	New software protocols for enabling laboratory based temporal CT. Review of Scientific Instruments, 2018, 89, 093702.	0.6	22
124	Synchrotron X-ray diffraction based method for stress intensity factor evaluation in the bulk of materials. Theoretical and Applied Fracture Mechanics, 2018, 98, 72-77.	2.1	9
125	Quantifying fibre reorientation during axial compression of a composite through time-lapse X-ray imaging and individual fibre tracking. Composites Science and Technology, 2018, 168, 47-54.	3.8	41
126	Laser-matter interactions in additive manufacturing of stainless steel SS316L and 13-93 bioactive glass revealed by in situ X-ray imaging. Additive Manufacturing, 2018, 24, 647-657.	1.7	57

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127	Improved Low Cycle Fatigue Analysis for Ni-Based Turbine Nozzles. , 2018, , .		1
128	7.6 Computed Tomography of Composites. , 2018, , 101-118.		3
129	High resolution low kV EBSD of heavily deformed and nanocrystalline Aluminium by dictionary-based indexing. Scientific Reports, 2018, 8, 10991.	1.6	51
130	Investigation of Cracking in Additively Manufactured IN718 by Correlative Tomography. Microscopy and Microanalysis, 2018, 24, 366-367.	0.2	3
131	4.10 Residual Stresses in Metal Matrix Composites. , 2018, , 275-286.		0
132	TomoPhantom, a software package to generate 2Dâ€“4D analytical phantoms for CT image reconstruction algorithm benchmarks. SoftwareX, 2018, 7, 150-155.	1.2	29
133	On compression and damage evolution in two thermoplastics. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20160495.	1.0	3
134	On the compression of aluminium foam structures under shock. AIP Conference Proceedings, 2017, , .	0.3	3
135	On the high-rate failure of carbon fibre composites. AIP Conference Proceedings, 2017, , .	0.3	3
136	On compression and damage evolution in PTFE and PEEK. AIP Conference Proceedings, 2017, , .	0.3	0
137	How to fragment peralkaline rhyolites: Observations on pumice using combined multi-scale 2D and 3D imaging. Journal of Volcanology and Geothermal Research, 2017, 336, 179-191.	0.8	23
138	A Novel Tomographic Reconstruction Method Based on the Robust Student's t Function For Suppressing Data Outliers. IEEE Transactions on Computational Imaging, 2017, 3, 682-693.	2.6	12
139	Timeâ€lapse labâ€based xâ€ray nanoâ€CT study of corrosion damage. Journal of Microscopy, 2017, 267, 98-106.	0.8	18
140	Comparison of grain to grain orientation and stiffness mapping by spatially resolved acoustic spectroscopy and EBSD. Journal of Microscopy, 2017, 267, 89-97.	0.8	14
141	Influence of Tow Architecture on Compaction and Nesting in Textile Preforms. Applied Composite Materials, 2017, 24, 337-350.	1.3	33
142	Crystallographic effects on the corrosion of twin roll cast AZ31 Mg alloy sheet. Acta Materialia, 2017, 133, 90-99.	3.8	83
143	Mapping fibre failure in situ in carbon fibre reinforced polymers by fast synchrotron X-ray computed tomography. Composites Science and Technology, 2017, 149, 81-89.	3.8	71
144	Ablation-resistant carbide Zr0.8Ti0.2C0.74B0.26 for oxidizing environments up to 3,000â€‰Â°C. Nature Communications, 2017, 8, 15836.	5.8	154

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145	A multi-scale correlative investigation of ductile fracture. Acta Materialia, 2017, 130, 56-68.	3.8	42
146	Comparison of residual stress distributions in conventional and stationary shoulder high-strength aluminum alloy friction stir welds. Journal of Materials Processing Technology, 2017, 242, 92-100.	3.1	77
147	X-ray micro computed tomography characterization of cellular SiC foams for their applications in chemical engineering. Materials Characterization, 2017, 123, 20-28.	1.9	43
148	Broad ion beam serial section tomography. Ultramicroscopy, 2017, 172, 52-64.	0.8	46
149	X-ray computed tomography study of kink bands in unidirectional composites. Composite Structures, 2017, 160, 917-924.	3.1	69
150	Evolution of Residual Stress in Tensile Armour Wires of Flexible Pipes During Pipe Manufacture. , 2017, , .		2
151	Model-based iterative reconstruction using higher-order regularization of dynamic synchrotron data. Measurement Science and Technology, 2017, 28, 094004.	1.4	14
152	Developments in Large Volume 3D Analysis via P-FIB: EBSD & EDS. Microscopy and Microanalysis, 2017, 23, 284-285.	0.2	3
153	Correlative Tomography for Additive Manufacturing of Biomedical Implants. Microscopy and Microanalysis, 2017, 23, 342-343.	0.2	4
154	The quantification of impact damage distribution in composite laminates by analysis of X-ray computed tomograms. Composites Science and Technology, 2017, 152, 139-148.	3.8	62
155	The Influence of Porosity on Fatigue Crack Initiation in Additively Manufactured Titanium Components. Scientific Reports, 2017, 7, 7308.	1.6	303
156	The imaging of failure in structural materials by synchrotron radiation X-ray microtomography. Engineering Fracture Mechanics, 2017, 182, 127-156.	2.0	168
157	Microstructural evolution during sintering of copper particles studied by laboratory diffraction contrast tomography (LabDCT). Scientific Reports, 2017, 7, 5251.	1.6	58
158	Multiscale correlative tomography: an investigation of creep cavitation in 316 stainless steel. Scientific Reports, 2017, 7, 7332.	1.6	33
159	Degradation of metallic materials studied by correlative tomography. IOP Conference Series: Materials Science and Engineering, 2017, 219, 012001.	0.3	7
160	Special Issue on â€˜Modern Imaging Techniques in Fracture and Damage Analysesâ€™: Selected papers from the 21st European Conference of Fracture (ECF 21), held in Catania, Sicily, Italy, on 20â€“24 June 2016. Engineering Fracture Mechanics, 2017, 183, iii-iv.	2.0	0
161	3D elemental mapping of materials and structures by laboratory scale spectroscopic X-ray tomography. Journal of Physics: Conference Series, 2017, 849, 012013.	0.3	0
162	X-ray microtomography as a tool for investigating the petrological context of Precambrian cellular remains. Geological Society Special Publication, 2017, 448, 33-56.	0.8	8

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163	The effect of the weld fusion zone shape on residual stress in submerged arc welding. International Journal of Advanced Manufacturing Technology, 2017, 90, 3451-3464.	1.5	21
164	Crack healing behaviour of Cr 2 AlC MAX phase studied by X-ray tomography. Journal of the European Ceramic Society, 2017, 37, 441-450.	2.8	41
165	SparseBeads data: benchmarking sparsity-regularized computed tomography. Measurement Science and Technology, 2017, 28, 124005.	1.4	54
166	Automated 3D Block Preparation Procedure for Focused Ion Beam 3D Analyses. Microscopy and Microanalysis, 2017, 23, 286-287.	0.2	2
167	Three dimensional imaging of electrical trees in multiple stages. , 2017, , .		2
168	X-ray Tomography Characterisation of Lattice Structures Processed by Selective Electron Beam Melting. Metals, 2017, 7, 300.	1.0	15
169	Use of Particle Tracking to Determine Optimal Release Dates and Locations for Rehabilitated Neonate Sea Turtles. Frontiers in Marine Science, 2017, 4, .	1.2	16
170	X-ray Tomographic Imaging of Tensile Deformation Modes of Electrospun Biodegradable Polyester Fibers. Frontiers in Materials, 2017, 4, .	1.2	31
171	Strain-induced reactivation of corrosion pits in austenitic stainless steel. Corrosion Science, 2017, 125, 12-19.	3.0	49
172	A study of the progression of damage in an axially loaded Branta leucopsis femur using X-ray computed tomography and digital image correlation. PeerJ, 2017, 5, e3416.	0.9	2
173	Mid-thickness studies of the stress intensity factor in the bulk of bainitic steel. Frattura Ed Integrita Strutturale, 2017, 11, 203-210.	0.5	0
174	4-D imaging of sub-second dynamics in pore-scale processes using real-time synchrotron X-ray tomography. Solid Earth, 2016, 7, 1059-1073.	1.2	33
175	An in situ Method for Preserving Buried Voids and Cracks During TEM Sample Preparation using FIB. Microscopy and Microanalysis, 2016, 22, 186-187.	0.2	0
176	Temporal sparsity exploiting nonlocal regularization for 4D computed tomography reconstruction. Journal of X-Ray Science and Technology, 2016, 24, 207-219.	0.7	13
177	Physical Properties of Composites. , 2016, , .		0
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