John Banhart

List of Publications by Year
in descending order

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385 papers	20,388 citations	12330 69 h-index	14208 128 g-index
400 all docs	400 docs citations	400 times ranked	11494 citing authors

#	Article	IF	Citations
1	Shortâ€Range Ordered Aluminum Foams. Advanced Engineering Materials, 2022, 24, 2100795.	3.5	2
2	Combined effect of Sn addition and pre-ageing on natural secondary and artificial ageing of Alâ€“Mgâ€“Si alloys. Journal of Materials Science, 2022, 57, 2149-2162.	3.7	3
3	Clustering and precipitation in Al-Mg-Si alloys during linear heating. Journal of Materials Science and Technology, 2022, 120, 78-88.	10.7	10
4	Natural ageing clustering under different quenching conditions in an Al-Mg-Si alloy. Scripta Materialia, 2021, 190, 179-182.	5.2	29
5	Correlation between foam structure and mechanical performance of aluminium foam sandwich panels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 800, 140260.	5.6	23
6	Nucleation and growth of gas bubbles in AlSi8Mg4 foam investigated by X-ray tomoscopy. Acta Materialia, 2021, 206, 116583.	7.9	14
7	Unravelling the Mechanism of Lithium Nucleation and Growth and the Interaction with the Solid Electrolyte Interface. ACS Energy Letters, 2021, 6, 1719-1728.	17.4	61
8	Study of Possible Frequency Dependence of Small AC Fields on Magnetic Flux Trapping in Niobium by Polarized Neutron Imaging. Applied Sciences (Switzerland), 2021, 11, 6308.	2.5	3
9	Determination of the Spatial Resolution in the Case of Imaging Magnetic Fields by Polarized Neutrons. Applied Sciences (Switzerland), 2021, 11, 6973.	2.5	3
10	Influence of Gas Pressure and Blowing Agent Content on the Formation of Aluminum Alloy Foam. Advanced Engineering Materials, 2021, 23, 2100242.	3.5	8
11	Natural and artificial ageing in aluminium alloys â€“ the role of excess vacancies. Acta Materialia, 2021, 215, 117014.	7.9	35
12	Aluminium foam with sub-mm sized cells produced using a rotating gas injector. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 273, 115427.	3.5	4
13	The Neutron Imaging Instrument CONRADâ€”Post-Operational Review. Journal of Imaging, 2021, 7, 11.	3.0	4
14	Tomoscopy: Timeâ€Resolved Tomography for Dynamic Processes in Materials. Advanced Materials, 2021, 33, e2104659.	21.0	32
15	Clustering phenomena in quenched Al, Alâ€“Mg, Alâ€“Si and Alâ€“Mgâ€“Si alloys. Scripta Materialia, 2020, 177, 203-207.	5.2	12
16	Exploring the hidden world of solute atoms, clusters and vacancies in aluminium alloys. MATEC Web of Conferences, 2020, 326, 01001.	0.2	3
17	Motion of liquid and stabilising particles in individual liquid aluminium alloy films. Journal of Materials Science, 2020, 55, 14125-14136.	3.7	2
18	Visualization of compensating currents in type-II/1 superconductor via high field cooling. Applied Physics Letters, 2020, 116, 192602.	3.3	4

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19	The Influence of Alloy Composition and Liquid Phase on Foaming of Alâ€“Siâ€“Mg Alloys. Metals, 2020, 10, 189.	2.3	15
20	Co-evolution of vacancies and solute clusters during artificial ageing of Al-Mg-Si alloys. Physical Review Materials, 2020, 4, .	2.4	8
21	Decomposition of Ti and Zr Hydrides Studied by Neutron Diffraction. Minerals, Metals and Materials Series, 2020, , 39-46.	0.4	0
22	Influence of quench rate on multi-stage ageing of AA6014 alloy. MATEC Web of Conferences, 2020, 326, 02005.	0.2	1
23	Realizing a (nearly) 100% neutron beam polarization. Measurement Science and Technology, 2020, 31, 115017.	2.6	0
24	Effect of pre-ageing on natural secondary ageing and paint bake hardening in Alâ€“Mgâ€“Si alloys. Materialia, 2019, 7, 100413.	2.7	20
25	Influence of Sn on the age hardening behavior of Alâ€“Mgâ€“Si alloys at different temperatures. Materialia, 2019, 8, 100441.	2.7	14
26	Hardness data related to pre-ageing, natural secondary ageing, and paint bake hardening in Al-Mg-Si alloys. Data in Brief, 2019, 27, 104494.	1.0	10
27	Crystal structure of Mo-substituted lanthanum tungstate La_{5.4}W_{1â^'y}Mo_yO_{12â^'Î´} (0 â‰¤ y â‰¤ 0.2) studied by X-ray and neutron diffraction. Journal of Applied Crystallography, 2019, 52, 1043-1053.	4.5	3
28	Using X-ray tomoscopy to explore the dynamics of foaming metal. Nature Communications, 2019, 10, 3762.	12.8	94
29	Influence of A-site deficiency on structural evolution of Pr2-xNiO4+Î´ with temperature. Solid State Ionics, 2019, 342, 115056.	2.7	15
30	Visualization and quantification of inhomogeneous and anisotropic magnetic fields by polarized neutron grating interferometry. Nature Communications, 2019, 10, 3788.	12.8	13
31	Neutron Radiography and Tomography. , 2019, , 1-85.		0
32	Non-destructive characterization of lithium deposition at the Li/separator and Li/carbon matrix interregion by synchrotron X-ray tomography. Nano Energy, 2019, 62, 11-19.	16.0	26
33	Effect of Sn and In on the natural ageing kinetics of Alâ€“Mgâ€“Si alloys. Materialia, 2019, 6, 100261.	2.7	17
34	Inâ€…situ and Operando Tracking of Microstructure and Volume Evolution of Silicon Electrodes by using Synchrotron Xâ€ray Imaging. ChemSusChem, 2019, 12, 261-269.	6.8	20
35	Neutron Radiography and Tomography. , 2019, , 1217-1299.		2
36	Advances in neutron imaging. Materials Today, 2018, 21, 652-672.	14.2	138

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37	Simultaneous X-ray radioscopy/tomography and energy-dispersive diffraction applied to liquid aluminium alloy foams. Journal of Synchrotron Radiation, 2018, 25, 1790-1796.	2.4	10
38	Preface on International Conference on Solidification Science and Processing. Transactions of the Indian Institute of Metals, 2018, 71, 2615-2615.	1.5	0
39	An X-ray Tomographic Study of Rechargeable Zn/MnO2 Batteries. Materials, 2018, 11, 1486.	2.9	8
40	4.14 Production of Metal Foams. , 2018, , 347-363.		15
41	Reversion of natural ageing in Al-Mg-Si alloys. Acta Materialia, 2018, 159, 163-172.	7.9	43
42	In-operando stress measurement and neutron imaging of metal hydride composites for solid-state hydrogen storage. Journal of Power Sources, 2018, 397, 262-270.	7.8	19
43	Imaging with Polarized Neutrons. Journal of Imaging, 2018, 4, 23.	3.0	7
44	Time-resolved in situ tomography for the analysis of evolving metal-foam granulates. Journal of Synchrotron Radiation, 2018, 25, 1505-1508.	2.4	20
45	Investigation of electronic and local structural changes during lithium uptake and release of nano-crystalline NiFe2O4 by X-ray absorption spectroscopy. Journal of Power Sources, 2017, 342, 56-63.	7.8	29
46	Complementary X-ray and neutron radiography study of the initial lithiation process in lithium-ion batteries containing silicon electrodes. Applied Surface Science, 2017, 399, 359-366.	6.1	40
47	Improved Performance of Polymer Electrolyte Membrane Fuel Cells with Modified Microporous Layer Structures. Energy Technology, 2017, 5, 1612-1618.	3.8	25
48	Formation of intermetallic Î´ phase in Al-10Si-0.3Fe alloy investigated by in-situ 4D X-ray synchrotron tomography. Acta Materialia, 2017, 129, 194-202.	7.9	53
49	Stability of various particle-stabilised aluminium alloys foams made by gas injection. Journal of Materials Science, 2017, 52, 6401-6414.	3.7	19
50	Relation between composition and vacant oxygen sites in the mixed ionic-electronic conductors La5.4W1â^'MO12â^' (M= Mo, Re; 0 â‰¤yâ‰¤ 0.2) and their mother compound La6â^'WO12â^' (0.4 â‰¤xâ‰¤ 0.8). Solid State Ionics, 2017, 306, 104-111.	2.7	13
51	In Operando Quantification of Three-Dimensional Water Distribution in Nanoporous Carbon-Based Layers in Polymer Electrolyte Membrane Fuel Cells. ACS Nano, 2017, 11, 5944-5949.	14.6	50
52	Manufacturing and Characterization of Highly Porous Bioactive Glass Composite Scaffolds Using Unidirectional Freeze Casting. Advanced Engineering Materials, 2017, 19, 1700129.	3.5	10
53	In situ X-ray tomography of aqueous foams: Analysis of columnar foam generation. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 534, 78-84.	4.7	9
54	Microporosity in aluminium foams. Acta Materialia, 2017, 131, 156-168.	7.9	72

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55	Study of the Mechanisms of Internal Short Circuit in a Li/Li Cell by Synchrotron X-ray Phase Contrast Tomography. ACS Energy Letters, 2017, 2, 94-104.	17.4	89
56	Setup for polarized neutron imaging using in situâ€ˆ3He cells at the Oak Ridge National Laboratory High Flux Isotope Reactor CG-1D beamline. Review of Scientific Instruments, 2017, 88, 095103.	1.3	12
57	Neutron radiographic in operando investigation of water transport in polymer electrolyte membrane fuel cells with channel barriers. Energy Conversion and Management, 2017, 148, 604-610.	9.2	52
58	Effect of Magnesium Addition on the Cell Structure of Foams Produced From Re-melted Aluminum Alloy Scrap. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 2551-2563.	2.1	4
59	Local structural changes of nano-crystalline ZnFe2O4 during lithiation and de-lithiation studied by X-ray absorption spectroscopy. Electrochimica Acta, 2017, 246, 699-706.	5.2	19
60	Elastic and failure response of imperfect three-dimensional metallic lattices: the role of geometric defects induced by Selective Laser Melting. Journal of the Mechanics and Physics of Solids, 2017, 107, 160-184.	4.8	352
61	Fast Synchrotron Xâ€Ray Tomography of Dynamic Processes in Liquid Aluminium Alloy Foam. Advanced Engineering Materials, 2017, 19, 1600550.	3.5	19
62	Coalescence Avalanches in Liquid Aluminum Foams. Metals, 2017, 7, 298.	2.3	5
63	Influence of the Heating Rate on the Foaming Behavior of Various Aluminium Alloys. Metals, 2017, 7, 323.	2.3	8
64	Nanoscale order in the frustrated mixed conductor La_{5.6}WO_{12â^’Î´}. Journal of Applied Crystallography, 2016, 49, 997-1008.	4.5	15
65	Synchrotron Xâ€ray Tomographic Study of a Silicon Electrode Before and After Discharge and the Effect of Cavities on Particle Fracturing. ChemElectroChem, 2016, 3, 1170-1177.	3.4	20
66	Carbides in Coâ€“Reâ€“Cr-based high-temperature alloys. Journal of Materials Science, 2016, 51, 7145-7155.	3.7	9
67	Positron lifetime study of the formation of vacancy clusters and dislocations in quenched Al, Alâ€“Mg and Alâ€“Si alloys. Journal of Materials Science, 2016, 51, 7754-7767.	3.7	24
68	Investigation of failure mechanisms in silicon based half cells during the first cycle by micro X-ray tomography and radiography. Journal of Power Sources, 2016, 321, 174-184.	7.8	38
69	Investigation of a porous NiSi 2 /Si composite anode material used for lithium-ion batteries by X-ray absorption spectroscopy. Journal of Power Sources, 2016, 324, 830-835.	7.8	16
70	Morphological Evolution of Electrochemically Plated/Stripped Lithium Microstructures Investigated by Synchrotron X-ray Phase Contrast Tomography. ACS Nano, 2016, 10, 7990-7997.	14.6	108
71	Fabrication of cellular and lamellar LiFePO₄/C Cathodes for Li-ion batteries by unidirectional freeze-casting method. Journal of the Ceramic Society of Japan, 2016, 124, 1067-1071.	1.1	15
72	Inâ€…Situ Radiographic Investigation of (De)Lithiation Mechanisms in a Tinâ€Electrode Lithiumâ€ion Battery. ChemSusChem, 2016, 9, 946-950.	6.8	27

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73	CONRAD-2: the new neutron imaging instrument at the Helmholtz-Zentrum Berlin. Journal of Applied Crystallography, 2016, 49, 195-202.	4.5	78
74	Intermetallic phases in high purity Al-10Si-0.3Fe cast alloys with and without Sr modification studied by FIB tomography and TEM. Intermetallics, 2016, 72, 53-61.	3.9	29
75	Effect of Cu and Ge on solute clustering in Alâ€“Mgâ€“Si alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 658, 238-245.	5.6	33
76	Structural Changes in a Li-Rich 0.5Li₂MnO₃[*]0.5LiMn_{0.4}Ni_{0.4}Co_{0.2}O₂Cath Material for Li-Ion Batteries: A Local Perspective. Journal of the Electrochemical Society, 2016, 163, A811-A820.	2.9	21
77	Investigation of water transport dynamics in polymer electrolyte membrane fuel cells based on high porous micro porous layers. Energy, 2016, 102, 161-165.	8.8	51
78	Three-Dimensional Visualization of Gas Evolution and Channel Formation inside a Lithium-Ion Battery. ACS Applied Materials & Interfaces, 2016, 8, 7156-7164.	8.0	39
79	Effect of ageing of gas diffusion layers on the water distribution in flow field channels of polymer electrolyte membrane fuel cells. Journal of Power Sources, 2016, 301, 386-391.	7.8	39
80	Crystal structure of Re-substituted lanthanum tungstate La_{5.4}W_{1â^'y}Re_yO_{12â€“Î´}(0 â‰¤yâ‰¤ 0.2) studied by neutron diffraction. Journal of Applied Crystallography, 2016, 49, 1544-1560.	4.5	11
81	Age Hardening of Aluminum Alloys. , 2016, , 214-239.		9
82	Imaging with Cold Neutrons at the CONRAD-2 Facility. Physics Procedia, 2015, 69, 60-66.	1.2	10
83	Neutron Bragg Edge Tomography for Phase Mapping. Physics Procedia, 2015, 69, 227-236.	1.2	33
84	The stabilising effect of oxides in foamed aluminium alloy scrap. International Journal of Materials Research, 2015, 106, 978-987.	0.3	8
85	In-Operando Neutron Radiography Studies of Polymer Electrolyte Membrane Water Electrolyzers. ECS Transactions, 2015, 69, 1135-1140.	0.5	28
86	Three-Dimensional Imaging of Magnetic Domains with Neutron Grating Interferometry. Physics Procedia, 2015, 69, 404-412.	1.2	3
87	Fuel Cell Research with Neutron Imaging at Helmholtz Centre Berlin. Physics Procedia, 2015, 69, 619-627.	1.2	9
88	Degradation of Li/S Battery Electrodes On 3D Current Collectors Studied Using X-ray Phase Contrast Tomography. Scientific Reports, 2015, 5, 10921.	3.3	68
89	Sub-mm sized bubbles injected into metallic melts. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 473, 60-67.	4.7	16
90	Influence of local carbon fibre orientation on the water transport in the gas diffusion layer of polymer electrolyte membrane fuel cells. Electrochemistry Communications, 2015, 51, 133-136.	4.7	26

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91	Pressure-Induced Foaming of Metals. Jom, 2015, 67, 955-965.	1.9	13
92	In situcharacterization of Î²â€²â€² precipitation in an Alâ€“Mgâ€“Si alloy by anisotropic small-angle neutron scattering on a single crystal. Journal of Applied Crystallography, 2015, 48, 455-463.	4.5	12
93	Evolution of nanoscale clusters in Î³â€² precipitates of a Niâ€“Alâ€“Ti model alloy. Ultramicroscopy, 2015, 159, 278-284.	1.9	17
94	Local constriction around minor elements in Al 86 Ni 7 X 1 Y 6 metallic glass (X: Ag, Au, Pt). Journal of Non-Crystalline Solids, 2015, 422, 26-31.	3.1	4
95	A dedicated compression device for high resolution X-ray tomography of compressed gas diffusion layers. Review of Scientific Instruments, 2015, 86, 043702.	1.3	15
96	In operando synchrotron X-ray radiography studies of polymer electrolyte membrane water electrolyzers. Electrochemistry Communications, 2015, 55, 55-59.	4.7	60
97	An experimental study of columnar crystals using monodisperse microbubbles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 473, 55-59.	4.7	17
98	Slow crystallisation of a monodisperse foam stabilised against coarsening. Soft Matter, 2015, 11, 4710-4716.	2.7	15
99	Early stages of solute clustering in an Alâ€“Mgâ€“Si alloy. Acta Materialia, 2015, 91, 355-364.	7.9	80
100	Neutron guide optimisation for a time-of-flight neutron imaging instrument at the European Spallation Source. Optics Express, 2015, 23, 301.	3.4	9
101	Stabilisation of aluminium foams and films by the joint action of dispersed particles and oxide films. Acta Materialia, 2015, 99, 313-324.	7.9	44
102	Investigations of the structural stability of metal hydride composites by in-situ neutron imaging. Journal of Power Sources, 2015, 293, 109-118.	7.8	20
103	Monitoring the hydrogen distribution in poly(2,5-benzimidazole)-based (ABPBI) membranes in operating high-temperature polymer electrolyte fuel cells by using H-D contrast neutron imaging. Journal of Power Sources, 2015, 299, 125-129.	7.8	21
104	In operando visualization of hydride-graphite composites during cyclic hydrogenation by high-resolution neutron imaging. Journal of Power Sources, 2015, 277, 360-369.	7.8	17
105	Change in atomic coordination in a heavily deformed metallic glass. Journal of Applied Physics, 2014, 115, .	2.5	7
106	Neutron radiography and current distribution measurements for studying cathode flow field properties of direct methanol fuel cells. International Journal of Energy Research, 2014, 38, 926-943.	4.5	11
107	3D Mapping of Crystallographic Phase Distribution using Energyâ€Selective Neutron Tomography. Advanced Materials, 2014, 26, 4069-4073.	21.0	98
108	Structural Changes in Li₂MnO₃ Cathode Material for Liâ€Ion Batteries. Advanced Energy Materials, 2014, 4, 1300998.	19.5	194

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109	Local structural changes in LiMn1.5Ni0.5O4 spinel cathode material for lithium-ion batteries. Journal of Power Sources, 2014, 255, 439-449.	7.8	49
110	The rupture of a single liquid aluminium alloy film. Soft Matter, 2014, 10, 4711.	2.7	8
111	On the structural integrity and electrochemical activity of a 0.5Li2MnO3Â·0.5LiCoO2 cathode material for lithium-ion batteries. Journal of Materials Chemistry A, 2014, 2, 9099.	10.3	49
112	Analysis of liquid metal foams through X-ray radioscopy and microgravity experiments. Soft Matter, 2014, 10, 6955-6962.	2.7	21
113	Heat Treatment of Aluminium Foam Precursors: Effects on Foam Expansion and Final Cellular Structure. , 2014, 4, 287-292.		14
114	Role of Ambient Oxygen in the Stabilisation of Single Aluminium Alloy Films. , 2014, 4, 263-268.		8
115	Radiography and tomography with polarized neutrons. Journal of Magnetism and Magnetic Materials, 2014, 350, 188-198.	2.3	29
116	On the evolution of long-range order from short-range order in a Ni2(Cr0.5Mo0.5) alloy. Journal of Alloys and Compounds, 2014, 586, 561-566.	5.5	13
117	Three-dimensional study of compressed gas diffusion layers using synchrotron X-ray imaging. Journal of Power Sources, 2014, 253, 123-131.	7.8	102
118	Synchrotron X-ray radioscopic in situ study of high-temperature polymer electrolyte fuel cells - Effect of operation conditions on structure of membrane. Journal of Power Sources, 2014, 246, 290-298.	7.8	49
119	RÃ¶ntgentomografische Untersuchung eines kommerziellen Lithium-Ionen-Kondensators*. Materialpruefung/Materials Testing, 2014, 56, 722-727.	2.2	0
120	Lightâ€Metal Foamsâ€”History of Innovation and Technological Challenges. Advanced Engineering Materials, 2013, 15, 82-111.	3.5	274
121	Reduced-Pressure Foaming of Aluminum Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 419-426.	2.2	20
122	In-plane neutron radiography for studying the influence of surface treatment and design of cathode flow fields in direct methanol fuel cells. International Journal of Hydrogen Energy, 2013, 38, 2443-2454.	7.1	16
123	Mapping the evolution of hierarchical microstructures in a Ni-based superalloy. Nature Communications, 2013, 4, 2955.	12.8	56
124	Drainage of particle-stabilised aluminium composites through single films and Plateau borders. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 438, 85-92.	4.7	22
125	Distribution of Fe-rich phases in eutectic grains of Sr-modified Alâ€“10wt.% Siâ€“0.1wt.% Fe casting alloy. Journal of Alloys and Compounds, 2013, 558, 18-25.	5.5	36
126	Characterization of borides in Coâ€“Reâ€“Cr-based high-temperature alloys. Journal of Alloys and Compounds, 2013, 569, 82-87.	5.5	9

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127	Statistical analysis of composition fluctuations and short-range order in stoichiometric Niâ€“Crâ€“Mo alloys. Ultramicroscopy, 2013, 132, 227-232.	1.9	11
128	Srâ€“Alâ€“Si co-segregated regions in eutectic Si phase of Sr-modified Alâ€“10Si alloy. Ultramicroscopy, 2013, 132, 216-221.	1.9	36
129	Influence of cracks in the microporous layer on the water distribution in a PEM fuel cell investigated by synchrotron radiography. Electrochemistry Communications, 2013, 34, 22-24.	4.7	98
130	Foaming of AA 6061 using multiple pieces of foamable precursor. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 438, 47-55.	4.7	34
131	Water Evolution in Direct Methanol Fuel Cell Cathodes Studied by Synchrotron Xâ€Ray Radiography. Fuel Cells, 2013, 13, 371-379.	2.4	6
132	Atomic-scale compositional characterization of a nanocrystalline AlCrCuFeNiZn high-entropy alloy using atom probe tomography. Acta Materialia, 2013, 61, 4696-4706.	7.9	138
133	Particle and liquid motion in semi-solid aluminium alloys: A quantitative in situ microradioscopy study. Acta Materialia, 2013, 61, 1244-1253.	7.9	28
134	Foaming of Aluminum Alloys Derived From Scrap. Advanced Engineering Materials, 2013, 15, 129-133.	3.5	12
135	Metal Foaming Studied In Situ by Energy Dispersive Xâ€Ray Diffraction of Synchrotron Radiation, Xâ€Ray Radioscopy, and Optical Expandometry. Advanced Engineering Materials, 2013, 15, 141-148.	3.5	13
136	Investigation of the local catalyst distribution in an aged direct methanol fuel cell MEA by means of differential synchrotron X-ray absorption edge imaging with high energy resolution. Journal of Power Sources, 2013, 221, 210-216.	7.8	40
137	Hierarchical radioscopy using polychromatic and partially coherent hard synchrotron radiation. Applied Optics, 2013, 52, 8122.	1.8	9
138	Electrolyte Distribution and Discharge Time - A Combined Study of X-ray Tomography and Electrical Measurements of a Commercially Available Lithium-Ion Capacitor. ECS Transactions, 2013, 53, 211-218.	0.5	3
139	Investigation of Fuel Cell Materials and Liquid Water Transport by Means of Synchrotron Imaging. ECS Transactions, 2013, 45, 195-202.	0.5	0
140	Suitability of various complex hydrides for foaming aluminum alloys. Journal of Materials Research, 2013, 28, 2436-2443.	2.6	11
141	Influence of Artificial Ageing of Gas Diffusion Layers on the Water Management of PEM Fuel Cells. ECS Transactions, 2013, 53, 21-28.	0.5	4
142	White-beam X-ray radioscopy and tomography with simultaneous diffraction at the EDDI beamline. Journal of Synchrotron Radiation, 2013, 20, 809-810.	2.4	16
143	Influence of Artificial Aging of Gas Diffusion Layers on the Water Management of PEM Fuel Cells. ECS Electrochemistry Letters, 2013, 3, F7-F9.	1.9	15
144	Influence of Artificial Aging of Gas Diffusion Layers on the Water Management of PEM Fuel Cells. ECS Meeting Abstracts, 2013, , .	0.0	0

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145	Tomografische Methoden fÃ¼r die Brennstoffzellenforschungâ€”. Materialpruefung/Materials Testing, 2013, 55, 207-213.	2.2	2
146	Synchrotron-Radiographie und -Tomographie einer PEM-Brennstoffzelle. Materialpruefung/Materials Testing, 2013, 55, 355-360.	2.2	2
147	Polarized neutron imaging and three-dimensional calculation of magnetic flux trapping in bulk of superconductors. Physical Review B, 2012, 85, .	3.2	37
148	The kinetics of clustering in Alâ€“Mgâ€“Si alloys studied by Monte Carlo simulation. International Journal of Materials Research, 2012, 103, 980-986.	0.3	18
149	Influence of Mg/Si ratio on the clustering kinetics in Alâ€“Mgâ€“Si alloys. International Journal of Materials Research, 2012, 103, 955-961.	0.3	14
150	Automated quantitative 3D analysis of faceting of particles in tomographic datasets. Ultramicroscopy, 2012, 122, 65-75.	1.9	14
151	Combined synchrotron X-ray radiography and tomography study of water transport in gas diffusion layers. Micro and Nano Letters, 2012, 7, 689.	1.3	13
152	Early stages of decomposition within the Î³â€² phase of a Niâ€“Alâ€“Ti model alloy. Intermetallics, 2012, 22, 226-230.	3.9	17
153	Neutron tomographic investigations of water distributions in polymer electrolyte membrane fuel cell stacks. Journal of Power Sources, 2012, 219, 120-125.	7.8	63
154	Plastic deformation of Al85Ni10La5 by equal channel angular pressing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 558, 64-69.	5.6	3
155	Three-Dimensional Studies on Compressed Gas Diffusion Layers and the Water Distribution in Operating Fuel Cells Using Synchrotron X-ray Imaging. ECS Meeting Abstracts, 2012, , .	0.0	0
156	Metal Foaming Investigated by X-ray Radioscopy. Metals, 2012, 2, 10-21.	2.3	39
157	Analysis of particle rolling and intrinsic rotations in copper powder during sintering. Journal of Materials Science, 2012, 47, 7047-7055.	3.7	16
158	Detection system for microimaging with neutrons. Journal of Instrumentation, 2012, 7, P02014-P02014.	1.2	97
159	Recent Trends in Aluminum Foam Sandwich Technology. Advanced Engineering Materials, 2012, 14, 1082-1087.	3.5	100
160	Structure and deformation correlation of closed-cell aluminium foam subject to uniaxial compression. Acta Materialia, 2012, 60, 3604-3615.	7.9	78
161	The role of strontium in modifying aluminiumâ€“silicon alloys. Acta Materialia, 2012, 60, 3920-3928.	7.9	292
162	Visualization of the water distribution in perforated gas diffusion layers by means of synchrotron X-ray radiography. International Journal of Hydrogen Energy, 2012, 37, 7757-7761.	7.1	82

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163	Local structure and site substitution in Al86Ni6Co2Y4.5La1.5 bulk amorphous alloy. Materials Letters, 2012, 70, 171-173.	2.6	12
164	Partial decomposition of TiH2 studied in situ by energy-dispersive diffraction and ex situ by diffraction microtomography of hard X-ray synchrotron radiation. Scripta Materialia, 2012, 66, 757-760.	5.2	21
165	Investigation of fuel cells using scanning neutron imaging and a focusing neutron guide. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 663, 48-54.	1.6	12
166	Study of ageing in Alâ€“Mgâ€“Si alloys by positron annihilation spectroscopy. Physica B: Condensed Matter, 2012, 407, 2689-2696.	2.7	27
167	The Effect of Cu and Cr on Clustering and Precipitation in Al-Mg-Si Alloys. , 2012, , 1125-1130.		2
168	Neutron Bragg-edge mapping of weld seams. International Journal of Materials Research, 2012, 103, 151-154.	0.3	29
169	Investigations on the Precipitation in Monocrystalline Al-Mg-Si Model Alloy by Small Angle Neutron Scattering. , 2012, , 1083-1088.		0
170	Muon Spin Relaxation and Positron Annihilation Spectroscopy Studies of Natural Aging in Al-Mg-Si Alloys. , 2012, , 37-42.		1
171	ECAA 2011. International Journal of Materials Research, 2012, 103, 941-941.	0.3	0
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