

Nikolay Kardjilov

List of Publications by Year in descending order

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256
papers

7,276
citations

53751

45
h-index

85498

71
g-index

257
all docs

257
docs citations

257
times ranked

4718
citing authors

#	ARTICLE	IF	CITATIONS
1	Investigation of water evolution and transport in fuel cells with high resolution synchrotron x-ray radiography. Applied Physics Letters, 2007, 90, 174105.	1.5	305
2	Advances in neutron radiography and tomography. Journal Physics D: Applied Physics, 2009, 42, 243001.	1.3	243
3	Neutron imaging in materials science. Materials Today, 2011, 14, 248-256.	8.3	196
4	Three-dimensional imaging of magnetic fields with polarized neutrons. Nature Physics, 2008, 4, 399-403.	6.5	186
5	Cross-sectional insight in the water evolution and transport in polymer electrolyte fuel cells. Applied Physics Letters, 2008, 92, .	1.5	160
6	Three-dimensional imaging of magnetic domains. Nature Communications, 2010, 1, 125.	5.8	143
7	Neutron Dark-Field Tomography. Physical Review Letters, 2008, 101, 123902.	2.9	139
8	Advances in neutron imaging. Materials Today, 2018, 21, 652-672.	8.3	138
9	Three-dimensional imaging of hydrogen blister in iron with neutron tomography. Acta Materialia, 2014, 78, 14-22.	3.8	105
10	4D imaging of lithium-batteries using correlative neutron and X-ray tomography with a virtual unrolling technique. Nature Communications, 2020, 11, 777.	5.8	104
11	Quasi-“in situ neutron tomography on polymer electrolyte membrane fuel cell stacks. Applied Physics Letters, 2007, 90, 184101.	1.5	103
12	Combined neutron radiography and locally resolved current density measurements of operating PEM fuel cells. Journal of Power Sources, 2008, 176, 452-459.	4.0	103
13	3D Mapping of Crystallographic Phase Distribution using Energy-Selective Neutron Tomography. Advanced Materials, 2014, 26, 4069-4073.	11.1	98
14	Detection system for microimaging with neutrons. Journal of Instrumentation, 2012, 7, P02014-P02014.	0.5	97
15	Wavelength tunable device for neutron radiography and tomography. Applied Physics Letters, 2006, 89, 203504.	1.5	95
16	X-ray and neutron imaging “ Complementary techniques for materials science and engineering. International Journal of Materials Research, 2010, 101, 1069-1079.	0.1	85
17	In situ investigation of the discharge of alkaline Zn-“MnO ₂ batteries with synchrotron x-ray and neutron tomographies. Applied Physics Letters, 2007, 90, 214102.	1.5	84
18	Variability and constraint in the mammalian vertebral column. Journal of Evolutionary Biology, 2011, 24, 1080-1090.	0.8	81

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19	CONRAD-2: the new neutron imaging instrument at the Helmholtz-Zentrum Berlin. Journal of Applied Crystallography, 2016, 49, 195-202.	1.9	78
20	Eocene lizard from Germany reveals amphisbaenian origins. Nature, 2011, 473, 364-367.	13.7	75
21	Neutron tomography instrument CONRAD at HZB. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 651, 47-52.	0.7	74
22	Capturing 3D Water Flow in Rooted Soil by Ultra-fast Neutron Tomography. Scientific Reports, 2017, 7, 6192.	1.6	74
23	Neutron Bragg-edge-imaging for strain mapping under <i>in situ</i> tensile loading. Journal of Applied Physics, 2011, 109, .	1.1	73
24	Industrial applications at the new cold neutron radiography and tomography facility of the HMI. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 542, 16-21.	0.7	71
25	Characterization of water exchange and two-phase flow in porous gas diffusion materials by hydrogen-deuterium contrast neutron radiography. Applied Physics Letters, 2008, 92, .	1.5	71
26	Sculpture and vascularization of dermal bones, and the implications for the physiology of basal tetrapods. Zoological Journal of the Linnean Society, 0, 160, 302-340.	1.0	71
27	In-situ two-phase flow investigation of different porous transport layer for a polymer electrolyte membrane (PEM) electrolyzer with neutron spectroscopy. Journal of Power Sources, 2018, 390, 108-115.	4.0	71
28	Large area high resolution neutron imaging detector for fuel cell research. Journal of Power Sources, 2011, 196, 4631-4637.	4.0	69
29	A highly adaptive detector system for high resolution neutron imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 651, 95-99.	0.7	68
30	New trends in neutron imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 605, 13-15.	0.7	65
31	Investigation of Energy-Relevant Materials with Synchrotron X-Rays and Neutrons. Advanced Engineering Materials, 2011, 13, 712-729.	1.6	63
32	Neutron tomographic investigations of water distributions in polymer electrolyte membrane fuel cell stacks. Journal of Power Sources, 2012, 219, 120-125.	4.0	63
33	New features in cold neutron radiography and tomography Part II: applied energy-selective neutron radiography and tomography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 501, 536-546.	0.7	62
34	Hydrogen distribution measurements by neutrons. Applied Radiation and Isotopes, 2004, 61, 503-509.	0.7	62
35	Combined local current distribution measurements and high resolution neutron radiography of operating Direct Methanol Fuel Cells. Electrochemistry Communications, 2009, 11, 1606-1609.	2.3	61
36	The influence of gas diffusion layer wettability on direct methanol fuel cell performance: A combined local current distribution and high resolution neutron radiography study. Journal of Power Sources, 2010, 195, 4765-4771.	4.0	61

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37	Revealing Hidden Facts of Li Anode in Cycled Lithium-Oxygen Batteries through X-ray and Neutron Tomography. ACS Energy Letters, 2019, 4, 306-316.	8.8	61
38	High-Resolution Neutron and X-Ray Imaging of Granular Materials. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2013, 139, 715-723.	1.5	58
39	Description of the first lithostrotian titanosaur embryo in ovo with Neutron characterization and implications for lithostrotian Aptian migration and dispersion. Gondwana Research, 2011, 20, 621-629.	3.0	57
40	The new cold neutron radiography and tomography instrument CONRAD at HMI Berlin. Physica B: Condensed Matter, 2006, 385-386, 1213-1215.	1.3	54
41	Imaging with polarized neutrons. New Journal of Physics, 2009, 11, 043013.	1.2	52
42	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.	4.4	52
43	Investigations on dynamic water transport characteristics in flow field channels using neutron imaging techniques. Journal of Power Sources, 2013, 239, 596-603.	4.0	49
44	Floccular fossa size is not a reliable proxy of ecology and behaviour in vertebrates. Scientific Reports, 2017, 7, 2005.	1.6	49
45	Reconstruction of limited computed tomography data of fuel cell components using Direct Iterative Reconstruction of Computed Tomography Trajectories. Journal of Power Sources, 2011, 196, 5293-5298.	4.0	48
46	The energy-selective option in neutron imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 603, 429-438.	0.7	47
47	Scattering corrections in neutron radiography using point scattered functions. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 542, 336-341.	0.7	46
48	Wavelength-dispersive dark-field contrast: micrometre structure resolution in neutron imaging with gratings. Journal of Applied Crystallography, 2016, 49, 569-573.	1.9	43
49	Revealing microstructural inhomogeneities with dark-field neutron imaging. Journal of Applied Physics, 2010, 107, 036101.	1.1	42
50	Phase-contrast radiography with a polychromatic neutron beam. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 527, 519-530.	0.7	41
51	Analysis of neutron attenuation in boron-alloyed stainless steel with neutron radiography and JEN-3 gauge. Journal of Nuclear Materials, 2005, 341, 189-200.	1.3	41
52	Characterization of water management in metal foam flow-field based polymer electrolyte fuel cells using in-operando neutron radiography. International Journal of Hydrogen Energy, 2020, 45, 2195-2205.	3.8	41
53	Mass transport in polymer electrolyte membrane water electrolyser liquid-gas diffusion layers: A combined neutron imaging and X-ray computed tomography study. Journal of Power Sources, 2020, 455, 227968.	4.0	41
54	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.	3.1	40

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55	Three-Dimensional Visualization of Gas Evolution and Channel Formation inside a Lithium-Ion Battery. ACS Applied Materials & Interfaces, 2016, 8, 7156-7164.	4.0	39
56	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.	4.0	39
57	What comes NeXT? " High-Speed Neutron Tomography at ILL. Optics Express, 2019, 27, 28640.	1.7	39
58	Skeletal ossification and sequence heterochrony in xenarthran evolution. Evolution & Development, 2011, 13, 460-476.	1.1	38
59	Dynamic oxygen mapping in the root zone by fluorescence dye imaging combined with neutron radiography. Journal of Soils and Sediments, 2012, 12, 63-74.	1.5	38
60	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.	4.0	38
61	New features in cold neutron radiography and tomography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 491, 481-491.	0.7	37
62	Scattering correction algorithm for neutron radiography and tomography tested at facilities with different beam characteristics. Physica B: Condensed Matter, 2006, 385-386, 1194-1196.	1.3	37
63	Imaging of an operating LaNi _{4.8} Al _{0.2} -based hydrogen storage container. International Journal of Hydrogen Energy, 2011, 36, 9751-9757.	3.8	37
64	Full-field Measurements of Strain Localisation in Sandstone by Neutron Tomography and 3D-Volumetric Digital Image Correlation. Physics Procedia, 2015, 69, 509-515.	1.2	37
65	Multidimensional operando analysis of macroscopic structure evolution in lithium sulfur cells by X-ray radiography. Physical Chemistry Chemical Physics, 2016, 18, 10630-10636.	1.3	37
66	Porosity detection in electron beam-melted Ti-6Al-4V using high-resolution neutron imaging and grating-based interferometry. Progress in Additive Manufacturing, 2017, 2, 125-132.	2.5	36
67	Tensorial neutron tomography of three-dimensional magnetic vector fields in bulk materials. Nature Communications, 2018, 9, 4023.	5.8	36
68	Neutron tomography for archaeological investigations. Journal of Neutron Research, 2006, 14, 29-36.	0.4	34
69	Imaging with polarized neutrons. Physica B: Condensed Matter, 2009, 404, 2611-2614.	1.3	34
70	Investigation of the skin effect in the bulk of electrical conductors with spin-polarized neutron radiography. Journal of Applied Physics, 2008, 104, .	1.1	33
71	Observation of Magnetic Domains in Insulation-Coated Electrical Steels by Neutron Dark-Field Imaging. Applied Physics Express, 2010, 3, 106602.	1.1	33
72	Neutron Bragg Edge Tomography for Phase Mapping. Physics Procedia, 2015, 69, 227-236.	1.2	33

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73	Estimation of water flow velocity in small plants using cold neutron imaging with D2O tracer. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 605, 146-149.	0.7	32
74	Fossil evidence of core monocots in the Early Cretaceous. Nature Plants, 2019, 5, 691-696.	4.7	32
75	CONRAD-2: Cold Neutron Tomography and Radiography at BER II (V7). Journal of Large-scale Research Facilities JLSRF, 0, 2, A98.	0.0	32
76	High-resolution investigations of edge effects in neutron imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 604, 640-645.	0.7	31
77	Review about old and new imaging signals for neutron computerized tomography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 542, 367-375.	0.7	30
78	New insights into the respiration and metabolic physiology of Lystrosaurus. Acta Zoologica, 2011, 92, 363-371.	0.6	29
79	Neutron Bragg-edge mapping of weld seams. International Journal of Materials Research, 2012, 103, 151-154.	0.1	29
80	Neutron imaging of lithium batteries. Joule, 2022, 6, 35-52.	11.7	29
81	Characterization of a focusing parabolic guide using neutron radiography method. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 542, 248-252.	0.7	28
82	Time-of-flight neutron imaging for spatially resolved strain investigations based on Bragg edge transmission at a reactor source. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 680, 27-34.	0.7	28
83	In-Operando Neutron Radiography Studies of Polymer Electrolyte Membrane Water Electrolyzers. ECS Transactions, 2015, 69, 1135-1140.	0.3	28
84	How mobile are protons in the structure of dental glass ionomer cements?. Scientific Reports, 2015, 5, 8972.	1.6	27
85	In-situ Radiographic Investigation of (De)Lithiation Mechanisms in a Tin Electrode Lithium-Ion Battery. ChemSusChem, 2016, 9, 946-950.	3.6	27
86	Improving the image contrast and resolution in the phase-contrast neutron radiography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 542, 100-105.	0.7	26
87	Analysis of liquid water formation in polymer electrolyte membrane (PEM) fuel cell flow fields with a dry cathode supply. Journal of Power Sources, 2016, 306, 658-665.	4.0	26
88	Mapping water, oxygen, and pH dynamics in the rhizosphere of young maize roots. Journal of Plant Nutrition and Soil Science, 2017, 180, 336-346.	1.1	26
89	Cranial anatomy of the gorgonopsian Cynariops robustus based on CT-reconstruction. PLoS ONE, 2018, 13, e0207367.	1.1	26
90	Effect of cell compression on the water dynamics of a polymer electrolyte fuel cell using in-plane and through-plane in-operando neutron radiography. Journal of Power Sources, 2019, 439, 227074.	4.0	26

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91	Effect of compression on the water management of polymer electrolyte fuel cells: An in-operando neutron radiography study. <i>Journal of Power Sources</i> , 2019, 412, 597-605.	4.0	25
92	TOF-SEMSANSâ€”Time-of-flight spin-echo modulated small-angle neutron scattering. <i>Journal of Applied Physics</i> , 2012, 112, .	1.1	24
93	Mammalian development does not recapitulate suspected key transformations in the evolutionary detachment of the mammalian middle ear. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2016, 283, 20152606.	1.2	24
94	Fast 4â€” Imaging of Fluid Flow in Rock by Highâ€”Speed Neutron Tomography. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 3557-3569.	1.4	24
95	Binder-free carbon monolith cathode material for operando investigation of high performance lithium-sulfur batteries with X-ray radiography. <i>Energy Storage Materials</i> , 2017, 9, 96-104.	9.5	23
96	Validation of Bragg edge experiments by Monte Carlo simulations for quantitative texture analysis. <i>Journal of Applied Crystallography</i> , 2011, 44, 1040-1046.	1.9	22
97	Differential phase contrast and dark field neutron imaging. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2009, 605, 9-12.	0.7	21
98	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. <i>Journal of Power Sources</i> , 2015, 299, 125-129.	4.0	21
99	Samples to Determine the Resolution of Neutron Radiography and Tomography. <i>Physics Procedia</i> , 2017, 88, 258-265.	1.2	21
100	Neutron interferometry detection of early crack formation caused by bending fatigue in additively manufactured SS316 dogbones. <i>Materials and Design</i> , 2018, 140, 420-430.	3.3	21
101	Investigation of water generation and accumulation in polymer electrolyte fuel cells using hydro-electrochemical impedance imaging. <i>Journal of Power Sources</i> , 2019, 414, 272-277.	4.0	21
102	Polarization measurements in neutron imaging. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 123001.	1.3	21
103	<i>In situ</i> Synchrotron Xâ€”ray Radiography Investigations of Water Transport in PEMâ€”Fuel Cells. <i>Fuel Cells</i> , 2010, 10, 26-34.	1.5	20
104	Investigations of the structural stability of metal hydride composites by in-situ neutron imaging. <i>Journal of Power Sources</i> , 2015, 293, 109-118.	4.0	20
105	Non-invasive archaeometallurgical approach to the investigations of bronze figurines using neutron, laser, and X-ray techniques. <i>Microchemical Journal</i> , 2016, 124, 765-774.	2.3	20
106	Inâ€”situ and Operando Tracking of Microstructure and Volume Evolution of Silicon Electrodes by using Synchrotron Xâ€”ray Imaging. <i>ChemSusChem</i> , 2019, 12, 261-269.	3.6	20
107	Energy-selective neutron radiography and tomography at FRM. <i>Applied Radiation and Isotopes</i> , 2004, 61, 455-460.	0.7	19
108	In-operando stress measurement and neutron imaging of metal hydride composites for solid-state hydrogen storage. <i>Journal of Power Sources</i> , 2018, 397, 262-270.	4.0	19

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109	Operando Laboratory X-Ray Imaging of Silver-Based Gas Diffusion Electrodes during Oxygen Reduction Reaction in Highly Alkaline Media. <i>Materials</i> , 2019, 12, 2686.	1.3	19
110	Multi-length scale characterization of compression on metal foam flow-field based fuel cells using X-ray computed tomography and neutron radiography. <i>Energy Conversion and Management</i> , 2021, 230, 113785.	4.4	19
111	In-situ investigation of water distribution in polymer electrolyte membrane fuel cells using high-resolution neutron tomography with 6.5 Åµm pixel size. <i>AIMS Energy</i> , 2018, 6, 607-614.	1.1	19
112	Polarized neutron imaging: A spin-echo approach. <i>Physica B: Condensed Matter</i> , 2011, 406, 2415-2418.	1.3	18
113	Visualization of embolism formation in the xylem of liana stems using neutron radiography. <i>Annals of Botany</i> , 2013, 111, 723-730.	1.4	18
114	Imaging of dynamic magnetic fields with spin-polarized neutron beams. <i>New Journal of Physics</i> , 2015, 17, 043047.	1.2	18
115	Effect of stress on NiO reduction in solid oxide fuel cells: a new application of energy-resolved neutron imaging. <i>Journal of Applied Crystallography</i> , 2015, 48, 401-408.	1.9	18
116	Inner ear development in cetaceans. <i>Journal of Anatomy</i> , 2017, 230, 249-261.	0.9	18
117	Dynamic volume magnetic domain wall imaging in grain oriented electrical steel at power frequencies with accumulative high-frame rate neutron dark-field imaging. <i>Scientific Reports</i> , 2018, 8, 15754.	1.6	18
118	Monte Carlo simulation of neutron transmission of boron-alloyed steel. <i>IEEE Transactions on Nuclear Science</i> , 2005, 52, 394-399.	1.2	17
119	Time-of-flight neutron imaging at a continuous source: Proof of principle using a scintillator CCD imaging detector. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011, 651, 149-155.	0.7	17
120	Prenatal cranial ossification of the humpback whale (<i>Megaptera novaeangliae</i>). <i>Journal of Morphology</i> , 2015, 276, 564-582.	0.6	17
121	In operando visualization of hydride-graphite composites during cyclic hydrogenation by high-resolution neutron imaging. <i>Journal of Power Sources</i> , 2015, 277, 360-369.	4.0	17
122	High-resolution X-ray and neutron computed tomography of partially saturated granular materials subjected to projectile penetration. <i>International Journal of Impact Engineering</i> , 2016, 89, 72-82.	2.4	17
123	Energy-selective neutron imaging by exploiting wavelength gradients of double crystal monochromators—Simulations and experiments. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2019, 943, 162477.	0.7	17
124	Combination of Magnetic Resonance Imaging and Neutron Computed Tomography for Three-dimensional Rhizosphere Imaging. <i>Vadose Zone Journal</i> , 2019, 18, 1-11.	1.3	17
125	External water transport is more important than vascular transport in the extreme atmospheric epiphyte <i>Tillandsia usneoides</i> (Spanish moss). <i>Plant, Cell and Environment</i> , 2019, 42, 1645-1656.	2.8	17
126	On neutron phase contrast imaging. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2008, 266, 181-186.	0.6	16

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127	Neutron tomography using an elliptic focusing guide. <i>Journal of Applied Physics</i> , 2010, 108, 034905.	1.1	16
128	Braincase, palatoquadrate and ear region of the plagiosaurid <i>Gerrothorax pulcherrimus</i> from the Middle Triassic of Germany. <i>Palaeontology</i> , 2012, 55, 31-50.	1.0	16
129	In-plane neutron radiography for studying the influence of surface treatment and design of cathode flow fields in direct methanol fuel cells. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 2443-2454.	3.8	16
130	Characterizing Partially Saturated Compacted-Sand Specimen Using 3D Image Registration of High-Resolution Neutron and X-Ray Tomography. <i>Journal of Computing in Civil Engineering</i> , 2015, 29, .	2.5	16
131	Combined neutron and laser techniques for technological and compositional investigations of hollow bronze figurines. <i>Journal of Analytical Atomic Spectrometry</i> , 2015, 30, 713-720.	1.6	16
132	Influence of Stoichiometry on the Two-Phase Flow Behavior of Proton Exchange Membrane Electrolyzers. <i>Energies</i> , 2019, 12, 350.	1.6	16
133	Advanced neutron imaging methods with a potential to benefit from pulsed sources. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011, 651, 57-61.	0.7	15
134	Using a grating analyser for SEMSANS investigations in the very small angle range. <i>Physica B: Condensed Matter</i> , 2012, 407, 4132-4135.	1.3	15
135	Non-invasive detection and localization of microplastic particles in a sandy sediment by complementary neutron and X-ray tomography. <i>Journal of Soils and Sediments</i> , 2021, 21, 1476-1487.	1.5	15
136	Scatter rejection in quantitative thermal and cold neutron imaging. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011, 651, 145-148.	0.7	14
137	Assessment of Greener Cement by employing thermally treated sugarcane straw ashes. <i>Construction and Building Materials</i> , 2017, 141, 343-352.	3.2	14
138	Correction approach of detector backlighting in radiography. <i>Review of Scientific Instruments</i> , 2019, 90, 125108.	0.6	14
139	Absorption- and Phase-Based Imaging Signals for Neutron Tomography. , 0, , 407-420.		13
140	Polarized neutron imaging at the CONRAD instrument at Helmholtz Centre Berlin. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2009, 605, 26-29.	0.7	13
141	Investigation of soot sediments in particulate filters and engine components. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2009, 610, 622-626.	0.7	13
142	Convergence vs. Specialization in the ear region of moles (mammalia). <i>Journal of Morphology</i> , 2015, 276, 900-914.	0.6	13
143	Time-resolved Bragg-edge neutron radiography for observing martensitic phase transformation from austenitized super martensitic steel. <i>Journal of Materials Science</i> , 2017, 52, 3490-3496.	1.7	13
144	3D visualisation of hepatitis B vaccine in the oral delivery vehicle SBA-15. <i>Scientific Reports</i> , 2019, 9, 6106.	1.6	13

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145	Wassermanagement in Brennstoffzellen – die Bedeutung von hochauflösenden zerstörungsfreien Untersuchungsmethoden. <i>Materialprüfung/Materials Testing</i> , 2008, 50, 609-614.	0.8	13
146	Wasserverteilung in PEM-Brennstoffzellen. <i>Materialprüfung/Materials Testing</i> , 2009, 51, 219-226.	0.8	13
147	Operando Radiography and Multimodal Analysis of Lithium–Sulfur Pouch Cells–Electrolyte Dependent Morphology Evolution at the Cathode. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	13
148	A mobile neutron source based on the SbBe reaction. <i>Applied Radiation and Isotopes</i> , 2004, 61, 659-662.	0.7	12
149	Investigation of fuel cells using scanning neutron imaging and a focusing neutron guide. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2012, 663, 48-54.	0.7	12
150	Setup for polarized neutron imaging using <i>in situ</i> ^3He cells at the Oak Ridge National Laboratory High Flux Isotope Reactor CG-1D beamline. <i>Review of Scientific Instruments</i> , 2017, 88, 095103.	0.6	12
151	Editors’ Choice™ 4D Neutron and X-ray Tomography Studies of High Energy Density Primary Batteries: Part I. Dynamic Studies of LiSOCl ₂ during Discharge. <i>Journal of the Electrochemical Society</i> , 2020, 167, 130545.	1.3	12
152	Spatially resolved time-of-flight neutron imaging using a scintillator CMOS-camera detector with kHz time resolution. <i>Optics Express</i> , 2019, 27, 26218.	1.7	12
153	Monte Carlo simulations for the analysis of texture and strain measured with Bragg edge neutron transmission. <i>Journal of Physics: Conference Series</i> , 2012, 340, 012022.	0.3	11
154	Neutron radiography and current distribution measurements for studying cathode flow field properties of direct methanol fuel cells. <i>International Journal of Energy Research</i> , 2014, 38, 926-943.	2.2	11
155	Spectral neutron tomography. <i>Materials Today Advances</i> , 2021, 9, 100132.	2.5	11
156	Three-dimensional in vivo analysis of water uptake and translocation in maize roots by fast neutron tomography. <i>Scientific Reports</i> , 2021, 11, 10578.	1.6	11
157	Non-destructive characterization of archaeological glasses by neutron tomography. <i>Physica B: Condensed Matter</i> , 2006, 385-386, 1206-1208.	1.3	10
158	Visualization of water usage and photosynthetic activity of street trees exposed to 2ppm of SO ₂ – A combined evaluation by cold neutron and chlorophyll fluorescence imaging. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2009, 605, 185-187.	0.7	10
159	Investigation of phase transfer properties of light and heavy water by means of energy selective neutron imaging. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2012, 670, 68-72.	0.7	10
160	Detection of water with high sensitivity to study polymer electrolyte fuel cell membranes using cold neutrons at high spatial resolution. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	10
161	Imaging with Cold Neutrons at the CONRAD-2 Facility. <i>Physics Procedia</i> , 2015, 69, 60-66.	1.2	10
162	Neutron computed laminography on ancient metal artefacts. <i>Analytical Methods</i> , 2015, 7, 271-278.	1.3	10

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