

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	Capturing 3D water layers and water-filled micropores in carbonate rock by high-resolution neutron tomography. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 633, 127838.	2.3	1
2	Using crystallography tools to improve vaccine formulations. <i>IUCr</i> , 2022, 9, 11-20.	1.0	2
3	Intact, Commercial Lithium-Polymer Batteries: Spatially Resolved Grating-Based Interferometry Imaging, Bragg Edge Imaging, and Neutron Diffraction. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 1281.	1.3	3
4	Neutron imaging of lithium batteries. <i>Joule</i> , 2022, 6, 35-52.	11.7	29
5	Compact and versatile neutron imaging detector with sub-4 $\frac{1}{4}$ μ m spatial resolution based on a single-crystal thin-film scintillator. <i>Optics Express</i> , 2022, 30, 14461.	1.7	8
6	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
7	Development of a Modular Operando Cell for X-ray Imaging of Strongly Absorbing Silver-Based Gas Diffusion Electrodes. <i>Journal of the Electrochemical Society</i> , 2022, 169, 044508.	1.3	8
8	High-speed 4D neutron computed tomography for quantifying water dynamics in polymer electrolyte fuel cells. <i>Nature Communications</i> , 2022, 13, 1616.	5.8	10
9	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
10	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
11	Spectral neutron tomography. <i>Materials Today Advances</i> , 2021, 9, 100132.	2.5	11
12	PTFE Content in Catalyst Layers and Microporous Layers: Effect on Performance and Water Distribution in Polymer Electrolyte Membrane Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2021, 168, 034509.	1.3	4
13	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
14	Analysis of erbium diffusion in zirconium-niobium alloys using neutron imaging and laser-induced breakdown spectroscopy. <i>Journal of Nuclear Materials</i> , 2021, 549, 152869.	1.3	1
15	Neutron darkfield imaging of fiber composites. <i>Materialprüfung/Materials Testing</i> , 2021, 63, 623-629.	0.8	0
16	Multimodal ex vivo methods reveal that Gd-rich corrosion byproducts remain at the implant site of biodegradable Mg-Gd screws. <i>Acta Biomaterialia</i> , 2021, 136, 582-591.	4.1	8
17	Neutron computed laminography yields 3D root system architecture and complements investigations of spatiotemporal rhizosphere patterns. <i>Plant and Soil</i> , 2021, 469, 489-501.	1.8	6
18	The Neutron Imaging Instrument CONRAD Post-Operational Review. <i>Journal of Imaging</i> , 2021, 7, 11.	1.7	4

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19	Time-Resolved Neutron Bragg-Edge Imaging: A Case Study by Observing Martensitic Phase Formation in Low Temperature Transformation (LTT) Steel during GTAW. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 10886.	1.3	3
20	Characterisation of Single-Phase Fluid-Flow Heterogeneity Due to Localised Deformation in a Porous Rock Using Rapid Neutron Tomography. <i>Journal of Imaging</i> , 2021, 7, 275.	1.7	3
21	Visualization of magnetic domain structure in FeSi based high permeability steel plates by neutron imaging. <i>Materials Letters</i> , 2020, 259, 126816.	1.3	7
22	Characterization of water management in metal foam flow-field based polymer electrolyte fuel cells using in-operando neutron radiography. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 2195-2205.	3.8	41
23	Non-invasive characterization of ancient Indonesian Kris through neutron methods. <i>European Physical Journal Plus</i> , 2020, 135, 1.	1.2	3
24	Mass transport in polymer electrolyte membrane water electrolyser liquid-gas diffusion layers: A combined neutron imaging and X-ray computed tomography study. <i>Journal of Power Sources</i> , 2020, 455, 227968.	4.0	41
25	Non-destructive characterisation of dopant spatial distribution in cuprate superconductors. <i>Physica C: Superconductivity and Its Applications</i> , 2020, 575, 1353691.	0.6	4
26	4D imaging of lithium-batteries using correlative neutron and X-ray tomography with a virtual unrolling technique. <i>Nature Communications</i> , 2020, 11, 777.	5.8	104
27	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
28	Editors' Choice 4D Neutron and X-ray Tomography Studies of High Energy Density Primary Batteries: Part II. Multi-Modal Microscopy of LiSOCl ₂ Cells. <i>Journal of the Electrochemical Society</i> , 2020, 167, 140509.	1.3	7
29	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
30	Fossil evidence of core monocots in the Early Cretaceous. <i>Nature Plants</i> , 2019, 5, 691-696.	4.7	32
31	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
32	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
33	Effect of cell compression on the water dynamics of a polymer electrolyte fuel cell using in-plane and through-plane in-operando neutron radiography. <i>Journal of Power Sources</i> , 2019, 439, 227074.	4.0	26
34	What comes NeXT? " High-Speed Neutron Tomography at ILL. <i>Optics Express</i> , 2019, 27, 28640.	1.7	39
35	Probing the 3D molecular and mineralogical heterogeneity in oil reservoir rocks at the pore scale. <i>Scientific Reports</i> , 2019, 9, 8263.	1.6	7
36	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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37	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
38	Improving polarized neutron imaging for visualization of the Meissner effect in superconductors. <i>Review of Scientific Instruments</i> , 2019, 90, 033705.	0.6	6
39	Fast 4D Imaging of Fluid Flow in Rock by High-Speed Neutron Tomography. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 3557-3569.	1.4	24
40	Influence of Stoichiometry on the Two-Phase Flow Behavior of Proton Exchange Membrane Electrolyzers. <i>Energies</i> , 2019, 12, 350.	1.6	16
41	Correction approach of detector backlighting in radiography. <i>Review of Scientific Instruments</i> , 2019, 90, 125108.	0.6	14
42	Polarization measurements in neutron imaging. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 123001.	1.3	21
43	Revealing Hidden Facts of Li Anode in Cycled Lithium-Oxygen Batteries through X-ray and Neutron Tomography. <i>ACS Energy Letters</i> , 2019, 4, 306-316.	8.8	61
44	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
45	Neutron Imaging. , 2019, , 47-59.		1
46	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
47	In-situ and Operando Tracking of Microstructure and Volume Evolution of Silicon Electrodes by using Synchrotron X-ray Imaging. <i>ChemSusChem</i> , 2019, 12, 261-269.	3.6	20
48	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
49	Merging of imaging techniques based on reflectance hyperspectral and neutron tomography for characterization of a modern replica of a 13th century knife from Croatia. , 2019, , .		0
50	Continuous cropping of endangered therapeutic plants via electron beam soil-treatment and neutron tomography. <i>Scientific Reports</i> , 2018, 8, 2136.	1.6	3
51	Advances in neutron imaging. <i>Materials Today</i> , 2018, 21, 652-672.	8.3	138
52	In-situ two-phase flow investigation of different porous transport layer for a polymer electrolyte membrane (PEM) electrolyzer with neutron spectroscopy. <i>Journal of Power Sources</i> , 2018, 390, 108-115.	4.0	71
53	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
54	Investigating phase behavior and structural changes in NiO/Ni-YSZ composite with monochromatic in-situ 2D and static 3D neutron imaging. <i>Physica B: Condensed Matter</i> , 2018, 551, 24-28.	1.3	6

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55	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
56	Cranial anatomy of the gorgonopsian <i>Cynariops robustus</i> based on CT-reconstruction. <i>PLoS ONE</i> , 2018, 13, e0207367.	1.1	26
57	Tensorial neutron tomography of three-dimensional magnetic vector fields in bulk materials. <i>Nature Communications</i> , 2018, 9, 4023.	5.8	36
58	Space-resolved study of binder burnout process in dry pressed ZnO ceramics by neutron imaging. <i>Journal of the European Ceramic Society</i> , 2018, 38, 5448-5453.	2.8	2
59	In Operando Neutron Radiography Analysis of a High-Temperature Polymer Electrolyte Fuel Cell Based on a Phosphoric Acid-Doped Polybenzimidazole Membrane Using the Hydrogen-Deuterium Contrast Method. <i>Energies</i> , 2018, 11, 2214.	1.6	4
60	An X-ray Tomographic Study of Rechargeable Zn/MnO ₂ Batteries. <i>Materials</i> , 2018, 11, 1486.	1.3	8
61	Early detection of fracture failure in SLM AM tension testing with Talbot-Lau neutron interferometry. <i>Additive Manufacturing</i> , 2018, 22, 658-664.	1.7	8
62	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
63	Imaging with Polarized Neutrons. <i>Journal of Imaging</i> , 2018, 4, 23.	1.7	7
64	Röntgen- und Neutronentomographie am knöchernen Innenohr der Bartenwale. <i>Materialprüfung/Materials Testing</i> , 2018, 60, 173-178.	0.8	2
65	Neutronen-Laminografie am Beispiel eines historischen Artefakts. <i>Materialprüfung/Materials Testing</i> , 2018, 60, 1209-1214.	0.8	1
66	Investigations of the hydrogen diffusion and distribution in Zirconium by means of Neutron Imaging. <i>Kerntechnik</i> , 2018, 83, 495-501.	0.2	2
67	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
68	Complementary X-ray and neutron radiography study of the initial lithiation process in lithium-ion batteries containing silicon electrodes. <i>Applied Surface Science</i> , 2017, 399, 359-366.	3.1	40
69	Phase-contrast synchrotron microtomography reveals the internal morphology of a new fossil species of the <i>Corticaria-sylvicola</i> -group (Coleoptera: Latridiidae). <i>Zootaxa</i> , 2017, 4242, 578.	0.2	6
70	Mapping water, oxygen, and pH dynamics in the rhizosphere of young maize roots. <i>Journal of Plant Nutrition and Soil Science</i> , 2017, 180, 336-346.	1.1	26
71	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
72	Combined application of imaging techniques for the characterization and authentication of ancient weapons. <i>European Physical Journal Plus</i> , 2017, 132, 1.	1.2	4

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73	Assessment of Greener Cement by employing thermally treated sugarcane straw ashes. Construction and Building Materials, 2017, 141, 343-352.	3.2	14
74	Inner ear development in cetaceans. Journal of Anatomy, 2017, 230, 249-261.	0.9	18
75	Probing Our Heritage with Neutrons – One Successful Story. Neutron Scattering Applications and Techniques, 2017, , 3-18.	0.2	0
76	Neutron Imaging. Neutron Scattering Applications and Techniques, 2017, , 329-349.	0.2	4
77	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. Review of Scientific Instruments, 2017, 88, 095103.	0.6	12
78	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
79	Which Resolution can be Achieved in Practice in Neutron Imaging Experiments? – A General View and Application on the Zr - ZrH ₂ and ZrO ₂ - ZrN Systems. Physics Procedia, 2017, 88, 266-274.	1.2	9
80	Monte Carlo Simulation for Designing Collimator of the Neutron Radiography Facility in Malaysia. Physics Procedia, 2017, 88, 361-368.	1.2	10
81	Samples to Determine the Resolution of Neutron Radiography and Tomography. Physics Procedia, 2017, 88, 258-265.	1.2	21
82	Floccular fossa size is not a reliable proxy of ecology and behaviour in vertebrates. Scientific Reports, 2017, 7, 2005.	1.6	49
83	Capturing 3D Water Flow in Rooted Soil by Ultra-fast Neutron Tomography. Scientific Reports, 2017, 7, 6192.	1.6	74
84	The Nanoporous RP-20 Carbon Electrode as a Model for Energy Storage and Conversion Systems – Studied with μCT , SAXS and SANS Techniques. ECS Transactions, 2017, 77, 1133-1144.	0.3	5
85	Binder-free carbon monolith cathode material for operando investigation of high performance lithium-sulfur batteries with X-ray radiography. Energy Storage Materials, 2017, 9, 96-104.	9.5	23
86	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
87	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
88	Characterization of Lithium Ion Batteries with In Situ X-Ray Tomography and Radiography. ECS Transactions, 2016, 72, 3-11.	0.3	0
89	Wavelength-dispersive dark-field contrast: micrometre structure resolution in neutron imaging with gratings. Journal of Applied Crystallography, 2016, 49, 569-573.	1.9	43
90	In-situ Radiographic Investigation of (De)Lithiation Mechanisms in a Tin Electrode Lithium-Ion Battery. ChemSusChem, 2016, 9, 946-950.	3.6	27

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91	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
92	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
93	CONRAD-2: the new neutron imaging instrument at the Helmholtz-Zentrum Berlin. <i>Journal of Applied Crystallography</i> , 2016, 49, 195-202.	1.9	78
94	Multidimensional operando analysis of macroscopic structure evolution in lithium sulfur cells by X-ray radiography. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 10630-10636.	1.3	37
95	Three-Dimensional Visualization of Gas Evolution and Channel Formation inside a Lithium-Ion Battery. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 7156-7164.	4.0	39
96	Analysis of liquid water formation in polymer electrolyte membrane (PEM) fuel cell flow fields with a dry cathode supply. <i>Journal of Power Sources</i> , 2016, 306, 658-665.	4.0	26
97	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
98	Effect of ageing of gas diffusion layers on the water distribution in flow field channels of polymer electrolyte membrane fuel cells. <i>Journal of Power Sources</i> , 2016, 301, 386-391.	4.0	39
99	Imaging with Cold Neutrons at the CONRAD-2 Facility. <i>Physics Procedia</i> , 2015, 69, 60-66.	1.2	10
100	Neutron Bragg Edge Tomography for Phase Mapping. <i>Physics Procedia</i> , 2015, 69, 227-236.	1.2	33
101	Neutron Imaging Investigations of the Secondary Hydriding of Nuclear Fuel Cladding Alloys during Loss of Coolant Accidents. <i>Physics Procedia</i> , 2015, 69, 436-444.	1.2	5
102	In-Operando Neutron Radiography Studies of Polymer Electrolyte Membrane Water Electrolyzers. <i>ECS Transactions</i> , 2015, 69, 1135-1140.	0.3	28
103	Three-Dimensional Imaging of Magnetic Domains with Neutron Grating Interferometry. <i>Physics Procedia</i> , 2015, 69, 404-412.	1.2	3
104	Fuel Cell Research with Neutron Imaging at Helmholtz Centre Berlin. <i>Physics Procedia</i> , 2015, 69, 619-627.	1.2	9
105	Measuring Hydrogen Distributions in Iron and Steel Using Neutrons. <i>Physics Procedia</i> , 2015, 69, 445-450.	1.2	9
106	Full-field Measurements of Strain Localisation in Sandstone by Neutron Tomography and 3D-Volumetric Digital Image Correlation. <i>Physics Procedia</i> , 2015, 69, 509-515.	1.2	37
107	Prenatal cranial ossification of the humpback whale (<i>Megaptera novaeangliae</i>). <i>Journal of Morphology</i> , 2015, 276, 564-582.	0.6	17
108	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

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109	Microfocus X-ray imaging of Brazil nuts for quality control. <i>Semina:Ciencias Agrarias</i> , 2015, 36, 2565.	0.1	5
110	How mobile are protons in the structure of dental glass ionomer cements?. <i>Scientific Reports</i> , 2015, 5, 8972.	1.6	27
111	Different Carbide Derived Nanoporous Carbon Supports and Electroreduction of Oxygen. <i>ECS Transactions</i> , 2015, 66, 69-80.	0.3	4
112	Neutron computed laminography on ancient metal artefacts. <i>Analytical Methods</i> , 2015, 7, 271-278.	1.3	10
113	State-of-the-art neutron imaging. <i>Neutron News</i> , 2015, 26, 15-18.	0.1	1
114	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
115	Imaging of dynamic magnetic fields with spin-polarized neutron beams. <i>New Journal of Physics</i> , 2015, 17, 043047.	1.2	18
116	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
117	Convergence vs. Specialization in the ear region of moles (mammalia). <i>Journal of Morphology</i> , 2015, 276, 900-914.	0.6	13
118	Neutron guide optimisation for a time-of-flight neutron imaging instrument at the European Spallation Source. <i>Optics Express</i> , 2015, 23, 301.	1.7	9
119	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
120	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
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	Structure investigation of soil aggregates treated with different organic matter using X-ray micro tomography*. <i>Materialpruefung/Materials Testing</i> , 2015, 57, 234-238.	0.8	3
123	Neutron tomography in archaeology*. <i>Materialpruefung/Materials Testing</i> , 2015, 57, 324-328.	0.8	1
124	Untersuchung dreidimensionaler struktureller VerÄnderungen in LiFePO ₄ -Batterien mittels Röntgen-Tomografie. <i>Materialpruefung/Materials Testing</i> , 2015, 57, 872-876.	0.8	0
125	X-ray Compton line scan tomography*. <i>Materialpruefung/Materials Testing</i> , 2015, 57, 985-991.	0.8	0
126	CONRAD-2: The neutron imaging instrument at HZB. <i>Neutron News</i> , 2014, 25, 23-26.	0.1	9

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127	Crystallographic Characterization: 3D Mapping of Crystallographic Phase Distribution using Energy-Selective Neutron Tomography (Adv. Mater. 24/2014). Advanced Materials, 2014, 26, 4068-4068.	11.1	0
128	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.	2.2	11
129	3D Mapping of Crystallographic Phase Distribution using Energy-Selective Neutron Tomography. Advanced Materials, 2014, 26, 4069-4073.	11.1	98
130	Imaging of hydrogen in steels using neutrons. International Journal of Materials Research, 2014, 105, 640-644.	0.1	7
131	Neutron tomography of ancient lead artefacts. Analytical Methods, 2014, 6, 2390.	1.3	5
132	Three-dimensional imaging of hydrogen blister in iron with neutron tomography. Acta Materialia, 2014, 78, 14-22.	3.8	105
133	Nondestructive Visualization and Quantification of 3-D Microstructure of Granular Materials and Direct Numerical Simulations. , 2014, , .		1
134	Upgrading of neutron radiography/tomography facility at research reactor. Kerntechnik, 2014, 79, 70-74.	0.2	1
135	Investigation of Wood Materials by Combined Application of X-ray and Neutron Imaging Techniques*. Materialpruefung/Materials Testing, 2014, 56, 224-229.	0.8	1
136	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.	3.8	16
137	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
138	High-Resolution Neutron and X-Ray Imaging of Granular Materials. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2013, 139, 715-723.	1.5	58
139	Investigation on Dynamic Water Transport of PEFCs Combining Neutron Radiography and CFD Simulation. ECS Transactions, 2013, 51, 215-226.	0.3	5
140	Methodology for Combined Neutron Diffraction and Bragg Edge Imaging. Materials Research Society Symposia Proceedings, 2013, 1528, 1.	0.1	7
141	Visualization of embolism formation in the xylem of liana stems using neutron radiography. Annals of Botany, 2013, 111, 723-730.	1.4	18
142	Detection of water with high sensitivity to study polymer electrolyte fuel cell membranes using cold neutrons at high spatial resolution. Applied Physics Letters, 2013, 102, .	1.5	10
143	Tomografische Methoden für die Brennstoffzellenforschung. Materialpruefung/Materials Testing, 2013, 55, 207-213.	0.8	2
144	Monte Carlo simulations for the analysis of texture and strain measured with Bragg edge neutron transmission. Journal of Physics: Conference Series, 2012, 340, 012022.	0.3	11

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145	Refraction contrast imaging and edge effects in neutron radiography. Journal of Instrumentation, 2012, 7, C02047-C02047.	0.5	7
146	Neutron tomography for polymer electrolyte membrane fuel cell characterization. , 2012, , 243-262e.		1
147	Braincase, palatoquadrate and ear region of the plagiosaurid <i>Gerrothorax pulcherrimus</i> from the Middle Triassic of Germany. Palaeontology, 2012, 55, 31-50.	1.0	16
148	Using a grating analyser for SEMSANS investigations in the very small angle range. Physica B: Condensed Matter, 2012, 407, 4132-4135.	1.3	15
149	Neutron tomographic investigations of water distributions in polymer electrolyte membrane fuel cell stacks. Journal of Power Sources, 2012, 219, 120-125.	4.0	63
150	TOF-SEMSANS – Time-of-flight spin-echo modulated small-angle neutron scattering. Journal of Applied Physics, 2012, 112, .	1.1	24
151	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
152	Detection system for microimaging with neutrons. Journal of Instrumentation, 2012, 7, P02014-P02014.	0.5	97
153	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.	0.7	12
154	Investigation of phase transfer properties of light and heavy water by means of energy selective neutron imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 670, 68-72.	0.7	10
155	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
156	Imaging and diffusion structural diagnostics of silicon carbide-based composites and fibers. Journal of Thermal Analysis and Calorimetry, 2012, 107, 447-452.	2.0	2
157	Neutron Bragg-edge mapping of weld seams. International Journal of Materials Research, 2012, 103, 151-154.	0.1	29
158	Neutron Bragg-edge-imaging for strain mapping under <i>in situ</i> tensile loading. Journal of Applied Physics, 2011, 109, .	1.1	73
159	Variability and constraint in the mammalian vertebral column. Journal of Evolutionary Biology, 2011, 24, 1080-1090.	0.8	81
160	New insights into the respiration and metabolic physiology of <i>Lystrosaurus</i> . Acta Zoologica, 2011, 92, 363-371.	0.6	29
161	Skeletal ossification and sequence heterochrony in xenarthran evolution. Evolution & Development, 2011, 13, 460-476.	1.1	38
162	Eocene lizard from Germany reveals amphisbaenian origins. Nature, 2011, 473, 364-367.	13.7	75

#	ARTICLE	IF	CITATIONS
163	Time-of-flight neutron imaging at a continuous source: Proof of principle using a scintillator CCD imaging detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 651, 149-155.	0.7	17
164	Scatter rejection in quantitative thermal and cold neutron imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 651, 145-148.	0.7	14
165	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
166	Polarized neutron imaging using helium-3 cells and a polychromatic beam. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 651, 140-144.	0.7	9
167	Advanced neutron imaging methods with a potential to benefit from pulsed sources. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 651, 57-61.	0.7	15
168	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
169	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
170	Imaging of an operating LaNi _{4.8} AlO ₂ -based hydrogen storage container. International Journal of Hydrogen Energy, 2011, 36, 9751-9757.	3.8	37
171	Validation of Bragg edge experiments by Monte Carlo simulations for quantitative texture analysis. Journal of Applied Crystallography, 2011, 44, 1040-1046.	1.9	22
172	Dreidimensionale Abbildung magnetischer Domänen. Physik in Unserer Zeit, 2011, 42, 59-60.	0.0	0
173	Neutron imaging in materials science. Materials Today, 2011, 14, 248-256.	8.3	196
174	Investigation of Energy-Relevant Materials with Synchrotron X-Rays and Neutrons. Advanced Engineering Materials, 2011, 13, 712-729.	1.6	63
175	Localisation of deposited filling gases (CO ₂) in cryogenic thermal insulation materials using neutron radiography. Cryogenics, 2011, 51, 150-153.	0.9	0
176	Polarized neutron imaging: A spin-echo approach. Physica B: Condensed Matter, 2011, 406, 2415-2418.	1.3	18
177	Neutron imaging with the XPAD3-S hybrid pixel detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 634, 85-90.	0.7	0
178	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
179	Large area high resolution neutron imaging detector for fuel cell research. Journal of Power Sources, 2011, 196, 4631-4637.	4.0	69
180	<i>In situ</i> Synchrotron X-ray Radiography Investigations of Water Transport in PEM Fuel Cells. Fuel Cells, 2010, 10, 26-34.	1.5	20

#	ARTICLE	IF	CITATIONS
181	Comparison of Polarizers for Neutron Radiography. Journal of Physics: Conference Series, 2010, 251, 012068.	0.3	6
182	Observation of Magnetic Domains in Insulation-Coated Electrical Steels by Neutron Dark-Field Imaging. Applied Physics Express, 2010, 3, 106602.	1.1	33
183	X-ray and neutron imaging – Complementary techniques for materials science and engineering. International Journal of Materials Research, 2010, 101, 1069-1079.	0.1	85
184	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
185	Neutron tomography using an elliptic focusing guide. Journal of Applied Physics, 2010, 108, 034905.	1.1	16
186	Revealing microstructural inhomogeneities with dark-field neutron imaging. Journal of Applied Physics, 2010, 107, 036101.	1.1	42
187	Three-dimensional imaging of magnetic domains. Nature Communications, 2010, 1, 125.	5.8	143
188	WATER FLOW IN CUT ROSE PEDUNCLES – DESTRUCTIVE AND NON DESTRUCTIVE MEASUREMENT METHODS. Acta Horticulturae, 2010, , 257-262.	0.1	1
189	Untersuchung des Einflusses von GDL-Eigenschaften auf den Wasserhaushalt mittels Neutronenradiografie. Materialpruefung/Materials Testing, 2010, 52, 718-724.	0.8	1
190	Rekonstruktion limitierter CT-Messdatensätze von Brennstoffzellen mit Directt. Materialpruefung/Materials Testing, 2010, 52, 676-683.	0.8	2
191	Design of In-Situ Experimentation for the Study of Fuel Cells with X-rays and Neutrons. Materialpruefung/Materials Testing, 2010, 52, 725-735.	0.8	6
192	NON-DESTRUCTIVE MEASUREMENT OF WATER FLOW IN SMALL PLANTS USING COLD NEUTRON RADIOGRAPHY - AN APPLICATION TO INVESTIGATE BENT-NECK SYMPTOM OF CUT ROSES. Acta Horticulturae, 2010, , 387-392.	0.1	2
193	Hochortsaufweisendes, großflächiges Neutronen-Detektorsystem für die Brennstoffzellenforschung. Materialpruefung/Materials Testing, 2010, 52, 684-691.	0.8	0
194	APPLICATION OF COLD NEUTRON AND SYNCHROTRON X-RAY IMAGING TO INVESTIGATE ROSE BENT NECK SYNDROME. Acta Horticulturae, 2009, , 279-286.	0.1	3
195	Neutron-Imaging Instrument CONRAD. Neutron News, 2009, 20, 20-23.	0.1	7
196	Polarized neutron imaging at the CONRAD instrument at Helmholtz Centre Berlin. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 605, 26-29.	0.7	13
197	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. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment. 2009, 605, 185-187.	0.7	10
198	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

#	ARTICLE	IF	CITATIONS
199	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
200	Differential phase contrast and dark field neutron imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 605, 9-12.	0.7	21
201	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
202	Investigation of soot sediments in particulate filters and engine components. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 610, 622-626.	0.7	13
203	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
204	Imaging with polarized neutrons. Physica B: Condensed Matter, 2009, 404, 2611-2614.	1.3	34
205	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
206	Advances in neutron radiography and tomography. Journal Physics D: Applied Physics, 2009, 42, 243001.	1.3	243
207	Imaging with polarized neutrons. New Journal of Physics, 2009, 11, 043013.	1.2	52
208	Wasserverteilung in PEM-Brennstoffzellen. Materialpruefung/Materials Testing, 2009, 51, 219-226.	0.8	13
209	Novel Imaging Techniques: Polarized Neutrons and Neutron-Based Magnetic Resonance Imaging. Neutron Scattering Applications and Techniques, 2009, , 171-187.	0.2	0
210	Einblicke in Magnetfelder. Physik in Unserer Zeit, 2008, 39, 166-167.	0.0	0
211	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
212	On neutron phase contrast imaging. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 181-186.	0.6	16
213	Three-dimensional imaging of magnetic fields with polarized neutrons. Nature Physics, 2008, 4, 399-403.	6.5	186
214	Beschichtung von metallischen Membranen mittels Pulsed Laser Deposition. Vakuuum in Forschung Und Praxis, 2008, 20, 14-19.	0.0	0
215	Non-destructive compositional analysis of historic organ reed pipes. Journal of Physics Condensed Matter, 2008, 20, 104250.	0.7	8
216	Neutron Dark-Field Tomography. Physical Review Letters, 2008, 101, 123902.	2.9	139

#	ARTICLE	IF	CITATIONS
217	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
218	Cross-sectional insight in the water evolution and transport in polymer electrolyte fuel cells. Applied Physics Letters, 2008, 92, .	1.5	160
219	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
220	Coating of meso-porous metallic membranes with oriented channel-like fine pores by pulsed laser deposition. Nanotechnology, 2008, 19, 065706.	1.3	4
221	NEUTRON ABSORPTION TOMOGRAPHY. , 2008, , 375-408.		5
222	NEUTRON PHASE-CONTRAST AND POLARIZED NEUTRON TOMOGRAPHY. , 2008, , 409-424.		1
223	Wassermanagement in Brennstoffzellen – die Bedeutung von hochauflösenden zerstörungsfreien Untersuchungsmethoden. Materialprüfung/Materials Testing, 2008, 50, 609-614.	0.8	13
224	Visualisierung dreidimensionaler magnetischer Feldverteilungen mit spin-polarisierten Neutronen. Materialprüfung/Materials Testing, 2008, 50, 572-579.	0.8	1
225	Bragg-edge Imaging with Neutrons. Materialprüfung/Materials Testing, 2008, 50, 569-571.	0.8	7
226	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
227	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
228	Quasi-“in situ neutron tomography on polymer electrolyte membrane fuel cell stacks. Applied Physics Letters, 2007, 90, 184101.	1.5	103
229	Non-destructive characterization of archaeological glasses by neutron tomography. Physica B: Condensed Matter, 2006, 385-386, 1206-1208.	1.3	10
230	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
231	The new cold neutron radiography and tomography instrument CONRAD at HMI Berlin. Physica B: Condensed Matter, 2006, 385-386, 1213-1215.	1.3	54
232	Crack detection in Al alloy using phase-contrast neutron radiography and tomography. Measurement Science and Technology, 2006, 17, 2479-2484.	1.4	9
233	Neutron tomography for archaeological investigations. Journal of Neutron Research, 2006, 14, 29-36.	0.4	34
234	Wavelength tunable device for neutron radiography and tomography. Applied Physics Letters, 2006, 89, 203504.	1.5	95

#	ARTICLE	IF	CITATIONS
235	Analysis of neutron attenuation in boron-alloyed stainless steel with neutron radiography and JEN-3 gauge. <i>Journal of Nuclear Materials</i> , 2005, 341, 189-200.	1.3	41
236	Scattering corrections in neutron radiography using point scattered functions. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2005, 542, 336-341.	0.7	46
237	Improving the image contrast and resolution in the phase-contrast neutron radiography. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2005, 542, 100-105.	0.7	26
238	Industrial applications at the new cold neutron radiography and tomography facility of the HMI. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2005, 542, 16-21.	0.7	71
239	Characterization of a focusing parabolic guide using neutron radiography method. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2005, 542, 248-252.	0.7	28
240	Review about old and new imaging signals for neutron computerized tomography. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2005, 542, 367-375.	0.7	30
241	Application of refraction contrast tomography. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2005, 542, 383-386.	0.7	9
242	Neutron imaging of fiber-reinforced materials. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2005, 542, 106-115.	0.7	5
243	Monte Carlo simulation of neutron transmission of boron-alloyed steel. <i>IEEE Transactions on Nuclear Science</i> , 2005, 52, 394-399.	1.2	17
244	Performance studies of a mobile neutron source based on the SbBe reaction. <i>IEEE Transactions on Nuclear Science</i> , 2005, 52, 342-345.	1.2	5
245	The cold neutron tomography set-up at SINQ. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2004, 525, 69-73.	0.7	5
246	Phase-contrast radiography with a polychromatic neutron beam. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2004, 527, 519-530.	0.7	41
247	Energy-selective neutron radiography and tomography at FRM. <i>Applied Radiation and Isotopes</i> , 2004, 61, 455-460.	0.7	19
248	Region of interest tomography of bigger than detector samples. <i>Applied Radiation and Isotopes</i> , 2004, 61, 561-565.	0.7	3
249	A mobile neutron source based on the SbBe reaction. <i>Applied Radiation and Isotopes</i> , 2004, 61, 659-662.	0.7	12
250	Hydrogen distribution measurements by neutrons. <i>Applied Radiation and Isotopes</i> , 2004, 61, 503-509.	0.7	62
251	New features in cold neutron radiography and tomography Part II: applied energy-selective neutron radiography and tomography. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2003, 501, 536-546.	0.7	62
252	Representation of the image formation in applied neutron radiography in terms of a PSF superposition. <i>Applied Physics A: Materials Science and Processing</i> , 2002, 74, s228-s230.	1.1	8

#	ARTICLE	IF	CITATIONS
253	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
254	Absorption- and Phase-Based Imaging Signals for Neutron Tomography. , 0, , 407-420.		13
255	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
256	CONRAD-2: Cold Neutron Tomography and Radiography at BER II (V7). Journal of Large-scale Research Facilities JLSRF, 0, 2, A98.	0.0	32