

Marco Stampanoni

List of Publications by Year in descending order

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399
papers

16,819
citations

16411

64
h-index

23472

111
g-index

405
all docs

405
docs citations

405
times ranked

14538
citing authors

#	ARTICLE	IF	CITATIONS
1	X-ray phase imaging with a grating interferometer. <i>Optics Express</i> , 2005, 13, 6296.	1.7	1,135
2	Visualization and Quantification of Electrochemical and Mechanical Degradation in Li Ion Batteries. <i>Science</i> , 2013, 342, 716-720.	6.0	571
3	Stripe and ring artifact removal with combined wavelet-Fourier filtering. <i>Optics Express</i> , 2009, 17, 8567.	1.7	514
4	Real-time 3D imaging of Haines jumps in porous media flow. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 3755-3759.	3.3	490
5	Regridding reconstruction algorithm for real-time tomographic imaging. <i>Journal of Synchrotron Radiation</i> , 2012, 19, 1029-1037.	1.0	362
6	3D experimental investigation of the microstructure of cement pastes using synchrotron X-ray microtomography (μ CT). <i>Cement and Concrete Research</i> , 2007, 37, 360-368.	4.6	300
7	Synchrotron X-ray tomographic microscopy of fossil embryos. <i>Nature</i> , 2006, 442, 680-683.	13.7	279
8	The First Analysis and Clinical Evaluation of Native Breast Tissue Using Differential Phase-Contrast Mammography. <i>Investigative Radiology</i> , 2011, 46, 801-806.	3.5	228
9	X-Ray Tomography of Porous, Transition Metal Oxide Based Lithium Ion Battery Electrodes. <i>Advanced Energy Materials</i> , 2013, 3, 845-850.	10.2	215
10	Low-dose, simple, and fast grating-based X-ray phase-contrast imaging. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 13576-13581.	3.3	208
11	Simulation comparison of wake mitigation control strategies for a two-turbine case. <i>Wind Energy</i> , 2015, 18, 2135-2143.	1.9	206
12	Trends in synchrotron-based tomographic imaging: the SLS experience. , 2006, , .		196
13	Cellular and Subcellular Structure of Neoproterozoic Animal Embryos. <i>Science</i> , 2006, 314, 291-294.	6.0	190
14	Imaging and image processing in porous media research. <i>Advances in Water Resources</i> , 2008, 31, 1174-1187.	1.7	183
15	Off-the-shelf human decellularized tissue-engineered heart valves in a non-human primate model. <i>Biomaterials</i> , 2013, 34, 7269-7280.	5.7	173
16	Phase-contrast X-ray microtomography links Cretaceous seeds with Gnetales and Bennettitales. <i>Nature</i> , 2007, 450, 549-552.	13.7	172
17	Ultrastructural Properties in Cortical Bone Vary Greatly in Two Inbred Strains of Mice as Assessed by Synchrotron Light Based Micro- and Nano-CT. <i>Journal of Bone and Mineral Research</i> , 2007, 22, 1557-1570.	3.1	166
18	Vascular Graph Model to Simulate the Cerebral Blood Flow in Realistic Vascular Networks. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2009, 29, 1429-1443.	2.4	166

#	ARTICLE	IF	CITATIONS
19	Determination of Material Properties of Gas Diffusion Layers: Experiments and Simulations Using Phase Contrast Tomographic Microscopy. <i>Journal of the Electrochemical Society</i> , 2009, 156, B1175.	1.3	163
20	Hierarchical microimaging for multiscale analysis of large vascular networks. <i>NeuroImage</i> , 2006, 32, 626-636.	2.1	161
21	Implementation of a fast method for high resolution phase contrast tomography. <i>Optics Express</i> , 2006, 14, 8103.	1.7	157
22	Developmental alveolarization of the mouse lung. <i>Developmental Dynamics</i> , 2008, 237, 2108-2116.	0.8	145
23	Evidence and structural mechanism for late lung alveolarization. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2008, 294, L246-L254.	1.3	144
24	Fossilized Nuclei and Germination Structures Identify Ediacaran "Animal Embryos" as Encysting Protists. <i>Science</i> , 2011, 334, 1696-1699.	6.0	142
25	GigaFRoST: the gigabit fast readout system for tomography. <i>Journal of Synchrotron Radiation</i> , 2017, 24, 1250-1259.	1.0	139
26	In Vivo Time-Resolved Microtomography Reveals the Mechanics of the Blowfly Flight Motor. <i>PLoS Biology</i> , 2014, 12, e1001823.	2.6	134
27	Investigation of liquid water in gas diffusion layers of polymer electrolyte fuel cells using X-ray tomographic microscopy. <i>Electrochimica Acta</i> , 2011, 56, 2254-2262.	2.6	132
28	Progress in In Situ X-Ray Tomographic Microscopy of Liquid Water in Gas Diffusion Layers of PEFC. <i>Journal of the Electrochemical Society</i> , 2011, 158, B963-B970.	1.3	130
29	High resolution X-ray detector for synchrotron-based microtomography. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2002, 491, 291-301.	0.7	125
30	Development and trends in synchrotron studies of ancient and historical materials. <i>Physics Reports</i> , 2012, 519, 51-96.	10.3	125
31	Dietary specializations and diversity in feeding ecology of the earliest stem mammals. <i>Nature</i> , 2014, 512, 303-305.	13.7	125
32	Embryo fossilization is a biological process mediated by microbial biofilms. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 19360-19365.	3.3	119
33	Phase-contrast tomography at the nanoscale using hard x rays. <i>Physical Review B</i> , 2010, 81, .	1.1	115
34	Time-lapsed investigation of three-dimensional failure and damage accumulation in trabecular bone using synchrotron light. <i>Bone</i> , 2006, 39, 289-299.	1.4	112
35	Fossil jawless fish from China foreshadows early jawed vertebrate anatomy. <i>Nature</i> , 2011, 476, 324-327.	13.7	112
36	Non-invasive classification of microcalcifications with phase-contrast X-ray mammography. <i>Nature Communications</i> , 2014, 5, 3797.	5.8	110

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37	3D imaging of microstructure of spruce wood. <i>Journal of Structural Biology</i> , 2007, 159, 46-55.	1.3	109
38	Quantifying microstructural dynamics and electrochemical activity of graphite and silicon-graphite lithium ion battery anodes. <i>Nature Communications</i> , 2016, 7, 12909.	5.8	109
39	Advanced phase-contrast imaging using a grating interferometer. <i>Journal of Synchrotron Radiation</i> , 2009, 16, 562-572.	1.0	102
40	Development of teeth and jaws in the earliest jawed vertebrates. <i>Nature</i> , 2012, 491, 748-751.	13.7	98
41	A quantitative framework for the 3D characterization of the osteocyte lacunar system. <i>Bone</i> , 2013, 57, 142-154.	1.4	95
42	In situ synchrotron X-ray micro-tomography study of pitting corrosion in stainless steel. <i>Corrosion Science</i> , 2011, 53, 2684-2687.	3.0	94
43	Fungus-like mycelial fossils in 2.4-billion-year-old vesicular basalt. <i>Nature Ecology and Evolution</i> , 2017, 1, 141.	3.4	94
44	Using X-ray tomography to explore the dynamics of foaming metal. <i>Nature Communications</i> , 2019, 10, 3762.	5.8	94
45	Dynamic Operation of HT-PEFC: In-Operando Imaging of Phosphoric Acid Profiles and (Re)distribution. <i>Journal of the Electrochemical Society</i> , 2015, 162, F310-F316.	1.3	92
46	Finite element 3D reconstruction of the pulmonary acinus imaged by synchrotron X-ray tomography. <i>Journal of Applied Physiology</i> , 2008, 105, 964-976.	1.2	86
47	Scientific data exchange: a schema for HDF5-based storage of raw and analyzed data. <i>Journal of Synchrotron Radiation</i> , 2014, 21, 1224-1230.	1.0	86
48	Synchrotron X-ray radiography studies of pitting corrosion of stainless steel: Extraction of pit propagation parameters. <i>Corrosion Science</i> , 2015, 100, 23-35.	3.0	83
49	The materials science beamline at the Swiss Light Source: design and realization. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2005, 540, 42-67.	0.7	81
50	X-ray microtomography studies of localised corrosion and transitions to stress corrosion cracking. <i>Materials Science and Technology</i> , 2006, 22, 1076-1085.	0.8	81
51	TOMCAT: A beamline for TOMographic Microscopy and Coherent rAdiology experimenTs. <i>AIP Conference Proceedings</i> , 2007, , .	0.3	79
52	The origin of conodonts and of vertebrate mineralized skeletons. <i>Nature</i> , 2013, 502, 546-549.	13.7	79
53	Time-lapsed assessment of microcrack initiation and propagation in murine cortical bone at submicrometer resolution. <i>Bone</i> , 2009, 45, 164-173.	1.4	78
54	Towards on-the-fly data post-processing for real-time tomographic imaging at TOMCAT. <i>Advanced Structural and Chemical Imaging</i> , 2017, 3, 1.	4.0	78

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55	Angiotensin II infusion into ApoE ^{-/-} mice: a model for aortic dissection rather than abdominal aortic aneurysm?. <i>Cardiovascular Research</i> , 2017, 113, 1230-1242.	1.8	78
56	Prenatally engineered autologous amniotic fluid stem cell-based heart valves in the fetal circulation. <i>Biomaterials</i> , 2012, 33, 4031-4043.	5.7	76
57	A multiple source model for 6 MV photon beam dose calculations using Monte Carlo. <i>Physics in Medicine and Biology</i> , 2001, 46, 1407-1427.	1.6	75
58	Operando Properties of Gas Diffusion Layers: Saturation and Liquid Permeability. <i>Journal of the Electrochemical Society</i> , 2017, 164, F115-F126.	1.3	75
59	Imaging brain amyloid deposition using grating-based differential phase contrast tomography. <i>NeuroImage</i> , 2012, 61, 1336-1346.	2.1	74
60	Dynamic intensity normalization using eigen flat fields in X-ray imaging. <i>Optics Express</i> , 2015, 23, 27975.	1.7	74
61	Local Strain Distribution in Real Three-Dimensional Alveolar Geometries. <i>Annals of Biomedical Engineering</i> , 2011, 39, 2835-2843.	1.3	71
62	Sensitivity of X-ray grating interferometry. <i>Optics Express</i> , 2011, 19, 18324.	1.7	70
63	Novel three-dimensional analysis tool for vascular trees indicates complete micro-networks, not single capillaries, as the angiogenic endpoint in mice overexpressing human VEGF165 in the brain. <i>NeuroImage</i> , 2008, 39, 1549-1558.	2.1	69
64	Development of a laser-based heating system for <i>in situ</i> synchrotron-based X-ray tomographic microscopy. <i>Journal of Synchrotron Radiation</i> , 2012, 19, 352-358.	1.0	67
65	Characterization of Liquid Water Saturation in Gas Diffusion Layers by X-Ray Tomographic Microscopy. <i>Journal of the Electrochemical Society</i> , 2016, 163, F202-F209.	1.3	67
66	Embryos, polyps and medusae of the Early Cambrian scyphozoan <i>Olivoooides</i> . <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2013, 280, 20130071.	1.2	66
67	Fossilized fungi in subseafloor Eocene basalts. <i>Geology</i> , 2012, 40, 163-166.	2.0	65
68	Ascending Aortic Aneurysm in Angiotensin II-Infused Mice. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2016, 36, 673-681.	1.1	65
69	<i>Potomacanthus lobatus</i> gen. et sp. nov., a new flower of probable Lauraceae from the Early Cretaceous (Early to Middle Albian) of eastern North America. <i>American Journal of Botany</i> , 2007, 94, 2041-2053.	0.8	64
70	Synchrotron X-Ray Microtomography Study of the Role of Y in Corrosion of Magnesium Alloy WE43. <i>Electrochemical and Solid-State Letters</i> , 2007, 10, C5.	2.2	63
71	Phase contrast tomography: An alternative approach. <i>Applied Physics Letters</i> , 2006, 88, 214104.	1.5	62
72	Deep biosphere consortium of fungi and prokaryotes in Eocene subseafloor basalts. <i>Geobiology</i> , 2014, 12, 489-496.	1.1	62

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73	Imaging the Ultrasmall-Angle X-Ray Scattering Distribution with Grating Interferometry. <i>Physical Review Letters</i> , 2012, 108, 048101.	2.9	60
74	Virtual taphonomy using synchrotron tomographic microscopy reveals cryptic features and internal structure of modern and fossil plants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 12013-12018.	3.3	59
75	Dose optimization approach to fast X-ray microtomography of the lung alveoli. <i>Journal of Applied Crystallography</i> , 2013, 46, 856-860.	1.9	59
76	Dissecting abdominal aortic aneurysm in Ang II-infused mice: suprarenal branch ruptures and apparent luminal dilatation. <i>Cardiovascular Research</i> , 2015, 105, 213-222.	1.8	59
77	Simultaneous 3D visualization and quantification of murine bone and bone vasculature using micro-computed tomography and vascular replica. <i>Microscopy Research and Technique</i> , 2009, 72, 690-701.	1.2	58
78	A Study on Mastectomy Samples to Evaluate Breast Imaging Quality and Potential Clinical Relevance of Differential Phase Contrast Mammography. <i>Investigative Radiology</i> , 2014, 49, 131-137.	3.5	57
79	Image processing pipeline for synchrotron-radiation-based tomographic microscopy. <i>Journal of Synchrotron Radiation</i> , 2010, 17, 550-559.	1.0	53
80	The anatomy, taphonomy, taxonomy and systematic affinity of <i>Markuelia</i> : Early Cambrian to Early Ordovician scalidophorans. <i>Palaeontology</i> , 2010, 53, 1291-1314.	1.0	53
81	Micrometer-resolution imaging using M ² -NCH: towards G ₂ -less grating interferometry. <i>Journal of Synchrotron Radiation</i> , 2016, 23, 1462-1473.	1.0	53
82	Fossilized iron bacteria reveal a pathway to the biological origin of banded iron formation. <i>Nature Communications</i> , 2013, 4, 2050.	5.8	52
83	Fungus, not comet or catastrophe, accounts for carbonaceous spherules in the Younger Dryas "impact layer". <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	51
84	3D-characterization of three-phase systems using X-ray tomography: tracking the microstructural evolution in ice cream. <i>Soft Matter</i> , 2012, 8, 4584.	1.2	51
85	Four-dimensional in vivo X-ray microscopy with projection-guided gating. <i>Scientific Reports</i> , 2015, 5, 8727.	1.6	51
86	Beam-shaping condenser lenses for full-field transmission X-ray microscopy. <i>Journal of Synchrotron Radiation</i> , 2008, 15, 106-108.	1.0	50
87	Three-dimensional visualization of fossil flowers, fruits, seeds, and other plant remains using synchrotron radiation X-ray tomographic microscopy (SRXTM): new insights into Cretaceous plant diversity. <i>Journal of Paleontology</i> , 2014, 88, 684-701.	0.5	50
88	Metal assisted chemical etching of silicon in the gas phase: a nanofabrication platform for X-ray optics. <i>Nanoscale Horizons</i> , 2020, 5, 869-879.	4.1	50
89	High-numerical-aperture microscope optics for time-resolved experiments. <i>Journal of Synchrotron Radiation</i> , 2019, 26, 1161-1172.	1.0	50
90	Non-linear regularized phase retrieval for unidirectional X-ray differential phase contrast radiography. <i>Optics Express</i> , 2011, 19, 25545.	1.7	49

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91	Direct depiction of bone microstructure using MRI with zero echo time. <i>Bone</i> , 2013, 54, 44-47.	1.4	49
92	Fast reconstruction algorithm dealing with tomography artifacts. <i>Proceedings of SPIE</i> , 2010, , .	0.8	48
93	Determination of Liquid Water Distribution in Porous Transport Layers. <i>ECS Transactions</i> , 2008, 16, 587-592.	0.3	47
94	Osteocyte lacunar properties in rat cortical bone: Differences between lamellar and central bone. <i>Journal of Structural Biology</i> , 2015, 191, 59-67.	1.3	47
95	Natural gas hydrate investigations by synchrotron radiation X-ray cryo-tomographic microscopy (SRXCTM). <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	46
96	Pitting corrosion of stainless steel: measuring and modelling pit propagation in support of damage prediction for radioactive waste containers. <i>Corrosion Engineering Science and Technology</i> , 2011, 46, 205-211.	0.7	46
97	Dual phase grating interferometer for tunable dark-field sensitivity. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	46
98	Experimental taphonomy of giant sulphur bacteria: implications for the interpretation of the embryo-like Ediacaran Doushantuo fossils. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2012, 279, 1857-1864.	1.2	45
99	Operando X-ray Tomographic Microscopy Imaging of HT-PEFC: A Comparative Study of Phosphoric Acid Electrolyte Migration. <i>Journal of the Electrochemical Society</i> , 2016, 163, F842-F847.	1.3	45
100	2D-Omnidirectional Hard-X-Ray Scattering Sensitivity in a Single Shot. <i>Physical Review Letters</i> , 2016, 116, 093902.	2.9	45
101	A comparative study of X-ray tomographic microscopy on shales at different synchrotron facilities: ALS, APS and SLS. <i>Journal of Synchrotron Radiation</i> , 2013, 20, 172-180.	1.0	44
102	Advantages of phase retrieval for fast x-ray tomographic microscopy. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 494004.	1.3	44
103	X-ray phase-contrast imaging at 100 keV on a conventional source. <i>Scientific Reports</i> , 2015, 4, 5198.	1.6	44
104	High resolution, large field of view x-ray differential phase contrast imaging on a compact setup. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	43
105	Distinguishing geology from biology in the Ediacaran Doushantuo biota relaxes constraints on the timing of the origin of bilaterians. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2012, 279, 2369-2376.	1.2	43
106	Comparison of two x-ray phase-contrast imaging methods with a microfocus source. <i>Optics Express</i> , 2013, 21, 30183.	1.7	43
107	Towards clinical grating-interferometry mammography. <i>European Radiology</i> , 2020, 30, 1419-1425.	2.3	43
108	A new partial temporal bone of a juvenile hominin from the site of Kromdraai B (South Africa). <i>Journal of Human Evolution</i> , 2013, 65, 447-456.	1.3	42

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109	Brachiopod punctae: A complexity in shell biomineralisation. <i>Journal of Structural Biology</i> , 2009, 167, 62-67.	1.3	41
110	The importance of murine cortical bone microstructure for microcrack initiation and propagation. <i>Bone</i> , 2011, 49, 1186-1193.	1.4	41
111	Performance and optimization of X-ray grating interferometry. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2014, 372, 20130027.	1.6	41
112	Fast X-ray Tomographic Microscopy: Investigating Mechanisms of Performance Drop during Freeze Starts of Polymer Electrolyte Fuel Cells. <i>ChemElectroChem</i> , 2015, 2, 1551-1559.	1.7	41
113	Radiation dose optimized lateral expansion of the field of view in synchrotron radiation X-ray tomographic microscopy. <i>Journal of Synchrotron Radiation</i> , 2010, 17, 590-599.	1.0	40
114	Complex Congenital Heart Disease Associated With Disordered Myocardial Architecture in a Midtrimester Human Fetus. <i>Circulation: Cardiovascular Imaging</i> , 2018, 11, e007753.	1.3	40
115	X-ray Fourier ptychography. <i>Science Advances</i> , 2019, 5, eaav0282.	4.7	40
116	In situ tomographic investigation on the early hydration behaviors of cementing systems. <i>Construction and Building Materials</i> , 2012, 29, 284-290.	3.2	39
117	Human hand radiography using X-ray differential phase contrast combined with dark-field imaging. <i>Skeletal Radiology</i> , 2013, 42, 827-835.	1.2	39
118	Towards sub-micrometer high aspect ratio X-ray gratings by atomic layer deposition of iridium. <i>Microelectronic Engineering</i> , 2018, 192, 19-24.	1.1	39
119	Universality and self-similarity in pinch-off of rods by bulk diffusion. <i>Nature Physics</i> , 2010, 6, 796-800.	6.5	38
120	A sensitive x-ray phase contrast technique for rapid imaging using a single phase grid analyzer. <i>Optics Letters</i> , 2013, 38, 4605.	1.7	38
121	Implications of polymer electrolyte fuel cell exposure to synchrotron radiation on gas diffusion layer water distribution. <i>Journal of Power Sources</i> , 2014, 245, 796-800.	4.0	38
122	Application areas of synchrotron radiation tomographic microscopy for wood research. <i>Wood Science and Technology</i> , 2010, 44, 67-84.	1.4	37
123	Self-assembly nanostructured gold for high aspect ratio silicon microstructures by metal assisted chemical etching. <i>RSC Advances</i> , 2016, 6, 16025-16029.	1.7	37
124	Bragg magnifier: A detector for submicrometer x-ray computer tomography. <i>Journal of Applied Physics</i> , 2002, 92, 7630-7635.	1.1	36
125	Pore space analysis of beech wood: The vessel network. <i>Holzforschung</i> , 2010, 64, .	0.9	36
126	Fast iterative reconstruction of differential phase contrast X-ray tomograms. <i>Optics Express</i> , 2013, 21, 5511.	1.7	36

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127	Visualization and stereological characterization of individual rat lung acini by high-resolution X-ray tomographic microscopy. <i>Journal of Applied Physiology</i> , 2013, 115, 1379-1387.	1.2	36
128	Diffraction small angle X-ray scattering imaging for anisotropic structures. <i>Nature Communications</i> , 2019, 10, 5130.	5.8	36
129	Towards the Fabrication of High-Aspect-Ratio Silicon Gratings by Deep Reactive Ion Etching. <i>Micromachines</i> , 2020, 11, 864.	1.4	36
130	Microfabrication of X-ray Optics by Metal Assisted Chemical Etching: A Review. <i>Micromachines</i> , 2020, 11, 589.	1.4	36
131	Real Time Tomography at the Swiss Light Source. <i>AIP Conference Proceedings</i> , 2010, , .	0.3	35
132	Damage evolution in wood: synchrotron radiation micro-computed tomography (SR μ CT) as a complementary tool for interpreting acoustic emission (AE) behavior. <i>Holzforschung</i> , 2015, 69, 1015-1025.	0.9	35
133	Exceptional preservation of tiny embryos documents seed dormancy in early angiosperms. <i>Nature</i> , 2015, 528, 551-554.	13.7	35
134	Effect of isopropanol on gold assisted chemical etching of silicon microstructures. <i>Microelectronic Engineering</i> , 2017, 177, 59-65.	1.1	35
135	High sensitivity X-ray phase contrast imaging by laboratory grating-based interferometry at high Talbot order geometry. <i>Optics Express</i> , 2021, 29, 2049.	1.7	35
136	Investigation of discrete imaging models and iterative image reconstruction in differential X-ray phase-contrast tomography. <i>Optics Express</i> , 2012, 20, 10724.	1.7	34
137	A multi-purpose imaging endstation for high-resolution micrometer-scaled sub-second tomography. <i>Physica Medica</i> , 2016, 32, 1771-1778.	0.4	34
138	Fabrication of Au gratings by seedless electroplating for X-ray grating interferometry. <i>Materials Science in Semiconductor Processing</i> , 2019, 92, 73-79.	1.9	34
139	Hard X-ray phase imaging and tomography using a grating interferometer. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2007, 62, 626-630.	1.5	33
140	The total number of acini remains constant throughout postnatal rat lung development. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2016, 311, L1082-L1089.	1.3	33
141	A subcutaneous cellular implant for passive immunization against amyloid- β 2 reduces brain amyloid and tau pathologies. <i>Brain</i> , 2016, 139, 1587-1604.	3.7	33
142	Determining the uncertainty in microstructural parameters extracted from tomographic data. <i>Sustainable Energy and Fuels</i> , 2018, 2, 598-605.	2.5	33
143	Comprehensive Analysis of Animal Models of Cardiovascular Disease using Multiscale X-Ray Phase Contrast Tomography. <i>Scientific Reports</i> , 2019, 9, 6996.	1.6	33
144	High-throughput full-automatic synchrotron-based tomographic microscopy. <i>Journal of Synchrotron Radiation</i> , 2011, 18, 117-124.	1.0	32

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145	Halo suppression in full-field x-ray Zernike phase contrast microscopy. <i>Optics Letters</i> , 2014, 39, 1601.	1.7	32
146	High Aspect Ratio Grating Microfabrication by Platinum-Assisted Chemical Etching and Gold Electroplating. <i>Advanced Engineering Materials</i> , 2020, 22, 2000258.	1.6	32
147	Tomoscopy: Time-Resolved Tomography for Dynamic Processes in Materials. <i>Advanced Materials</i> , 2021, 33, e2104659.	11.1	32
148	The microXAS beamline at the swiss light source: Towards nano-scale imaging. <i>Journal of Physics: Conference Series</i> , 2009, 186, 012003.	0.3	31
149	Synchrotron-based tomographic microscopy (SbTM) of wood: development of a testing device and observation of plastic deformation of uniaxially compressed Norway spruce samples. <i>Holzforschung</i> , 2012, 66, 973-979.	0.9	31
150	Quantitative 3D characterization of cellular materials: Segmentation and morphology of foam. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2012, 415, 230-238.	2.3	31
151	NRStitcher: non-rigid stitching of terapixel-scale volumetric images. <i>Bioinformatics</i> , 2019, 35, 5290-5297.	1.8	31
152	Nanotomography based on double asymmetrical Bragg diffraction. <i>Applied Physics Letters</i> , 2003, 82, 2922-2924.	1.5	30
153	Elucidating the affinities and habitat of ancient, widespread Cyperaceae: <i>Volkeria messelensis</i> gen. et sp. nov., a fossil mapanioid sedge from the Eocene of Europe. <i>American Journal of Botany</i> , 2009, 96, 1506-1518.	0.8	29
154	Following Dynamic Processes by X-ray Tomographic Microscopy with Sub-second Temporal Resolution. <i>AIP Conference Proceedings</i> , 2011, , .	0.3	29
155	Microstructure characteristics during hydrate formation and dissociation revealed by X-ray tomographic microscopy. <i>Geo-Marine Letters</i> , 2012, 32, 555-562.	0.5	29
156	The importance of the intracortical canal network for murine bone mechanics. <i>Bone</i> , 2013, 53, 120-128.	1.4	29
157	Hard x-ray multi-projection imaging for single-shot approaches. <i>Optica</i> , 2018, 5, 1521.	4.8	29
158	Direct e-beam writing of high aspect ratio nanostructures in PMMA: A tool for diffractive X-ray optics fabrication. <i>Microelectronic Engineering</i> , 2010, 87, 1052-1056.	1.1	28
159	Pinch-off of rods by bulk diffusion. <i>Acta Materialia</i> , 2011, 59, 4922-4932.	3.8	28
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