

# Marco Stampanoni

## List of Publications by Year in descending order

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399  
papers

16,819  
citations

16451

64  
h-index

23533

111  
g-index

405  
all docs

405  
docs citations

405  
times ranked

14538  
citing authors

#	ARTICLE	IF	CITATIONS
1	Macroscopic mapping of microscale fibers in freeform injection molded fiber-reinforced composites using X-ray scattering tensor tomography. <i>Composites Part B: Engineering</i> , 2022, 233, 109634.	12.0	7
2	Fabrication of a fractal pattern device for focus characterizations of X-ray imaging systems by Si deep reactive ion etching and bottom-up Au electroplating. <i>Applied Optics</i> , 2022, 61, 3850.	1.8	5
3	Envelope modulated x-ray grating interferometry. <i>Applied Physics Letters</i> , 2022, 120, 193701.	3.3	2
4	TriB-RT: Simultaneous optimization of photon, electron and proton beams. <i>Physics in Medicine and Biology</i> , 2021, 66, 045006.	3.0	8
5	Micrometer-resolution X-ray tomographic full-volume reconstruction of an intact post-mortem juvenile rat lung. <i>Histochemistry and Cell Biology</i> , 2021, 155, 215-226.	1.7	22
6	Brain microvasculature imaging: An unsupervised deep learning algorithm for segmenting mouse brain volume probed by high-resolution phase-contrast X-ray tomography. <i>International Journal of Imaging Systems and Technology</i> , 2021, 31, 1211-1220.	4.1	3
7	Washcoating of catalytic particulate filters studied by time-resolved X-ray tomography. <i>Chemical Engineering Journal</i> , 2021, 409, 128057.	12.7	12
8	Optimization of displacement Talbot lithography for fabrication of uniform high aspect ratio gratings. <i>Japanese Journal of Applied Physics</i> , 2021, 60, SCCA01.	1.5	12
9	Simultaneous Reciprocal and Real Space X-Ray Imaging of Time-Evolving Systems. <i>Physical Review Applied</i> , 2021, 15, .	3.8	8
10	Fabrication of X-ray Gratings for Interferometric Imaging by Conformal Seedless Gold Electroplating. <i>Micromachines</i> , 2021, 12, 517.	2.9	14
11	Sparse ab initio x-ray transmission spectrotomography for nanoscopic compositional analysis of functional materials. <i>Science Advances</i> , 2021, 7, .	10.3	16
12	Laboratory X-ray interferometry imaging with a fan-shaped source grating. <i>Optics Letters</i> , 2021, 46, 3693.	3.3	9
13	Comprehensive assessment of myocardial remodeling in ischemic heart disease by synchrotron propagation based X-ray phase contrast imaging. <i>Scientific Reports</i> , 2021, 11, 14020.	3.3	14
14	Tunable X-ray dark-field imaging for sub-resolution feature size quantification in porous media. <i>Scientific Reports</i> , 2021, 11, 18446.	3.3	15
15	Hierarchical imaging and computational analysis of three-dimensional vascular network architecture in the entire postnatal and adult mouse brain. <i>Nature Protocols</i> , 2021, 16, 4564-4610.	12.0	23
16	High sensitivity X-ray phase contrast imaging by laboratory grating-based interferometry at high Talbot order geometry. <i>Optics Express</i> , 2021, 29, 2049.	3.4	35
17	Sparse X-ray hyperspectral tomography for nanoscopic compositional analysis of VPO catalysts. , 2021, , .		0
18	Tomoscopy: Time-Resolved Tomography for Dynamic Processes in Materials. <i>Advanced Materials</i> , 2021, 33, e2104659.	21.0	32

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19	Fast acquisition protocol for X-ray scattering tensor tomography. Scientific Reports, 2021, 11, 23046.	3.3	3
20	Deep learning based classification of dynamic processes in time-resolved X-ray tomographic microscopy. Scientific Reports, 2021, 11, 24174.	3.3	3
21	Towards clinical grating-interferometry mammography. European Radiology, 2020, 30, 1419-1425.	4.5	43
22	Towards MR-guided electron therapy: Measurement and simulation of clinical electron beams in magnetic fields. Physica Medica, 2020, 78, 83-92.	0.7	1
23	Unveiling water dynamics in fuel cells from time-resolved tomographic microscopy data. Scientific Reports, 2020, 10, 16388.	3.3	6
24	Towards the Fabrication of High-Aspect-Ratio Silicon Gratings by Deep Reactive Ion Etching. Micromachines, 2020, 11, 864.	2.9	36
25	Development of an extended Macro Monte Carlo method for efficient and accurate dose calculation in magnetic fields. Medical Physics, 2020, 47, 6519-6530.	3.0	3
26	X-ray Tomographic In Situ Imaging of an Entire Post Mortem Juvenile Rat Lung at Microscopical Resolution. , 2020, , .		0
27	Can grating interferometry-based mammography discriminate benign from malignant microcalcifications in fresh biopsy samples?. European Journal of Radiology, 2020, 129, 109077.	2.6	5
28	High-Aspect-Ratio Grating Microfabrication by Platinum-Assisted Chemical Etching and Gold Electroplating. Advanced Engineering Materials, 2020, 22, 2000258.	3.5	32
29	Microfabrication of X-ray Optics by Metal Assisted Chemical Etching: A Review. Micromachines, 2020, 11, 589.	2.9	36
30	Visualizing and Analyzing 3D Metal Nanowire Networks for Stretchable Electronics. Advanced Theory and Simulations, 2020, 3, 2000038.	2.8	9
31	Metal assisted chemical etching of silicon in the gas phase: a nanofabrication platform for X-ray optics. Nanoscale Horizons, 2020, 5, 869-879.	8.0	50
32	Time Resolved in situ X-Ray Tomographic Microscopy Unraveling Dynamic Processes in Geologic Systems. Frontiers in Earth Science, 2020, 7, .	1.8	27
33	X-ray scattering tensor tomography with circular gratings. Applied Physics Letters, 2020, 116, .	3.3	20
34	Modeling of beam hardening effects in a dual-phase X-ray grating interferometer for quantitative dark-field imaging. Optics Express, 2020, 28, 19187.	3.4	13
35	Impact of lossy compression of X-ray projections onto reconstructed tomographic slices. Journal of Synchrotron Radiation, 2020, 27, 1326-1338.	2.4	2
36	Low-dose in situ prelocation of protein microcrystals by 2D X-ray phase-contrast imaging for serial crystallography. IUCr, 2020, 7, 1131-1141.	2.2	1

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37	Accuracy of Ex Vivo Semiautomatic Segmentation of Urinary Stone Size in Computed Tomography Compared With Manual Size Estimation in Radiographic Correlation. <i>Urology</i> , 2019, 123, 70-75.	1.0	1
38	NRStitcher: non-rigid stitching of terapixel-scale volumetric images. <i>Bioinformatics</i> , 2019, 35, 5290-5297.	4.1	31
39	Synchrotron X-Ray Phase Contrast Imaging and Deep Neural Networks for Cardiac Collagen Quantification in Hypertensive Rat Model. <i>Lecture Notes in Computer Science</i> , 2019, , 187-195.	1.3	0
40	A Charcoalified Ovule Adapted for Wind Dispersal and Detering Herbivory from the Late Visian (Carboniferous) of Scotland. <i>International Journal of Plant Sciences</i> , 2019, 180, 1059-1074.	1.3	4
41	Diffraction small angle X-ray scattering imaging for anisotropic structures. <i>Nature Communications</i> , 2019, 10, 5130.	12.8	36
42	Using X-ray tomography to explore the dynamics of foaming metal. <i>Nature Communications</i> , 2019, 10, 3762.	12.8	94
43	Adaptive step size algorithm to increase efficiency of proton macro Monte Carlo dose calculation. <i>Radiation Oncology</i> , 2019, 14, 165.	2.7	4
44	EP-1771 Measuring the influence of magnetic fields on the dose distributions of clinical electron beams. <i>Radiotherapy and Oncology</i> , 2019, 133, S957.	0.6	1
45	X-ray Fourier ptychography. <i>Science Advances</i> , 2019, 5, eaav0282.	10.3	40
46	Assessing lesion malignancy by scanning small-angle x-ray scattering of breast tissue with microcalcifications. <i>Physics in Medicine and Biology</i> , 2019, 64, 155010.	3.0	4
47	Comprehensive Analysis of Animal Models of Cardiovascular Disease using Multiscale X-Ray Phase Contrast Tomography. <i>Scientific Reports</i> , 2019, 9, 6996.	3.3	33
48	AUTHOR REPLY. <i>Urology</i> , 2019, 123, 75.	1.0	0
49	A Postnatal Increase of the Fractal Dimension of the Pulmonary Rat Acini Indicates a Non-Uniform Acinar Development and an Increase of Acinar Complexity. , 2019, , .		0
50	Real-time reconstruction and visualisation towards dynamic feedback control during time-resolved tomography experiments at TOMCAT. <i>Scientific Reports</i> , 2019, 9, 18379.	3.3	21
51	Unsupervised data to content transformation with histogram-matching cycle-consistent generative adversarial networks. <i>Nature Machine Intelligence</i> , 2019, 1, 461-470.	16.0	22
52	Fabrication of Au gratings by seedless electroplating for X-ray grating interferometry. <i>Materials Science in Semiconductor Processing</i> , 2019, 92, 73-79.	4.0	34
53	High-numerical-aperture microscope optics for time-resolved experiments. <i>Journal of Synchrotron Radiation</i> , 2019, 26, 1161-1172.	2.4	50
54	X-ray Fourier ptychography for out-of-focus measurements. , 2019, , .		0

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55	Propagation-based phase-contrast synchrotron imaging of aortic dissection in mice: from individual elastic lamella to 3D analysis. <i>Scientific Reports</i> , 2018, 8, 2223.	3.3	23
56	Towards sub-micrometer high aspect ratio X-ray gratings by atomic layer deposition of iridium. <i>Microelectronic Engineering</i> , 2018, 192, 19-24.	2.4	39
57	Electron beam collimation with a photon MLC for standard electron treatments. <i>Physics in Medicine and Biology</i> , 2018, 63, 025017.	3.0	19
58	Independent Monte-Carlo dose calculation for MLC based CyberKnife radiotherapy. <i>Physics in Medicine and Biology</i> , 2018, 63, 015015.	3.0	6
59	Determining the uncertainty in microstructural parameters extracted from tomographic data. <i>Sustainable Energy and Fuels</i> , 2018, 2, 598-605.	4.9	33
60	Coherent Hard X-ray Multiprojection Imaging. <i>Microscopy and Microanalysis</i> , 2018, 24, 52-53.	0.4	4
61	Complex Congenital Heart Disease Associated With Disordered Myocardial Architecture in a Midtrimester Human Fetus. <i>Circulation: Cardiovascular Imaging</i> , 2018, 11, e007753.	2.6	40
62	The Making of 3D Microscopic Movies: A Look Behind the Scenes of the Fast Tomographic Imaging Program at TOMCAT. <i>Microscopy and Microanalysis</i> , 2018, 24, 446-449.	0.4	5
63	PO-0891: Enhancing efficiency of proton macro Monte Carlo dose calculation by an adaptive step size algorithm. <i>Radiotherapy and Oncology</i> , 2018, 127, S472-S473.	0.6	1
64	EP-1876: Column generation based multicriteria direct aperture optimization for mixed beam radiotherapy. <i>Radiotherapy and Oncology</i> , 2018, 127, S1015.	0.6	0
65	Part 2: Dynamic mixed beam radiotherapy (<sc>DYMBER</sc>): Photon dynamic trajectories combined with modulated electron beams. <i>Medical Physics</i> , 2018, 45, 4213-4226.	3.0	19
66	A non-rigid registration method for the analysis of local deformations in the wood cell wall. <i>Advanced Structural and Chemical Imaging</i> , 2018, 4, 1.	4.0	10
67	Development of Laboratory Grating-based X-ray Phase Contrast Microtomography for Improved Pathology. <i>Microscopy and Microanalysis</i> , 2018, 24, 192-193.	0.4	6
68	Model-free classification of X-ray scattering signals applied to image segmentation. <i>Journal of Applied Crystallography</i> , 2018, 51, 1378-1386.	4.5	11
69	Hard x-ray multi-projection imaging for single-shot approaches. <i>Optica</i> , 2018, 5, 1521.	9.3	29
70	The Quantification of Myocardial remodelling in a Rat Model of Myocardial Infarction by Synchrotron X-ray Phase Contrast Imaging. <i>Cardiologia Croatica</i> , 2018, 13, 433-434.	0.0	0
71	High aspect ratio metal microcasting by hot embossing for X-ray optics fabrication. <i>Microelectronic Engineering</i> , 2017, 176, 6-10.	2.4	27
72	A Swiss cheese error detection method for real-time EPID-based quality assurance and error prevention. <i>Medical Physics</i> , 2017, 44, 1212-1223.	3.0	12

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73	Dual phase grating interferometer for tunable dark-field sensitivity. Applied Physics Letters, 2017, 110, .	3.3	46
74	Quantification of local image noise variation in PET images for standardization of noise-dependent analysis metrics. Biomedical Physics and Engineering Express, 2017, 3, 025007.	1.2	6
75	Effect of isopropanol on gold assisted chemical etching of silicon microstructures. Microelectronic Engineering, 2017, 177, 59-65.	2.4	35
76	Towards on-the-fly data post-processing for real-time tomographic imaging at TOMCAT. Advanced Structural and Chemical Imaging, 2017, 3, 1.	4.0	78
77	Design of a sensitive grating-based phase contrast mammography prototype (Conference) Tj ETQq1 1 0.784314 rgBT /Overlqck 10 Tf50		
78	Simultaneous optimization of photons and electrons for mixed beam radiotherapy. Physics in Medicine and Biology, 2017, 62, 5840-5860.	3.0	27
79	Fungus-like mycelial fossils in 2.4-billion-year-old vesicular basalt. Nature Ecology and Evolution, 2017, 1, 141.	7.8	94
80	High-aspect ratio silicon structures by displacement Talbot lithography and Bosch etching. Proceedings of SPIE, 2017, , .	0.8	18
81	Morphoproteomic Characterization of Lung Squamous Cell Carcinoma Fragmentation, a Histological Marker of Increased Tumor Invasiveness. Cancer Research, 2017, 77, 2585-2593.	0.9	15
82	Operando Properties of Gas Diffusion Layers: Saturation and Liquid Permeability. Journal of the Electrochemical Society, 2017, 164, F115-F126.	2.9	75
83	Tomographic in vivo microscopy for the study of lung physiology at the alveolar level. Scientific Reports, 2017, 7, 12545.	3.3	28
84	Hot embossing of Au- and Pb-based alloys for x-ray grating fabrication. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2017, 35, .	1.2	14
85	Investigation of suitable biopsy markers for grating-based phase contrast mammography. Journal of Instrumentation, 2017, 12, T01007-T01007.	1.2	2
86	Effective segmentation of fresh post-mortem murine lung parenchyma in phase contrast X-ray tomographic microscopy images. Journal of Physics: Conference Series, 2017, 849, 012006.	0.4	2
87	TLD measurements and Monte Carlo calculations of head and neck organ and effective doses for cone beam computed tomography using 3D Accuitomo 170. Dentomaxillofacial Radiology, 2017, 46, 20170047.	2.7	19
88	Imaging samples larger than the field of view: the SLS experience. Journal of Physics: Conference Series, 2017, 849, 012004.	0.4	6
89	Improving Analytical Tomographic Reconstructions Through Consistency Conditions. Fundamenta Informaticae, 2017, 155, 341-361.	0.4	1
90	Angiotensin II infusion into ApoE <sup>-/-</sup> mice: a model for aortic dissection rather than abdominal aortic aneurysm?. Cardiovascular Research, 2017, 113, 1230-1242.	3.8	78

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91	Nogo-A regulates vascular network architecture in the postnatal brain. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2017, 37, 614-631.	4.3	17
92	Fast iterative reconstruction of data in full interior tomography. <i>Journal of Synchrotron Radiation</i> , 2017, 24, 205-219.	2.4	4
93	Circular Unit Cell Gratings for X-ray Dark-Field Imaging. <i>Journal of Physics: Conference Series</i> , 2017, 849, 012053.	0.4	0
94	Stimulated scintillation emission depletion X-ray imaging. <i>Optics Express</i> , 2017, 25, 654.	3.4	7
95	STED properties of Ce <sup>3+</sup> , Tb <sup>3+</sup> , and Eu <sup>3+</sup> doped inorganic scintillators. <i>Optics Express</i> , 2017, 25, 1251.	3.4	11
96	Sensitivity-based optimization for the design of a grating interferometer for clinical X-ray phase contrast mammography. <i>Optics Express</i> , 2017, 25, 6349.	3.4	25
97	Contrast-transfer-function phase retrieval based on compressed sensing. <i>Optics Letters</i> , 2017, 42, 1133.	3.3	12
98	Automated computer-assisted quantitative analysis of intact murine lungs at the alveolar scale. <i>PLoS ONE</i> , 2017, 12, e0183979.	2.5	14
99	Microstructural Analysis of Cardiac Endomyocardial Biopsies with Synchrotron Radiation-Based X-Ray Phase Contrast Imaging. <i>Lecture Notes in Computer Science</i> , 2017, , 23-31.	1.3	6
100	GigaFRoST: the gigabit fast readout system for tomography. <i>Journal of Synchrotron Radiation</i> , 2017, 24, 1250-1259.	2.4	139
101	Postnatal development of pulmonary acini in rats. , 2017, , .		0
102	Fast 3D reconstruction method for differential phase contrast X-ray CT. <i>Optics Express</i> , 2016, 24, 14564.	3.4	24
103	Fast gridding projectors for analytical and iterative tomographic reconstruction of differential phase contrast data. <i>Optics Express</i> , 2016, 24, 14748.	3.4	1
104	Moving image analysis to the cloud: A case study with a genome-scale tomographic study. <i>AIP Conference Proceedings</i> , 2016, , .	0.4	2
105	Single shot x-ray phase contrast imaging using a direct conversion microstrip detector with single photon sensitivity. <i>Applied Physics Letters</i> , 2016, 108, .	3.3	14
106	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.	2.9	33
107	A multi-purpose imaging endstation for high-resolution micrometer-scaled sub-second tomography. <i>Physica Medica</i> , 2016, 32, 1771-1778.	0.7	34
108	Signal-to-noise criterion for free-propagation imaging techniques at free-electron lasers and synchrotrons. <i>Optics Express</i> , 2016, 24, 3189.	3.4	28

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109	Joint absorption and phase retrieval in grating-based x-ray radiography. <i>Optics Express</i> , 2016, 24, 7253.	3.4	5
110	Correspondence: Reply to "Quantitative evaluation of X-ray dark-field images for microcalcification analysis in mammography". <i>Nature Communications</i> , 2016, 7, 10868.	12.8	8
111	A generalized quantitative interpretation of dark-field contrast for highly concentrated microsphere suspensions. <i>Scientific Reports</i> , 2016, 6, 35259.	3.3	27
112	Quantifying microstructural dynamics and electrochemical activity of graphite and silicon-graphite lithium ion battery anodes. <i>Nature Communications</i> , 2016, 7, 12909.	12.8	109
113	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.	2.9	45
114	Identifying layers in random multiphase structures. <i>AIP Conference Proceedings</i> , 2016, , .	0.4	1
115	Baring it all: undressing Cambrian "Orsten" phosphatocopine crustaceans using synchrotron radiation X-ray tomographic microscopy. <i>Lethaia</i> , 2016, 49, 312-326.	1.4	12
116	Amyloid- $\beta^2$ plaque deposition measured using propagation-based X-ray phase contrast CT imaging. <i>Journal of Synchrotron Radiation</i> , 2016, 23, 813-819.	2.4	27
117	A Forward Regridding Method With Minimal Oversampling for Accurate and Efficient Iterative Tomographic Algorithms. <i>IEEE Transactions on Image Processing</i> , 2016, 25, 1207-1218.	9.8	11
118	Ascending Aortic Aneurysm in Angiotensin II "Infused Mice. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2016, 36, 673-681.	2.4	65
119	Self-assembly nanostructured gold for high aspect ratio silicon microstructures by metal assisted chemical etching. <i>RSC Advances</i> , 2016, 6, 16025-16029.	3.6	37
120	Failure and failure mechanisms of wood during longitudinal compression monitored by synchrotron micro-computed tomography. <i>Holzforschung</i> , 2016, 70, 179-185.	1.9	17
121	A subcutaneous cellular implant for passive immunization against amyloid- $\beta^2$ reduces brain amyloid and tau pathologies. <i>Brain</i> , 2016, 139, 1587-1604.	7.6	33
122	2D-Omnidirectional Hard-X-Ray Scattering Sensitivity in a Single Shot. <i>Physical Review Letters</i> , 2016, 116, 093902.	7.8	45
123	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.	2.9	67
124	Grating-based interferometry and hybrid photon counting detectors: Towards a new era in X-ray medical imaging. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2016, 809, 23-30.	1.6	10
125	Virtual reading of a large ancient handwritten science book. <i>Microchemical Journal</i> , 2016, 125, 185-189.	4.5	18
126	Micrometer-resolution imaging using M $\lambda$ -NCH: towards G <sub>2</sub> -less grating interferometry. <i>Journal of Synchrotron Radiation</i> , 2016, 23, 1462-1473.	2.4	53



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127	SU-F-T-89: Investigation of Simultaneous Optimization of Photon and Electron Apertures for Mixed Beam Radiotherapy Based On An Academic Case. <i>Medical Physics</i> , 2016, 43, 3482-3482.	3.0	1
128	MO-FG-202-07: Real-Time EPID-Based Detection Metric For VMAT Delivery Errors. <i>Medical Physics</i> , 2016, 43, 3713-3713.	3.0	0
129	SU-G-IeP4-13: PET Image Noise Variability and Its Consequences for Quantifying Tumor Hypoxia. <i>Medical Physics</i> , 2016, 43, 3680-3680.	3.0	0
130	Dynamic intensity normalization using eigen flat fields in X-ray imaging. <i>Optics Express</i> , 2015, 23, 27975.	3.4	74
131	Damage evolution in wood: synchrotron radiation micro-computed tomography (SR $\mu$ CT) as a complementary tool for interpreting acoustic emission (AE) behavior. <i>Holzforschung</i> , 2015, 69, 1015-1025.	1.9	35
132	Imaging Phosphoric Acid Migration in High Temperature Polymer Electrolyte Fuel Cells by X-Ray Tomographic Microscopy. <i>ECS Transactions</i> , 2015, 69, 591-599.	0.5	7
133	X-ray spectrometry and imaging for ancient administrative handwritten documents. <i>X-Ray Spectrometry</i> , 2015, 44, 93-98.	1.4	25
134	Study of the signal response of the M $\ddot{A}$ -NCH 25 $\mu$ m pitch hybrid pixel detector at different photon absorption depths. <i>Journal of Instrumentation</i> , 2015, 10, C03022-C03022.	1.2	3
135	Four-dimensional in vivo X-ray microscopy with projection-guided gating. <i>Scientific Reports</i> , 2015, 5, 8727.	3.3	51
136	Simulation comparison of wake mitigation control strategies for a two-turbine case. <i>Wind Energy</i> , 2015, 18, 2135-2143.	4.2	206
137	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.	3.4	41
138	Osteocyte lacunar properties in rat cortical bone: Differences between lamellar and central bone. <i>Journal of Structural Biology</i> , 2015, 191, 59-67.	2.8	47
139	Exceptional preservation of tiny embryos documents seed dormancy in early angiosperms. <i>Nature</i> , 2015, 528, 551-554.	27.8	35
140	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.	2.9	92
141	Structural mouthpart interaction evolved already in the earliest lineages of insects. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2015, 282, 20151033.	2.6	16
142	Synchrotron X-ray radiography studies of pitting corrosion of stainless steel: Extraction of pit propagation parameters. <i>Corrosion Science</i> , 2015, 100, 23-35.	6.6	83
143	Ancient administrative handwritten documents: X-ray analysis and imaging. <i>Journal of Synchrotron Radiation</i> , 2015, 22, 446-451.	2.4	22
144	Ultra-high-resolution 3D imaging of atherosclerosis in mice with synchrotron differential phase contrast: a proof of concept study. <i>Scientific Reports</i> , 2015, 5, 11980.	3.3	14

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145	Quantitative volumetric breast density estimation using phase contrast mammography. <i>Physics in Medicine and Biology</i> , 2015, 60, 4123-4135.	3.0	11
146	X-ray phase-contrast imaging at 100 keV on a conventional source. <i>Scientific Reports</i> , 2015, 4, 5198.	3.3	44
147	Ex vivo differential phase contrast and magnetic resonance imaging for characterization of human carotid atherosclerotic plaques. <i>International Journal of Cardiovascular Imaging</i> , 2015, 31, 1425-1434.	1.5	8
148	Spline based iterative phase retrieval algorithm for X-ray differential phase contrast radiography. <i>Optics Express</i> , 2015, 23, 10631.	3.4	10
149	Diagnostic Accuracy of Quantitative and Qualitative Phase-Contrast Imaging for the ex Vivo Characterization of Human Coronary Atherosclerotic Plaques. <i>Radiology</i> , 2015, 277, 64-72.	7.3	12
150	Dissecting abdominal aortic aneurysm in Ang II-infused mice: suprarenal branch ruptures and apparent luminal dilatation. <i>Cardiovascular Research</i> , 2015, 105, 213-222.	3.8	59
151	High-throughput phenotyping and genetic linkage of cortical bone microstructure in the mouse. <i>BMC Genomics</i> , 2015, 16, 493.	2.8	5
152	Single-cell resolution in high-resolution synchrotron X-ray CT imaging with gold nanoparticles. <i>Journal of Synchrotron Radiation</i> , 2014, 21, 242-250.	2.4	22
153	In Vivo Time-Resolved Microtomography Reveals the Mechanics of the Blowfly Flight Motor. <i>PLoS Biology</i> , 2014, 12, e1001823.	5.6	134
154	Combining Monte Carlo methods with coherent wave optics for the simulation of phase-sensitive X-ray imaging. <i>Journal of Synchrotron Radiation</i> , 2014, 21, 613-622.	2.4	24
155	Living-Engineered Valves for Transcatheter Venous Valve Repair. <i>Tissue Engineering - Part C: Methods</i> , 2014, 20, 451-463.	2.1	14
156	Comparison of propagation- and grating-based x-ray phase-contrast imaging techniques with a liquid-metal-jet source. <i>Proceedings of SPIE</i> , 2014, , .	0.8	0
157	A robust tool for photon source geometry measurements using the fractional Talbot effect. <i>Optics Express</i> , 2014, 22, 2745.	3.4	9
158	Tilted-grating approach for scanning-mode X-ray phase contrast imaging. <i>Optics Express</i> , 2014, 22, 15447.	3.4	21
159	Simple merging technique for improving resolution in qualitative single image phase contrast tomography. <i>Optics Express</i> , 2014, 22, 27257.	3.4	14
160	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.	0.8	50
161	Forward treatment planning for modulated electron radiotherapy (MERT) employing Monte Carlo methods. <i>Medical Physics</i> , 2014, 41, 031712.	3.0	14
162	Efficient estimation of the total number of acini in adult rat lung. <i>Physiological Reports</i> , 2014, 2, e12063.	1.7	27

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163	Two-dimensional ultra-small angle X-ray scattering with grating interferometry. Applied Physics Letters, 2014, 105, .	3.3	14
164	Non-invasive classification of microcalcifications with phase-contrast X-ray mammography. Nature Communications, 2014, 5, 3797.	12.8	110
165	Halo suppression in full-field x-ray Zernike phase contrast microscopy. Optics Letters, 2014, 39, 1601.	3.3	32
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