

# Julia Herzen

## List of Publications by Citations

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159  
papers

2,787  
citations

30  
h-index

43  
g-index

182  
ext. papers

3,364  
ext. citations

4.9  
avg, IF

4.82  
L-index

#	Paper	IF	Citations
159	Emphysema diagnosis using X-ray dark-field imaging at a laser-driven compact synchrotron light source. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 17880-5	11.5	138
158	Dosimetric evaluation of a 2D pixel ionization chamber for implementation in clinical routine. <i>Physics in Medicine and Biology</i> , <b>2007</b> , 52, 1197-208	3.8	111
157	Quantitative phase-contrast tomography of a liquid phantom using a conventional x-ray tube source. <i>Optics Express</i> , <b>2009</b> , 17, 10010-8	3.3	87
156	Spectral Photon-counting CT: Initial Experience with Dual-Contrast Agent K-Edge Colonography. <i>Radiology</i> , <b>2017</b> , 283, 723-728	20.5	83
155	In-vivo X-ray Dark-Field Chest Radiography of a Pig. <i>Scientific Reports</i> , <b>2017</b> , 7, 4807	4.9	69
154	Grating-based X-ray phase contrast for biomedical imaging applications. <i>Zeitschrift Fur Medizinische Physik</i> , <b>2013</b> , 23, 176-85	7.6	61
153	The contractile sponge epithelium <i>sensu lato</i> --body contraction of the demosponge <i>Tethya wilhelma</i> is mediated by the pinacoderm. <i>Journal of Experimental Biology</i> , <b>2011</b> , 214, 1692-8	3	58
152	Quantitative breast tissue characterization using grating-based x-ray phase-contrast imaging. <i>Physics in Medicine and Biology</i> , <b>2014</b> , 59, 1557-71	3.8	56
151	Three-dimensional virtual histology enabled through cytoplasm-specific X-ray stain for microscopic and nanoscopic computed tomography. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 2293-2298	11.5	55
150	Spatial resolution characterization of a X-ray microCT system. <i>Applied Radiation and Isotopes</i> , <b>2014</b> , 94, 230-234	1.7	52
149	Quantitative X-ray phase-contrast computed tomography at 82 keV. <i>Optics Express</i> , <b>2013</b> , 21, 4155-66	3.3	51
148	Phase-contrast CT: qualitative and quantitative evaluation of atherosclerotic carotid artery plaque. <i>Radiology</i> , <b>2014</b> , 271, 870-8	20.5	50
147	Assessment of quantification accuracy and image quality of a full-body dual-layer spectral CT system. <i>Journal of Applied Clinical Medical Physics</i> , <b>2018</b> , 19, 204-217	2.3	48
146	Experimental Realisation of High-sensitivity Laboratory X-ray Grating-based Phase-contrast Computed Tomography. <i>Scientific Reports</i> , <b>2016</b> , 6, 24022	4.9	47
145	X-ray dark-field imaging of the human lung-A feasibility study on a deceased body. <i>PLoS ONE</i> , <b>2018</b> , 13, e0204565	3.7	46
144	X-ray Dark-field Radiography - In-Vivo Diagnosis of Lung Cancer in Mice. <i>Scientific Reports</i> , <b>2017</b> , 7, 402	4.9	42
143	Simultaneous dual-contrast multi-phase liver imaging using spectral photon-counting computed tomography: a proof-of-concept study. <i>European Radiology Experimental</i> , <b>2017</b> , 1, 25	4.5	40

142	Assessment of grating-based X-ray phase-contrast CT for differentiation of invasive ductal carcinoma and ductal carcinoma in situ in an experimental ex vivo set-up. <i>European Radiology</i> , <b>2013</b> , 23, 381-7	8	38
141	Short-range order in mesoscale systems probed by X-ray grating interferometry. <i>Europhysics Letters</i> , <b>2015</b> , 112, 68002	1.6	38
140	High density resolution in synchrotron-radiation-based attenuation-contrast microtomography <b>2008</b> ,		38
139	Toward Clinically Compatible Phase-Contrast Mammography. <i>PLoS ONE</i> , <b>2015</b> , 10, e0130776	3.7	37
138	Insights into the skeletonization, lifestyle, and affinity of the unusual Ediacaran fossil Corumbella. <i>PLoS ONE</i> , <b>2015</b> , 10, e0114219	3.7	35
137	Diagnosing and mapping pulmonary emphysema on X-ray projection images: incremental value of grating-based X-ray dark-field imaging. <i>PLoS ONE</i> , <b>2013</b> , 8, e59526	3.7	35
136	Helical X-ray phase-contrast computed tomography without phase stepping. <i>Scientific Reports</i> , <b>2016</b> , 6, 23953	4.9	34
135	Latest developments in microtomography and nanotomography at PETRA III. <i>Powder Diffraction</i> , <b>2010</b> , 25, 161-164	1.8	34
134	X-ray phase-contrast imaging of the breast--advances towards clinical implementation. <i>British Journal of Radiology</i> , <b>2014</b> , 87, 20130606	3.4	32
133	Dark-field X-ray imaging of unsaturated water transport in porous materials. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 154105	3.4	32
132	Improved visualization of breast cancer features in multifocal carcinoma using phase-contrast and dark-field mammography: an ex vivo study. <i>European Radiology</i> , <b>2015</b> , 25, 3659-68	8	31
131	Large field-of-view tiled grating structures for X-ray phase-contrast imaging. <i>Review of Scientific Instruments</i> , <b>2017</b> , 88, 015104	1.7	30
130	Bi-directional x-ray phase-contrast mammography. <i>PLoS ONE</i> , <b>2014</b> , 9, e93502	3.7	30
129	Comparison between x-ray tube-based and synchrotron radiation-based CT <b>2008</b> ,		28
128	Quantitative imaging using high-energy X-ray phase-contrast CT with a 70 kVp polychromatic X-ray spectrum. <i>Optics Express</i> , <b>2015</b> , 23, 523-35	3.3	27
127	Evaluation of phase-contrast CT of breast tissue at conventional X-ray sources - presentation of selected findings. <i>Zeitschrift Fur Medizinische Physik</i> , <b>2013</b> , 23, 212-21	7.6	27
126	Imaging liver lesions using grating-based phase-contrast computed tomography with bi-lateral filter post-processing. <i>PLoS ONE</i> , <b>2014</b> , 9, e83369	3.7	27
125	The nanotomography endstation at the PETRA III Imaging Beamline. <i>Journal of Physics: Conference Series</i> , <b>2013</b> , 425, 182002	0.3	27

124	Non-invasive differentiation of kidney stone types using X-ray dark-field radiography. <i>Scientific Reports</i> , <b>2015</b> , 5, 9527	4.9	26
123	Visualizing typical features of breast fibroadenomas using phase-contrast CT: an ex-vivo study. <i>PLoS ONE</i> , <b>2014</b> , 9, e97101	3.7	26
122	X-ray phase contrast tomography by tracking near field speckle. <i>Scientific Reports</i> , <b>2015</b> , 5, 8762	4.9	25
121	Depiction of pneumothoraces in a large animal model using x-ray dark-field radiography. <i>Scientific Reports</i> , <b>2018</b> , 8, 2602	4.9	24
120	AHA classification of coronary and carotid atherosclerotic plaques by grating-based phase-contrast computed tomography. <i>European Radiology</i> , <b>2016</b> , 26, 3223-33	8	24
119	Multi-contrast 3D X-ray imaging of porous and composite materials. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 154102	3.4	23
118	Translation of atherosclerotic plaque phase-contrast CT imaging from synchrotron radiation to a conventional lab-based X-ray source. <i>PLoS ONE</i> , <b>2013</b> , 8, e73513	3.7	23
117	Scalable routing easy as PIE: A practical isometric embedding protocol <b>2011</b> ,		23
116	Grating-based X-ray phase-contrast tomography of atherosclerotic plaque at high photon energies. <i>Zeitschrift Fur Medizinische Physik</i> , <b>2013</b> , 23, 194-203	7.6	22
115	Energy-resolved visibility analysis of grating interferometers operated at polychromatic X-ray sources. <i>Optics Express</i> , <b>2014</b> , 22, 30394-409	3.3	22
114	X-ray grating interferometer for materials-science imaging at a low-coherent wiggler source. <i>Review of Scientific Instruments</i> , <b>2011</b> , 82, 113711	1.7	21
113	Direct quantitative material decomposition employing grating-based X-ray phase-contrast CT. <i>Scientific Reports</i> , <b>2018</b> , 8, 16394	4.9	21
112	Mono-Energy Coronary Angiography with a Compact Synchrotron Source. <i>Scientific Reports</i> , <b>2017</b> , 7, 42211	4.9	20
111	Accurate effective atomic number determination with polychromatic grating-based phase-contrast computed tomography. <i>Optics Express</i> , <b>2018</b> , 26, 15153-15166	3.3	20
110	Comparison of contrast-to-noise ratios of transmission and dark-field signal in grating-based X-ray imaging for healthy murine lung tissue. <i>Zeitschrift Fur Medizinische Physik</i> , <b>2013</b> , 23, 236-42	7.6	20
109	Grating-based phase-contrast and dark-field computed tomography: a single-shot method. <i>Scientific Reports</i> , <b>2017</b> , 7, 7476	4.9	20
108	Phase-Contrast Hounsfield Units of Fixated and Non-Fixated Soft-Tissue Samples. <i>PLoS ONE</i> , <b>2015</b> , 10, e0137016	3.7	20
107	Optimization of tube voltage in X-ray dark-field chest radiography. <i>Scientific Reports</i> , <b>2019</b> , 9, 8699	4.9	19

106	P05 imaging beamline at PETRA III: first results <b>2014</b> ,		19
105	Sponge budding is a spatiotemporal morphological patterning process: Insights from synchrotron radiation-based x-ray microtomography into the asexual reproduction of <i>Tethya wilhelma</i> . <i>Frontiers in Zoology</i> , <b>2009</b> , 6, 19	2.8	19
104	Is solid always best? Cranial performance in solid and fenestrated caecilian skulls. <i>Journal of Experimental Biology</i> , <b>2012</b> , 215, 833-44	3	19
103	K-edge subtraction imaging for coronary angiography with a compact synchrotron X-ray source. <i>PLoS ONE</i> , <b>2018</b> , 13, e0208446	3.7	19
102	High resolution laboratory grating-based X-ray phase-contrast CT. <i>Scientific Reports</i> , <b>2018</b> , 8, 15884	4.9	19
101	Phase unwrapping in spectral X-ray differential phase-contrast imaging with an energy-resolving photon-counting pixel detector. <i>IEEE Transactions on Medical Imaging</i> , <b>2015</b> , 34, 816-23	11.7	18
100	X-ray phase-contrast tomosynthesis for improved breast tissue discrimination. <i>European Journal of Radiology</i> , <b>2014</b> , 83, 531-6	4.7	18
99	X-ray dark-field chest imaging for detection and quantification of emphysema in patients with chronic obstructive pulmonary disease: a diagnostic accuracy study. <i>The Lancet Digital Health</i> , <b>2021</b> , 3, e733-e744	14.4	17
98	Improved Diagnostics by Assessing the Micromorphology of Breast Calcifications via X-Ray Dark-Field Radiography. <i>Scientific Reports</i> , <b>2016</b> , 6, 36991	4.9	17
97	Increasing the field of view in grating based X-ray phase contrast imaging using stitched gratings. <i>Journal of X-Ray Science and Technology</i> , <b>2016</b> , 24, 379-88	2.1	16
96	Nucleus-specific X-ray stain for 3D virtual histology. <i>Scientific Reports</i> , <b>2018</b> , 8, 17855	4.9	16
95	Imaging features in post-mortem x-ray dark-field chest radiographs and correlation with conventional x-ray and CT. <i>European Radiology Experimental</i> , <b>2019</b> , 3, 25	4.5	15
94	Unwrapping differential x-ray phase-contrast images through phase estimation from multiple energy data. <i>Optics Express</i> , <b>2013</b> , 21, 29101-8	3.3	15
93	Visualization of subcutaneous insulin injections by x-ray computed tomography. <i>Physics in Medicine and Biology</i> , <b>2012</b> , 57, 7191-203	3.8	14
92	Low-dose, phase-contrast mammography with high signal-to-noise ratio. <i>Biomedical Optics Express</i> , <b>2016</b> , 7, 381-91	3.5	14
91	Helical differential X-ray phase-contrast computed tomography. <i>Physica Medica</i> , <b>2014</b> , 30, 374-9	2.7	13
90	X-ray phase-contrast computed tomography of human coronary arteries. <i>Investigative Radiology</i> , <b>2015</b> , 50, 686-94	10.1	13
89	Micro- and nano-tomography at the GKSS Imaging Beamline at PETRA III <b>2010</b> ,		13

88	Quantitative Three-Dimensional Imaging of Lipid, Protein, and Water Contents via X-Ray Phase-Contrast Tomography. <i>PLoS ONE</i> , <b>2016</b> , 11, e0151889	3.7	13
87	Analysis and correction of bias induced by phase stepping jitter in grating-based X-ray phase-contrast imaging. <i>Optics Express</i> , <b>2018</b> , 26, 12707-12722	3.3	12
86	Evaluation of the potential of phase-contrast computed tomography for improved visualization of cancerous human liver tissue. <i>Zeitschrift Fur Medizinische Physik</i> , <b>2013</b> , 23, 204-11	7.6	12
85	Lens-term- and edge-effect in X-ray grating interferometry. <i>Biomedical Optics Express</i> , <b>2015</b> , 6, 4812-24	3.5	11
84	Simulated cystic renal lesions: quantitative X-ray phase-contrast CT--an in vitro phantom study. <i>Radiology</i> , <b>2014</b> , 272, 739-48	20.5	11
83	The non-hierarchical, non-uniformly branching topology of a leuconoid sponge aquiferous system revealed by 3D reconstruction and morphometrics using corrosion casting and X-ray microtomography. <i>Acta Zoologica</i> , <b>2012</b> , 93, 160-170	0.8	11
82	Qualitative and Quantitative Imaging Evaluation of Renal Cell Carcinoma Subtypes with Grating-based X-ray Phase-contrast CT. <i>Scientific Reports</i> , <b>2017</b> , 7, 45400	4.9	10
81	Correspondence: Quantitative evaluation of X-ray dark-field images for microcalcification analysis in mammography. <i>Nature Communications</i> , <b>2016</b> , 7, 10863	17.4	10
80	Recent advances in X-ray imaging of breast tissue: From two- to three-dimensional imaging. <i>Physica Medica</i> , <b>2020</b> , 79, 69-79	2.7	10
79	Two-shot X-ray dark-field imaging. <i>Optics Express</i> , <b>2016</b> , 24, 27032-27045	3.3	10
78	Dose-compatible grating-based phase-contrast mammography on mastectomy specimens using a compact synchrotron source. <i>Scientific Reports</i> , <b>2018</b> , 8, 15700	4.9	10
77	Cone-beam differential phase-contrast laminography with x-ray tube source. <i>Europhysics Letters</i> , <b>2014</b> , 106, 68002	1.6	9
76	Spectral Angiography Material Decomposition Using an Empirical Forward Model and a Dictionary-Based Regularization. <i>IEEE Transactions on Medical Imaging</i> , <b>2018</b> , 37, 2298-2309	11.7	9
75	Grating-based X-ray dark-field computed tomography for the characterization of friction stir welds: A feasibility study. <i>Materials Characterization</i> , <b>2017</b> , 129, 143-148	3.9	8
74	K-edge Subtraction Computed Tomography with a Compact Synchrotron X-ray Source. <i>Scientific Reports</i> , <b>2019</b> , 9, 13332	4.9	8
73	Contrast-to-noise ratios and thickness-normalized, ventilation-dependent signal levels in dark-field and conventional in vivo thorax radiographs of two pigs. <i>PLoS ONE</i> , <b>2019</b> , 14, e0217858	3.7	8
72	A step towards valid detection and quantification of lung cancer volume in experimental mice with contrast agent-based X-ray microtomography. <i>Scientific Reports</i> , <b>2019</b> , 9, 1325	4.9	8
71	Simultaneous wood and metal particle detection on dark-field radiography. <i>European Radiology Experimental</i> , <b>2018</b> , 2, 1	4.5	8

70	Contrast-enhanced spectral mammography with a compact synchrotron source. <i>PLoS ONE</i> , <b>2019</b> , 14, e0222816	3.7	8
69	The New GKSS Materials Science Beamlines at DESY: Recent Results and Future Options. <i>Materials Science Forum</i> , <b>2010</b> , 638-642, 2470-2475	0.4	8
68	Spectral Differential Phase Contrast X-Ray Radiography. <i>IEEE Transactions on Medical Imaging</i> , <b>2020</b> , 39, 578-587	11.7	8
67	Qualitative and Quantitative Evaluation of Structural Myocardial Alterations by Grating-Based Phase-Contrast Computed Tomography. <i>Investigative Radiology</i> , <b>2018</b> , 53, 26-34	10.1	7
66	Synchrotron-microcomputed tomography studies of normal and pathological cranial sutures: further insight. <i>Journal of Neurosurgery: Pediatrics</i> , <b>2010</b> , 5, 238-42	2.1	7
65	Comparative micro computed tomography study of a vertebral body <b>2008</b> ,		7
64	Applying x-ray tomography in the field of vertebrate biology: form, function, and evolution of the skull of caecilians (Lissamphibia: Gymnophiona) <b>2008</b> ,		7
63	Biomedical x-ray imaging with a GaAs photon-counting detector: A comparative study. <i>APL Photonics</i> , <b>2020</b> , 5, 106108	5.2	7
62	Assessment of intraductal carcinoma in situ (DCIS) using grating-based X-ray phase-contrast CT at conventional X-ray sources: An experimental ex-vivo study. <i>PLoS ONE</i> , <b>2019</b> , 14, e0210291	3.7	7
61	A theoretical framework for comparing noise characteristics of spectral, differential phase-contrast and spectral differential phase-contrast x-ray imaging. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 065010	3.8	6
60	Electron Density of Adipose Tissues Determined by Phase-Contrast Computed Tomography Provides a Measure for Mitochondrial Density and Fat Content. <i>Frontiers in Physiology</i> , <b>2018</b> , 9, 707	4.6	6
59	Dark-field imaging in coronary atherosclerosis. <i>European Journal of Radiology</i> , <b>2017</b> , 94, 38-45	4.7	6
58	Anatomy, function, and evolution of jaw and hyobranchial muscles in cryptobranchoid salamander larvae. <i>Journal of Morphology</i> , <b>2014</b> , 275, 230-46	1.6	6
57	Morphology of atherosclerotic coronary arteries <b>2012</b> ,		6
56	Grating-based spectral X-ray dark-field imaging for correlation with structural size measures. <i>Scientific Reports</i> , <b>2020</b> , 10, 13195	4.9	6
55	X-ray dark-field contrast imaging of water transport during hydration and drying of early-age cement-based materials. <i>Materials Characterization</i> , <b>2018</b> , 142, 560-576	3.9	6
54	Ex Vivo Assessment of Coronary Atherosclerotic Plaque by Grating-Based Phase-Contrast Computed Tomography: Correlation With Optical Coherence Tomography. <i>Investigative Radiology</i> , <b>2017</b> , 52, 223-231	10.1	5
53	The female cloaca of an oviparous caecilian amphibian (Gymnophiona): functional and seasonal aspects. <i>Acta Zoologica</i> , <b>2012</b> , 93, 208-221	0.8	5

52	Grating-based x-ray phase-contrast imaging at PETRA III <b>2014</b> ,		5
51	Characterization of the CCD and CMOS cameras for grating-based phase-contrast tomography <b>2014</b> ,		5
50	Morphology of urethral tissues <b>2010</b> ,		5
49	X-ray grating interferometer for imaging at a second-generation synchrotron radiation source <b>2010</b> ,		5
48	K-edge subtraction imaging for iodine and calcium separation at a compact synchrotron x-ray source. <i>Journal of Medical Imaging</i> , <b>2020</b> , 7, 023504	2.6	5
47	High resolution and sensitivity bi-directional x-ray phase contrast imaging using 2D Talbot array illuminators. <i>Optica</i> ,	8.6	5
46	3D grating-based X-ray phase-contrast computed tomography for high-resolution quantitative assessment of cartilage: An experimental feasibility study with 3T MRI, 7T MRI and biomechanical correlation. <i>PLoS ONE</i> , <b>2019</b> , 14, e0212106	3.7	4
45	Dynamic Quantitative Iodine Myocardial Perfusion Imaging with Dual-Layer CT using a Porcine Model. <i>Scientific Reports</i> , <b>2019</b> , 9, 16046	4.9	4
44	Mineral distribution in highly fluorotic and in normal teeth: A synchrotron microcomputer tomographic study. <i>Materialwissenschaft Und Werkstofftechnik</i> , <b>2009</b> , 40, 294-296	0.9	4
43	Ultra-small angle neutron scattering and X-ray tomography studies of caseinate/hydroxyapatite microporous materials. <i>Materials Chemistry and Physics</i> , <b>2010</b> , 123, 77-82	4.4	4
42	High density resolution synchrotron radiation based x-ray microtomography (SR $\mu$ CT) for quantitative 3D-morphometrics in zoological sciences <b>2008</b> ,		4
41	Single-grating interferometer for high-resolution phase-contrast imaging at synchrotron radiation sources <b>2016</b> ,		4
40	Early detection of radiation-induced lung damage with X-ray dark-field radiography in mice. <i>European Radiology</i> , <b>2021</b> , 31, 4175-4183	8	4
39	Fourier domain image fusion for differential X-ray phase-contrast breast imaging. <i>European Journal of Radiology</i> , <b>2017</b> , 89, 27-32	4.7	3
38	Advanced Non-Destructive Ocular Visualization Methods by Improved X-Ray Imaging Techniques. <i>PLoS ONE</i> , <b>2017</b> , 12, e0170633	3.7	3
37	Tilted grating phase-contrast computed tomography using statistical iterative reconstruction. <i>Scientific Reports</i> , <b>2018</b> , 8, 6608	4.9	3
36	Absorption and Phase Contrast X-Ray Imaging in Paleontology Using Laboratory and Synchrotron Sources. <i>Microscopy and Microanalysis</i> , <b>2015</b> , 21, 1288-95	0.5	3
35	Grating interferometry-based phase microtomography of atherosclerotic human arteries <b>2014</b> ,		3



34	Grating-based tomography of human tissues <b>2012</b> ,		3
33	Quality and parameter control of X-ray absorption gratings by angular X-ray transmission. <i>Optics Express</i> , <b>2019</b> , 27, 15943-15955	3-3	3
32	X-ray Dark-Field Radiography: Potential for Visualization of Monosodium Urate Deposition. <i>Investigative Radiology</i> , <b>2020</b> , 55, 494-498	10.1	3
31	Photon-counting spectral basis component material decomposition for musculoskeletal radiographs. <i>Scientific Reports</i> , <b>2020</b> , 10, 13889	4-9	3
30	Whole-body x-ray dark-field radiography of a human cadaver. <i>European Radiology Experimental</i> , <b>2021</b> , 5, 6	4-5	3
29	High resolution laboratory grating-based x-ray phase-contrast CT <b>2017</b> ,		2
28	Ex vivo characterization of pathologic fluids with quantitative phase-contrast computed tomography. <i>European Journal of Radiology</i> , <b>2017</b> , 86, 99-104	4-7	2
27	Paleometry as a key tool to deal with paleobiological and astrobiological issues: some contributions and reflections on the Brazilian fossil record. <i>International Journal of Astrobiology</i> , <b>2019</b> , 18, 575-589	1-4	2
26	Signal-to-thickness calibration and pixel-wise interpolation for beam-hardening artefact reduction in microCT. <i>Europhysics Letters</i> , <b>2019</b> , 125, 38003	1-6	2
25	Single spectrum three-material decomposition with grating-based x-ray phase-contrast CT. <i>Physics in Medicine and Biology</i> , <b>2020</b> , 65, 185011	3-8	2
24	Grating-based phase-contrast CT (PCCT): histopathological correlation of human liver cirrhosis and hepatocellular carcinoma specimen. <i>Journal of Clinical Pathology</i> , <b>2020</b> , 73, 483-487	3-9	2
23	Revising the lower statistical limit of x-ray grating-based phase-contrast computed tomography. <i>PLoS ONE</i> , <b>2017</b> , 12, e0184217	3-7	2
22	SRCT study of crack propagation within laser-welded aluminum-alloy T-joints <b>2008</b> ,		2
21	Evaluation of the degradation behavior of resorbable metal implants for in vivo osteosynthesis by synchrotron radiation based x-ray tomography and histology <b>2016</b> ,		2
20	Propagation-based phase-contrast tomography of a guinea pig inner ear with cochlear implant using a model-based iterative reconstruction algorithm. <i>Biomedical Optics Express</i> , <b>2018</b> , 9, 5330-5339	3-5	2
19	Quantitative X-ray phase contrast computed tomography with grating interferometry : Biomedical applications of quantitative X-ray grating-based phase contrast computed tomography. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , <b>2021</b> , 48, 4171-4188	8.8	2
18	X-ray Dark-Field Chest Imaging can Detect and Quantify Emphy-sema in COPD Patients		2
17	Dosimetry on first clinical dark-field chest radiography. <i>Medical Physics</i> , <b>2021</b> , 48, 6152-6159	4-4	2

16	Redefining the lower statistical limit in x-ray phase-contrast imaging <b>2015</b> ,		1
15	Optimization of in vivo murine X-ray dark-field computed tomography. <i>Review of Scientific Instruments</i> , <b>2019</b> , 90, 103103	1.7	1
14	Three-dimensional registration of synchrotron radiation-based micro-computed tomography images with advanced laboratory micro-computed tomography data from murine kidney casts <b>2014</b> ,		1
13	Compressed sensing for phase contrast CT <b>2012</b> ,		1
12	The GKSS beamlines at PETRA III and DORIS III <b>2008</b> ,		1
11	Internal structures of scaffold-free 3D cell cultures visualized by synchrotron radiation-based micro-computed tomography <b>2008</b> ,		1
10	Dual-Energy X-Ray Dark-Field Material Decomposition. <i>IEEE Transactions on Medical Imaging</i> , <b>2021</b> , 40, 974-985	11.7	1
9	Direct Differentiation of Pathological Changes in the Human Lung Parenchyma With Grating-Based Spectral X-ray Dark-Field Radiography. <i>IEEE Transactions on Medical Imaging</i> , <b>2021</b> , 40, 1568-1578	11.7	0
8	Correlation of image quality parameters with tube voltage in X-ray dark-field chest radiography: a phantom study. <i>Scientific Reports</i> , <b>2021</b> , 11, 14130	4.9	0
7	X-ray dark-field radiography for in situ gout diagnosis by means of an ex vivo animal study. <i>Scientific Reports</i> , <b>2021</b> , 11, 19021	4.9	0
6	In-vivo X-ray dark-field computed tomography for the detection of radiation-induced lung damage in mice. <i>Physics and Imaging in Radiation Oncology</i> , <b>2021</b> , 20, 11-16	3.1	0
5	Dark-field chest x-ray imaging: first experience in patients with alpha1-antitrypsin deficiency.. <i>European Radiology Experimental</i> , <b>2022</b> , 6, 9	4.5	0
4	$\mu$ -Tomography of Engineering Materials <b>2017</b> , 275-289		
3	Dose and spatial resolution analysis of grating-based phase-contrast mammography using an inverse Compton x-ray source. <i>Journal of Medical Imaging</i> , <b>2020</b> , 7, 023505	2.6	
2	A proof-of-principal study using phase-contrast imaging for the detection of large airway pathologies after lung transplantation. <i>Scientific Reports</i> , <b>2020</b> , 10, 18444	4.9	
1	Retrieval of 3D information in X-ray dark-field imaging with a large field of view. <i>Scientific Reports</i> , <b>2021</b> , 11, 23504	4.9	