Chris Jacobsen

List of Publications by Year
in descending order

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221 papers	14,470 citations	17440 63 h-index	19749 117 g-index
233 all docs	233 docs citations	233 times ranked	11425 citing authors

#	Article	IF	Citations
1	Comet 81P/Wild 2 Under a Microscope. Science, 2006, 314, 1711-1716.	12.6	848
2	TomoPy: a framework for the analysis of synchrotronÂtomographic data. Journal of Synchrotron Radiation, 2014, 21, 1188-1193.	2.4	695
3	Soft X-ray microscopes and their biological applications. Quarterly Reviews of Biophysics, 1995, 28, 33-130.	5.7	601
4	Organics Captured from Comet 81P/Wild 2 by the Stardust Spacecraft. Science, 2006, 314, 1720-1724.	12.6	519
5	High-resolution ab initio three-dimensional x-ray diffraction microscopy. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2006, 23, 1179.	1.5	511
6	Biological imaging by soft x-ray diffraction microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 15343-15346.	7.1	506
7	An assessment of the resolution limitation due to radiation-damage in X-ray diffraction microscopy. Journal of Electron Spectroscopy and Related Phenomena, 2009, 170, 4-12.	1.7	427
8	Spatial complexity of soil organic matter forms at nanometre scales. Nature Geoscience, 2008, 1, 238-242.	12.9	374
9	Generation of Spatially Coherent Light at Extreme Ultraviolet Wavelengths. Science, 2002, 297, 376-378.	12.6	365
10	Soft X-ray spectroscopy from image sequences with sub-100 nm spatial resolution. Journal of Microscopy, 2000, 197, 173-184.	1.8	334
11	High-Resolution Imaging by Fourier Transform X-ray Holography. Science, 1992, 256, 1009-1012.	12.6	272
12	Diffraction-limited imaging in a scanning transmission x-ray microscope. Optics Communications, 1991, 86, 351-364.	2.1	241
13	Quantifying Trace Elements in Individual Aquatic Protist Cells with a Synchrotron X-ray Fluorescence Microprobe. Analytical Chemistry, 2003, 75, 3806-3816.	6.5	216
14	Near-edge X-ray absorption fine structure (NEXAFS) spectroscopy for mapping nano-scale distribution of organic carbon forms in soil: Application to black carbon particles. Global Biogeochemical Cycles, 2005, 19, .	4.9	215
15	Innershell Absorption Spectroscopy of Amino Acids. Journal of Physical Chemistry A, 2002, 106, 3153-3168.	2.5	209
16	The origin of organic matter in the solar system: evidence from the interplanetary dust particles. Geochimica Et Cosmochimica Acta, 2003, 67, 4791-4806.	3.9	203
17	Cluster analysis of soft X-ray spectromicroscopy data. Ultramicroscopy, 2004, 100, 35-57.	1.9	180
18	Evolution of xylem lignification and hydrogel transport regulation. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 17555-17558.	7.1	167

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19	Achromatic Fresnel optics for wideband extreme-ultraviolet and X-ray imaging. Nature, 2003, 424, 50-53.	27.8	166
20	Carbon (1s) NEXAFS Spectroscopy of Biogeochemically Relevant Reference Organic Compounds. Soil Science Society of America Journal, 2009, 73, 1817-1830.	2.2	153
21	Reconstruction of a yeast cell from X-ray diffraction data. Acta Crystallographica Section A: Foundations and Advances, 2006, 62, 248-261.	0.3	151
22	The Bionanoprobe: hard X-ray fluorescence nanoprobe with cryogenic capabilities. Journal of Synchrotron Radiation, 2014, 21, 66-75.	2.4	151
23	Soft X-ray radiation-damage studies in PMMA using a cryo-STXM. Journal of Synchrotron Radiation, 2003, 10, 280-283.	2.4	149
24	The nature of molecular cloud material in interplanetary dust. Geochimica Et Cosmochimica Acta, 2004, 68, 2577-2589.	3.9	148
25	Chemical Heterogeneity of Organic Soil Colloids Investigated by Scanning Transmission X-ray Microscopy and C-1s NEXAFS Microspectroscopy. Environmental Science & Technology, 2005, 39, 9094-9100.	10.0	147
26	Quantitative 3D elemental microtomography ofCyclotella meneghinianaat 400-nm resolution. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 15676-15680.	7.1	146
27	Simultaneous cryo X-ray ptychographic and fluorescence microscopy of green algae. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2314-2319.	7.1	146
28	Advantages of soft X-ray absorption over TEM-EELS for solid carbon studiesâ€“â€“a comparative study on diesel soot with EELS and NEXAFS. Carbon, 2005, 43, 117-124.	10.3	145
29	Micro- and nano-environments of carbon sequestration: Multi-element STXMâ€“NEXAFS spectromicroscopy assessment of microbial carbon and mineral associations. Chemical Geology, 2012, 329, 53-73.	3.3	142
30	Quantitative organic and lightâ€element analysis of comet 81P/Wild 2 particles using Câ€; Nâ€; and Oâ€Î¼â€XANES. Meteoritics and Planetary Science, 2008, 43, 353-365.	1.6	137
31	Soft X-Ray Diffraction Microscopy of a Frozen Hydrated Yeast Cell. Physical Review Letters, 2009, 103, 198101.	7.8	137
32	Carbon edge XANES spectroscopy of amino acids and peptides. Journal of Electron Spectroscopy and Related Phenomena, 1997, 85, 9-15.	1.7	126
33	High-resolution x-ray diffraction microscopy of specifically labeled yeast cells. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 7235-7239.	7.1	121
34	Process optimization for production of sub-20 nm soft x-ray zone plates. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1997, 15, 2872.	1.6	119
35	Epidermal Growth Factor Receptor Targeted Nuclear Delivery and High-Resolution Whole Cell X-ray Imaging of Fe₃O₄@TiO₂ Nanoparticles in Cancer Cells. ACS Nano, 2013, 7, 10502-10517.	14.6	113
36	X-ray holograms at improved resolution: a study of zymogen granules. Science, 1987, 238, 514-517.	12.6	112

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37	X-ray holographic microscopy using photoresists. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1990, 7, 1847.	1.5	109
38	Single-element elliptical hard x-ray micro-optics. Optics Express, 2003, 11, 919.	3.4	106
39	Parallel ptychographic reconstruction. Optics Express, 2014, 22, 32082.	3.4	106
40	Zernike phase contrast in scanning microscopy with X-rays. Nature Physics, 2010, 6, 883-887.	16.7	105
41	Soft X-ray microscopy with a cryo scanning transmission X-ray microscope: II. Tomography. Journal of Microscopy, 2000, 197, 80-93.	1.8	104
42	MANTiS: a program for the analysis of X-ray spectromicroscopy data. Journal of Synchrotron Radiation, 2014, 21, 1206-1212.	2.4	102
43	Continuous motion scan ptychography: characterization for increased speed in coherent x-ray imaging. Optics Express, 2015, 23, 5438.	3.4	102
44	New directions in X-ray microscopy. Contemporary Physics, 2011, 52, 293-318.	1.8	99
45	Quantitative Phase Imaging with a Scanning Transmission X-Ray Microscope. Physical Review Letters, 2008, 100, 163902.	7.8	93
46	Measurements of wet metaphase chromosomes in the scanning transmission Xâ€ray microscope. Journal of Microscopy, 1993, 170, 155-165.	1.8	92
47	X-ray ptychographic and fluorescence microscopy of frozen-hydrated cells using continuous scanning. Scientific Reports, 2017, 7, 445.	3.3	88
48	An assessment of the amount and types of organic matter contributed to the Earth by interplanetary dust. Advances in Space Research, 2004, 33, 57-66.	2.6	87
49	Scientific data exchange: a schema for HDF5-based storage of raw and analyzed data. Journal of Synchrotron Radiation, 2014, 21, 1224-1230.	2.4	86
50	Preserving elemental content in adherent mammalian cells for analysis by synchrotronâ€based xâ€ray fluorescence microscopy. Journal of Microscopy, 2017, 265, 81-93.	1.8	83
51	Resolution in soft X-ray microscopes. Ultramicroscopy, 1992, 47, 55-79.	1.9	82
52	Soft x-ray microscopy. Trends in Cell Biology, 1999, 9, 44-47.	7.9	82
53	Signal-to-noise and radiation exposure considerations in conventional and diffraction x-ray microscopy. Optics Express, 2009, 17, 13541.	3.4	80
54	Correlative 3D x-ray fluorescence and ptychographic tomography of frozen-hydrated green algae. Science Advances, 2018, 4, eaau4548.	10.3	79

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55	Organic chemical differentiation within fossil plant cell walls detected with X-ray spectromicroscopy. Geology, 2002, 30, 1039.	4.4	78
56	Examining marine particulate organic matter at sub-micron scales using scanning transmission X-ray microscopy and carbon X-ray absorption near edge structure spectroscopy. Marine Chemistry, 2004, 92, 107-121.	2.3	76
57	Differential phase contrast with a segmented detector in a scanning X-ray microprobe. Journal of Synchrotron Radiation, 2008, 15, 355-362.	2.4	75
58	Rapid alignment of nanotomography data using joint iterative reconstruction and reprojection. Scientific Reports, 2017, 7, 11818.	3.3	75
59	Quantifying Mesoscale Neuroanatomy Using X-Ray Microtomography. ENeuro, 2017, 4, ENEURO.0195-17.2017.	1.9	74
60	Exposure strategies for polymethyl methacrylate from in situ x-ray absorption near edge structure spectroscopy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1995, 13, 1477.	1.6	71
61	X-ray scattering and spectroscopy studies on diesel soot from oxygenated fuel under various engine load conditions. Carbon, 2005, 43, 2588-2599.	10.3	71
62	X-ray holographic microscopy by means of photoresist recording and atomic-force microscope readout. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1996, 13, 1788.	1.5	69
63	Micro-XANES: Chemical contrast in the scanning transmission X-ray microscope. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1994, 347, 431-435.	1.6	64
64	Origin and mobility of fulvic acids in the Gorleben aquifer system: implications from isotopic data and carbon/sulfur XANES. Organic Geochemistry, 2005, 36, 567-582.	1.8	64
65	Quantitative amplitude and phase contrast imaging in a scanning transmission X-ray microscope. Ultramicroscopy, 2007, 107, 644-655.	1.9	63
66	CarbonK-edge spectra of carbonate minerals. Journal of Synchrotron Radiation, 2010, 17, 676-682.	2.4	61
67	X-ray nanoprobes and diffraction-limited storage rings: opportunities and challenges of fluorescence tomography of biological specimens. Journal of Synchrotron Radiation, 2014, 21, 1031-1047.	2.4	61
68	Soft X-ray spectromicroscopy on solid-stabilized emulsions. Colloid and Polymer Science, 1999, 277, 719-726.	2.1	60
69	A characterisation of dark-field imaging of colloidal gold labels in a scanning transmission X-ray microscope. Ultramicroscopy, 1996, 62, 191-213.	1.9	57
70	Scanning luminescence Xâ€ray microscopy: Imaging fluorescence dyes at suboptical resolution. Journal of Microscopy, 1993, 172, 121-129.	1.8	56
71	A study of diesel PM with X-ray microspectroscopy. Fuel, 2004, 83, 997-1000.	6.4	55
72	Integrating Silicon detector with segmentation for scanning transmission X-ray microscopy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 565, 841-854.	1.6	55

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73	Illumination for coherent soft X-ray applications: the new X1A beamline at the NSLS. Journal of Synchrotron Radiation, 2000, 7, 395-404.	2.4	54
74	Tomosaic: efficient acquisition and reconstruction of teravoxel tomography data using limited-size synchrotron X-ray beams. Journal of Synchrotron Radiation, 2018, 25, 1478-1489.	2.4	54
75	Using automatic differentiation as a general framework for ptychographic reconstruction. Optics Express, 2019, 27, 18653.	3.4	54
76	Micro- and nano-environments of C sequestration in soil: A multi-elemental STXMâ€“NEXAFS assessment of black C and organomineral associations. Science of the Total Environment, 2012, 438, 372-388.	8.0	51
77	Relative merits and limiting factors for x-ray and electron microscopy of thick, hydrated organic materials. Ultramicroscopy, 2018, 184, 293-309.	1.9	51
78	X-ray microscopy with synchrotron radiation. Nature Structural Biology, 1998, 5, 650-653.	9.7	50
79	Chemical composition of aquatic dissolved organic matter in five boreal forest catchments sampled in spring and fall seasons. Biogeochemistry, 2006, 80, 263-275.	3.5	49
80	Soft xâ€ray microscopy with coherent x rays (invited). Review of Scientific Instruments, 1992, 63, 557-563.	1.3	48
81	Soft X-ray induced chemical modification of polysaccharides in vascular plant cell walls. Journal of Electron Spectroscopy and Related Phenomena, 2009, 170, 57-64.	1.7	48
82	Applications of a CCD detector in scanning transmission xâ€ray microscope. Review of Scientific Instruments, 1995, 66, 1332-1334.	1.3	47
83	Distributed Automatic Differentiation for Ptychography. Procedia Computer Science, 2017, 108, 404-414.	2.0	47
84	Incorrect support and missing center tolerances of phasing algorithms. Optics Express, 2010, 18, 26441.	3.4	44
85	Absorption microanalysis with a scanning soft Xâ€ray microscope: mapping the distribution of calcium in bone. Journal of Microscopy, 1985, 138, 321-328.	1.8	43
86	Radiation sensitivity of natural organic matter: Clay mineral association effects in the Callovo-Oxfordian argillite. Journal of Electron Spectroscopy and Related Phenomena, 2009, 170, 49-56.	1.7	43
87	A specimen chamber for soft X-ray spectromicroscopy on aqueous and liquid samples. Journal of Synchrotron Radiation, 2000, 7, 110-112.	2.4	41
88	Data preparation and evaluation techniques for x-ray diffraction microscopy. Optics Express, 2010, 18, 18598.	3.4	40
89	Nanoscale x-ray imaging of circuit features without wafer etching. Physical Review B, 2017, 95, .	3.2	40
90	Apparatus for X-ray diffraction microscopy and tomography of cryo specimens. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 545, 459-468.	1.6	38

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91	Non-negative matrix analysis for effective feature extraction in X-ray spectromicroscopy. Faraday Discussions, 2014, 171, 357-371.	3.2	37
92	Fabrication of hard x-ray zone plates with high aspect ratio using metal-assisted chemical etching. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, 06G901.	1.2	37
93	Joint reconstruction of x-ray fluorescence and transmission tomography. Optics Express, 2017, 25, 13107.	3.4	34
94	3D x-ray imaging of continuous objects beyond the depth of focus limit. Optica, 2018, 5, 1078.	9.3	34
95	Strategies for high-throughput focused-beam ptychography. Journal of Synchrotron Radiation, 2017, 24, 1078-1081.	2.4	33
96	The use of soft X-ray spectromicroscopy to investigate the distribution and composition of organic matter in a diatom frustule and a biomimetic analog. Deep-Sea Research Part II: Topical Studies in Oceanography, 2009, 56, 1369-1380.	1.4	32
97	Multislice does it allâ€"calculating the performance of nanofocusing X-ray optics. Optics Express, 2017, 25, 1831.	3.4	31
98	Intracellular in situ labeling of TiO2 nanoparticles for fluorescence microscopy detection. Nano Research, 2018, 11, 464-476.	10.4	30
99	Optimizing detector geometry for trace element mapping by X-ray fluorescence. Ultramicroscopy, 2015, 152, 44-56.	1.9	29
100	Relaxation of the Crowther criterion in multislice tomography. Optics Letters, 2018, 43, 4811.	3.3	29
101	Three dimensions, two microscopes, one code: Automatic differentiation for x-ray nanotomography beyond the depth of focus limit. Science Advances, 2020, 6, eaay3700.	10.3	27
102	Data analysis for X-ray fluorescence imaging. European Physical Journal Special Topics, 2003, 104, 617-622.	0.2	26
103	Advantages of intermediate X-ray energies in Zernike phase contrast X-ray microscopy. Biotechnology Advances, 2013, 31, 387-392.	11.7	26
104	The scanning transmission microscope at the NSLS. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1990, 291, 54-59.	1.6	25
105	A numerical study of resolution and contrast in soft Xâ€ray contact microscopy. Journal of Microscopy, 1998, 191, 159-169.	1.8	25
106	Instrumentation developments in scanning soft xâ€ray microscopy at the NSLS (invited). Review of Scientific Instruments, 1995, 66, 1271-1275.	1.3	24
107	Ultraviolet Germicidal Irradiation and Its Effects on Elemental Distributions in Mouse Embryonic Fibroblast Cells in X-Ray Fluorescence Microanalysis. PLoS ONE, 2015, 10, e0117437.	2.5	24
108	Development of a Cryo Scanning Transmission X-Ray Microscope at the NSLS. , 1998, , 35-44.		24

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109	Scanning transmission X-ray microscopy with aÂsegmented detector. European Physical Journal Special Topics, 2003, 104, 529-534.	0.2	24
110	Alignment of low-dose X-ray fluorescence tomographyÂimages using differential phase contrast. Journal of Synchrotron Radiation, 2014, 21, 229-234.	2.4	24
111	Softâ€xâ€ray imaging with the 35 period undulator at the NSLS. Review of Scientific Instruments, 1989, 60, 2444-2447.	1.3	22
112	Rapid calculation of paraxial wave propagation for cylindrically symmetric optics. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2015, 32, 2074.	1.5	22
113	More are better, but the details matter: combinations of multiple Fresnel zone plates for improved resolution and efficiency in X-ray microscopy. Journal of Synchrotron Radiation, 2018, 25, 1048-1059.	2.4	22
114	The performance of the NSLS mini-undulator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1988, 266, 96-105.	1.6	21
115	Anti-contamination device for cryogenic soft X-ray diffraction microscopy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 638, 171-175.	1.6	19
116	Future challenges for x-ray microscopy. AIP Conference Proceedings, 2016, , .	0.4	19
117	Tunable hard x-ray nanofocusing with Fresnel zone plates fabricated using deep etching. Optica, 2020, 7, 410.	9.3	19
118	<title>Applications and instrumentation advances with the Stony Brook scanning transmission x-ray microscope</title>. , 1998, , .		18
119	Lensless imaging of nanoporous glass with soft X-rays. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 1150-1153.	2.1	18
120	Adorym: a multi-platform generic X-ray image reconstruction framework based on automatic differentiation. Optics Express, 2021, 29, 10000.	3.4	18
121	New results in soft X-ray microscopy. Nuclear Instruments & Methods in Physics Research B, 1994, 87, 92-97.	1.4	16
122	A shutterâ€“photodiode combination for UV and soft X-ray beamlines. Journal of Synchrotron Radiation, 1999, 6, 50-50.	2.4	16
123	Non-negative matrix analysis in x-ray spectromicroscopy: Choosing regularizers. AIP Conference Proceedings, 2016, 1696, .	0.4	16
124	A technique for projection xâ€ray lithography using computerâ€generated holograms. Journal of Applied Physics, 1992, 71, 2993-3001.	2.5	15
125	Upscaling X-ray nanoimaging to macroscopic specimens. Journal of Applied Crystallography, 2021, 54, 386-401.	4.5	15
126	Construction and test of phase zone plates for x-ray microscopy. Optics Letters, 1991, 16, 621.	3.3	14

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127	Rapid and Accurate Analysis of an X-Ray Fluorescence Microscopy Data Set through Gaussian Mixture-Based Soft Clustering Methods. Microscopy and Microanalysis, 2013, 19, 1281-1289.	0.4	14
128	A Next-Generation Hard X-Ray Nanoprobe Beamline for In Situ Studies of Energy Materials and Devices. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 85-97.	2.2	14
129	X-ray tomography of extended objects: a comparison of data acquisition approaches. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2018, 35, 1871.	1.5	14
130	Quantitative imaging and microanalysis with a scanning soft X-ray microscope. Physics in Medicine and Biology, 1987, 32, 431-437.	3.0	13
131	Toward a practical X-ray Fourier holography at high resolution. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 467-468, 864-867.	1.6	13
132	The Bionanoprobe: Synchrotron-Based Hard X-ray Fluorescence Microscopy for 2D/3D Trace Element Mapping. Microscopy Today, 2015, 23, 26-29.	0.3	13
133	A program for calculating and plotting soft-X-ray optical interaction coefficients for molecules. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1990, 291, 107-109.	1.6	12
134	Predictions On The Performance Of The Soft X-Ray Undulator. Proceedings of SPIE, 1986, , .	0.8	11
135	A three-dimensional thalamocortical dataset for characterizing brain heterogeneity. Scientific Data, 2020, 7, 358.	5.3	11
136	Diffractive x-ray optics using production fabrication methods. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 214.	1.6	10
137	Cluster analysis of soft X-ray spectromicroscopy data. European Physical Journal Special Topics, 2003, 104, 623-626.	0.2	10
138	Unsupervised cell identification on multidimensional X-ray fluorescence datasets. Journal of Synchrotron Radiation, 2014, 21, 568-579.	2.4	10
139	SPECTROMICROSCOPY OF BIOLOGICAL AND ENVIRONMENTAL SYSTEMS AT STONY BROOK: INSTRUMENTATION AND ANALYSIS. Surface Review and Letters, 2002, 09, 185-191.	1.1	9
140	Soft xâ€ray microscopy at the NSLS. Synchrotron Radiation News, 2003, 16, 11-15.	0.8	9
141	Orientation dependence of linewidth variation in sub-50-nm Gaussian e-beam lithography and its correction. Journal of Vacuum Science & Technology B, 2006, 24, 2881.	1.3	9
142	Processing of X-ray Microcalorimeter Data with Pulse Shape Variation using Principal Component Analysis. Journal of Low Temperature Physics, 2016, 184, 397-404.	1.4	9
143	Development of Fe3O4 coreâ€“TiO2 shell nanocomposites and nanoconjugates as a foundation for neuroblastoma radiosensitization. Cancer Nanotechnology, 2021, 12, 12.	3.7	9
144	A Perspective on Biological X-Ray and Electron Microscopy. , 1998, , 197-206.		9

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145	X-ray Microscopy with the NSLS Soft X-ray Undulator. Physica Scripta, 1990, T31, 12-17.	2.5	8
146	Soft-X-ray microscope using fourier transform holography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1990, 291, 74-79.	1.6	8
147	Scanning transmission X-ray microscopic analysis of purified melanosomes of the mouse iris. Micron, 2006, 37, 689-698.	2.2	8
148	A method for phase reconstruction from measurements obtained using a configured detector with a scanning transmission X-ray microscope. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 582, 218-220.	1.6	8
149	Multimodal x-ray nanotomography. MRS Bulletin, 2020, 45, 272-276.	3.5	8
150	Near, far, wherever you are: simulations on the dose efficiency of holographic and ptychographic coherent imaging. Journal of Applied Crystallography, 2020, 53, 748-759.	4.5	8
151	Effect of tilt on circular zone plate performance. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2020, 37, 374.	1.5	8
152	An undulator source beamline for soft X-ray imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1986, 246, 159-162.	1.6	7
153	Soft X-ray Microscopy in Biology and Medicine: Status and Prospects. Physica Scripta, 1990, T31, 18-22.	2.5	7
154	Demonstration of phase contrast in scanning transmission X-ray microscopy: Comparison of images obtained at NSLS X1-A with numerical simulations. AIP Conference Proceedings, 2000, , .	0.4	7
155	<title>Novel integrating solid state detector with segmentation for scanning transmission soft x-ray microscopy</title>. , 2001, , .		7
156	Calculation of x-ray refraction from near-edge absorption data only. , 2004, 5538, 23.		7
157	A new workflow for x-ray fluorescence tomography: MAPStoTomoPy. , 2015, 9592, .		7
158	Fast digital lossy compression for X-ray ptychographic data. Journal of Synchrotron Radiation, 2021, 28, 292-300.	2.4	7
159	Elemental analysis using differential absorption techniques. Biological Trace Element Research, 1987, 13, 103-113.	3.5	6
160	The NSLS VUV undulator: Spectral characteristics and operating experience. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1988, 266, 106-111.	1.6	6
161	Dark-Field X-Ray Microscopy of Immunogold-Labeled Cells. Microscopy and Microanalysis, 1996, 2, 53-62.	0.4	6
162	Biological microscopy and soft X-ray optics at Stony Brook. Journal of Electron Spectroscopy and Related Phenomena, 1996, 80, 337-341.	1.7	6

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163	<title>Scanning transmission soft x-ray microscopy at beamline X-1A at the NSLS: advances in instrumentation and selected applications</title>. , 2001, , .		6
164	Quantification and localization of trace metals inÂnatural plankton cells using a synchrotron X-ray fluorescence microprobe. European Physical Journal Special Topics, 2003, 104, 435-438.	0.2	6
165	Principal component analysis for soft x-ray spectromicroscopy. AIP Conference Proceedings, 2000, , .	0.4	5
166	Analysis of interplanetary dust particles by soft and hard X-ray microscopy. European Physical Journal Special Topics, 2003, 104, 367-372.	0.2	5
167	Efficient ptychographic phase retrieval via a matrix-free Levenberg-Marquardt algorithm. Optics Express, 2021, 29, 23019.	3.4	5
168	Possibilities for projection x-ray lithography using holographic optical elements. Applied Optics, 1991, 30, 1580.	2.1	4
169	Projection x-ray lithography using computer-generated holograms: A study of compatibility with proximity lithography. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1992, 10, 3177.	1.6	4
170	<title>Scanning transmission x-ray microscope at the NSLS: from XANES to cryo</title>. , 1995, , .		4
171	Practices and Standards for Data and Processing at the APS. Synchrotron Radiation News, 2015, 28, 15-21.	0.8	4
172	Development of Multi-Scale X-ray Fluorescence Tomography for Examination of Nanocomposite-Treated Biological Samples. Cancers, 2021, 13, 4497.	3.7	4
173	Microanalysis with a Soft X Ray Scanning Microprobe. Annals of the New York Academy of Sciences, 1986, 483, 463-470.	3.8	3
174	Soft X-ray diffraction tomography: Simulations and first experimental results. European Physical Journal Special Topics, 2003, 104, 31-34.	0.2	3
175	Data intensive science at synchrotron based 3D x-ray imaging facilities. , 2012, , .		3
176	TomoPy: A framework for the analysis of synchrotron tomographic data. Proceedings of SPIE, 2014, , .	0.8	3
177	Spectromicroscopy of soil colloids. European Physical Journal Special Topics, 2003, 104, 405-408.	0.2	3
178	Comparison of distributed memory algorithms for X-ray wave propagation in inhomogeneous media. Optics Express, 2020, 28, 29590.	3.4	3
179	Calibration of high-resolution X-ray tomography with atomic force microscopy. Journal of Research of the National Institute of Standards and Technology, 2000, 105, 867.	1.2	3
180	Zone-Plate X-Ray Microscopy. Springer Handbooks, 2019, , 1145-1204.	0.6	3

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