

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	Fast and noise-tolerant determination of the center of rotation in tomography. Journal of Synchrotron Radiation, 2022, 29, 488-495.	2.4	2
2	Lensless X-Ray Nanoimaging: Revolutions and opportunities. IEEE Signal Processing Magazine, 2022, 39, 44-54.	5.6	3
3	Fast digital lossy compression for X-ray ptychographic data. Journal of Synchrotron Radiation, 2021, 28, 292-300.	2.4	7
4	Upscaling X-ray nanoimaging to macroscopic specimens. Journal of Applied Crystallography, 2021, 54, 386-401.	4.5	15
5	Adorym: a multi-platform generic X-ray image reconstruction framework based on automatic differentiation. Optics Express, 2021, 29, 10000.	3.4	18
6	Using a modified double deep image prior for crosstalk mitigation in multislice ptychography. Journal of Synchrotron Radiation, 2021, 28, 1137-1145.	2.4	1
7	Development of Fe ₃ O ₄ core@TiO ₂ shell nanocomposites and nanoconjugates as a foundation for neuroblastoma radiosensitization. Cancer Nanotechnology, 2021, 12, 12.	3.7	9
8	Efficient ptychographic phase retrieval via a matrix-free Levenberg-Marquardt algorithm. Optics Express, 2021, 29, 23019.	3.4	5
9	Development of Multi-Scale X-ray Fluorescence Tomography for Examination of Nanocomposite-Treated Biological Samples. Cancers, 2021, 13, 4497.	3.7	4
10	A three-dimensional thalamocortical dataset for characterizing brain heterogeneity. Scientific Data, 2020, 7, 358.	5.3	11
11	Developments in the Correlative Cryo Confocal Light Microscope (C3LM) at the Advanced Photon Source. Microscopy and Microanalysis, 2020, 26, 2768-2769.	0.4	0
12	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
13	Multimodal x-ray nanotomography. MRS Bulletin, 2020, 45, 272-276.	3.5	8
14	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
15	Comparison of distributed memory algorithms for X-ray wave propagation in inhomogeneous media. Optics Express, 2020, 28, 29590.	3.4	3
16	Tunable hard x-ray nanofocusing with Fresnel zone plates fabricated using deep etching. Optica, 2020, 7, 410.	9.3	19
17	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
18	X-Ray Physics. , 2019, , 23-70.		0

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19	Imaging Physics. , 2019, , 71-198.		0
20	X-Ray Focusing Optics. , 2019, , 199-240.		1
21	X-Ray Microscope Systems. , 2019, , 241-258.		0
22	X-Ray Spectromicroscopy. , 2019, , 350-389.		0
23	Coherent Imaging. , 2019, , 390-456.		0
24	Radiation Damage and Cryo Microscopy. , 2019, , 457-495.		1
25	Applications, and Future Prospects. , 2019, , 496-514.		0
26	X-Ray Microscopes: a Short Introduction. , 2019, , 1-4.		0
27	A Bit of History. , 2019, , 5-22.		0
28	X-Ray Microscope Instrumentation. , 2019, , 259-320.		0
29	X-Ray Tomography. , 2019, , 321-349.		1
30	Learning Phase Retrieval with Backpropagation. Microscopy and Microanalysis, 2019, 25, 62-63.	0.4	2
31	Correlative 3D X-ray Fluorescence and Ptychographic Tomography of Frozen-Hydrated Green Algae. Microscopy and Microanalysis, 2019, 25, 114-115.	0.4	0
32	Correlative X-ray Ptychographic and Fluorescence Imaging at the Advanced Photon Source. Microscopy and Microanalysis, 2019, 25, 1030-1031.	0.4	1
33	Using automatic differentiation as a general framework for ptychographic reconstruction. Optics Express, 2019, 27, 18653.	3.4	54
34	Zone-Plate X-Ray Microscopy. Springer Handbooks, 2019, , 1145-1204.	0.6	3
35	Coherent x-ray imaging at the nanoscale: propagating from cells to tissues. , 2019, , .		0
36	Intracellular in situ labeling of TiO2 nanoparticles for fluorescence microscopy detection. Nano Research, 2018, 11, 464-476.	10.4	30

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37	Relative merits and limiting factors for x-ray and electron microscopy of thick, hydrated organic materials. <i>Ultramicroscopy</i> , 2018, 184, 293-309.	1.9	51
38	Correlative Cryo Confocal Light Microscopy (C3LM) and X-ray Fluorescence. <i>Microscopy and Microanalysis</i> , 2018, 24, 152-153.	0.4	0
39	A Pipeline for Distributed Segmentation of Teravoxel Tomography Datasets. <i>Microscopy and Microanalysis</i> , 2018, 24, 166-167.	0.4	2
40	Correlative 3D x-ray fluorescence and ptychographic tomography of frozen-hydrated green algae. <i>Science Advances</i> , 2018, 4, eaau4548.	10.3	79
41	3D x-ray imaging of continuous objects beyond the depth of focus limit. <i>Optica</i> , 2018, 5, 1078.	9.3	34
42	<i>Tomosaic</i> : efficient acquisition and reconstruction of teravoxel tomography data using limited-size synchrotron X-ray beams. <i>Journal of Synchrotron Radiation</i> , 2018, 25, 1478-1489.	2.4	54
43	More are better, but the details matter: combinations of multiple Fresnel zone plates for improved resolution and efficiency in X-ray microscopy. <i>Journal of Synchrotron Radiation</i> , 2018, 25, 1048-1059.	2.4	22
44	Zone Plate Performance as a Function of Tilt Analyzed via Multislice Simulations. <i>Microscopy and Microanalysis</i> , 2018, 24, 302-303.	0.4	2
45	X-ray tomography of extended objects: a comparison of data acquisition approaches. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2018, 35, 1871.	1.5	14
46	Relaxation of the Crowther criterion in multislice tomography. <i>Optics Letters</i> , 2018, 43, 4811.	3.3	29
47	Nanoscale x-ray imaging of circuit features without wafer etching. <i>Physical Review B</i> , 2017, 95, .	3.2	40
48	Fabrication of hard x-ray zone plates with high aspect ratio using metal-assisted chemical etching. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2017, 35, 06G901.	1.2	37
49	Distributed Automatic Differentiation for Ptychography. <i>Procedia Computer Science</i> , 2017, 108, 404-414.	2.0	47
50	X-ray ptychographic and fluorescence microscopy of frozen-hydrated cells using continuous scanning. <i>Scientific Reports</i> , 2017, 7, 445.	3.3	88
51	Preserving elemental content in adherent mammalian cells for analysis by synchrotron-based x-ray fluorescence microscopy. <i>Journal of Microscopy</i> , 2017, 265, 81-93.	1.8	83
52	Rapid alignment of nanotomography data using joint iterative reconstruction and reprojection. <i>Scientific Reports</i> , 2017, 7, 11818.	3.3	75
53	Multislice does it all—calculating the performance of nanofocusing X-ray optics. <i>Optics Express</i> , 2017, 25, 1831.	3.4	31
54	Joint reconstruction of x-ray fluorescence and transmission tomography. <i>Optics Express</i> , 2017, 25, 13107.	3.4	34

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55	Strategies for high-throughput focused-beam ptychography. Journal of Synchrotron Radiation, 2017, 24, 1078-1081.	2.4	33
56	Quantifying Mesoscale Neuroanatomy Using X-Ray Microtomography. ENeuro, 2017, 4, ENEURO.0195-17.2017.	1.9	74
57	Future challenges for x-ray microscopy. AIP Conference Proceedings, 2016, , .	0.4	19
58	Non-negative matrix analysis in x-ray spectromicroscopy: Choosing regularizers. AIP Conference Proceedings, 2016, 1696, .	0.4	16
59	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
60	The Bionanoprobe: Synchrotron-Based Hard X-ray Fluorescence Microscopy for 2D/3D Trace Element Mapping. Microscopy Today, 2015, 23, 26-29.	0.3	13
61	Multilayer on-chip stacked Fresnel zone plates: Hard x-ray fabrication and soft x-ray simulations. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2015, 33, .	1.2	1
62	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
63	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
64	Cryogenic Sample Preparation Preserves Elemental Composition for Correlative Light and X-ray Fluorescence Microscopy. Microscopy and Microanalysis, 2015, 21, 877-878.	0.4	0
65	Practices and Standards for Data and Processing at the APS. Synchrotron Radiation News, 2015, 28, 15-21.	0.8	4
66	Simultaneous x-ray nano-ptychographic and fluorescence microscopy at the bionanoprobe. , 2015, , .		2
67	Opportunities and limitations for combined fly-scan ptychography and fluorescence microscopy. , 2015, 9592, .		2
68	A new workflow for x-ray fluorescence tomography: MAPStoTomoPy. , 2015, 9592, .		7
69	Optimizing detector geometry for trace element mapping by X-ray fluorescence. Ultramicroscopy, 2015, 152, 44-56.	1.9	29
70	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
71	Continuous motion scan ptychography: characterization for increased speed in coherent x-ray imaging. Optics Express, 2015, 23, 5438.	3.4	102
72	<i>MANTIS</i>: a program for the analysis of X-ray spectromicroscopy data. Journal of Synchrotron Radiation, 2014, 21, 1206-1212.	2.4	102

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73	TomoPy: a framework for the analysis of synchrotron tomographic data. Journal of Synchrotron Radiation, 2014, 21, 1188-1193.	2.4	695
74	Nanoscale and bio imaging: general discussion. Faraday Discussions, 2014, 171, 419-427.	3.2	0
75	TomoPy: A framework for the analysis of synchrotron tomographic data. Proceedings of SPIE, 2014, , .	0.8	3
76	Non-negative matrix analysis for effective feature extraction in X-ray spectromicroscopy. Faraday Discussions, 2014, 171, 357-371.	3.2	37
77	Parallel ptychographic reconstruction. Optics Express, 2014, 22, 32082.	3.4	106
78	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
79	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
80	X-ray nanoprobe 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
81	Alignment of low-dose X-ray fluorescence tomography images using differential phase contrast. Journal of Synchrotron Radiation, 2014, 21, 229-234.	2.4	24
82	The Bionanoprobe: hard X-ray fluorescence nanoprobe with cryogenic capabilities. Journal of Synchrotron Radiation, 2014, 21, 66-75.	2.4	151
83	Unsupervised cell identification on multidimensional X-ray fluorescence datasets. Journal of Synchrotron Radiation, 2014, 21, 568-579.	2.4	10
84	Advantages of intermediate X-ray energies in Zernike phase contrast X-ray microscopy. Biotechnology Advances, 2013, 31, 387-392.	11.7	26
85	Epidermal Growth Factor Receptor Targeted Nuclear Delivery and High-Resolution Whole Cell X-ray Imaging of Fe ₃ O ₄ @TiO ₂ Nanoparticles in Cancer Cells. ACS Nano, 2013, 7, 10502-10517.	14.6	113
86	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
87	A next-generation in-situ nanoprobe beamline for the Advanced Photon Source. Proceedings of SPIE, 2013, , .	0.8	2
88	Sub-100-nm 3D-elemental mapping of frozen-hydrated cells using the bionanoprobe. Proceedings of SPIE, 2013, , .	0.8	0
89	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
90	Micro- and nano-environments of carbon sequestration: Multi-element STXM-NEXAFS spectromicroscopy assessment of microbial carbon and mineral associations. Chemical Geology, 2012, 329, 53-73.	3.3	142

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91	Data intensive science at synchrotron based 3D x-ray imaging facilities. , 2012, , .		3
92	Micro- and nano-environments of C sequestration in soil: A multi-elemental STXM“NEXAFS assessment of black C and organomineral associations. Science of the Total Environment, 2012, 438, 372-388.	8.0	51
93	New directions in X-ray microscopy. Contemporary Physics, 2011, 52, 293-318.	1.8	99
94	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
95	Carbon K-edge spectra of carbonate minerals. Journal of Synchrotron Radiation, 2010, 17, 676-682.	2.4	61
96	Zernike phase contrast in scanning microscopy with X-rays. Nature Physics, 2010, 6, 883-887.	16.7	105
97	Quantitative 3D elemental microtomography of <i>Cyclotella meneghiniana</i> at 400-nm resolution. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 15676-15680.	7.1	146
98	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
99	Data preparation and evaluation techniques for x-ray diffraction microscopy. Optics Express, 2010, 18, 18598.	3.4	40
100	Incorrect support and missing center tolerances of phasing algorithms. Optics Express, 2010, 18, 26441.	3.4	44
101	Soft X-Ray Diffraction Microscopy of a Frozen Hydrated Yeast Cell. Physical Review Letters, 2009, 103, 198101.	7.8	137
102	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
103	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
104	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
105	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
106	Signal-to-noise and radiation exposure considerations in conventional and diffraction x-ray microscopy. Optics Express, 2009, 17, 13541.	3.4	80
107	Carbon (1s) NEXAFS Spectroscopy of Biogeochemically Relevant Reference Organic Compounds. Soil Science Society of America Journal, 2009, 73, 1817-1830.	2.2	153
108	Differential phase contrast with a segmented detector in a scanning X-ray microprobe. Journal of Synchrotron Radiation, 2008, 15, 355-362.	2.4	75

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109	Quantitative Phase Imaging with a Scanning Transmission X-Ray Microscope. <i>Physical Review Letters</i> , 2008, 100, 163902.	7.8	93
110	Spatial complexity of soil organic matter forms at nanometre scales. <i>Nature Geoscience</i> , 2008, 1, 238-242.	12.9	374
111	Quantitative organic and light element analysis of comet 81P/Wild 2 particles using C, N, and O XANES. <i>Meteoritics and Planetary Science</i> , 2008, 43, 353-365.	1.6	137
112	A method for phase reconstruction from measurements obtained using a configured detector with a scanning transmission X-ray microscope. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2007, 582, 218-220.	1.6	8
113	Quantitative amplitude and phase contrast imaging in a scanning transmission X-ray microscope. <i>Ultramicroscopy</i> , 2007, 107, 644-655.	1.9	63
114	Comet 81P/Wild 2 Under a Microscope. <i>Science</i> , 2006, 314, 1711-1716.	12.6	848
115	Organics Captured from Comet 81P/Wild 2 by the Stardust Spacecraft. <i>Science</i> , 2006, 314, 1720-1724.	12.6	519
116	High-resolution ab initio three-dimensional x-ray diffraction microscopy. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2006, 23, 1179.	1.5	511
117	Reconstruction of a yeast cell from X-ray diffraction data. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2006, 62, 248-261.	0.3	151
118	Imaging at arm's length. <i>Nature Physics</i> , 2006, 2, 71-72.	16.7	2
119	Scanning transmission X-ray microscopic analysis of purified melanosomes of the mouse iris. <i>Micron</i> , 2006, 37, 689-698.	2.2	8
120	Chemical composition of aquatic dissolved organic matter in five boreal forest catchments sampled in spring and fall seasons. <i>Biogeochemistry</i> , 2006, 80, 263-275.	3.5	49
121	Integrating Silicon detector with segmentation for scanning transmission X-ray microscopy. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2006, 565, 841-854.	1.6	55
122	Orientation dependence of linewidth variation in sub-50-nm Gaussian e-beam lithography and its correction. <i>Journal of Vacuum Science & Technology B</i> , 2006, 24, 2881.	1.3	9
123	Apparatus for X-ray diffraction microscopy and tomography of cryo specimens. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2005, 545, 459-468.	1.6	38
124	Advantages of soft X-ray absorption over TEM-EELS for solid carbon studies—a comparative study on diesel soot with EELS and NEXAFS. <i>Carbon</i> , 2005, 43, 117-124.	10.3	145
125	X-ray scattering and spectroscopy studies on diesel soot from oxygenated fuel under various engine load conditions. <i>Carbon</i> , 2005, 43, 2588-2599.	10.3	71
126	Biological imaging by soft x-ray diffraction microscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 15343-15346.	7.1	506

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127	Chemical Heterogeneity of Organic Soil Colloids Investigated by Scanning Transmission X-ray Microscopy and C-1s NEXAFS Microspectroscopy. <i>Environmental Science & Technology</i> , 2005, 39, 9094-9100.	10.0	147
128	Origin and mobility of fulvic acids in the Gorleben aquifer system: implications from isotopic data and carbon/sulfur XANES. <i>Organic Geochemistry</i> , 2005, 36, 567-582.	1.8	64
129	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. <i>Global Biogeochemical Cycles</i> , 2005, 19, .	4.9	215
130	Calculation of x-ray refraction from near-edge absorption data only. , 2004, 5538, 23.		7
131	Evolution of xylem lignification and hydrogel transport regulation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 17555-17558.	7.1	167
132	An assessment of the amount and types of organic matter contributed to the Earth by interplanetary dust. <i>Advances in Space Research</i> , 2004, 33, 57-66.	2.6	87
133	A study of diesel PM with X-ray microspectroscopy. <i>Fuel</i> , 2004, 83, 997-1000.	6.4	55
134	Cluster analysis of soft X-ray spectromicroscopy data. <i>Ultramicroscopy</i> , 2004, 100, 35-57.	1.9	180
135	Examining marine particulate organic matter at sub-micron scales using scanning transmission X-ray microscopy and carbon X-ray absorption near edge structure spectroscopy. <i>Marine Chemistry</i> , 2004, 92, 107-121.	2.3	76
136	The nature of molecular cloud material in interplanetary dust. <i>Geochimica Et Cosmochimica Acta</i> , 2004, 68, 2577-2589.	3.9	148
137	Soft X-ray radiation-damage studies in PMMA using a cryo-STXM. <i>Journal of Synchrotron Radiation</i> , 2003, 10, 280-283.	2.4	149
138	Achromatic Fresnel optics for wideband extreme-ultraviolet and X-ray imaging. <i>Nature</i> , 2003, 424, 50-53.	27.8	166
139	Single-element elliptical hard x-ray micro-optics. <i>Optics Express</i> , 2003, 11, 919.	3.4	106
140	The origin of organic matter in the solar system: evidence from the interplanetary dust particles. <i>Geochimica Et Cosmochimica Acta</i> , 2003, 67, 4791-4806.	3.9	203
141	Quantifying Trace Elements in Individual Aquatic Protist Cells with a Synchrotron X-ray Fluorescence Microprobe. <i>Analytical Chemistry</i> , 2003, 75, 3806-3816.	6.5	216
142	Soft x-ray microscopy at the NSLS. <i>Synchrotron Radiation News</i> , 2003, 16, 11-15.	0.8	9
143	Diffraction x-ray optics using production fabrication methods. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2003, 21, 214.	1.6	10
144	Data analysis for X-ray fluorescence imaging. <i>European Physical Journal Special Topics</i> , 2003, 104, 617-622.	0.2	26

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145	Soft X-ray diffraction tomography: Simulations and first experimental results. European Physical Journal Special Topics, 2003, 104, 31-34.	0.2	3
146	Analysis of interplanetary dust particles by soft and hard X-ray microscopy. European Physical Journal Special Topics, 2003, 104, 367-372.	0.2	5
147	Development of a novel apparatus for experiments in soft X-ray diffraction imaging and diffraction tomography. European Physical Journal Special Topics, 2003, 104, 27-30.	0.2	2
148	Spectromicroscopy of soil colloids. European Physical Journal Special Topics, 2003, 104, 405-408.	0.2	3
149	Quantification and localization of trace metals in natural plankton cells using a synchrotron X-ray fluorescence microprobe. European Physical Journal Special Topics, 2003, 104, 435-438.	0.2	6
150	Scanning transmission X-ray microscopy with a segmented detector. European Physical Journal Special Topics, 2003, 104, 529-534.	0.2	24
151	Cluster analysis of soft X-ray spectromicroscopy data. European Physical Journal Special Topics, 2003, 104, 623-626.	0.2	10
152	Fully spatially coherent EUV source. Springer Series in Chemical Physics, 2003, , 66-68.	0.2	0
153	Generation of Spatially Coherent Light at Extreme Ultraviolet Wavelengths. Science, 2002, 297, 376-378.	12.6	365
154	SPECTROMICROSCOPY OF BIOLOGICAL AND ENVIRONMENTAL SYSTEMS AT STONY BROOK: INSTRUMENTATION AND ANALYSIS. Surface Review and Letters, 2002, 09, 185-191.	1.1	9
155	Organic chemical differentiation within fossil plant cell walls detected with X-ray spectromicroscopy. Geology, 2002, 30, 1039.	4.4	78
156	Innershell Absorption Spectroscopy of Amino Acids. Journal of Physical Chemistry A, 2002, 106, 3153-3168.	2.5	209
157	Cryogenic scanning transmission microscopy for biochemical analysis of the sperm.. Fertility and Sterility, 2001, 76, S265.	1.0	0
158	<title>Novel integrating solid state detector with segmentation for scanning transmission soft x-ray microscopy</title>. , 2001, , .		7
159	<title>Scanning transmission soft x-ray microscopy at beamline X-1A at the NSLS: advances in instrumentation and selected applications</title>. , 2001, , .		6
160	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
161	Principal component analysis for soft x-ray spectromicroscopy. AIP Conference Proceedings, 2000, , .	0.4	5
162	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

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163	A specimen chamber for soft X-ray spectromicroscopy on aqueous and liquid samples. Journal of Synchrotron Radiation, 2000, 7, 110-112.	2.4	41
164	Soft X-ray microscopy with a cryo scanning transmission X-ray microscope: II. Tomography. Journal of Microscopy, 2000, 197, 80-93.	1.8	104
165	Soft X-ray spectroscopy from image sequences with sub-100 nm spatial resolution. Journal of Microscopy, 2000, 197, 173-184.	1.8	334
166	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
167	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
168	A shutterâ€“photodiode combination for UV and soft X-ray beamlines. Journal of Synchrotron Radiation, 1999, 6, 50-50.	2.4	16
169	Soft x-ray microscopy. Trends in Cell Biology, 1999, 9, 44-47.	7.9	82
170	Soft X-ray spectromicroscopy on solid-stabilized emulsions. Colloid and Polymer Science, 1999, 277, 719-726.	2.1	60
171	X-ray microscopy with synchrotron radiation. Nature Structural Biology, 1998, 5, 650-653.	9.7	50
172	A numerical study of resolution and contrast in soft Xâ€“ray contact microscopy. Journal of Microscopy, 1998, 191, 159-169.	1.8	25
173	<title>Applications and instrumentation advances with the Stony Brook scanning transmission x-ray microscope</title>. , 1998, , .		18
174	A Perspective on Biological X-Ray and Electron Microscopy. , 1998, , 197-206.		9
175	Development of a Cryo Scanning Transmission X-Ray Microscope at the NSLS. , 1998, , 35-44.		24
176	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
177	Carbon edge XANES spectroscopy of amino acids and peptides. Journal of Electron Spectroscopy and Related Phenomena, 1997, 85, 9-15.	1.7	126
178	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
179	Dark-Field X-Ray Microscopy of Immunogold-Labeled Cells. Microscopy and Microanalysis, 1996, 2, 53-62.	0.4	6
180	<title>Considerations for a soft x-ray spectromicroscopy beamline</title>. , 1996, , .		2

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181	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
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