Alberto Bravin

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

229 papers	7,216 citations	46 h-index	77 g-index
249 ext. papers	8,093 ext. citations	3.3 avg, IF	5.53 L-index

#	Paper	IF	Citations
229	Lung tissue biomechanics imaged with synchrotron phase contrast microtomography in live rats.. *Scientific Reports*, **2022**, 12, 5056	4.9	0
228	Imaging Regional Lung Structure and Function in Small Animals Using Synchrotron Radiation Phase-Contrast and K-Edge Subtraction Computed Tomography.. *Frontiers in Physiology*, **2022**, 13, 825435	4.6	1
227	Non-conventional Ultra-High Dose Rate (FLASH) Microbeam Radiotherapy Provides Superior Normal Tissue Sparing in Rat Lung Compared to Non-conventional Ultra-High Dose Rate (FLASH) Radiotherapy.. *Cureus*, **2021**, 13, e19317	1.2	1
226	X-ray Phase Contrast 3D virtual histology: evaluation of lung alterations after micro-beam irradiation. *International Journal of Radiation Oncology Biology Physics*, **2021**,	4	1
225	3D Spatial Distribution of Nanoparticles in Mice Brain Metastases by X-ray Phase-Contrast Tomography. *Frontiers in Oncology*, **2021**, 11, 554668	5.3	1
224	Multiscale X-ray phase contrast imaging of human cartilage for investigating osteoarthritis formation. *Journal of Biomedical Science*, **2021**, 28, 42	13.3	5
223	High-Spatial-Resolution Three-dimensional Imaging of Human Spinal Cord and Column Anatomy with Postmortem X-ray Phase-Contrast Micro-CT. *Radiology*, **2021**, 298, 135-146	20.5	7
222	Imaging atelectrauma in Ventilator-Induced Lung Injury using 4D X-ray microscopy. *Scientific Reports*, **2021**, 11, 4236	4.9	4
221	Steerable3D: An ImageJ plugin for neurovascular enhancement in 3-D segmentation. *Physica Medica*, **2021**, 81, 197-209	2.7	1
220	The ThomX ICS source. *Physics Open*, **2020**, 5, 100051	1.6	9
219	Synthesis and activation of an iron oxide immobilized drug-mimicking reporter under conventional and pulsed X-ray irradiation conditions.. *RSC Advances*, **2020**, 10, 3366-3370	3.7	2
218	Establishing sample-preparation protocols for X-ray phase-contrast CT of rodent spinal cords: Aldehyde fixations and osmium impregnation. *Journal of Neuroscience Methods*, **2020**, 339, 108744	3	6
217	Auditory chain reaction: Effects of sound pressure and particle motion on auditory structures in fishes. *PLoS ONE*, **2020**, 15, e0230578	3.7	8
216	X-ray phase contrast tomography for the investigation of amyotrophic lateral sclerosis. *Journal of Synchrotron Radiation*, **2020**, 27, 1042-1048	2.4	3
215	Multiscale pink-beam microCT imaging at the ESRF-ID17 biomedical beamline. *Journal of Synchrotron Radiation*, **2020**, 27, 1347-1357	2.4	8
214	High resolution 3D visualization of the spinal cord in a post-mortem murine model. *Biomedical Optics Express*, **2020**, 11, 2235-2253	3.5	3
213	Simplified retrieval method for Edge Illumination X-ray phase contrast imaging allowing multi-modal imaging with fewer input frames. *Optics Express*, **2020**, 28, 11597-11608	3.3	4

212	Single-shot K-edge subtraction x-ray discrete computed tomography with a polychromatic source and the Pixie-III detector. *Physics in Medicine and Biology*, **2020**, 65, 055016	3.8	5
211	Characterization of the acquisition modes implemented in Pixirad-1/Pixie-III X-ray Detector: Effects of charge sharing correction on spectral resolution and image quality. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2020**, 955, 163020	1.2	6
210	Convolutional neuronal networks combined with X-ray phase-contrast imaging for a fast and observer-independent discrimination of cartilage and liver diseases stages. *Scientific Reports*, **2020**, 10, 20007	4.9	0
209	Experimental benchmarking of Monte Carlo simulations for radiotherapy dosimetry using monochromatic X-ray beams in the presence of metal-based compounds. *Physica Medica*, **2019**, 66, 45-54	2.7	0
208	Regional Behavior of Airspaces During Positive Pressure Reduction Assessed by Synchrotron Radiation Computed Tomography. *Frontiers in Physiology*, **2019**, 10, 719	4.6	5
207	The Effect of Positive End-Expiratory Pressure on Lung Micromechanics Assessed by Synchrotron Radiation Computed Tomography in an Animal Model of ARDS. *Journal of Clinical Medicine*, **2019**, 8,	5.1	4
206	Investigation of the refractive index decrement of 3D printing materials for manufacturing breast phantoms for phase contrast imaging. *Physics in Medicine and Biology*, **2019**, 64, 075008	3.8	11
205	Individual Airway Closure Characterized In Vivo by Phase-Contrast CT Imaging in Injured Rabbit Lung. *Critical Care Medicine*, **2019**, 47, e774-e781	1.4	20
204	In-situ visualization of sound-induced otolith motion using hard X-ray phase contrast imaging. *Scientific Reports*, **2018**, 8, 3121	4.9	15
203	Quantitative Assessment of Degenerative Cartilage and Subchondral Bony Lesions in a Preserved Cadaveric Knee: Propagation-Based Phase-Contrast CT Versus Conventional MRI and CT. *American Journal of Roentgenology*, **2018**, 210, 1317-1322	5.4	12
202	Micro-imaging of Brain Cancer Radiation Therapy Using Phase-contrast Computed Tomography. *International Journal of Radiation Oncology Biology Physics*, **2018**, 101, 965-984	4	15
201	3D map of theranostic nanoparticles distribution in mice brain and liver by means of X-ray Phase Contrast Tomography. *Journal of Instrumentation*, **2018**, 13, C01049-C01049	1	1
200	Synchrotron-generated microbeams induce hippocampal transections in rats. *Scientific Reports*, **2018**, 8, 184	4.9	6
199	Evaluation of the Profile and Mechanism of Neurotoxicity of Water-Soluble [Cu(P)]PF and [Au(P)]PF (P = thp or PTA) Anticancer Complexes. *Neurotoxicity Research*, **2018**, 34, 93-108	4.3	6
198	Suitability of low density materials for 3D printing of physical breast phantoms. *Physics in Medicine and Biology*, **2018**, 63, 175020	3.8	29
197	Characterizing pearls structures using X-ray phase-contrast and neutron imaging: a pilot study. *Scientific Reports*, **2018**, 8, 12118	4.9	4
196	High resolution hard X-ray 3D mapping of a Macaca fascicularis eye: A feasibility study without contrast agents. *Physica Medica*, **2018**, 51, 7-12	2.7	5
195	Low-dose quantitative phase contrast medical CT. *Measurement Science and Technology*, **2018**, 29, 024006	2	4

194	Characterization of noise and efficiency of the Pixirad-1/Pixie-III CdTe X-ray imaging detector. *Journal of Instrumentation*, **2018**, 13, C12008-C12008	1	7
193	Quantitative 3D investigation of Neuronal network in mouse spinal cord model. *Scientific Reports*, **2017**, 7, 41054	4.9	29
192	Dynamic Mechanical Interactions Between Neighboring Airspaces Determine Cyclic Opening and Closure in Injured Lung. *Critical Care Medicine*, **2017**, 45, 687-694	1.4	25
191	Feasibility Study of the 3D Visualization at High Resolution of Intra-Cranial Rabbit Eyes With X-Ray CT Phase-Contrast Imaging **2017**, 58, 5941-5948		3
190	X-Ray Phase Contrast Tomography Reveals Early Vascular Alterations and Neuronal Loss in a Multiple Sclerosis Model. *Scientific Reports*, **2017**, 7, 5890	4.9	47
189	Rat sensorimotor cortex tolerance to parallel transections induced by synchrotron-generated X-ray microbeams. *Scientific Reports*, **2017**, 7, 14290	4.9	5
188	Characterization of a sCMOS-based high-resolution imaging system. *Journal of Synchrotron Radiation*, **2017**, 24, 1226-1236	2.4	29
187	Generalized pupil function of a compound X-ray refractive lens. *Optics Express*, **2017**, 25, 25090-25097	3.3	3
186	Refraction and ultra-small-angle scattering of X-rays in a single-crystal diamond compound refractive lens. *Journal of Synchrotron Radiation*, **2017**, 24, 1137-1145	2.4	6
185	Multi-strip silicon sensors for beam array monitoring in micro-beam radiation therapy. *Physica Medica*, **2016**, 32, 1795-1800	2.7	5
184	Characterization of mouse spinal cord vascular network by means of synchrotron radiation X-ray phase contrast tomography. *Physica Medica*, **2016**, 32, 1779-1784	2.7	14
183	A single-image retrieval method for edge illumination X-ray phase-contrast imaging: Application and noise analysis. *Physica Medica*, **2016**, 32, 1759-1764	2.7	11
182	Hard X-ray index of refraction tomography of a whole rabbit knee joint: A feasibility study. *Physica Medica*, **2016**, 32, 1785-1789	2.7	2
181	Target Nanoparticles for Therapy - SANS and DLS of Drug Carrier Liposomes and Polymer Nanoparticles. *Journal of Physics: Conference Series*, **2016**, 746, 012069	0.3	1
180	Detection of Post-Therapeutic Effects in Breast Carcinoma Using Hard X-Ray Index of Refraction Computed Tomography - A Feasibility Study. *PLoS ONE*, **2016**, 11, e0158306	3.7	3
179	A method for high-energy, low-dose mammography using edge illumination x-ray phase-contrast imaging. *Physics in Medicine and Biology*, **2016**, 61, 8750-8761	3.8	20
178	Virtual unrolling and deciphering of Herculaneum papyri by X-ray phase-contrast tomography. *Scientific Reports*, **2016**, 6, 27227	4.9	22
177	X-ray phase contrast tomography; proof of principle for post-mortem imaging. *British Journal of Radiology*, **2016**, 89, 20150565	3.4	7

176	In-line phase-contrast breast tomosynthesis: a phantom feasibility study at a synchrotron radiation facility. *Physics in Medicine and Biology*, **2016**, 61, 6243-63	3.8	15
175	Single-image phase retrieval using an edge illumination X-ray phase-contrast imaging setup. *Journal of Synchrotron Radiation*, **2015**, 22, 1072-7	2.4	30
174	SYRA3 COST Action--Microbeam radiation therapy: Roots and prospects. *Physica Medica*, **2015**, 31, 561-3	2.7	16
173	A single-image method for x-ray refractive index CT. *Physics in Medicine and Biology*, **2015**, 60, 3433-40	3.8	3
172	A software platform for phase contrast x-ray breast imaging research. *Computers in Biology and Medicine*, **2015**, 61, 62-74	7	15
171	Boundary value problem for phase retrieval from unidirectional X-ray differential phase images. *Optics Express*, **2015**, 23, 13294-308	3.3	3
170	Improved normal tissue protection by proton and X-ray microchannels compared to homogeneous field irradiation. *Physica Medica*, **2015**, 31, 615-20	2.7	9
169	A continuous sampling scheme for edge illumination x-ray phase contrast imaging. *Journal of Applied Physics*, **2015**, 118, 054901	2.5	10
168	Thin silicon strip detectors for beam monitoring in Micro-beam Radiation Therapy. *Journal of Instrumentation*, **2015**, 10, P11007-P11007	1	11
167	Microradiosurgical cortical transections generated by synchrotron radiation. *Physica Medica*, **2015**, 31, 642-6	2.7	9
166	Simultaneous submicrometric 3D imaging of the micro-vascular network and the neuronal system in a mouse spinal cord. *Scientific Reports*, **2015**, 5, 8514	4.9	56
165	A track length estimator method for dose calculations in low-energy X-ray irradiations: implementation, properties and performance. *Zeitschrift Fur Medizinische Physik*, **2015**, 25, 36-47	7.6	10
164	New Radiosurgical Paradigms to Treat Epilepsy Using Synchrotron Radiation **2015**, 231-236		
163	High contrast microstructural visualization of natural acellular matrices by means of phase-based x-ray tomography. *Scientific Reports*, **2015**, 5, 18156	4.9	29
162	Radiation dose in breast CT imaging with monochromatic x-rays: simulation study of the influence of energy, composition and thickness. *Physics in Medicine and Biology*, **2014**, 59, 2199-217	3.8	24
161	Sensitivity of edge illumination X-ray phase-contrast imaging. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2014**, 372, 20130128	3	4
160	Edge illumination X-ray phase-contrast imaging: nanoradian sensitivity at synchrotrons and translation to conventional sources. *Journal of Physics: Conference Series*, **2014**, 499, 012006	0.3	7
159	Tomographic reconstruction of the refractive index with hard X-rays: an efficient method based on the gradient vector-field approach. *Optics Express*, **2014**, 22, 5216-27	3.3	12

158	Breast tumor segmentation in high resolution x-ray phase contrast analyzer based computed tomography. *Medical Physics*, **2014**, 41, 111902	4.4	6
157	Cartilage and soft tissue imaging using X-rays: propagation-based phase-contrast computed tomography of the human knee in comparison with clinical imaging techniques and histology. *Investigative Radiology*, **2014**, 49, 627-34	10.1	52
156	The combined therapeutical effect of metal-based drugs and radiation therapy: the present status of research. *Current Medicinal Chemistry*, **2014**, 21, 2237-65	4.3	41
155	Synchrotron-based photon activation therapy effect on cisplatin pre-treated human glioma stem cells. *Anticancer Research*, **2014**, 34, 5351-5	2.3	6
154	X-ray phase-contrast imaging: from pre-clinical applications towards clinics. *Physics in Medicine and Biology*, **2013**, 58, R1-35	3.8	469
153	Looking Inside Marine Organisms with Magnetic Resonance and X-ray Imaging **2013**, 122-184		9
152	Response of the rat spinal cord to X-ray microbeams. *Radiotherapy and Oncology*, **2013**, 106, 106-11	5.3	45
151	On the possibility of quantitative refractive-index tomography of large biomedical samples with hard X-rays. *Biomedical Optics Express*, **2013**, 4, 1512-8	3.5	14
150	An efficient numerical tool for dose deposition prediction applied to synchrotron medical imaging and radiation therapy. *Journal of Synchrotron Radiation*, **2013**, 20, 785-92	2.4	16
149	X-ray phase-contrast imaging with nanoradian angular resolution. *Physical Review Letters*, **2013**, 110, 138105	7.4	62
148	Phase-contrast x-ray imaging of the breast: recent developments towards clinics. *Journal Physics D: Applied Physics*, **2013**, 46, 494007	3	42
147	Improved sensitivity at synchrotrons using edge illumination X-ray phase-contrast imaging. *Journal of Instrumentation*, **2013**, 8, C06002-C06002	1	3
146	A new gas attenuator system for the ID17 biomedical beamline at the ESRF. *Journal of Physics: Conference Series*, **2013**, 425, 022002	0.3	10
145	Synchrotron-generated microbeam sensorimotor cortex transections induce seizure control without disruption of neurological functions. *PLoS ONE*, **2013**, 8, e53549	3.7	22
144	The effect of Photon Activation Therapy on cisplatin pre-treated human tumour cell lines: comparison with conventional X-ray irradiation. *Journal of Biological Regulators and Homeostatic Agents*, **2013**, 27, 477-85	0.7	3
143	High-resolution, low-dose phase contrast X-ray tomography for 3D diagnosis of human breast cancers. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 18290-4	11.5	145
142	Process for the 3D virtual reconstruction of a microcultural heritage artifact obtained by synchrotron radiation CT technology using open source and free software. *Journal of Cultural Heritage*, **2012**, 13, 221-225	2.9	21
141	Amplification of the phase contrast signal at very high x-ray energies. *Optics Letters*, **2012**, 37, 915-7	3	27

140	Theoretical comparison of three X-ray phase-contrast imaging techniques: propagation-based imaging, analyzer-based imaging and grating interferometry. *Optics Express*, **2012**, 20, 2789-805	3.3	79
139	Analytical and experimental determination of signal-to-noise ratio and figure of merit in three phase-contrast imaging techniques. *Optics Express*, **2012**, 20, 27670-90	3.3	47
138	High-resolution breast tomography at high energy: a feasibility study of phase contrast imaging on a whole breast. *Physics in Medicine and Biology*, **2012**, 57, 2931-42	3.8	53
137	X-Tream: a novel dosimetry system for Synchrotron Microbeam Radiation Therapy. *Journal of Instrumentation*, **2012**, 7, P07022-P07022	1	29
136	Dosimetry protocol for the forthcoming clinical trials in synchrotron stereotactic radiation therapy (SSRT). *Medical Physics*, **2011**, 38, 1709-17	4.4	37
135	A simplified approach for computed tomography with an X-ray grating interferometer. *Optics Express*, **2011**, 19, 1691-8	3.3	28
134	Dosimetry of intensive synchrotron microbeams. *Radiation Measurements*, **2011**, 46, 1560-1565	1.5	23
133	Synchrotron radiation in cancer treatments and diagnostics: an overview. *Clinical and Translational Oncology*, **2011**, 13, 715-20	3.6	4
132	Comparison of in vitro breast cancer visibility in analyser-based computed tomography with histopathology, mammography, computed tomography and magnetic resonance imaging. *Journal of Synchrotron Radiation*, **2011**, 18, 689-96	2.4	11
131	Microbeam radiation-induced tissue damage depends on the stage of vascular maturation. *International Journal of Radiation Oncology Biology Physics*, **2011**, 80, 1522-32	4	42
130	Radiation Therapy Using Synchrotron Radiation: Preclinical Studies Toward Clinical Trials. *Synchrotron Radiation News*, **2011**, 24, 8-12	0.6	1
129	In-line phase-contrast stereoscopic X-ray imaging for radiological purposes: An initial experimental study. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2011**, 629, 345-349	1.2	5
128	The Contribution of the ESRF to Biomedical Science: From Nano to Humans. *Synchrotron Radiation News*, **2011**, 24, 34-38	0.6	
127	Synchrotron-generated microbeam radiosurgery: a novel experimental approach to modulate brain function. *Neurological Research*, **2011**, 33, 825-31	2.7	18
126	Translation of Synchrotron-based Research into the Clinic: Assessing the Current Clinical Potential of Diffraction Enhanced Imaging. *Synchrotron Radiation News*, **2011**, 24, 29-33	0.6	1
125	Microbeam radiosurgery using synchrotron-generated submillimetric beams: a new tool for the treatment of brain disorders. *Neurosurgical Review*, **2010**, 34, 133-42	3.9	26
124	Characterization of osteoarthritic and normal human patella cartilage by computed tomography X-ray phase-contrast imaging: a feasibility study. *Investigative Radiology*, **2010**, 45, 437-44	10.1	56
123	Potential High Resolution Dosimeters For MRT **2010**,		20

122	Comparison of analyzer-based imaging computed tomography extraction algorithms and application to bone-cartilage imaging. *Physics in Medicine and Biology*, **2010**, 55, 7663-79	3.8	17
121	Synchrotron Radiation Therapy from a Medical Physics point of view **2010**,		5
120	Absorption, refraction and scattering in analyzer-based imaging: comparison of different algorithms. *Optics Express*, **2010**, 18, 3494-509	3.3	35
119	Effects of pulsed, spatially fractionated, microscopic synchrotron X-ray beams on normal and tumoral brain tissue. *Mutation Research - Reviews in Mutation Research*, **2010**, 704, 160-6	7	147
118	Monte Carlo dosimetry for forthcoming clinical trials in x-ray microbeam radiation therapy. *Physics in Medicine and Biology*, **2010**, 55, 4375-88	3.8	42
117	The Clinical Trials Program at the ESRF Biomedical Beamline ID17: Status and Remaining Steps **2010**,		4
116	Phase-contrast X-ray imaging of breast. *Acta Radiologica*, **2010**, 51, 866-84	2	76
115	In vivo x-ray phase contrast analyzer-based imaging for longitudinal osteoarthritis studies in guinea pigs. *Physics in Medicine and Biology*, **2010**, 55, 7649-62	3.8	35
114	The thermoluminescence response of Ge-doped silica fibres for synchrotron microbeam radiation therapy dosimetry. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2010**, 619, 167-170	1.2	32
113	Advanced contrast modalities for X-ray radiology: Phase-contrast and dark-field imaging using a grating interferometer. *Zeitschrift Fur Medizinische Physik*, **2010**, 20, 7-16	7.6	51
112	Preferential effect of synchrotron microbeam radiation therapy on intracerebral 9L gliosarcoma vascular networks. *International Journal of Radiation Oncology Biology Physics*, **2010**, 78, 1503-12	4	127
111	High-precision radiosurgical dose delivery by interlaced microbeam arrays of high-flux low-energy synchrotron X-rays. *PLoS ONE*, **2010**, 5, e9028	3.7	69
110	Tissue injury by microbeam irradiation depends on the stage of vascular maturation. *FASEB Journal*, **2010**, 24, lb16	0.9	
109	C-9 Medieval Microfabrication: X-ray Tomographic and Laminographic Visualization of Religious Artwork. *Powder Diffraction*, **2010**, 25, 219-219	1.8	
108	Compact x-ray sources for mammographic applications: Monte Carlo simulations of image quality. *Medical Physics*, **2009**, 36, 5149-61	4.4	13
107	Simulation of dose deposition in stereotactic synchrotron radiation therapy: a fast approach combining Monte Carlo and deterministic algorithms. *Physics in Medicine and Biology*, **2009**, 54, 4671-85	3.8	9
106	Gadolinium dose enhancement studies in microbeam radiation therapy. *Medical Physics*, **2009**, 36, 3568-74	4.4	41
105	Biological equivalent dose studies for dose escalation in the stereotactic synchrotron radiation therapy clinical trials. *Medical Physics*, **2009**, 36, 725-33	4.4	21

104	A note on medieval microfabrication: the visualization of a prayer nut by synchrotron-based computer X-ray tomography. *Journal of Synchrotron Radiation*, **2009**, 16, 310-3	2.4	7
103	First trial of spatial and temporal fractionations of the delivered dose using synchrotron microbeam radiation therapy. *Journal of Synchrotron Radiation*, **2009**, 16, 587-90	2.4	41
102	A new method of creating minibeam patterns for synchrotron radiation therapy: a feasibility study. *Journal of Synchrotron Radiation*, **2009**, 16, 582-6	2.4	37
101	Phase contrast medical imaging with compact X-ray sources at the Munich-Centre for Advance Photonics (MAP). *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2009**, 608, S44-S46	1.2	6
100	Synchrotron microbeam radiation therapy for rat brain tumor palliation-influence of the microbeam width at constant valley dose. *Physics in Medicine and Biology*, **2009**, 54, 6711-24	3.8	90
99	The effect of beam polarization in Microbeam Radiation Therapy (MRT): Monte Carlo simulations using Geant4 **2009**,		1
98	New technology enables high precision multislit collimators for microbeam radiation therapy. *Review of Scientific Instruments*, **2009**, 80, 074301	1.7	70
97	MOSFET dosimetry with high spatial resolution in intense synchrotron-generated x-ray microbeams. *Medical Physics*, **2009**, 36, 1128-37	4.4	33
96	X-ray energy optimization in minibeam radiation therapy. *Medical Physics*, **2009**, 36, 4897-902	4.4	33
95	A Note on the Imaging of Lead White and Vermilion Paint Layers by Synchrotron Radiation-based, Simultaneous Dual Energy K-edge Absorption Radiography. *Journal of the American Institute for Conservation*, **2009**, 48, 159-169	0.6	
94	GafChromic Film Measurements for Microbeam Radiation Therapy (MRT). *IFMBE Proceedings*, **2009**, 174-177	0.2	6
93	Analyzer-based imaging technique in tomography of cartilage and metal implants: a study at the ESRF. *European Journal of Radiology*, **2008**, 68, S41-8	4.7	37
92	USAXS and SAXS from cancer-bearing breast tissue samples. *European Journal of Radiology*, **2008**, 68, S89-94	4.7	12
91	Enhancement of survival of 9L gliosarcoma bearing rats following intracerebral delivery of drugs in combination with microbeam radiation therapy. *European Journal of Radiology*, **2008**, 68, S151-5	4.7	34
90	Memory and survival after microbeam radiation therapy. *European Journal of Radiology*, **2008**, 68, S142-6	4.7	48
89	The radiotherapy clinical trials projects at the ESRF: technical aspects. *European Journal of Radiology*, **2008**, 68, S147-50	4.7	32
88	Region-of-interest tomography for grating-based X-ray differential phase-contrast imaging. *Physical Review Letters*, **2008**, 101, 168101	7.4	33
87	Monte Carlo code comparison of dose delivery prediction for microbeam radiation therapy. *Journal of Physics: Conference Series*, **2008**, 102, 012005	0.3	7

86	Characterization and quantification of cerebral edema induced by synchrotron x-ray microbeam radiation therapy. *Physics in Medicine and Biology*, **2008**, 53, 1153-66	3.8	79
85	Advances in the visualization of unstained brain tumors using grating-based x-ray phase-contrast tomography **2008**,		3
84	. *IEEE Transactions on Nuclear Science*, **2008**, 55, 1008-1017	1.7	11
83	Irradiation of intracerebral 9L gliosarcoma by a single array of microplanar x-ray beams from a synchrotron: balance between curing and sparing. *Physics in Medicine and Biology*, **2008**, 53, 861-78	3.8	86
82	State of the Art and Perspectives of Biomedical Imaging at the ESRF. *Synchrotron Radiation News*, **2008**, 21, 30-41	0.6	6
81	Brain tumor vessel response to synchrotron microbeam radiation therapy: a short-term in vivo study. *Physics in Medicine and Biology*, **2008**, 53, 3609-22	3.8	66
80	Advances in synchrotron hard X-ray based imaging. *Comptes Rendus Physique*, **2008**, 9, 624-641	1.4	52
79	Relics in medieval altarpieces? Combining X-ray tomographic, laminographic and phase-contrast imaging to visualize thin organic objects in paintings. *Journal of Synchrotron Radiation*, **2008**, 15, 55-61	2.4	39
78	Toward high-contrast breast CT at low radiation dose. *Radiology*, **2008**, 249, 321-7	20.5	64
77	High-resolution CT by diffraction-enhanced x-ray imaging: mapping of breast tissue samples and comparison with their histo-pathology. *Physics in Medicine and Biology*, **2007**, 52, 2197-211	3.8	96
76	CMR 2007: 3.05: Use of a Gd-chelate as a dose enhancement agent for synchrotron microbeam radiation therapy applied to rodent brain tumors. *Contrast Media and Molecular Imaging*, **2007**, 2, 282-282	3.2	
75	Evaluation of the minimum iodine concentration for contrast enhanced subtraction mammography. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2007**, 580, 1115-1118	1.2	6
74	Refraction and scattering of X-rays in analyzer-based imaging. *Journal of Synchrotron Radiation*, **2007**, 14, 512-21	2.4	28
73	Monte Carlo assessment of peak-to-valley dose ratio for MRT. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2007**, 580, 489-492	1.2	7
72	Geant4 simulations for microbeam radiation therapy (MRT) dosimetry **2007**,		2
71	Synchrotron Radiation Computed Tomography Station at the ESRF Biomedical Beamline. *AIP Conference Proceedings*, **2007**,	0	1
70	Technical Report: Biomedical Research at the ESRF: From DNA to Human. *Synchrotron Radiation News*, **2007**, 20, 25-31	0.6	1
69	Quantitative analysis of the effect of energy separation in k-edge digital subtraction imaging. *Physics in Medicine and Biology*, **2007**, 52, 3015-26	3.8	11

68	Fast dose calculation for stereotactic synchrotron radiotherapy. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2007**, 2007, 3914-7		1
67	Analysis of the x-ray refraction using an array-structured detector. *Applied Physics Letters*, **2007**, 90, 184106	3.4	2
66	A numerical wave-optical approach for the simulation of analyzer-based x-ray imaging. *Optics Express*, **2007**, 15, 5641-8	3.3	8
65	High-resolution brain tumor visualization using three-dimensional x-ray phase contrast tomography. *Physics in Medicine and Biology*, **2007**, 52, 6923-30	3.8	182
64	The GEANT4 toolkit for microdosimetry calculations: application to microbeam radiation therapy (MRT). *Medical Physics*, **2007**, 34, 4322-30	4.4	47
63	THE BIOMEDICAL PROGRAMS AT THE ID17 BEAMLINE OF THE EUROPEAN SYNCHROTRON RADIATION FACILITY **2007**, 225-239		1
62	Qualitative evaluation of titanium implant integration into bone by diffraction enhanced imaging. *Physics in Medicine and Biology*, **2006**, 51, 1313-24	3.8	36
61	Evaluation of the minimum iodine concentration for contrast-enhanced subtraction mammography. *Physics in Medicine and Biology*, **2006**, 51, 4233-51	3.8	41
60	Determination of dosimetrical quantities used in microbeam radiation therapy (MRT) with Monte Carlo simulations. *Medical Physics*, **2006**, 33, 3248-59	4.4	98
59	K-edge digital subtraction imaging with dichromatic x-ray sources: SNR and dose studies. *Physics in Medicine and Biology*, **2006**, 51, 4311-28	3.8	24
58	Radiosurgical palliation of aggressive murine SCCVII squamous cell carcinomas using synchrotron-generated X-ray microbeams. *British Journal of Radiology*, **2006**, 79, 71-5	3.4	91
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