Francoise Peyrin

List of Publications by Year
in descending order

300	9,034	34493 54	64407 83
papers	citations	h-index	g-index

313	313	313	8086
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Brain virtual histology with X-ray phase-contrast tomography Part I: whole-brain myelin mapping in white-matter injury models. Biomedical Optics Express, 2022, 13, 1620.	1.5	8
2	Virtual monoenergetic images from photon-counting spectral computed tomography to assess knee osteoarthritis. European Radiology Experimental, 2022, 6, 10.	1.7	15
3	Impact of the training loss in deep learningâ€"based CT reconstruction of bone microarchitecture. Medical Physics, 2022, , .	1.6	1
4	Interconnectivity Explains High Canalicular Network Robustness between Neighboring Osteocyte Lacunae in Human Bone. Advanced NanoBiomed Research, 2022, 2, .	1.7	8
5	Impact of Anti-Angiogenic Treatment on Bone Vascularization in a Murine Model of Breast Cancer Bone Metastasis Using Synchrotron Radiation Micro-CT. Cancers, 2022, 14, 3443.	1.7	2
6	Quantification of the bone lacunocanalicular network from 3D Xâ€ray phase nanotomography images. Journal of Microscopy, 2021, 282, 30-44.	0.8	6
7	Deep Expectation-Maximization For Image Reconstruction From Under-Sampled Poisson Data. , 2021, , .		2
8	Single-pixel image reconstruction from experimental data using neural networks. Optics Express, 2021, 29, 17097.	1.7	8
9	Cortical bone viscoelastic damping assessed with resonant ultrasound spectroscopy reflects porosity and mineral content. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 117, 104388.	1.5	6
10	Quantitative analysis of bone microvasculature in a mouse model using the monogenic signal phase asymmetry and marker-controlled watershed. Physics in Medicine and Biology, 2021, 66, 125005.	1.6	3
11	An experimentally informed statistical elasto-plastic mineralised collagen fibre model at the micrometre and nanometre lengthscale. Scientific Reports, 2021, 11, 15539.	1.6	8
12	Material Decomposition in Spectral CT Using Deep Learning: A Sim2Real Transfer Approach. IEEE Access, 2021, 9, 25632-25647.	2.6	18
13	3D denoised completion network for deep single-pixel reconstruction of hyperspectral images. Optics Express, 2021, 29, 39559.	1.7	4
14	What is the influence of two strain rates on the relationship between human cortical bone toughness and micro-structure?. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2020, 234, 247-254.	1.0	2
15	Recurrent Neural Networks for Compressive Video Reconstruction. , 2020, , .		3
16	Segmentation of Bone Vessels in 3D Micro-CT Images Using the Monogenic Signal Phase and Watershed. , 2020, , .		1
17	Assessment of the human bone lacuno-canalicular network at the nanoscale and impact of spatial resolution. Scientific Reports, 2020, 10, 4567.	1.6	27
18	3D analysis of the osteonal and interstitial tissue in human radii cortical bone. Bone, 2019, 127, 526-536.	1.4	12

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19	Influence of loading condition and anatomical location on human cortical bone linear micro-cracks. Journal of Biomechanics, 2019, 85, 59-66.	0.9	7
20	Technical Note: Relative proton stopping power estimation from virtual monoenergetic images reconstructed from dualâ€layer computed tomography. Medical Physics, 2019, 46, 1821-1828.	1.6	16
21	Homogenization of cortical bone reveals that the organization and shape of pores marginally affect elasticity. Journal of the Royal Society Interface, 2019, 16, 20180911.	1.5	20
22	Anisotropic elastic properties of human femoral cortical bone and relationships with composition and microstructure in elderly. Acta Biomaterialia, 2019, 90, 254-266.	4.1	31
23	Nonconvex Mixed TV/Cahnâ€“Hilliard Functional for Super-Resolution/Segmentation of 3D Trabecular Bone Images. Journal of Mathematical Imaging and Vision, 2019, 61, 504-514.	0.8	0
24	Investigation of Semi-Coupled Dictionary Learning in 3-D Super Resolution HR-pQCT Imaging. IEEE Transactions on Radiation and Plasma Medical Sciences, 2019, 3, 129-136.	2.7	3
25	Label-free THG imaging of bone tissue microstructure: effect of low gravity on the lacuno-canalicular network. , 2019, , .		0
26	Evaluation of noise and blur effects with SIRT-FISTA-TV reconstruction algorithm: Application to fast environmental transmission electron tomography. Ultramicroscopy, 2018, 189, 109-123.	0.8	21
27	Relationships between human cortical bone toughness and collagen cross-links on paired anatomical locations. Bone, 2018, 112, 202-211.	1.4	20
28	Statistical content-adapted sampling (SCAS) for 3D Computed Tomography. Computers in Biology and Medicine, 2018, 92, 9-21.	3.9	5
29	Registration of phaseâ€contrast images in propagationâ€based Xâ€ray phase tomography. Journal of Microscopy, 2018, 269, 36-47.	0.8	7
30	An ADMM Algorithm for Constrained Material Decomposition in Spectral CT. , 2018, , .		1
31	Nonlinear material decomposition using a regularized iterative scheme based on the Bregman distance. Inverse Problems, 2018, 34, 124003.	1.0	12
32	Low-dose synchrotron nano-CT via compressed sensing. , 2018, , .		0
33	A constrained Gauss-Newton algorithm for material decomposition in spectral computed tomography. , 2018, , .		0
34	Time-resolved multispectral imaging based on an adaptive single-pixel camera. Optics Express, 2018, 26, 10550.	1.7	54
35	Evaluation of phase retrieval approaches in magnified X-ray phase nano computerized tomography applied to bone tissue. Optics Express, 2018, 26, 11110.	1.7	23
36	Broadband time-resolved multi-channel functional near-infrared spectroscopy system to monitor in vivo physiological changes of human brain activity. Applied Optics, 2018, 57, 6417.	0.9	16

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37	A Semi Nonnegative Matrix Factorization Technique for Pattern Generalization in Single-Pixel Imaging. IEEE Transactions on Computational Imaging, 2018, 4, 284-294.	2.6	12
38	3D micro structural analysis of human cortical bone in paired femoral diaphysis, femoral neck and radial diaphysis. Journal of Structural Biology, 2018, 204, 182-190.	1.3	20
39	Extraction of the 3D local orientation of myocytes in human cardiac tissue using X-ray phase-contrast micro-tomography and multi-scale analysis. Medical Image Analysis, 2017, 38, 117-132.	7.0	29
40	Cortical bone elasticity measured by resonant ultrasound spectroscopy is not altered by defatting and synchrotron X-ray imaging. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 72, 241-245.	1.5	12
41	One-month spaceflight compromises the bone microstructure, tissue-level mechanical properties, osteocyte survival and lacunae volume in mature mice skeletons. Scientific Reports, 2017, 7, 2659.	1.6	80
42	Strain rate influence on human cortical bone toughness: A comparative study of four paired anatomical sites. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 71, 223-230.	1.5	26
43	Time-resolved wavelet-based acquisitions using a single-pixel camera. Proceedings of SPIE, 2017, , .	0.8	0
44	Adaptive Basis Scan by Wavelet Prediction for Single-Pixel Imaging. IEEE Transactions on Computational Imaging, 2017, 3, 36-46.	2.6	81
45	Regularization of nonlinear decomposition of spectral xâ€ray projection images. Medical Physics, 2017, 44, e174-e187.	1.6	65
46	Quantification of stiffness measurement errors in resonant ultrasound spectroscopy of human cortical bone. Journal of the Acoustical Society of America, 2017, 142, 2755-2765.	0.5	17
47	Spectral CT Material Decomposition in the Presence of Poisson Noise: A Kullbackâ€“Leibler Approach. Irbm, 2017, 38, 214-218.	3.7	2
48	Label-free imaging of bone multiscale porosity and interfaces using third-harmonic generation microscopy. Scientific Reports, 2017, 7, 3419.	1.6	62
49	Phase retrieval in 3D X-ray magnified phase nano CT: Imaging bone tissue at the nanoscale. , 2017, , .		3
50	Super-resolution/segmentation of 3D trabecular bone images with total variation and nonconvex Cahn-Hilliard functional. , 2017, , .		3
51	Estimation of the blurring kernel in experimental HR-pQCT images based on mutual information. , 2017, , .		0
52	Assessment of imaging quality in magnified phase CT of human bone tissue at the nanoscale. , 2017, , .		2
53	A Kullback-Leibler approach for 3D reconstruction of spectral CT data corrupted by Poisson noise. , 2017, , .		0
54	Sparse reconstruction methods in x-ray CT. , 2017, , .		0

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55	Surface delivery of tunable doses of BMP-2 from an adaptable polymeric scaffold induces volumetric bone regeneration. Biomaterials, 2016, 104, 168-181.	5.7	124
56	Proton therapy monitoring by Compton imaging: influence of the large energy spectrum of the prompt-Î³radiation. Physics in Medicine and Biology, 2016, 61, 3127-3146.	1.6	29
57	Multiscale and multimodality computed tomography for cortical bone analysis. Physics in Medicine and Biology, 2016, 61, 8553-8576.	1.6	13
58	Quantitative evaluation of regularized phase retrieval algorithms on bone scaffolds seeded with bone cells. Physics in Medicine and Biology, 2016, 61, N215-N231.	1.6	7
59	Super-resolution/segmentation of 2D trabecular bone images by a Mumford-Shah approach and comparison to total variation. , 2016, , .		2
60	Multi-level tomography reconstructions with level-set and TV regularization methods. , 2016, , .		0
61	Adaptive acquisitions in biomedical optical imaging based on single pixel camera: Comparison with compressive sensing. , 2016, , .		2
62	Characterizing microcrack orientation distribution functions in osteonal bone samples. Journal of Microscopy, 2016, 264, 268-281.	0.8	26
63	Binary tomography reconstruction from few projections with Total Variation regularization for bone microstructure studies. Journal of X-Ray Science and Technology, 2016, 24, 177-189.	0.7	1
64	3D X-ray ultra-microscopy of bone tissue. Osteoporosis International, 2016, 27, 441-455.	1.3	29
65	Stochastic multiscale modelling of cortical bone elasticity based on high-resolution imaging. Biomechanics and Modeling in Mechanobiology, 2016, 15, 111-131.	1.4	7
66	Filtered stochastic optimization for binary tomography. , 2015, , .		1
67	Fast virtual histology using X-ray in-line phase tomography: application to the 3D anatomy of maize developing seeds. Plant Methods, 2015, 11, 55.	1.9	49
68	Dose fractionation in synchrotron radiation x-ray phase micro-tomography. Physics in Medicine and Biology, 2015, 60, 7543-7566.	1.6	4
69	Quantification of nonlinear elasticity for the evaluation of submillimeter crack length in cortical bone. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 48, 210-219.	1.5	8
70	Binary Tomography Reconstructions With Stochastic Level-Set Methods. IEEE Signal Processing Letters, 2015, 22, 920-924.	2.1	9
71	Distribution of mesoscale elastic properties and mass density in the human femoral shaft. Connective Tissue Research, 2015, 56, 120-132.	1.1	11
72	Single pixel camera: An acquisition strategy based on the non-linear wavelet approximation. , 2015, 2015, 6240-3.		3

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73	Semi-blind joint super-resolution/segmentation of 3D trabecular bone images by a TV box approach. , 2015, , .		0
74	Voronoi-based analysis of bone cell network from synchrotron radiation micro-CT images. , 2015, , .		0
75	Cortical Bone Mineralization in the Human Femoral Neck in Cases and Controls from Synchrotron Radiation Study. Cell Biochemistry and Biophysics, 2015, 73, 51-57.	0.9	1
76	Canalicular Network Morphology Is the Major Determinant of the Spatial Distribution of Mass Density in Human Bone Tissue: Evidence by Means of Synchrotron Radiation Phase-Contrast nano-CT. Journal of Bone and Mineral Research, 2015, 30, 346-356.	3.1	108
77	Synchrotron X-ray phase nano-tomography-based analysis of the lacunarâ€“canalicular network morphology and its relation to the strains experienced by osteocytes in situ as predicted by case-specific finite element analysis. Biomechanics and Modeling in Mechanobiology, 2015, 14, 267-282.	1.4	83
78	A hyperspectral time resolved DOT system to monitor physiological changes of the human brain activity. , 2015, , .		1
79	To what extent can cortical bone millimeter-scale elasticity be predicted by a two-phase composite model with variable porosity?. Acta Biomaterialia, 2015, 12, 207-215.	4.1	20
80	Iterative choice of the optimal regularization parameter in TV image restoration. Inverse Problems and Imaging, 2015, 9, 1171-1191.	0.6	15
81	Non Destructive Characterization of Cortical Bone Micro-Damage by Nonlinear Resonant Ultrasound Spectroscopy. PLoS ONE, 2014, 9, e83599.	1.1	31
82	Computer vision tools to optimize reconstruction parameters in x-ray in-line phase tomography. Physics in Medicine and Biology, 2014, 59, 7767-7775.	1.6	10
83	Binary tomography reconstructions of bone microstructure from few projections with stochastic level-set methods. , 2014, , .		1
84	Investigation of the polynomial approach for material decomposition in spectral X-ray tomography using an energy-resolved detector. , 2014, , .		2
85	Micro- and Nano-CT for the Study of Bone Ultrastructure. Current Osteoporosis Reports, 2014, 12, 465-474.	1.5	87
86	Cardiac Câ€arm computed tomography using a 3D + time ROI reconstruction method with spatial and temporal regularization. Medical Physics, 2014, 41, 021903.	1.6	32
87	Removing streak artifacts from ECG-gated reconstructions using deconvolution. Journal of X-Ray Science and Technology, 2014, 22, 253-270.	0.7	3
88	QUANTIFICATION OF THE 3D MORPHOLOGY OF THE BONE CELL NETWORK FROM SYNCHROTRON MICRO-CT IMAGES. Image Analysis and Stereology, 2014, 33, 157.	0.4	15
89	3D osteocyte lacunar morphometric properties and distributions in human femoral cortical bone using synchrotron radiation micro-CT images. Bone, 2014, 60, 172-185.	1.4	105
90	On the elastic properties of mineralized turkey leg tendon tissue: multiscale model and experiment. Biomechanics and Modeling in Mechanobiology, 2014, 13, 1003-1023.	1.4	27

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91	Bone canalicular network segmentation in 3D nano-CT images through geodesic voting and image tessellation. Physics in Medicine and Biology, 2014, 59, 2155-2171.	1.6	15
92	Accessing osteocyte lacunar geometrical properties in human jaw bone on the submicron length scale using synchrotron radiation Î¼CT. Journal of Microscopy, 2014, 255, 158-168.	0.8	22
93	Higher order total variation super-resolution from a single trabecular bone image. , 2014, , .		4
94	Cortical measurements of the tibia from high resolution peripheral quantitative computed tomography images: A comparison with synchrotron radiation micro-computed tomography. Bone, 2014, 63, 7-14.	1.4	33
95	Priors for X-ray in-line phase tomography of heterogeneous objects. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130129.	1.6	22
96	Stochastic diffusion equation with singular diffusivity and gradient-dependent noise in binary tomography. Journal of Physics: Conference Series, 2014, 542, 012001.	0.3	3
97	Alterations of Mass Density and 3D Osteocyte Lacunar Properties in Bisphosphonate-Related Osteonecrotic Human Jaw Bone, a Synchrotron ÂµCT Study. PLoS ONE, 2014, 9, e88481.	1.1	47
98	3D characterization of pores in the cortical bone of human femur in the elderly at different locations as determined by synchrotron micro-computed tomography images. Osteoporosis International, 2013, 24, 1023-1033.	1.3	53
99	Investigation of the three-dimensional orientation of mineralized collagen fibrils in human lamellar bone using synchrotron X-ray phase nano-tomography. Acta Biomaterialia, 2013, 9, 8118-8127.	4.1	95
100	How minute sooglossid frogs hear without a middle ear. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15360-15364.	3.3	26
101	Region Growing: When Simplicity Meets Theory â€“ Region Growing Revisited in Feature Space and Variational Framework. Communications in Computer and Information Science, 2013, , 426-444.	0.4	4
102	Adaptive filtering for enhancement of the osteocyte cell network in 3D microtomography images. Irbm, 2013, 34, 48-52.	3.7	11
103	3D Microstructural Architecture of Muscle Attachments in Extant and Fossil Vertebrates Revealed by Synchrotron Microtomography. PLoS ONE, 2013, 8, e56992.	1.1	61
104	Synchrotron Radiation X-Ray Phase Micro-computed Tomography as a New Method to Detect Iron Oxide Nanoparticles in the Brain. Molecular Imaging and Biology, 2013, 15, 552-559.	1.3	39
105	A new quantitative approach for estimating bone cell connections from nano-CT images. , 2013, 2013, 3694-7.		5
106	Numerical assessment of the effects of the axial variations of porosity and mineralisation on the elastic properties in the human femoral neck. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 308-309.	0.9	2
107	Iterative choice of the optimal regularization parameter in TV image deconvolution. Journal of Physics: Conference Series, 2013, 464, 012005.	0.3	1
108	Information-based analysis of X-ray in-line phase tomography with application to the detection of iron oxide nanoparticles in the brain. Optics Express, 2013, 21, 27185.	1.7	8

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109	Nonlinear approaches for the single-distance phase retrieval problem involving regularizations with sparsity constraints. Applied Optics, 2013, 52, 3977.	0.9	12
110	Level set regularization for nonlinear absorption and phase retrieval in X-ray phase contrast tomography. , 2013, , .		1
111	Efficient extraction of 3D bone cells descriptors from micro-CT images. , 2013, , .		2
112	Bone microstructure reconstructions from few projections with level-set regularization. , 2013, , .		1
113	In Vitro Colonization of the Muscle Extracellular Matrix Components by Escherichia coli O157:H7: The Influence of Growth Medium, Temperature and pH on Initial Adhesion and Induction of Biofilm Formation by Collagens I and III. PLoS ONE, 2013, 8, e59386.	1.1	26
114	Microfibril Orientation Dominates the Microelastic Properties of Human Bone Tissue at the Lamellar Length Scale. PLoS ONE, 2013, 8, e58043.	1.1	56
115	Absorption and phase retrieval with Tikhonov and joint sparsity regularizations. Inverse Problems and Imaging, 2013, 7, 267-282.	0.6	14
116	X-ray in-line phase tomography of multimaterial objects. Optics Letters, 2012, 37, 2151.	1.7	38
117	3D X-ray CT imaging of the bone Lacuno-Canalicular Network. , 2012, , .		2
118	Deconvolution for limited-view streak artifacts removal: improvements upon an existing approach. , 2012, , .		0
119	Reconstruction of bone microstructure from few projections with convex-concave and non local regularization. , 2012, , .		2
120	Histogram Featureâ€“Based Classification Improves Differentiability of Early Bone Healing Stages From Micro-Computed Tomographic Data. Journal of Computer Assisted Tomography, 2012, 36, 469-476.	0.5	3
121	Absorption and phase retrieval in phase contrast imaging with non linear Tikhonov regularization. Journal of Physics: Conference Series, 2012, 386, 012012.	0.3	0
122	Shape prior in Variational Region Growing. , 2012, , .		1
123	Non-linear iterative phase retrieval based on Frechet derivative and projection operators. , 2012, , .		2
124	Mineral heterogeneity has a minor influence on the apparent elastic properties of human cancellous bone: a SRÎ¼CT-based finite element study. Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 1137-1144.	0.9	50
125	Propagation based X-ray phase microtomography of multi-material objects for simultaneous bone and soft tissue visualisation. , 2012, , .		0
126	Spatial distribution of tissue level properties in a human femoral cortical bone. Journal of Biomechanics, 2012, 45, 2264-2270.	0.9	42

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127	Structure and quantification of microvascularisation within mouse long bones: What and how should we measure?. Bone, 2012, 50, 390-399.	1.4	70
128	Anatomical distribution of the degree of mineralization of bone tissue in human femoral neck: Impact on biomechanical properties. Bone, 2012, 50, 876-884.	1.4	39
129	Local topological analysis at the distal radius by HR-pQCT: Application to in vivo bone microarchitecture and fracture assessment in the OFELY study. Bone, 2012, 51, 362-368.	1.4	21
130	Synchrotron radiation CT from the micro to nanoscale for the investigation of bone tissue. Proceedings of SPIE, 2012, , .	0.8	4
131	Nanoscale imaging of the bone cell network with synchrotron Xâ€ray tomography: optimization of acquisition setup. Medical Physics, 2012, 39, 2229-2238.	1.6	84
132	X-Ray Phase Nanotomography Resolves the 3D Human Bone Ultrastructure. PLoS ONE, 2012, 7, e35691.	1.1	140
133	Extracellular matrix deposition and scaffold biodegradation in an in vitro three-dimensional model of bone by X-ray computed microtomography. Journal of Tissue Engineering and Regenerative Medicine, 2012, 8, n/a-n/a.	1.3	11
134	Nonlinear Phase Retrieval Using Projection Operator and Iterative Wavelet Thresholding. IEEE Signal Processing Letters, 2012, 19, 579-582.	2.1	7
135	Relationship between histochemical, structural characteristics and oxidative stability of rhea limb muscles. Food Chemistry, 2012, 132, 1387-1394.	4.2	3
136	CT Imaging: Basics and New Trends. , 2012, , 883-915.		3
137	Simultaneous 3D Imaging of Bone and Vessel Microstructure in a Rat Model. IEEE Transactions on Nuclear Science, 2011, 58, 139-145.	1.2	17
138	Fluorescence diffuse optical tomography: Time-resolved versus continuous-wave in the reflectance configuration. Irbm, 2011, 32, 243-250.	3.7	10
139	Change in porosity is the major determinant of the variation of cortical bone elasticity at the millimeter scale in aged women. Bone, 2011, 49, 1020-1026.	1.4	116
140	Non-linear iterative phase retrieval based on Frechet derivative. Optics Express, 2011, 19, 22809.	1.7	27
141	Non linear phase retrieval from fresnel diffraction patterns using the frechet derivative. , 2011, , .		1
142	Synchrotron Radiation Micro-CT at the Micrometer Scale for the Analysis of the Three-Dimensional Morphology of Microcracks in Human Trabecular Bone. PLoS ONE, 2011, 6, e21297.	1.1	65
143	Evaluation of bone scaffolds by micro-CT. Osteoporosis International, 2011, 22, 2043-2048.	1.3	39
144	Intermittent PTH(1â€“84) is osteoanabolic but not osteoangiogenic and relocates bone marrow blood vessels closer to bone-forming sites. Journal of Bone and Mineral Research, 2011, 26, 2583-2596.	3.1	96

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145	3D microscopic imaging by synchrotron radiation micro/nano-CT. , 2011, , .		2
146	Segmentation of 3D cellular networks from SR-micro-CT images. , 2011, , .		4
147	Nonlinear ultrasound monitoring of fatigue microdamage accumulation in cortical bone. , 2011, , .		1
148	Acquisition of Synchrotron Radiation micro-CT images for the investigation of bone micro-cracks. , 2011, , .		0
149	Large Image Streaming using ITKv4. The Insight Journal, 2011, , .	0.2	1
150	A timeâ€domain waveletâ€based approach for fluorescence diffuse optical tomography. Medical Physics, 2010, 37, 2890-2900.	1.6	7
151	Local plate/rod descriptors of 3D trabecular bone microâ€CT images from medial axis topologic analysis. Medical Physics, 2010, 37, 4364-4376.	1.6	16
152	Parallel-beam imaging at the ESRF beamline ID19: current status and plans for the future. AIP Conference Proceedings, 2010, , .	0.3	25
153	Imaging and Quantitative Assessment of Long Bone Vascularization in the Adult Rat Using Microcomputed Tomography. Anatomical Record, 2010, 293, 215-224.	0.8	40
154	Determination of the heterogeneous anisotropic elastic properties of human femoral bone: From nanoscopic to organ scale. Journal of Biomechanics, 2010, 43, 1857-1863.	0.9	91
155	Regularized phase tomography enables study of mineralized and unmineralized tissue in porous bone scaffold. Journal of Microscopy, 2010, 238, 230-239.	0.8	22
156	Adaptive Remodeling of Trabecular Bone Core Cultured in 3-D Bioreactor Providing Cyclic Loading: An Acoustic Microscopy Study. Ultrasound in Medicine and Biology, 2010, 36, 999-1007.	0.7	10
157	A Finite Volume Method for Fluorescence Diffuse Optical Tomography: Influence on Forward Model and Reconstruction. , 2010, , .		0
158	A wavelet algorithm for zoom-in tomography. , 2010, , .		2
159	Regularization of Phase Retrieval With Phase-Attenuation Duality Prior for 3-D Holotomography. IEEE Transactions on Image Processing, 2010, 19, 2428-2436.	6.0	71
160	Vesselness-guided variational segmentation of cellular networks from 3D micro-CT. , 2010, , .		11
161	Graph-based multi-scale analysis of plates and rods in human trabecular bone. , 2010, , .		0
162	Status and evolution of the ESRF beamline ID19. AIP Conference Proceedings, 2010, , .	0.3	94

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163	Biodegradation of porous calcium phosphate scaffolds in an ectopic bone formation model studied by X-ray computed microtomograph. , 2010, 19, 136-146.		55
164	Cortical Bone Microelasticity Assessed with Scanning Acoustic Microscopy: Relationship to Nanostructural Characteristics across a Human Osteon. IFMBE Proceedings, 2010, , 190-192.	0.2	0
165	Regularization in fluorescence diffuse optical tomography using prior information on the medium optical properties. Proceedings of SPIE, 2010, , .	0.8	0
166	3D non-linear enhancement of tubular microscopic bone porosities. , 2009, , .		3
167	Simultaneous 3D imaging of bone and vessel microstructure in a rat model: Measurement of vascular-trabecular interdistance. , 2009, , .		0
168	X-Ray Synchrotron Radiation Pseudo-Holotomography as a New Imaging Technique to Investigate Angio- and Microvasculogenesis with No Usage of Contrast Agents. Tissue Engineering - Part C: Methods, 2009, 15, 425-430.	1.1	31
169	A comprehensive study of the use of temporal moments in time-resolved diffuse optical tomography: part I. Theoretical material. Physics in Medicine and Biology, 2009, 54, 7089-7105.	1.6	19
170	A comprehensive study of the use of temporal moments in time-resolved diffuse optical tomography: part II. Three-dimensional reconstructions. Physics in Medicine and Biology, 2009, 54, 7107-7119.	1.6	12
171	Assessment of Microelastic Properties of Bone Using Scanning Acoustic Microscopy: A Face-to-Face Comparison with Nanoindentation. Japanese Journal of Applied Physics, 2009, 48, 07GK01.	0.8	36
172	Investigation of bone with synchrotron radiation imaging: from micro to nano. Osteoporosis International, 2009, 20, 1057-1063.	1.3	40
173	Relationship between ultrasonic parameters and apparent trabecular bone elastic modulus: A numerical approach. Journal of Biomechanics, 2009, 42, 2033-2039.	0.9	44
174	Fourier-wavelet regularization of phase retrieval in x-ray in-line phase tomography. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2009, 26, 1876.	0.8	17
175	Quantitative investigation of bone microvascularization from 3D synchrotron micro-computed tomography in a rat model. , 2009, 2009, 1004-7.		9
176	Time resolved fluorescence diffuse optical tomography using multi-resolution exponential B-splines. , 2009, , .		1
177	A constrained region growing approach based on watershed for the segmentation of low contrast structures in bone micro-CT images. Pattern Recognition, 2008, 41, 2358-2368.	5.1	39
178	Fast wave ultrasonic propagation in trabecular bone: Numerical study of the influence of porosity and structural anisotropy. Journal of the Acoustical Society of America, 2008, 123, 1694-1705.	0.5	88
179	Quantitative comparison of direct phase retrieval algorithms in inâ€line phase tomography. Medical Physics, 2008, 35, 4556-4566.	1.6	143
180	Approximations of the measurable quantity in diffuse optical problems: theoretical analysis of model deviations. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2008, 25, 1174.	0.8	8

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181	Relationships of trabecular bone structure with quantitative ultrasound parameters: In vitro study on human proximal femur using transmission and backscatter measurements. Bone, 2008, 42, 1193-1202.	1.4	84
182	State of the Art and Perspectives of Biomedical Imaging at the ESRF. Synchrotron Radiation News, 2008, 21, 30-41.	0.2	7
183	Hessian based orientation analysis of the canal network in cortical bone micro-CT images. , 2008, , .		0
184	Fluorescence diffuse optical tomography: A simulation-based study comparing time-resolved and continuous wave reconstructions performances. , 2008, , .		4
185	A simulation-based study of reconstruction in Time-resolved Fluorescence Diffuse Optical Tomography in Cylindrical geometry. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 2639-42.	0.5	0
186	An Automatic Calibration Approach For Left Ventricular Volume Assessment. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 4460-3.	0.5	0
187	Feasibility of Micro-Crack Detection in Human Trabecular Bone Images from 3D Synchrotron Microtomography. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 3918-21.	0.5	9
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