

# Zhentian Wang

## List of Publications by Year in descending order

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61  
papers

1,388  
citations

430874

18  
h-index

345221

36  
g-index

61  
all docs

61  
docs citations

61  
times ranked

1525  
citing authors

#	ARTICLE	IF	CITATIONS
1	The First Analysis and Clinical Evaluation of Native Breast Tissue Using Differential Phase-Contrast Mammography. <i>Investigative Radiology</i> , 2011, 46, 801-806.	6.2	228
2	Suppression of Enhancer Overactivation by a RACK7-Histone Demethylase Complex. <i>Cell</i> , 2016, 165, 331-342.	28.9	163
3	Non-invasive classification of microcalcifications with phase-contrast X-ray mammography. <i>Nature Communications</i> , 2014, 5, 3797.	12.8	110
4	A Study on Mastectomy Samples to Evaluate Breast Imaging Quality and Potential Clinical Relevance of Differential Phase Contrast Mammography. <i>Investigative Radiology</i> , 2014, 49, 131-137.	6.2	57
5	Micrometer-resolution imaging using $M\tilde{A}$ -NCH: towards $G^{2\text{-less}}$ grating interferometry. <i>Journal of Synchrotron Radiation</i> , 2016, 23, 1462-1473.	2.4	53
6	Non-linear regularized phase retrieval for unidirectional X-ray differential phase contrast radiography. <i>Optics Express</i> , 2011, 19, 25545.	3.4	49
7	Dual phase grating interferometer for tunable dark-field sensitivity. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	46
8	2D-Omnidirectional Hard-X-Ray Scattering Sensitivity in a Single Shot. <i>Physical Review Letters</i> , 2016, 116, 093902.	7.8	45
9	Towards clinical grating-interferometry mammography. <i>European Radiology</i> , 2020, 30, 1419-1425.	4.5	43
10	Nono, a Bivalent Domain Factor, Regulates Erk Signaling and Mouse Embryonic Stem Cell Pluripotency. <i>Cell Reports</i> , 2016, 17, 997-1007.	6.4	40
11	Human hand radiography using X-ray differential phase contrast combined with dark-field imaging. <i>Skeletal Radiology</i> , 2013, 42, 827-835.	2.0	39
12	Diffraction small angle X-ray scattering imaging for anisotropic structures. <i>Nature Communications</i> , 2019, 10, 5130.	12.8	36
13	High sensitivity X-ray phase contrast imaging by laboratory grating-based interferometry at high Talbot order geometry. <i>Optics Express</i> , 2021, 29, 2049.	3.4	35
14	Fabrication of Au gratings by seedless electroplating for X-ray grating interferometry. <i>Materials Science in Semiconductor Processing</i> , 2019, 92, 73-79.	4.0	34
15	A generalized quantitative interpretation of dark-field contrast for highly concentrated microsphere suspensions. <i>Scientific Reports</i> , 2016, 6, 35259.	3.3	27
16	Sensitivity-based optimization for the design of a grating interferometer for clinical X-ray phase contrast mammography. <i>Optics Express</i> , 2017, 25, 6349.	3.4	25
17	Tilted-grating approach for scanning-mode X-ray phase contrast imaging. <i>Optics Express</i> , 2014, 22, 15447.	3.4	21
18	Low-dose multiple-information retrieval algorithm for X-ray grating-based imaging. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011, 635, 103-107.	1.6	20

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19	Image fusion scheme for differential phase contrast mammography. Journal of Instrumentation, 2013, 8, C07011-C07011.	1.2	18
20	High-aspect ratio silicon structures by displacement Talbot lithography and Bosch etching. Proceedings of SPIE, 2017, , .	0.8	18
21	Low dose reconstruction algorithm for differential phase contrast imaging. Journal of X-Ray Science and Technology, 2011, 19, 403-415.	1.0	16
22	Quantitative x-ray radiography using grating interferometry: a feasibility study. Physics in Medicine and Biology, 2013, 58, 6815-6826.	3.0	16
23	Toward clinical differential phase contrast mammography: preliminary evaluations and image processing schemes. Journal of Instrumentation, 2013, 8, C05009-C05009.	1.2	15
24	Image fusion algorithm for differential phase contrast imaging. , 2012, , .		14
25	Simple merging technique for improving resolution in qualitative single image phase contrast tomography. Optics Express, 2014, 22, 27257.	3.4	14
26	Single shot x-ray phase contrast imaging using a direct conversion microstrip detector with single photon sensitivity. Applied Physics Letters, 2016, 108, .	3.3	14
27	Fabrication of X-ray Gratings for Interferometric Imaging by Conformal Seedless Gold Electroplating. Micromachines, 2021, 12, 517.	2.9	14
28	Modeling of beam hardening effects in a dual-phase X-ray grating interferometer for quantitative dark-field imaging. Optics Express, 2020, 28, 19187.	3.4	13
29	GAMOS: An easy and flexible way to use GEANT4. , 2011, , .		12
30	Wavelet-based noise-model driven denoising algorithm for differential phase contrast mammography. Optics Express, 2013, 21, 10572.	3.4	12
31	Characterization of oriented microstructures through anisotropic small-angle scattering by 2D neutron dark-field imaging. Communications Physics, 2020, 3, .	5.3	12
32	Fast X-Ray Phase-Contrast Imaging Using High Resolution Detector. IEEE Transactions on Nuclear Science, 2009, 56, 1383-1388.	2.0	11
33	Large phase-stepping approach for high-resolution hard X-ray grating-based multiple-information imaging. Optics Express, 2010, 18, 10222.	3.4	11
34	Quantitative volumetric breast density estimation using phase contrast mammography. Physics in Medicine and Biology, 2015, 60, 4123-4135.	3.0	11
35	Spline based iterative phase retrieval algorithm for X-ray differential phase contrast radiography. Optics Express, 2015, 23, 10631.	3.4	10
36	Grating-based interferometry and hybrid photon counting detectors: Towards a new era in X-ray medical imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 809, 23-30.	1.6	10

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37	Correspondence: Reply to "Quantitative evaluation of X-ray dark-field images for microcalcification analysis in mammography". Nature Communications, 2016, 7, 10868.	12.8	8
38	Microbubbles as a contrast agent in grating interferometry mammography: an ex vivo proof-of-mechanism study. European Radiology Experimental, 2019, 3, 19.	3.4	8
39	Simultaneous Reciprocal and Real Space X-Ray Imaging of Time-Evolving Systems. Physical Review Applied, 2021, 15, .	3.8	8
40	Reconstruction method incorporating the object-position dependence of visibility loss in dark-field imaging. Proceedings of SPIE, 2013, , .	0.8	7
41	Implement X-ray refraction effect in Geant4 for phase contrast imaging. , 2009, , .		6
42	Noise-Analysis-Based Non-Local Means Method for X-ray Grating-Based Mammography Denoising. IEEE Transactions on Nuclear Science, 2013, 60, 802-809.	2.0	5
43	Joint absorption and phase retrieval in grating-based x-ray radiography. Optics Express, 2016, 24, 7253.	3.4	5
44	Can grating interferometry-based mammography discriminate benign from malignant microcalcifications in fresh biopsy samples?. European Journal of Radiology, 2020, 129, 109077.	2.6	5
45	Intensity-based iterative reconstruction for helical grating interferometry breast CT with static grating configuration. Optics Express, 2022, 30, 13847.	3.4	5
46	Differential Phase-Contrast Imaging Experimental System Under the Incoherent Condition With Conventional X-Ray Tubes. IEEE Transactions on Nuclear Science, 2009, 56, 1438-1443.	2.0	4
47	Three-dimensional visualization of rat retina by X-ray differential phase contrast tomographic microscopy. Microscopy Research and Technique, 2018, 81, 655-662.	2.2	4
48	INSIDEnet: Interpretable Nonexpansive Data-efficient network for denoising in grating interferometry breast CT. Medical Physics, 2022, 49, 3729-3748.	3.0	3
49	Mathematical Methods and Applications in Medical Imaging. Computational and Mathematical Methods in Medicine, 2014, 2014, 1-2.	1.3	2
50	Investigation of suitable biopsy markers for grating-based phase contrast mammography. Journal of Instrumentation, 2017, 12, T01007-T01007.	1.2	2
51	Differential phase-contrast tomosynthetic experimental system with weakly coherent hard X-rays. , 2008, , .		1
52	Picture comparison binarization method for cosmic ray muon radiography. , 2008, , .		1
53	Attenuation-refraction-scattering computed tomographic experimental system with a conventional X-ray tube: System optimization & image fusion. , 2009, , .		1
54	Multi-scale image fusion for x-ray grating-based mammography. , 2012, , .		1

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55	Bayesian reconstructions with PDE image model for emission tomography. , 2007, , .		0
56	X-ray phase contrast computed tomographic elementary experiments under incoherent conditions. , 2008, , .		0
57	Linear partial derivative matrix for iterative algorithm to reconstruct refractive index from refraction angle data. , 2009, , .		0
58	Phase-contrast enhanced mammography: A new diagnostic tool for breast imaging. , 2012, , .		0
59	Circular Unit Cell Gratings for X-ray Dark-Field Imaging. Journal of Physics: Conference Series, 2017, 849, 012053.	0.4	0
60	The classification of renal stones by gratings-based dark-field radiography. Central European Journal of Urology, 2021, 74, 453-458.	0.3	0
61	Iterative signal retrieval for X-ray grating interferometry with dual-shot. Journal of X-Ray Science and Technology, 2022, , 1-11.	1.0	0