

# Marie-Christine Zdora

## List of Publications by Year in descending order

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45  
papers

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citations

623734

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h-index

552781

26  
g-index

49  
all docs

49  
docs citations

49  
times ranked

650  
citing authors

#	ARTICLE	IF	CITATIONS
1	Speckle-Based X-Ray Phase-Contrast and Dark-Field Imaging with a Laboratory Source. <i>Physical Review Letters</i> , 2014, 112, 253903.	7.8	149
2	X-ray Phase-Contrast Imaging and Metrology through Unified Modulated Pattern Analysis. <i>Physical Review Letters</i> , 2017, 118, 203903.	7.8	78
3	State of the Art of X-ray Speckle-Based Phase-Contrast and Dark-Field Imaging. <i>Journal of Imaging</i> , 2018, 4, 60.	3.0	76
4	Speckle-based x-ray phase-contrast imaging with a laboratory source and the scanning technique. <i>Optics Letters</i> , 2015, 40, 2822.	3.3	42
5	Validation of diffusion tensor MRI measurements of cardiac microstructure with structure tensor synchrotron radiation imaging. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2016, 19, 31.	3.3	42
6	Megahertz x-ray microscopy at x-ray free-electron laser and synchrotron sources. <i>Optica</i> , 2019, 6, 1106.	9.3	41
7	X-ray phase tomography with near-field speckles for three-dimensional virtual histology. <i>Optica</i> , 2020, 7, 1221.	9.3	37
8	X-ray microtomography using correlation of near-field speckles for material characterization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 12569-12573.	7.1	33
9	Simulations of x-ray speckle-based dark-field and phase-contrast imaging with a polychromatic beam. <i>Journal of Applied Physics</i> , 2015, 118, .	2.5	32
10	X-ray phase microtomography with a single grating for high-throughput investigations of biological tissue. <i>Biomedical Optics Express</i> , 2017, 8, 1257.	2.9	19
11	An achromatic X-ray lens. <i>Nature Communications</i> , 2022, 13, 1305.	12.8	19
12	Advances in indirect detector systems for ultra high-speed hard X-ray imaging with synchrotron light. <i>Journal of Instrumentation</i> , 2018, 13, C04004-C04004.	1.2	18
13	A step towards valid detection and quantification of lung cancer volume in experimental mice with contrast agent-based X-ray microtomography. <i>Scientific Reports</i> , 2019, 9, 1325.	3.3	17
14	Functional and multiscale 3D structural investigation of brain tissue through correlative in vivo physiology, synchrotron microtomography and volume electron microscopy. <i>Nature Communications</i> , 2022, 13, .	12.8	17
15	Noise analysis of speckle-based x-ray phase-contrast imaging. <i>Optics Letters</i> , 2016, 41, 5490.	3.3	15
16	At-wavelength optics characterisation via X-ray speckle- and grating-based unified modulated pattern analysis. <i>Optics Express</i> , 2018, 26, 4989.	3.4	11
17	X-ray phase imaging with the unified modulated pattern analysis of near-field speckles at a laboratory source. <i>Applied Optics</i> , 2020, 59, 2270.	1.8	11
18	Tunable X-ray speckle-based phase-contrast and dark-field imaging using the unified modulated pattern analysis approach. <i>Journal of Instrumentation</i> , 2018, 13, C05005-C05005.	1.2	8

#	ARTICLE	IF	CITATIONS
19	Multimodal imaging of the human knee down to the cellular level. Journal of Physics: Conference Series, 2017, 849, 012026.	0.4	5
20	Characterisation of speckle-based X-ray phase-contrast imaging. Journal of Physics: Conference Series, 2017, 849, 012024.	0.4	4
21	Fast Multi-scale imaging using the Beamline I13L at the Diamond Light Source. , 2019, , .		4
22	Hierarchical imaging of the human knee. , 2016, , .		3
23	X-ray micro-tomography for investigations of brain tissues on cellular level. , 2016, , .		3
24	Comparison of laboratory grating-based and speckle-tracking x-ray phase-contrast imaging. Journal of Physics: Conference Series, 2017, 849, 012035.	0.4	3
25	Assessing Myocardial Microstructure With Biophysical Models of Diffusion MRI. IEEE Transactions on Medical Imaging, 2021, 40, 3775-3786.	8.9	3
26	Multi-scale imaging at the diamond beamline I13. AIP Conference Proceedings, 2019, , .	0.4	2
27	Micro- and nano-tomography at the DIAMOND beamline I13L imaging and coherence. , 2017, , .		2
28	Simulations of multi-contrast x-ray imaging using near-field speckles. AIP Conference Proceedings, 2016, , .	0.4	1
29	Hard X-ray submicrometer tomography of human brain tissue at Diamond Light Source. Journal of Physics: Conference Series, 2017, 849, 012030.	0.4	1
30	Multi-Scale Imaging at the Coherence and Imaging Beamline I13 at Diamond. Microscopy and Microanalysis, 2018, 24, 256-257.	0.4	1
31	Advanced X-ray phase-contrast and dark-field imaging with the unified modulated pattern analysis (UMPA). Microscopy and Microanalysis, 2018, 24, 22-23.	0.4	1
32	X-ray speckle-based phase-contrast imaging: principle and applications. , 2021, , .		1
33	Comparison of data processing techniques for single-grating x-ray Talbot interferometer data. , 2017, , .		1
34	Cold and Thermal Neutron Single Grating Dark-Field Imaging Extended to an Inverse Pattern Regime. Applied Sciences (Switzerland), 2022, 12, 2798.	2.5	1
35	Micro- and nano-imaging at the diamond beamline I13L-imaging and coherence. AIP Conference Proceedings, 2016, , .	0.4	0
36	Computational cell quantification in the human brain tissues based on hard x-ray phase-contrast tomograms. Proceedings of SPIE, 2016, , .	0.8	0

#	ARTICLE	IF	CITATIONS
37	Principles of X-ray Imaging. Springer Theses, 2021, , 11-57.	0.1	0
38	X-ray Single-Grating Interferometry. Springer Theses, 2021, , 69-111.	0.1	0
39	3D Virtual Histology Using X-ray Speckle with the Unified Modulated Pattern Analysis. Springer Theses, 2021, , 215-257.	0.1	0
40	Principles and State of the Art of X-ray Speckle-Based Imaging. Springer Theses, 2021, , 113-164.	0.1	0
41	Recent Developments and Ongoing Work in X-ray Speckle-Based Imaging. Springer Theses, 2021, , 259-313.	0.1	0
42	The Unified Modulated Pattern Analysis. Springer Theses, 2021, , 165-193.	0.1	0
43	At-Wavelength Optics Characterisation via X-ray Speckle- and Grating-Based Unified Modulated Pattern Analysis. Springer Theses, 2021, , 195-214.	0.1	0
44	The imaging and coherence beamline I13L at DIAMOND (Conference Presentation). , 2017, , .		0
45	New imaging opportunities at the DIAMOND beamline I13L. , 2019, , .		0