Riccardo Camattari

List of Publications by Year
in descending order

41 papers	435 citations	687363 13 h-index	839539 18 g-index
41 all docs	41 docs citations	41 times ranked	134 citing authors

#	Article	IF	Citations
1	Comment on â€˜Design and modeling of a Laue lens for radiation therapy with hard x-ray photonsâ€™. Physics in Medicine and Biology, 2022, 67, 138001.	3.0	0
2	Modular stand-alone photoelectrocatalytic reactor for emergent contaminant degradation via solar radiation. Solar Energy, 2021, 228, 120-127.	6.1	5
3	Design and Evaluation of a Novel Ultra High-Resolution Lens-Based SPECT: Insight to Light Field Imaging. , 2021, , .		1
4	X-ray characterization of self-standing bent Si crystal plates for Large Hadron Collider beam extraction. Journal of Applied Crystallography, 2020, 53, 486-493.	4.5	5
5	Characterization and modeling of thermally-induced doping contaminants in high-purity germanium. Journal Physics D: Applied Physics, 2019, 52, 035104.	2.8	11
6	Silicon crystalline undulator prototypes: Manufacturing and x-ray characterization. Physical Review Accelerators and Beams, 2019, 22, .	1.6	4
7	Thick self-standing bent crystals as optical elements for a Laue lens for applications in astrophysics. Experimental Astronomy, 2018, 46, 309-321.	3.7	4
8	Laue lens for radiotherapy applications through a focused hard x-ray beam: a feasibility study on requirements and tolerances. Physics in Medicine and Biology, 2017, 62, 7249-7266.	3.0	6
9	Optimal process parameters for phosphorus spin-on-doping of germanium. Applied Surface Science, 2017, 392, 1173-1180.	6.1	18
10	Homogeneous self-standing curved monocrystals, obtained using sandblasting, to be used as manipulators of hard X-rays and charged particle beams. Journal of Applied Crystallography, 2017, 50, 145-151.	4.5	11
11	Laue lens for astrophysics: Extensive comparison between mosaic, curved, and quasi-mosaic crystals. Astronomy and Astrophysics, 2016, 587, A21.	5.1	6
12	Laue lens to focus an X-ray beam for radiation therapy. Journal of Applied Crystallography, 2016, 49, 468-478.	4.5	5
13	Origin of quasi-mosaic effect for symmetric skew planes in a silicon or germanium plate. Journal of Applied Crystallography, 2016, 49, 1810-1813.	4.5	1
14	The `quasi-mosaic' effect in crystals and its applications in modern physics. Journal of Applied Crystallography, 2015, 48, 977-989.	4.5	24
15	Ion implantation for manufacturing bent and periodically bent crystals. Applied Physics Letters, 2015, 107, .	3.3	10
16	Manufacturing of advanced bent crystals for Laue Optics for Gamma ObservationS (LOGOS). Nuclear Instruments & Methods in Physics Research B, 2015, 355, 297-300.	1.4	6
17	High-efficiency diffraction and focusing of X-rays through asymmetric bent crystalline planes. Journal of Applied Crystallography, 2015, 48, 297-300.	4.5	6
18	Design study of a Laue lens for nuclear medicine. Journal of Applied Crystallography, 2015, 48, 125-137.	4.5	13

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19	<i>AniCryDe</i>: calculation of elastic properties in silicon and germanium crystals. Journal of Applied Crystallography, 2015, 48, 943-949.	4.5	14
20	Study and characterization of bent crystals for Laue lenses. Experimental Astronomy, 2014, 38, 401-416.	3.7	13
21	Stack of quasi-mosaic thin lamellae as a diffracting element for Laue lenses. Experimental Astronomy, 2014, 38, 25-40.	3.7	4
22	Quasi-mosaicity of (311) planes in silicon and its use in a Laue lens with high-focusing power. Experimental Astronomy, 2014, 38, 417-431.	3.7	8
23	High-efficiency focusing of hard X-rays exploiting the quasi-mosaic effect in a bent germanium crystal. Journal of Applied Crystallography, 2014, 47, 799-802.	4.5	11
24	Highly reproducible quasi-mosaic crystals as optical components for a Laue lens. Experimental Astronomy, 2014, 37, 1-10.	3.7	13
25	Genetic algorithm to design Laue lenses with optimal performance for focusing hard X- and<i>Î³</i>-rays. Astronomy and Astrophysics, 2014, 570, A17.	5.1	6
26	High diffraction efficiency with hard X-rays through a thick silicon crystal bent by carbon fiber deposition. Journal of Applied Crystallography, 2014, 47, 1762-1764.	4.5	15
27	Experimental analysis and modeling of self-standing curved crystals for focusing of X-rays. Meccanica, 2013, 48, 1875-1882.	2.0	22
28	Self-standing quasi-mosaic crystals for focusing hard X-rays. Review of Scientific Instruments, 2013, 84, 053110.	1.3	19
29	Curved crystals for high-resolution focusing of X and gamma rays through a Laue lens. Nuclear Instruments & Methods in Physics Research B, 2013, 309, 249-253.	1.4	15
30	Calculation of diffraction efficiency for curved crystals with arbitrary curvature radius. Journal of Applied Crystallography, 2013, 46, 415-420.	4.5	7
31	Ordered stacking of crystals with adjustable curvatures for hard X- and Î³-ray broadband focusing. Journal of Applied Crystallography, 2013, 46, 953-959.	4.5	12
32	Fabrication of quasi-mosaic Ge crystals for the LAUE project. Proceedings of SPIE, 2013, , .	0.8	5
33	Quasi-mosaicity as a powerful tool to investigate coherent effects. Proceedings of SPIE, 2013, , .	0.8	0
34	Proposal for a Laue lens relying on hybrid quasi-mosaic curved crystals. Astronomy and Astrophysics, 2013, 560, A58.	5.1	15
35	Quasi-mosaicity as a tool for focusing hard x-rays. Proceedings of SPIE, 2012, , .	0.8	4
36	Bent crystals as high-reflectivity components for a Laue lens: basic concepts and experimental techniques. , 2012, , .		0

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37	Stack of curved crystals as optical component for hard x- and gamma-ray focusing through a Laue lens. Proceedings of SPIE, 2012, , .	0.8	2
38	Bending of silicon plate crystals through superficial grooving: Modeling and experimentation. Thin Solid Films, 2011, 520, 1069-1073.	1.8	22
39	Self-standing bent silicon crystals for very high efficiency Laue lens. Experimental Astronomy, 2011, 31, 45-58.	3.7	38
40	Proposal for a Laue lens with quasi-mosaic crystalline tiles. Journal of Applied Crystallography, 2011, 44, 1255-1258.	4.5	25
41	High diffraction efficiency at hard X-ray energy in a silicon crystal bent by indentation. Journal of Applied Crystallography, 2010, 43, 1519-1521.	4.5	29