

Robin L Owen

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3403248/publications.pdf>

Version: 2024-02-01

37
papers

1,913
citations

304368

22
h-index

329751

37
g-index

39
all docs

39
docs citations

39
times ranked

2325
citing authors

#	ARTICLE	IF	CITATIONS
1	A sensor-adaptor mechanism for enterovirus uncoating from structures of EV71. <i>Nature Structural and Molecular Biology</i> , 2012, 19, 424-429.	3.6	347
2	Clustering procedures for the optimal selection of data sets from multiple crystals in macromolecular crystallography. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2013, 69, 1617-1632.	2.5	224
3	<i>In situ</i> macromolecular crystallography using microbeams. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2012, 68, 592-600.	2.5	113
4	Low-dose fixed-target serial synchrotron crystallography. <i>Acta Crystallographica Section D: Structural Biology</i> , 2017, 73, 373-378.	1.1	91
5	Outrunning free radicals in room-temperature macromolecular crystallography. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2012, 68, 810-818.	2.5	83
6	Determination of X-ray flux using silicon pin diodes. <i>Journal of Synchrotron Radiation</i> , 2009, 16, 143-151.	1.0	81
7	Exploiting fast detectors to enter a new dimension in room-temperature crystallography. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2014, 70, 1248-1256.	2.5	72
8	Fixed target combined with spectral mapping: approaching 100% hit rates for serial crystallography. <i>Acta Crystallographica Section D: Structural Biology</i> , 2016, 72, 944-955.	1.1	71
9	Dose-resolved serial synchrotron and XFEL structures of radiation-sensitive metalloproteins. <i>IUCr</i> , 2019, 6, 543-551.	1.0	65
10	Macromolecular microcrystallography. <i>Crystallography Reviews</i> , 2011, 17, 105-142.	0.4	55
11	A modular and compact portable mini-endstation for high-precision, high-speed fixed target serial crystallography at FEL and synchrotron sources. <i>Journal of Synchrotron Radiation</i> , 2015, 22, 1372-1378.	1.0	55
12	Where is crystallography going?. <i>Acta Crystallographica Section D: Structural Biology</i> , 2018, 74, 152-166.	1.1	54
13	Current advances in synchrotron radiation instrumentation for MX experiments. <i>Archives of Biochemistry and Biophysics</i> , 2016, 602, 21-31.	1.4	51
14	Crystallography on a chip “without the chip: sheet-on-sheet sandwich. <i>Acta Crystallographica Section D: Structural Biology</i> , 2018, 74, 1000-1007.	1.1	51
15	The design of macromolecular crystallography diffraction experiments. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2011, 67, 261-270.	2.5	40
16	The HARE chip for efficient time-resolved serial synchrotron crystallography. <i>Journal of Synchrotron Radiation</i> , 2020, 27, 360-370.	1.0	39
17	High-throughput structures of protein–ligand complexes at room temperature using serial femtosecond crystallography. <i>IUCr</i> , 2019, 6, 1074-1085.	1.0	36
18	Resolving polymorphs and radiation-driven effects in microcrystals using fixed-target serial synchrotron crystallography. <i>Acta Crystallographica Section D: Structural Biology</i> , 2019, 75, 151-159.	1.1	35

#	ARTICLE	IF	CITATIONS
19	An on-demand, drop-on-drop method for studying enzyme catalysis by serial crystallography. <i>Nature Communications</i> , 2021, 12, 4461.	5.8	34
20	Successful sample preparation for serial crystallography experiments. <i>Journal of Applied Crystallography</i> , 2019, 52, 1385-1396.	1.9	34
21	Enzyme catalysis captured using multiple structures from one crystal at varying temperatures. <i>IUCrJ</i> , 2018, 5, 283-292.	1.0	26
22	Polyhedra structures and the evolution of the insect viruses. <i>Journal of Structural Biology</i> , 2015, 192, 88-99.	1.3	25
23	Serial femtosecond and serial synchrotron crystallography can yield data of equivalent quality: A systematic comparison. <i>Science Advances</i> , 2021, 7, .	4.7	25
24	<i>xi</i> ² <i> multiplex</i> : a multi-crystal data-analysis pipeline. <i>Acta Crystallographica Section D: Structural Biology</i> , 2022, 78, 752-769.	1.1	25
25	Serial Femtosecond Zero Dose Crystallography Captures a Water-Free Distal Heme Site in a Dye-Decolorising Peroxidase to Reveal a Catalytic Role for an Arginine in Fe ^{IV} =O Formation. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 21656-21662.	7.2	24
26	X-ray free-electron laser studies reveal correlated motion during isopenicillin <i>N</i> synthase catalysis. <i>Science Advances</i> , 2021, 7, .	4.7	23
27	Dynamic adaptive X-ray optics. Part II. High-speed piezoelectric bimorph deformable Kirkpatrick-Baez mirrors for rapid variation of the 2D size and shape of X-ray beams. <i>Journal of Synchrotron Radiation</i> , 2019, 26, 45-51.	1.0	19
28	Direct measurement of X-ray-induced heating of microcrystals. <i>Journal of Synchrotron Radiation</i> , 2019, 26, 991-997.	1.0	19
29	Reducing sample consumption for serial crystallography using acoustic drop ejection. <i>Journal of Synchrotron Radiation</i> , 2019, 26, 1820-1825.	1.0	19
30	The structure-function relationship of oncogenic LMTK3. <i>Science Advances</i> , 2020, 6, .	4.7	18
31	Aspartate or arginine? Validated redox state X-ray structures elucidate mechanistic subtleties of Fe ^{IV} =O formation in bacterial dye-decolorizing peroxidases. <i>Journal of Biological Inorganic Chemistry</i> , 2021, 26, 743-761.	1.1	17
32	Anaerobic fixed-target serial crystallography. <i>IUCrJ</i> , 2020, 7, 901-912.	1.0	12
33	Serial synchrotron and XFEL crystallography for studies of metalloprotein catalysis. <i>Current Opinion in Structural Biology</i> , 2021, 71, 232-238.	2.6	11
34	Radiation damage and derivatization in macromolecular crystallography: a structure factor's perspective. <i>Acta Crystallographica Section D: Structural Biology</i> , 2016, 72, 388-394.	1.1	7
35	Experimental evidence for the benefits of higher X-ray energies for macromolecular crystallography. <i>IUCrJ</i> , 2021, 8, 896-904.	1.0	5
36	Serial Femtosecond Zero Dose Crystallography Captures a Water-Free Distal Heme Site in a Dye-Decolorising Peroxidase to Reveal a Catalytic Role for an Arginine in Fe ^{IV} =O Formation. <i>Angewandte Chemie</i> , 2020, 132, 21840-21846.	1.6	4

#	ARTICLE	IF	CITATIONS
37	Cloning, purification and structure determination of the HIV integrase-binding domain of lens epithelium-derived growth factor. Acta Crystallographica Section F, Structural Biology Communications, 2018, 74, 143-149.	0.4	3