Tamir Gonen

List of Publications by Year
in descending order

83 papers	8,183 citations	87723 38 h-index	66788 78 g-index
108 all docs	108 docs citations	108 times ranked	8606 citing authors

#	Article	IF	Citations
1	MicroED: conception, practice and future opportunities. IUCrJ, 2022, 9, 169-179.	1.0	10
2	Studying membrane proteins with MicroED. Biochemical Society Transactions, 2022, 50, 231-239.	1.6	5
3	Biocatalytic Carbene Transfer Using Diazirines. Journal of the American Chemical Society, 2022, 144, 8892-8896.	6.6	21
4	Ab initio phasing macromolecular structures using electron-counted MicroED data. Nature Methods, 2022, 19, 724-729.	9.0	29
5	Unlocking the potential of microcrystal electron diffraction. Physics Today, 2022, 75, 38-42.	0.3	0
6	MicroED in natural product and small molecule research. Natural Product Reports, 2021, 38, 423-431.	5.2	33
7	Protein and Small Molecule Structure Determination by the Cryo-EM Method MicroED. Methods in Molecular Biology, 2021, 2305, 323-342.	0.4	5
8	Microcrystal Electron Diffraction of Small Molecules. Journal of Visualized Experiments, 2021, , .	0.2	2
9	A conformational change in the N terminus of SLC38A9 signals mTORC1 activation. Structure, 2021, 29, 426-432.e8.	1.6	17
10	An Overview of Microcrystal Electron Diffraction (MicroED). Annual Review of Biochemistry, 2021, 90, 431-450.	5.0	14
11	MicroED structure of the human adenosine receptor determined from a single nanocrystal in LCP. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	36
12	Protocol for the use of focused ion-beam milling to prepare crystalline lamellae for microcrystal electron diffraction (MicroED). STAR Protocols, 2021, 2, 100686.	0.5	10
13	Ligand Incorporation into Protein Microcrystals for MicroED by On-Grid Soaking. Structure, 2021, 29, 88-95.e2.	1.6	16
14	Studying Membrane Protein Structures by MicroED. Methods in Molecular Biology, 2021, 2302, 137-151.	0.4	2
15	Microcrystal Electron Diffraction for Molecular Design of Functional Non-Fullerene Acceptor Structures. Chemistry of Materials, 2021, 33, 966-977.	3.2	12
16	Benchmarking the ideal sample thickness in cryo-EM. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	37
17	Structure Determination from Lipidic Cubic Phase Embedded Microcrystals by MicroED. Structure, 2020, 28, 1149-1159.e4.	1.6	21
18	MicroED structure of lipid-embedded mammalian mitochondrial voltage-dependent anion channel. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 32380-32385.	3.3	35

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19	Beyond protein structure determination with MicroED. Current Opinion in Structural Biology, 2020, 64, 51-58.	2.6	15
20	Experimental Phasing of MicroED Data Using Radiation Damage. Structure, 2020, 28, 458-464.e2.	1.6	18
21	Comparing serial X-ray crystallography and microcrystal electron diffraction (MicroED) as methods for routine structure determination from small macromolecular crystals. IUCrJ, 2020, 7, 306-323.	1.0	32
22	Fragment-based determination of a proteinase K structure from MicroED data using <i>ARCIMBOLDO_SHREDDER</i>. Acta Crystallographica Section D: Structural Biology, 2020, 76, 703-712.	1.1	12
23	Use of a scaffold peptide in the biosynthesis of amino acidâ€“derived natural products. Science, 2019, 365, 280-284.	6.0	108
24	Structure of amyloid-Î² (20-34) with Alzheimerâ€™s-associated isomerization at Asp23 reveals a distinct protofilament interface. Nature Communications, 2019, 10, 3357.	5.8	45
25	Qualitative Analyses of Polishing and Precoating FIB Milled Crystals for MicroED. Structure, 2019, 27, 1594-1600.e2.	1.6	33
26	Collection of Continuous Rotation MicroED Data from Ion Beam-Milled Crystals of Any Size. Structure, 2019, 27, 545-548.e2.	1.6	58
27	Structural basis for substrate binding and specificity of a sodiumâ€“alanine symporter AgcS. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 2086-2090.	3.3	14
28	The cryo-EM method microcrystal electron diffraction (MicroED). Nature Methods, 2019, 16, 369-379.	9.0	170
29	MicroED data collection with SerialEM. Ultramicroscopy, 2019, 201, 77-80.	0.8	50
30	MicroED with the Falcon III direct electron detector. IUCrJ, 2019, 6, 921-926.	1.0	52
31	Tailoring Tryptophan Synthase TrpB for Selective Quaternary Carbon Bond Formation. Journal of the American Chemical Society, 2019, 141, 19817-19822.	6.6	46
32	Microcrystal electron diffraction methodology and applications. MRS Bulletin, 2019, 44, 956-960.	1.7	2
33	Homochiral and racemic MicroED structures of a peptide repeat from the ice-nucleation protein InaZ. IUCrJ, 2019, 6, 197-205.	1.0	16
34	Structure-based inhibitors of amyloid beta core suggest a common interface with tau. ELife, 2019, 8, .	2.8	81
35	Molecular Mechanisms of Cueâ€Induced Translation Regulation. FASEB Journal, 2019, 33, .	0.2	0
36	Near-atomic cryo-EM imaging of a small protein displayed on a designed scaffolding system. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3362-3367.	3.3	82

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37	From electron crystallography of 2D crystals to MicroED of 3D crystals. Current Opinion in Colloid and Interface Science, 2018, 34, 9-16.	3.4	20
38	Atomic structures of low-complexity protein segments reveal kinked Î² sheets that assemble networks. Science, 2018, 359, 698-701.	6.0	376
39	Common fibrillar spines of amyloid-Î² and human islet amyloid polypeptide revealed by microelectron diffraction and structure-based inhibitors. Journal of Biological Chemistry, 2018, 293, 2888-2902.	1.6	50
40	Sub-Ã¥ngstrÃ¶m cryo-EM structure of a prion protofibril reveals a polar clasp. Nature Structural and Molecular Biology, 2018, 25, 131-134.	3.6	87
41	Analysis of Global and Site-Specific Radiation Damage in Cryo-EM. Structure, 2018, 26, 759-766.e4.	1.6	152
42	Atomic-level evidence for packing and positional amyloid polymorphism by segment from TDP-43 RRM2. Nature Structural and Molecular Biology, 2018, 25, 311-319.	3.6	89
43	MicroED structures of HIV-1 Gag CTD-SP1 reveal binding interactions with the maturation inhibitor bevirimat. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 13258-13263.	3.3	77
44	MicroED: a versatile cryoEM method for structure determination. Emerging Topics in Life Sciences, 2018, 2, 1-8.	1.1	22
45	The CryoEM Method MicroED as a Powerful Tool for Small Molecule Structure Determination. ACS Central Science, 2018, 4, 1587-1592.	5.3	307
46	MicroED structure of the NaK ion channel reveals a Na+ partition process into the selectivity filter. Communications Biology, 2018, 1, 38.	2.0	53
47	Crystal structure of arginine-bound lysosomal transporter SLC38A9 in the cytosol-open state. Nature Structural and Molecular Biology, 2018, 25, 522-527.	3.6	45
48	Chemotropic Receptor Deleted In Colorectal Cancer (DCC) Prevents Translation Initiation By Directly Inhibiting Ribosome Function. FASEB Journal, 2018, 32, 651.5.	0.2	0
49	Atomic-resolution structures from fragmented protein crystals with the cryoEM method MicroED. Nature Methods, 2017, 14, 399-402.	9.0	158
50	MicroED Structure of Au₁₄₆(p-MBA)₅₇ at Subatomic Resolution Reveals a Twinned FCC Cluster. Journal of Physical Chemistry Letters, 2017, 8, 5523-5530.	2.1	100
51	The Role of Disulfide Bond Replacements in Analogues of the Tarantula Toxin ProTx-II and Their Effects on Inhibition of the Voltage-Gated Sodium Ion Channel Na_v1.7. Journal of the American Chemical Society, 2017, 139, 13063-13075.	6.6	41
52	Taking the measure of MicroED. Current Opinion in Structural Biology, 2017, 46, 79-86.	2.6	35
53	Atomic resolution structure determination by the cryoâ€EM method MicroED. Protein Science, 2017, 26, 8-15.	3.1	22
54	Atomic structures of fibrillar segments of hIAPP suggest tightly mated Î²-sheets are important for cytotoxicity. ELife, 2017, 6, .	2.8	95

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55	The collection of MicroED data for macromolecular crystallography. Nature Protocols, 2016, 11, 895-904.	5.5	117
56	Modeling truncated pixel values of faint reflections in MicroED images. Journal of Applied Crystallography, 2016, 49, 1029-1034.	1.9	58
57	MicroED opens a new era for biological structure determination. Current Opinion in Structural Biology, 2016, 40, 128-135.	2.6	46
58	Ab initio structure determination from prion nanocrystals at atomic resolution by MicroED. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11232-11236.	3.3	95
59	Accurate design of megadalton-scale two-component icosahedral protein complexes. Science, 2016, 353, 389-394.	6.0	466
60	Data publication with the structural biology data grid supports live analysis. Nature Communications, 2016, 7, 10882.	5.8	113
61	MicroED data collection and processing. Acta Crystallographica Section A: Foundations and Advances, 2015, 71, 353-360.	0.0	115
62	Structure of a designed tetrahedral protein assembly variant engineered to have improved soluble expression. Protein Science, 2015, 24, 1695-1701.	3.1	30
63	Design of ordered two-dimensional arrays mediated by noncovalent protein-protein interfaces. Science, 2015, 348, 1365-1368.	6.0	219
64	Structure of the toxic core of Î±-synuclein from invisible crystals. Nature, 2015, 525, 486-490.	13.7	528
65	Structure of catalase determined by MicroED. ELife, 2014, 3, e03600.	2.8	115
66	High thermodynamic stability of parametrically designed helical bundles. Science, 2014, 346, 481-485.	6.0	264
67	Editorial overview: Membranes: Recent methods in the study of membrane protein structure. Current Opinion in Structural Biology, 2014, 27, iv-v.	2.6	1
68	Protein structure determination by MicroED. Current Opinion in Structural Biology, 2014, 27, 24-31.	2.6	46
69	Amphotericin forms an extramembranous and fungicidal sterol sponge. Nature Chemical Biology, 2014, 10, 400-406.	3.9	359
70	Accurate design of co-assembling multi-component protein nanomaterials. Nature, 2014, 510, 103-108.	13.7	504
71	High-resolution structure determination by continuous-rotation data collection in MicroED. Nature Methods, 2014, 11, 927-930.	9.0	340
72	A Type VI Secretion-Related Pathway in Bacteroidetes Mediates Interbacterial Antagonism. Cell Host and Microbe, 2014, 16, 227-236.	5.1	311

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73	A suite of software for processing MicroED data of extremely small protein crystals. Journal of Applied Crystallography, 2014, 47, 1140-1145.	1.9	16
74	Overview of Electron Crystallography of Membrane Proteins: Crystallization and Screening Strategies Using Negative Stain Electron Microscopy. Current Protocols in Protein Science, 2013, 72, Unit17.15.	2.8	25
75	The Collection of High-Resolution Electron Diffraction Data. Methods in Molecular Biology, 2013, 955, 153-169.	0.4	16
76	Three-dimensional electron crystallography of protein microcrystals. ELife, 2013, 2, e01345.	2.8	340
77	The influence of lipids on voltage-gated ion channels. Current Opinion in Structural Biology, 2012, 22, 529-536.	2.6	33
78	Fragment-Based Phase Extension for Three-Dimensional Structure Determination of Membrane Proteins by Electron Crystallography. Structure, 2011, 19, 976-987.	1.6	25
79	Lipidâ€"protein interactions in double-layered two-dimensional AQP0 crystals. Nature, 2005, 438, 633-638.	13.7	617
80	Aquaporin-0 membrane junctions reveal the structure of a closed water pore. Nature, 2004, 429, 193-197.	13.7	347
81	Aquaporin-0 Membrane Junctions Form Upon Proteolytic Cleavage. Journal of Molecular Biology, 2004, 342, 1337-1345.	2.0	119
82	Microcrystal Electron Diffraction for Molecular Design of Functional Non-Fullerene Acceptor Structures. , 0, , .		0
83	MicroED for the study of proteinâ€"ligand interactions and the potential for drug discovery. Nature Reviews Chemistry, 0, , .	13.8	8