Brent L Nannenga

List of Publications by Year
in descending order

41 papers	2,675 citations	430874 18 h-index	302126 39 g-index
48 all docs	48 docs citations	48 times ranked	2953 citing authors

#	Article	IF	Citations
1	Structure of the toxic core of Î±-synuclein from invisible crystals. Nature, 2015, 525, 486-490.	27.8	528
2	High-resolution structure determination by continuous-rotation data collection in MicroED. Nature Methods, 2014, 11, 927-930.	19.0	340
3	Three-dimensional electron crystallography of protein microcrystals. ELife, 2013, 2, e01345.	6.0	340
4	High thermodynamic stability of parametrically designed helical bundles. Science, 2014, 346, 481-485.	12.6	264
5	The cryo-EM method microcrystal electron diffraction (MicroED). Nature Methods, 2019, 16, 369-379.	19.0	170
6	The collection of MicroED data for macromolecular crystallography. Nature Protocols, 2016, 11, 895-904.	12.0	117
7	Structure of catalase determined by MicroED. ELife, 2014, 3, e03600.	6.0	115
8	MicroED data collection and processing. Acta Crystallographica Section A: Foundations and Advances, 2015, 71, 353-360.	0.1	115
9	Atomic structures of fibrillar segments of hIAPP suggest tightly mated Î²-sheets are important for cytotoxicity. ELife, 2017, 6, .	6.0	95
10	EKylation: Addition of an Alternating-Charge Peptide Stabilizes Proteins. Biomacromolecules, 2015, 16, 3357-3361.	5.4	51
11	Conformational Targeting of Fibrillar Polyglutamine Proteins in Live Cells Escalates Aggregation and Cytotoxicity. PLoS ONE, 2009, 4, e5727.	2.5	51
12	Reprogramming chaperone pathways to improve membrane protein expression in Escherichia coli. Protein Science, 2011, 20, 1411-1420.	7.6	47
13	Protein structure determination by MicroED. Current Opinion in Structural Biology, 2014, 27, 24-31.	5.7	46
14	MicroED opens a new era for biological structure determination. Current Opinion in Structural Biology, 2016, 40, 128-135.	5.7	46
15	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, .	7.1	36
16	MicroED methodology and development. Structural Dynamics, 2020, 7, 014304.	2.3	34
17	Crystal structure and orientation of organic semiconductor thin films by microcrystal electron diffraction and grazing-incidence wide-angle X-ray scattering. Chemical Communications, 2020, 56, 4204-4207.	4.1	27
18	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

#	Article	IF	Citations
19	MicroED: a versatile cryoEM method for structure determination. Emerging Topics in Life Sciences, 2018, 2, 1-8.	2.6	22
20	Structure Determination from Lipidic Cubic Phase Embedded Microcrystals by MicroED. Structure, 2020, 28, 1149-1159.e4.	3.3	21
21	The complementarity of serial femtosecond crystallography and MicroED for structure determination from microcrystals. Current Opinion in Structural Biology, 2019, 58, 286-293.	5.7	18
22	Beam-sensitive metal-organic framework structure determination by microcrystal electron diffraction. Ultramicroscopy, 2020, 216, 113048.	1.9	18
23	Enhanced expression of membrane proteins in E. coli with a PBAD promoter mutant: synergies with chaperone pathway engineering strategies. Microbial Cell Factories, 2011, 10, 105.	4.0	16
24	The Evolution and the Advantages of MicroED. Frontiers in Molecular Biosciences, 2018, 5, 114.	3.5	15
25	Efficient Free Triplet Generation Follows Singlet Fission in Diketopyrrolopyrrole Polymorphs with Goldilocks Coupling. Journal of Physical Chemistry C, 2021, 125, 12207-12213.	3.1	14
26	Enhancing the secretory yields of leech carboxypeptidase inhibitor in Escherichia coli: Influence of trigger factor and signal recognition particle. Protein Expression and Purification, 2010, 74, 122-128.	1.3	13
27	Antiâ€oligomeric single chain variable domain antibody differentially affects huntingtin and Î±â€synuclein aggregates. FEBS Letters, 2008, 582, 517-522.	2.8	12
28	A story of thrift unfolds. Nature Chemical Biology, 2010, 6, 880-881.	8.0	10
29	Recent Developments Toward Integrated Metabolomics Technologies (UHPLC-MS-SPE-NMR and) Tj ETQq1 1 0.784314 rgBT /Overloc Biosciences, 2021, 8, 720955.	3.5	9
30	MicroED for the study of proteinâ€“ligand interactions and the potential for drug discovery. Nature Reviews Chemistry, 0, , .	30.2	8
31	MicroED Sample Preparation and Data Collection For Protein Crystals. Methods in Molecular Biology, 2021, 2215, 287-297.	0.9	7
32	Folding Engineering Strategies for Efficient Membrane Protein Production in E. coli. Methods in Molecular Biology, 2012, 899, 187-202.	0.9	6
33	Rapid Structural Analysis of a Synthetic Non-canonical Amino Acid by Microcrystal Electron Diffraction. Frontiers in Molecular Biosciences, 2020, 7, 609999.	3.5	6
34	Proteinâ€facilitated gold nanoparticle formation as indicators of ionizing radiation. Biotechnology and Bioengineering, 2019, 116, 3160-3167.	3.3	5
35	Electrophoretic exclusion microscale sample preparation for cryo-EM structural determination of proteins. Biomicrofluidics, 2019, 13, 054112.	2.4	5
36	Structural insights into the function of the catalytically active human Taspase1. Structure, 2021, 29, 873-885.e5.	3.3	4

#	Article	IF	Citations
37	Proteinâ€“Nanoparticle Complex Structure Determination by Cryo-Electron Microscopy. ACS Applied Bio Materials, 2022, 5, 4696-4700.	4.6	3
38	Microcrystal electron diffraction methodology and applications. MRS Bulletin, 2019, 44, 956-960.	3.5	2
39	Heterologous expression and purification of the bicarbonate transporter BicA from Synechocystis sp. PCC 6803. Protein Expression and Purification, 2020, 175, 105716.	1.3	1
40	Structureâ€guided identification of a peptide for bioâ€enabled gold nanoparticle synthesis. Biotechnology and Bioengineering, 2021, 118, 4867-4873.	3.3	1
41	Tetragonal crystal form of the cyanobacterial bicarbonate-transporter regulator SbtB from Synechocystis sp. PCC 6803. Acta Crystallographica Section F, Structural Biology Communications, 2020, 76, 438-443.	0.8	0