

# Joachim Frank

## List of Publications by Citations

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149  
papers

13,698  
citations

57  
h-index

117  
g-index

170  
ext. papers

15,385  
ext. citations

10.3  
avg, IF

6.71  
L-index

#	Paper	IF	Citations
149	SPIDER and WEB: processing and visualization of images in 3D electron microscopy and related fields. <i>Journal of Structural Biology</i> , <b>1996</b> , 116, 190-9	3.4	1867
148	A ratchet-like inter-subunit reorganization of the ribosome during translocation. <i>Nature</i> , <b>2000</b> , 406, 318-24	32.4	693
147	Flexible fitting of atomic structures into electron microscopy maps using molecular dynamics. <i>Structure</i> , <b>2008</b> , 16, 673-83	5.2	678
146	Locking and unlocking of ribosomal motions. <i>Cell</i> , <b>2003</b> , 114, 123-34	56.2	529
145	Hepatitis C virus IRES RNA-induced changes in the conformation of the 40s ribosomal subunit. <i>Science</i> , <b>2001</b> , 291, 1959-62	33.3	433
144	SPIDER image processing for single-particle reconstruction of biological macromolecules from electron micrographs. <i>Nature Protocols</i> , <b>2008</b> , 3, 1941-74	18.8	371
143	Three-Dimensional Electron Microscopy of Macromolecular Assemblies <b>2006</b> ,		369
142	Disentangling conformational states of macromolecules in 3D-EM through likelihood optimization. <i>Nature Methods</i> , <b>2007</b> , 4, 27-9	21.6	333
141	Domain movements of elongation factor eEF2 and the eukaryotic 80S ribosome facilitate tRNA translocation. <i>EMBO Journal</i> , <b>2004</b> , 23, 1008-19	13	333
140	Dynamic reorganization of the functionally active ribosome explored by normal mode analysis and cryo-electron microscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 9319-23	11.5	299
139	Incorporation of aminoacyl-tRNA into the ribosome as seen by cryo-electron microscopy. <i>Nature Structural and Molecular Biology</i> , <b>2003</b> , 10, 899-906	17.6	296
138	Structure of a mammalian ryanodine receptor. <i>Nature</i> , <b>2015</b> , 517, 44-9	50.4	276
137	Spider <sup>3</sup> modular software system for electron image processing. <i>Ultramicroscopy</i> , <b>1981</b> , 6, 343-357	3.1	262
136	EF-G-dependent GTP hydrolysis induces translocation accompanied by large conformational changes in the 70S ribosome. <i>Nature Structural Biology</i> , <b>1999</b> , 6, 643-7		260
135	Single-particle imaging of macromolecules by cryo-electron microscopy. <i>Annual Review of Biophysics and Biomolecular Structure</i> , <b>2002</b> , 31, 303-19		258
134	Cryo-EM reveals an active role for aminoacyl-tRNA in the accommodation process. <i>EMBO Journal</i> , <b>2002</b> , 21, 3557-67	13	248
133	Regulation of eukaryotic translation by the RACK1 protein: a platform for signalling molecules on the ribosome. <i>EMBO Reports</i> , <b>2004</b> , 5, 1137-41	6.5	217

132	Structural Basis for Gating and Activation of RyR1. <i>Cell</i> , <b>2016</b> , 167, 145-157.e17	56.2	204
131	Visualization of the hybrid state of tRNA binding promoted by spontaneous ratcheting of the ribosome. <i>Molecular Cell</i> , <b>2008</b> , 32, 190-7	17.6	203
130	Ribosome-induced changes in elongation factor Tu conformation control GTP hydrolysis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2009</b> , 106, 1063-8	11.5	199
129	Structure and dynamics of a processive Brownian motor: the translating ribosome. <i>Annual Review of Biochemistry</i> , <b>2010</b> , 79, 381-412	29.1	197
128	The process of mRNA-tRNA translocation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 19671-8	11.5	178
127	Preparation of macromolecular complexes for cryo-electron microscopy. <i>Nature Protocols</i> , <b>2007</b> , 2, 3239-48	14.8	165
126	Trajectories of the ribosome as a Brownian nanomachine. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 17492-7	11.5	160
125	SPIDER <sup>Å</sup> modular software system for electron image processing. <i>Ultramicroscopy</i> , <b>1981</b> , 6, 343-357	3.1	147
124	Visualization of tRNA movements on the Escherichia coli 70S ribosome during the elongation cycle. <i>Journal of Cell Biology</i> , <b>2000</b> , 150, 447-60	7.3	146
123	Structures of modified eEF2 80S ribosome complexes reveal the role of GTP hydrolysis in translocation. <i>EMBO Journal</i> , <b>2007</b> , 26, 2421-31	13	145
122	Structure of mammalian eIF3 in the context of the 43S preinitiation complex. <i>Nature</i> , <b>2015</b> , 525, 491-5	50.4	142
121	A method of focused classification, based on the bootstrap 3D variance analysis, and its application to EF-G-dependent translocation. <i>Journal of Structural Biology</i> , <b>2006</b> , 154, 184-94	3.4	136
120	Hepatitis-C-virus-like internal ribosome entry sites displace eIF3 to gain access to the 40S subunit. <i>Nature</i> , <b>2013</b> , 503, 539-43	50.4	133
119	Averaging of low exposure electron micrographs of non-periodic objects. <i>Ultramicroscopy</i> , <b>1975</b> , 1, 159-62	3.1	131
118	Comprehensive molecular structure of the eukaryotic ribosome. <i>Structure</i> , <b>2009</b> , 17, 1591-1604	5.2	130
117	Channel opening and gating mechanism in AMPA-subtype glutamate receptors. <i>Nature</i> , <b>2017</b> , 549, 60-65	50.4	125
116	Continuous changes in structure mapped by manifold embedding of single-particle data in cryo-EM. <i>Methods</i> , <b>2016</b> , 100, 61-7	4.6	114
115	Estimation of variance in single-particle reconstruction using the bootstrap technique. <i>Journal of Structural Biology</i> , <b>2006</b> , 154, 168-83	3.4	107

114	Single-particle reconstruction of biological macromolecules in electron microscopy--30 years. <i>Quarterly Reviews of Biophysics</i> , <b>2009</b> , 42, 139-58	7	105
113	High-resolution cryo-electron microscopy structure of the Trypanosoma brucei ribosome. <i>Nature</i> , <b>2013</b> , 494, 385-9	50.4	102
112	Advances in the field of single-particle cryo-electron microscopy over the last decade. <i>Nature Protocols</i> , <b>2017</b> , 12, 209-212	18.8	96
111	A model of the translational apparatus based on a three-dimensional reconstruction of the Escherichia coli ribosome. <i>Biochemistry and Cell Biology</i> , <b>1995</b> , 73, 757-65	3.6	96
110	Elongation in translation as a dynamic interaction among the ribosome, tRNA, and elongation factors EF-G and EF-Tu. <i>Quarterly Reviews of Biophysics</i> , <b>2009</b> , 42, 159-200	7	92
109	Elucidation of AMPA receptor-stargazin complexes by cryo-electron microscopy. <i>Science</i> , <b>2016</b> , 353, 83-633.3	33.3	89
108	The role of tRNA as a molecular spring in decoding, accommodation, and peptidyl transfer. <i>FEBS Letters</i> , <b>2005</b> , 579, 959-62	3.8	82
107	Three-dimensional imaging of biological complexity. <i>Journal of Structural Biology</i> , <b>2002</b> , 138, 85-91	3.4	82
106	Structure and activity of lipid bilayer within a membrane-protein transporter. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 12985-12990	11.5	80
105	Structural characterization of mRNA-tRNA translocation intermediates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 6094-9	11.5	79
104	A Fast and Effective Microfluidic Spraying-Plunging Method for High-Resolution Single-Particle Cryo-EM. <i>Structure</i> , <b>2017</b> , 25, 663-670.e3	5.2	77
103	The ABC-F protein EttA gates ribosome entry into the translation elongation cycle. <i>Nature Structural and Molecular Biology</i> , <b>2014</b> , 21, 143-51	17.6	77
102	Structure of the STRA6 receptor for retinol uptake. <i>Science</i> , <b>2016</b> , 353,	33.3	73
101	Dynamics of EF-G interaction with the ribosome explored by classification of a heterogeneous cryo-EM dataset. <i>Journal of Structural Biology</i> , <b>2004</b> , 147, 283-90	3.4	73
100	Time-resolved cryo-electron microscopy: Recent progress. <i>Journal of Structural Biology</i> , <b>2017</b> , 200, 303-306	306	68
99	Ryanodine Receptor Structure and Function in Health and Disease. <i>Sub-Cellular Biochemistry</i> , <b>2018</b> , 87, 329-352	5.5	65
98	Domain motions of EF-G bound to the 70S ribosome: insights from a hand-shaking between multi-resolution structures. <i>Biophysical Journal</i> , <b>2000</b> , 79, 1670-8	2.9	64
97	Determination of signal-to-noise ratios and spectral SNRs in cryo-EM low-dose imaging of molecules. <i>Journal of Structural Biology</i> , <b>2009</b> , 166, 126-32	3.4	63

96	A glycan gate controls opening of the SARS-CoV-2 spike protein. <i>Nature Chemistry</i> , <b>2021</b> , 13, 963-968	17.6	63
95	Integrity of the P-site is probed during maturation of the 60S ribosomal subunit. <i>Journal of Cell Biology</i> , <b>2012</b> , 197, 747-59	7.3	62
94	EttA regulates translation by binding the ribosomal E site and restricting ribosome-tRNA dynamics. <i>Nature Structural and Molecular Biology</i> , <b>2014</b> , 21, 152-9	17.6	61
93	Structural dynamics of ribosome subunit association studied by mixing-spraying time-resolved cryogenic electron microscopy. <i>Structure</i> , <b>2015</b> , 23, 1097-105	5.2	60
92	Structural Bases of Desensitization in AMPA Receptor-Auxiliary Subunit Complexes. <i>Neuron</i> , <b>2017</b> , 94, 569-580.e5	13.9	56
91	Characterization of the nuclear export adaptor protein Nmd3 in association with the 60S ribosomal subunit. <i>Journal of Cell Biology</i> , <b>2010</b> , 189, 1079-86	7.3	54
90	Key Intermediates in Ribosome Recycling Visualized by Time-Resolved Cryoelectron Microscopy. <i>Structure</i> , <b>2016</b> , 24, 2092-2101	5.2	52
89	The ribosome and the mechanism of protein synthesis. <i>Reports on Progress in Physics</i> , <b>2006</b> , 69, 1383-1417	17.4	51
88	Electron microscopy of functional ribosome complexes. <i>Biopolymers</i> , <b>2003</b> , 68, 223-33	2.2	51
87	The structure of the 80S ribosome from <i>Trypanosoma cruzi</i> reveals unique rRNA components. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 10206-11	11.5	51
86	Late steps in bacterial translation initiation visualized using time-resolved cryo-EM. <i>Nature</i> , <b>2019</b> , 570, 400-404	50.4	48
85	Structure and assembly model for the <i>Trypanosoma cruzi</i> 60S ribosomal subunit. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 12174-12179	11.5	48
84	Structural insights into cognate versus near-cognate discrimination during decoding. <i>EMBO Journal</i> , <b>2011</b> , 30, 1497-507	13	47
83	Nmd3 is a structural mimic of eIF5A, and activates the cpGTPase Lsg1 during 60S ribosome biogenesis. <i>EMBO Journal</i> , <b>2017</b> , 36, 854-868	13	46
82	Recognition of aminoacyl-tRNA: a common molecular mechanism revealed by cryo-EM. <i>EMBO Journal</i> , <b>2008</b> , 27, 3322-31	13	44
81	Dynamics of the base of ribosomal A-site finger revealed by molecular dynamics simulations and Cryo-EM. <i>Nucleic Acids Research</i> , <b>2010</b> , 38, 1325-40	20.1	43
80	Activation of GTP hydrolysis in mRNA-tRNA translocation by elongation factor G. <i>Science Advances</i> , <b>2015</b> , 1,	14.3	40
79	Dynamical features of the <i>Plasmodium falciparum</i> ribosome during translation. <i>Nucleic Acids Research</i> , <b>2015</b> , 43, 10515-24	20.1	38

78	Cryo-electron microscopy as an investigative tool: the ribosome as an example. <i>BioEssays</i> , <b>2001</b> , 23, 725-727	3.2	37
77	Automated particle picking for low-contrast macromolecules in cryo-electron microscopy. <i>Journal of Structural Biology</i> , <b>2014</b> , 186, 1-7	3.4	36
76	Three-Dimensional Analysis of Mitochondrial Crista Ultrastructure in a Patient with Leigh Syndrome by In Situ Cryoelectron Tomography. <i>iScience</i> , <b>2018</b> , 6, 83-91	6.1	36
75	Molecular dynamics of EF-G during translocation. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2011</b> , 79, 1478-86	4.2	33
74	A twisted tRNA intermediate sets the threshold for decoding. <i>Rna</i> , <b>2003</b> , 9, 384-5	5.8	33
73	Retrieving functional pathways of biomolecules from single-particle snapshots. <i>Nature Communications</i> , <b>2020</b> , 11, 4734	17.4	33
72	Structure of human GABA receptor in an inactive state. <i>Nature</i> , <b>2020</b> , 584, 304-309	50.4	32
71	Cryoelectron microscopy structures of the ribosome complex in intermediate states during tRNA translocation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 4817-21	11.5	32
70	Generalized single-particle cryo-EM--a historical perspective. <i>Microscopy (Oxford, England)</i> , <b>2016</b> , 65, 3-8	1.3	31
69	Two promising future developments of cryo-EM: capturing short-lived states and mapping a continuum of states of a macromolecule. <i>Microscopy (Oxford, England)</i> , <b>2016</b> , 65, 69-79	1.3	30
68	CTF Challenge: Result summary. <i>Journal of Structural Biology</i> , <b>2015</b> , 190, 348-59	3.4	29
67	Toward an understanding of the structural basis of translation. <i>Genome Biology</i> , <b>2003</b> , 4, 237	18.3	28
66	Intermediate states during mRNA-tRNA translocation. <i>Current Opinion in Structural Biology</i> , <b>2012</b> , 22, 778-85	8.1	26
65	The structural basis for release-factor activation during translation termination revealed by time-resolved cryogenic electron microscopy. <i>Nature Communications</i> , <b>2019</b> , 10, 2579	17.4	25
64	Efficient estimation of three-dimensional covariance and its application in the analysis of heterogeneous samples in cryo-electron microscopy. <i>Structure</i> , <b>2015</b> , 23, 1129-37	5.2	24
63	Time-Resolved Cryo-electron Microscopy Using a Microfluidic Chip. <i>Methods in Molecular Biology</i> , <b>2018</b> , 1764, 59-71	1.4	24
62	New Insights into Ribosome Structure and Function. <i>Cold Spring Harbor Perspectives in Biology</i> , <b>2019</b> , 11,	10.2	24
61	Single-Particle Reconstruction of Biological Molecules-Story in a Sample (Nobel Lecture). <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 10826-10841	16.4	24

60	Determination of the ribosome structure to a resolution of 2.5 Å by single-particle cryo-EM. <i>Protein Science</i> , <b>2017</b> , 26, 82-92	6.3	23
59	Mechanism of ligand activation of a eukaryotic cyclic nucleotide-gated channel. <i>Nature Structural and Molecular Biology</i> , <b>2020</b> , 27, 625-634	17.6	22
58	New Opportunities Created by Single-Particle Cryo-EM: The Mapping of Conformational Space. <i>Biochemistry</i> , <b>2018</b> , 57, 888	3.2	21
57	Ribosome-associated vesicles: A dynamic subcompartment of the endoplasmic reticulum in secretory cells. <i>Science Advances</i> , <b>2020</b> , 6, eaay9572	14.3	20
56	Cryo-EM shows stages of initial codon selection on the ribosome by aa-tRNA in ternary complex with GTP and the GTPase-deficient EF-TuH84A. <i>Nucleic Acids Research</i> , <b>2018</b> , 46, 5861-5874	20.1	18
55	Story in a sample-the potential (and limitations) of cryo-electron microscopy applied to molecular machines. <i>Biopolymers</i> , <b>2013</b> , 99, 832-6	2.2	18
54	The translation elongation cycle-capturing multiple states by cryo-electron microscopy. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2017</b> , 372,	5.8	17
53	Escherichia coli NusG Links the Lead Ribosome with the Transcription Elongation Complex. <i>iScience</i> , <b>2020</b> , 23, 101352	6.1	17
52	Identification of ions in experimental electrostatic potential maps. <i>IUCrJ</i> , <b>2018</b> , 5, 375-381	4.7	14
51	Propagation of Conformational Coordinates Across Angular Space in Mapping the Continuum of States from Cryo-EM Data by Manifold Embedding. <i>Journal of Chemical Information and Modeling</i> , <b>2020</b> , 60, 2484-2491	6.1	13
50	Whither Ribosome Structure and Dynamics Research? (A Perspective). <i>Journal of Molecular Biology</i> , <b>2016</b> , 428, 3565-9	6.5	10
49	Quantitative Connection between Ensemble Thermodynamics and Single-Molecule Kinetics: A Case Study Using Cryogenic Electron Microscopy and Single-Molecule Fluorescence Resonance Energy Transfer Investigations of the Ribosome. <i>Journal of Physical Chemistry B</i> , <b>2015</b> , 119, 10888-10901	3.4	9
48	The mechanism of translation. <i>F1000Research</i> , <b>2017</b> , 6, 198	3.6	9
47	Quantitative Characterization of Domain Motions in Molecular Machines. <i>Journal of Physical Chemistry B</i> , <b>2017</b> , 121, 3747-3756	3.4	8
46	Particle migration analysis in iterative classification of cryo-EM single-particle data. <i>Journal of Structural Biology</i> , <b>2014</b> , 188, 267-73	3.4	8
45	The Ribosome Comes Alive. <i>Israel Journal of Chemistry</i> , <b>2010</b> , 50, 95-98	3.4	8
44	Estimation of variance distribution in three-dimensional reconstruction. II. Applications. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , <b>1995</b> , 12, 2628-35	1.8	8
43	The Israeli acute paralysis virus IRES captures host ribosomes by mimicking a ribosomal state with hybrid tRNAs. <i>EMBO Journal</i> , <b>2019</b> , 38, e102226	13	8

42	Symmetric activation and modulation of the human calcium-sensing receptor.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	7
41	The Ribosome as a Brownian Ratchet Machine158-190		6
40	Studies of Elongation Factor G-Dependent tRNA Translocation by Three-Dimensional Cryo-Electron Microscopy53-62		
39	POLARIS: Path of Least Action Analysis on Energy Landscapes. <i>Journal of Chemical Information and Modeling</i> , <b>2020</b> , 60, 2581-2590	6.1	4
38	Visualization of Molecular Machines by Cryo-Electron Microscopy20-37		4
37	Simulation of cryo-EM ensembles from atomic models of molecules exhibiting continuous conformations		4
36	Time-resolved imaging of macromolecular processes and interactions. <i>Journal of Structural Biology</i> , <b>2004</b> , 147, 209-10	3.4	3
35	A Time-Resolved Cryo-EM Study of <i>Saccharomyces cerevisiae</i> 80S Ribosome Protein Composition in Response to a Change in Carbon Source. <i>Proteomics</i> , <b>2021</b> , 21, e2000125	4.8	3
34	Geometric machine learning informed by ground truth: Recovery of conformational continuum from single-particle cryo-EM data of biomolecules		2
33	"Just in Time": The Role of Cryo-Electron Microscopy in Combating Recent Pandemics. <i>Biochemistry</i> , <b>2021</b> , 60, 3449-3451	3.2	2
32	Studying Kinetics by Counting Particles in Time-Resolved Cryo-EM. <i>Microscopy and Microanalysis</i> , <b>2019</b> , 25, 2-3	0.5	1
31	Contributions of single-particle cryoelectron microscopy toward fighting COVID-19. <i>Trends in Biochemical Sciences</i> , <b>2021</b> ,	10.3	1
30	Interaction Networks of Ribosomal Expansion Segments in Kinetoplastids. <i>Sub-Cellular Biochemistry</i> , <b>2021</b> , 96, 433-450	5.5	1
29	Identification of changing ribosome protein compositions using cryo-EM and mass spectrometry		1
28	Critical Role for <i>Saccharomyces cerevisiae</i> Asc1p in Translational Initiation at Elevated Temperatures. <i>Proteomics</i> , <b>2018</b> , 18, e1800208	4.8	1
27	Channel opening and gating mechanism in AMPA-subtype glutamate receptors. <i>journal of hand surgery Asian-Pacific volume, The</i> , <b>2018</b> , 542-558	0.5	0
26	Trajectories of the ribosome as a Brownian nanomachine. <i>journal of hand surgery Asian-Pacific volume, The</i> , <b>2018</b> , 463-475	0.5	0
25	Recovery of Conformational Continuum from Single-particle Cryo-EM Images: Optimization of ManifoldEM Informed by Ground Truth. <i>IEEE Transactions on Computational Imaging</i> , <b>2022</b> , 1-1	4.5	0



24	Key Intermediates in Ribosome Recycling Visualized by Time-Resolved Cryoelectron Microscopy. <i>journal of hand surgery Asian-Pacific volume, The, 2018, 516-525</i>	0.5
23	A cold look at transcription. <i>Structure, 2002, 10, 1156-7</i>	5.2
22	The process of mRNA-tRNA translocation. <i>journal of hand surgery Asian-Pacific volume, The, 2018, 405-412</i>	0.5
21	Structure of the 80S Ribosome from <i>Saccharomyces cerevisiae</i> -tRNA-Ribosome and Subunit-Subunit Interactions. <i>journal of hand surgery Asian-Pacific volume, The, 2018, 286-299</i>	0.5
20	The structure of the 80S ribosome from <i>Trypanosoma cruzi</i> reveals unique rRNA components. <i>journal of hand surgery Asian-Pacific volume, The, 2018, 383-388</i>	0.5
19	Structure and assembly model for the <i>Trypanosoma cruzi</i> 60S ribosomal subunit. <i>journal of hand surgery Asian-Pacific volume, The, 2018, 526-531</i>	0.5
18	Architecture of the Protein-Conducting Channel Associated with the Translating 80S Ribosome. <i>journal of hand surgery Asian-Pacific volume, The, 2018, 274-285</i>	0.5
17	Exploration of parameters in cryo-EM leading to an improved density map of the <i>E. coli</i> ribosome. <i>journal of hand surgery Asian-Pacific volume, The, 2018, 424-432</i>	0.5
16	Flexible Fitting of Atomic Structures into Electron Microscopy Maps Using Molecular Dynamics. <i>journal of hand surgery Asian-Pacific volume, The, 2018, 433-443</i>	0.5
15	Quantitative Connection between Ensemble Thermodynamics and Single-Molecule Kinetics: A Case Study Using Cryogenic Electron Microscopy and Single-Molecule Fluorescence Resonance Energy Transfer Investigations of the Ribosome. <i>journal of hand surgery Asian-Pacific volume, The, 2018, 476-489</i>	0.5
14	Incorporation of aminoacyl-tRNA into the ribosome as seen by cryo-electron microscopy. <i>journal of hand surgery Asian-Pacific volume, The, 2018, 339-346</i>	0.5
13	A twisted tRNA intermediate sets the threshold for decoding. <i>journal of hand surgery Asian-Pacific volume, The, 2018, 359-360</i>	0.5
12	Structural characterization of mRNA-tRNA translocation intermediates. <i>journal of hand surgery Asian-Pacific volume, The, 2018, 450-455</i>	0.5
11	Quantitative Characterization of Domain Motions in Molecular Machines. <i>journal of hand surgery Asian-Pacific volume, The, 2018, 532-541</i>	0.5
10	Domain movements of elongation factor eEF2 and the eukaryotic 80S ribosome facilitate tRNA translocation. <i>journal of hand surgery Asian-Pacific volume, The, 2018, 361-372</i>	0.5
9	The Cryo-EM Structure of a Translation Initiation Complex from <i>Escherichia coli</i> . <i>journal of hand surgery Asian-Pacific volume, The, 2018, 373-382</i>	0.5
8	Disentangling conformational states of macromolecules in 3D-EM through likelihood optimization. <i>journal of hand surgery Asian-Pacific volume, The, 2018, 413-415</i>	0.5
7	Structural Basis for Gating and Activation of RyR1. <i>journal of hand surgery Asian-Pacific volume, The, 2018, 497-515</i>	0.5

6	High-resolution cryo-electron microscopy structure of the Trypanosoma brucei ribosome. <i>Journal of hand surgery Asian-Pacific volume, The</i> , <b>2018</b> , 456-462	0.5
5	Activation of GTP hydrolysis in mRNA-tRNA translocation by elongation factor G. <i>Journal of hand surgery Asian-Pacific volume, The</i> , <b>2018</b> , 490-496	0.5
4	Locking and Unlocking of Ribosomal Motions. <i>Journal of hand surgery Asian-Pacific volume, The</i> , <b>2018</b> , 347-358	0.5
3	Einzelpartikel-Rekonstruktion biologischer Moleküle – Geschichte in einer Probe (Nobel-Aufsatz). <i>Angewandte Chemie</i> , <b>2018</b> , 130, 10990-11006	3.6
2	Alexander Spirin – Vision of the Ribosome as a Thermal Ratchet Machine. <i>Biochemistry (Moscow)</i> , <b>2021</b> , 86, 910-912	2.9
1	What is in the black box? - A perspective on software in cryoelectron microscopy. <i>Biophysical Journal</i> , <b>2021</b> , 120, 4307-4311	2.9