

Imre Berger

List of Publications by Year in descending order

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112
papers

6,181
citations

81743

39
h-index

82410

72
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134
all docs

134
docs citations

134
times ranked

7875
citing authors

#	ARTICLE	IF	CITATIONS
1	Baculovirus expression system for heterologous multiprotein complexes. <i>Nature Biotechnology</i> , 2004, 22, 1583-1587.	9.4	427
2	Structural insight into cap-snatching and RNA synthesis by influenza polymerase. <i>Nature</i> , 2014, 516, 361-366.	13.7	376
3	Free fatty acid binding pocket in the locked structure of SARS-CoV-2 spike protein. <i>Science</i> , 2020, 370, 725-730.	6.0	348
4	Protein complex expression by using multigene baculoviral vectors. <i>Nature Methods</i> , 2006, 3, 1021-1032.	9.0	330
5	Retriever is a multiprotein complex for retromer-independent endosomal cargo recycling. <i>Nature Cell Biology</i> , 2017, 19, 1214-1225.	4.6	243
6	MultiBac: expanding the research toolbox for multiprotein complexes. <i>Trends in Biochemical Sciences</i> , 2012, 37, 49-57.	3.7	201
7	New baculovirus expression tools for recombinant protein complex production. <i>Journal of Structural Biology</i> , 2010, 172, 45-54.	1.3	182
8	Nanosecond Molecular Dynamics Simulations of Parallel and Antiparallel Guanine Quadruplex DNA Molecules. <i>Journal of the American Chemical Society</i> , 1999, 121, 5519-5534.	6.6	162
9	The architecture of human general transcription factor TFIID core complex. <i>Nature</i> , 2013, 493, 699-702.	13.7	142
10	MultiBac: Multigene Baculovirus-Based Eukaryotic Protein Complex Production. <i>Current Protocols in Protein Science</i> , 2008, 51, Unit 5.20.	2.8	130
11	Formation Pathways of a Guanine-Quadruplex DNA Revealed by Molecular Dynamics and Thermodynamic Analysis of the Substates. <i>Biophysical Journal</i> , 2003, 85, 1787-1804.	0.2	128
12	Structure of the E. coli signal recognition particle bound to a translating ribosome. <i>Nature</i> , 2006, 444, 503-506.	13.7	126
13	Membrane protein insertion and proton-motive-force-dependent secretion through the bacterial holo-translocon SecYEG- σ^{54} -YajC-YidC. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 4844-4849.	3.3	124
14	Membrane association of myotubularin-related protein 2 is mediated by a pleckstrin homology-GRAM domain and a coiled-coil dimerization module. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 12177-12182.	3.3	113
15	Architecture of the Mediator head module. <i>Nature</i> , 2011, 475, 240-243.	13.7	104
16	Automated unrestricted multigene recombineering for multiprotein complex production. <i>Nature Methods</i> , 2009, 6, 447-450.	9.0	98
17	The SARS-CoV-2 Spike protein disrupts human cardiac pericytes function through CD147 receptor-mediated signalling: a potential non-infective mechanism of COVID-19 microvascular disease. <i>Clinical Science</i> , 2021, 135, 2667-2689.	1.8	97
18	Structural Dynamics and Cation Interactions of DNA Quadruplex Molecules Containing Mixed Guanine/Cytosine Quartets Revealed by Large-Scale MD Simulations. <i>Journal of the American Chemical Society</i> , 2001, 123, 3295-3307.	6.6	93

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19	Multi-level regulation of myotubularin-related protein-2 phosphatase activity by myotubularin-related protein-13/set-binding factor-2. <i>Human Molecular Genetics</i> , 2006, 15, 569-579.	1.4	92
20	Robots, pipelines, polyproteins: Enabling multiprotein expression in prokaryotic and eukaryotic cells. <i>Journal of Structural Biology</i> , 2011, 175, 198-208.	1.3	92
21	Highly efficient baculovirus-mediated multigene delivery in primary cells. <i>Nature Communications</i> , 2016, 7, 11529.	5.8	83
22	The SARS-CoV-2 spike protein: balancing stability and infectivity. <i>Cell Research</i> , 2020, 30, 1059-1060.	5.7	82
23	The structure of human thyroglobulin. <i>Nature</i> , 2020, 578, 627-630.	13.7	81
24	XLF and APLF bind Ku80 at two remote sites to ensure DNA repair by non-homologous end joining. <i>Nature Structural and Molecular Biology</i> , 2018, 25, 971-980.	3.6	78
25	Molecular Dynamics of Hemiprotonated Intercalated Four-Stranded i-DNA: Stable Trajectories on a Nanosecond Scale. <i>Journal of the American Chemical Society</i> , 1998, 120, 6147-6151.	6.6	77
26	Cytoplasmic TAF2/TAF8/TAF10 complex provides evidence for nuclear holo-TFIID assembly from preformed submodules. <i>Nature Communications</i> , 2015, 6, 6011.	5.8	77
27	Molecular Simulations suggest Vitamins, Retinoids and Steroids as Ligands of the Free Fatty Acid Pocket of the SARS-CoV-2 Spike Protein**. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 7098-7110.	7.2	77
28	SweetBac: A New Approach for the Production of Mammalianised Glycoproteins in Insect Cells. <i>PLoS ONE</i> , 2012, 7, e34226.	1.1	73
29	Genetic code expansion for multiprotein complex engineering. <i>Nature Methods</i> , 2016, 13, 997-1000.	9.0	63
30	Membrane protein insertion and assembly by the bacterial holo-translocon SecYEG/SecDFa/YajC/YidC. <i>Biochemical Journal</i> , 2016, 473, 3341-3354.	1.7	61
31	The MultiBac Baculovirus/Insect Cell Expression Vector System for Producing Complex Protein Biologics. <i>Advances in Experimental Medicine and Biology</i> , 2016, 896, 199-215.	0.8	59
32	A plasmid-based multigene expression system for mammalian cells. <i>Nature Communications</i> , 2010, 1, 120.	5.8	55
33	TFIID Enables RNA Polymerase II Promoter-Proximal Pausing. <i>Molecular Cell</i> , 2020, 78, 785-793.e8.	4.5	55
34	Molecular Dynamics of DNA Quadruplex Molecules Containing Inosine, 6-Thioguanine and 6-Thiopurine. <i>Biophysical Journal</i> , 2001, 80, 455-468.	0.2	54
35	Reaction cycle of the yeast Isw2 chromatin remodeling complex. <i>EMBO Journal</i> , 2004, 23, 3836-3843.	3.5	54
36	A central cavity within the holo-translocon suggests a mechanism for membrane protein insertion. <i>Scientific Reports</i> , 2016, 6, 38399.	1.6	54

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37	Multiprotein Expression Strategy for Structural Biology of Eukaryotic Complexes. <i>Structure</i> , 2007, 15, 275-279.	1.6	50
38	Nanosecond Molecular Dynamics of Zipper-like DNA Duplex Structures Containing Sheared GÂ·A Mismatch Pairs. <i>Journal of the American Chemical Society</i> , 2000, 122, 7564-7572.	6.6	47
39	Synthetic energy sensor AMPfret deciphers adenylate-dependent AMPK activation mechanism. <i>Nature Communications</i> , 2019, 10, 1038.	5.8	47
40	Microfluidic production and characterization of biofunctionalized giant unilamellar vesicles for targeted intracellular cargo delivery. <i>Biomaterials</i> , 2021, 264, 120203.	5.7	45
41	Chaperonin CCT checkpoint function in basal transcription factor TFIID assembly. <i>Nature Structural and Molecular Biology</i> , 2018, 25, 1119-1127.	3.6	43
42	Subunits of ADA-two-A-containing (ATAC) or Spt-Ada-Gcn5-acetyltrasferase (SAGA) Coactivator Complexes Enhance the Acetyltransferase Activity of GCN5. <i>Journal of Biological Chemistry</i> , 2015, 290, 28997-29009.	1.6	41
43	Direct Interaction of Ca ²⁺ /Calmodulin Inhibits Histone Deacetylase 5 Repressor Core Binding to Myocyte Enhancer Factor 2. <i>Journal of Biological Chemistry</i> , 2003, 278, 17625-17635.	1.6	39
44	Gene gymnastics. <i>Bioengineered</i> , 2013, 4, 279-287.	1.4	37
45	Zooming in on Transcription Preinitiation. <i>Journal of Molecular Biology</i> , 2016, 428, 2581-2591.	2.0	36
46	DNA origami-based single-molecule force spectroscopy elucidates RNA Polymerase III pre-initiation complex stability. <i>Nature Communications</i> , 2020, 11, 2828.	5.8	36
47	The Role of Backbone Oxygen Atoms in the Organization of Nucleic Acid Tertiary Structure: Zippers, Networks, Clamps, and Câ€”â€” Hydrogen Bonds. <i>Chemistry - A European Journal</i> , 1997, 3, 1400-1404.	1.7	35
48	Multiprotein Complex Production in Insect Cells by Using Polyproteins. <i>Methods in Molecular Biology</i> , 2014, 1091, 131-141.	0.4	34
49	Syntheses of 4'-thioribonucleosides and thermodynamic stability and crystal structure of RNA oligomers with incorporated 4'-thiocytosine. <i>Nucleic Acids Research</i> , 2005, 33, 3965-3975.	6.5	33
50	MultiBac turns sweet. <i>Bioengineered</i> , 2013, 4, 78-83.	1.4	29
51	MultiBac: from protein complex structures to synthetic viral nanosystems. <i>BMC Biology</i> , 2017, 15, 99.	1.7	29
52	Synthetic self-assembling ADDomer platform for highly efficient vaccination by genetically encoded multipeptide display. <i>Science Advances</i> , 2019, 5, eaaw2853.	4.7	29
53	Young infants exhibit robust functional antibody responses and restrained IFN-Î³ production to SARS-CoV-2. <i>Cell Reports Medicine</i> , 2021, 2, 100327.	3.3	29
54	Architecture of TAF11/TAF13/TBP complex suggests novel regulation properties of general transcription factor TFIID. <i>ELife</i> , 2017, 6, .	2.8	29

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55	Baculovirus expression: tackling the complexity challenge. <i>Current Opinion in Structural Biology</i> , 2013, 23, 357-364.	2.6	28
56	Getting a Grip on Complexes. <i>Current Genomics</i> , 2009, 10, 558-572.	0.7	27
57	Glutathione-conjugating and membrane-remodeling activity of GDAP1 relies on amphipathic C-terminal domain. <i>Scientific Reports</i> , 2016, 6, 36930.	1.6	27
58	Recombinant Heptameric Coatomer Complexes: Novel Tools to Study Isoform-Specific Functions. <i>Traffic</i> , 2011, 12, 682-692.	1.3	26
59	Ribosome-SRP-FtsY cotranslational targeting complex in the closed state. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 3943-3948.	3.3	26
60	Sequential Digestion with Trypsin and Elastase in Cross-Linking Mass Spectrometry. <i>Analytical Chemistry</i> , 2019, 91, 4472-4478.	3.2	26
61	MultiBac: Baculovirus-Mediated Multigene DNA Cargo Delivery in Insect and Mammalian Cells. <i>Viruses</i> , 2019, 11, 198.	1.5	25
62	Pathogen-sugar interactions revealed by universal saturation transfer analysis. <i>Science</i> , 2022, 377, .	6.0	24
63	TBPL2/TFIIA complex establishes the maternal transcriptome through oocyte-specific promoter usage. <i>Nature Communications</i> , 2020, 11, 6439.	5.8	23
64	Tandem Recombineering by SLIC Cloning and Cre-LoxP Fusion to Generate Multigene Expression Constructs for Protein Complex Research. <i>Methods in Molecular Biology</i> , 2013, 1073, 131-140.	0.4	23
65	Structural insights in cell-type specific evolution of intra-host diversity by SARS-CoV-2. <i>Nature Communications</i> , 2022, 13, 222.	5.8	23
66	The MultiBac Protein Complex Production Platform at the EMBL. <i>Journal of Visualized Experiments</i> , 2013, , e50159.	0.2	22
67	More pieces to the puzzle: recent structural insights into class II transcription initiation. <i>Current Opinion in Structural Biology</i> , 2014, 24, 91-97.	2.6	22
68	Homozygous TAF8 mutation in a patient with intellectual disability results in undetectable TAF8 protein, but preserved RNA polymerase II transcription. <i>Human Molecular Genetics</i> , 2018, 27, 2171-2186.	1.4	22
69	Polyproteins in structural biology. <i>Current Opinion in Structural Biology</i> , 2015, 32, 139-146.	2.6	21
70	Molecular structure of the halogenated anti-cancer drug iododoxorubicin complexed with d(TGTACA) and d(CGATCG). <i>Nucleic Acids Research</i> , 1995, 23, 4488-4494.	6.5	20
71	Targeted supplementation design for improved production and quality of enveloped viral particles in insect cell-baculovirus expression system. <i>Journal of Biotechnology</i> , 2016, 233, 34-41.	1.9	20
72	Synthetic virions reveal fatty acid-coupled adaptive immunogenicity of SARS-CoV-2 spike glycoprotein. <i>Nature Communications</i> , 2022, 13, 868.	5.8	20

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73	Structural characterization of recombinant IAV polymerase reveals a stable complex between viral PA-PB1 heterodimer and host RanBP5. <i>Scientific Reports</i> , 2016, 6, 24727.	1.6	19
74	The fatty acid site is coupled to functional motifs in the SARS-CoV-2 spike protein and modulates spike allosteric behaviour. <i>Computational and Structural Biotechnology Journal</i> , 2022, 20, 139-147.	1.9	19
75	Chemical cross-linking and mass spectrometry to determine the subunit interaction network in a recombinant human SAGA HAT subcomplex. <i>Protein Science</i> , 2015, 24, 1232-1246.	3.1	17
76	ACEMBL Tool-Kits for High-Throughput Multigene Delivery and Expression in Prokaryotic and Eukaryotic Hosts. <i>Advances in Experimental Medicine and Biology</i> , 2016, 896, 27-42.	0.8	17
77	MultiBac complexomics. <i>Expert Review of Proteomics</i> , 2012, 9, 363-373.	1.3	16
78	Structural basis of signal sequence surveillance and selection by the SRP-FtsY complex. <i>Nature Structural and Molecular Biology</i> , 2013, 20, 604-610.	3.6	16
79	Highly efficient CRISPR-mediated large DNA docking and multiplexed prime editing using a single baculovirus. <i>Nucleic Acids Research</i> , 2022, 50, 7783-7799.	6.5	15
80	Baculovirus expression: old dog, new tricks. <i>Bioengineered</i> , 2015, 6, 316-322.	1.4	14
81	Characterization and Production of Protein Complexes by Co-expression in <i>Escherichia coli</i> . <i>Methods in Molecular Biology</i> , 2015, 1261, 63-89.	0.4	14
82	The Production of Multiprotein Complexes in Insect Cells Using the Baculovirus Expression System. <i>Methods in Molecular Biology</i> , 2015, 1261, 91-114.	0.4	14
83	Synthetic Virus-Derived Nanosystems (SVNs) for Delivery and Precision Docking of Large Multifunctional DNA Circuitry in Mammalian Cells. <i>Pharmaceutics</i> , 2020, 12, 759.	2.0	13
84	Light it up: Highly efficient multigene delivery in mammalian cells. <i>BioEssays</i> , 2011, 33, 946-955.	1.2	12
85	Towards eukaryotic structural complexomics. <i>Journal of Structural and Functional Genomics</i> , 2009, 10, 37-46.	1.2	11
86	MultiBacMam Bimolecular Fluorescence Complementation (BiFC) tool-kit identifies new small-molecule inhibitors of the CDK5-p25 protein-protein interaction (PPI). <i>Scientific Reports</i> , 2018, 8, 5083.	1.6	11
87	ACEMBLing a Multiprotein Transmembrane Complex. <i>Methods in Enzymology</i> , 2015, 556, 23-49.	0.4	9
88	Genetically Encoded Fluorescent Biosensors to Explore AMPK Signaling and Energy Metabolism. <i>Exs</i> , 2016, 107, 491-523.	1.4	9
89	VLP-factory and ADDomer: Self-assembling Virus-Like Particle (VLP) Technologies for Multiple Protein and Peptide Epitope Display. <i>Current Protocols</i> , 2021, 1, e55.	1.3	9
90	OmniBac: Universal Multigene Transfer Plasmids for Baculovirus Expression Vector Systems. <i>Methods in Molecular Biology</i> , 2014, 1091, 123-130.	0.4	9

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91	Structure of the Human Cation-Independent Mannose 6-Phosphate/IGF2 Receptor Domains Uncovers the Mannose 6-Phosphate Binding Site of Domain 9. <i>Structure</i> , 2020, 28, 1300-1312.e5.	1.6	8
92	Structures of nonsense-mediated mRNA decay factors UPF3B and UPF3A in complex with UPF2 reveal molecular basis for competitive binding and for neurodevelopmental disorder-causing mutation. <i>Nucleic Acids Research</i> , 2022, 50, 5934-5947.	6.5	8
93	High-Throughput Production of Influenza Virus-Like Particle (VLP) Array by Using VLP-factory, a MultiBac Baculoviral Genome Customized for Enveloped VLP Expression. <i>Methods in Molecular Biology</i> , 2019, 2025, 213-226.	0.4	7
94	Frontispiz: Molecular Simulations suggest Vitamins, Retinoids and Steroids as Ligands of the Free Fatty Acid Pocket of the SARS-CoV-2 Spike Protein. <i>Angewandte Chemie</i> , 2021, 133, .	1.6	7
95	X-ray Structure of the Human Karyopherin RanBP5, an Essential Factor for Influenza Polymerase Nuclear Trafficking. <i>Journal of Molecular Biology</i> , 2020, 432, 3353-3359.	2.0	6
96	Molecular Simulations suggest Vitamins, Retinoids and Steroids as Ligands of the Free Fatty Acid Pocket of the SARS-CoV-2 Spike Protein**. <i>Angewandte Chemie</i> , 2021, 133, 7174-7186.	1.6	6
97	Efficient production of a mature and functional gamma secretase protease. <i>Scientific Reports</i> , 2018, 8, 12834.	1.6	5
98	The MultiBac BEVS: Basics, applications, performance and recent developments. <i>Methods in Enzymology</i> , 2021, 660, 129-154.	0.4	5
99	HR-Bac, a toolbox based on homologous recombination for expression, screening and production of multiprotein complexes using the baculovirus expression system. <i>Scientific Reports</i> , 2022, 12, 2030.	1.6	5
100	Protein production for structural biology: new solutions to new challenges. <i>Current Opinion in Structural Biology</i> , 2013, 23, 317-318.	2.6	4
101	Tuneable endogenous mammalian target complementation via multiplexed plasmid-based recombineering. <i>Scientific Reports</i> , 2015, 5, 17432.	1.6	4
102	New insights into HCV replication in original cells from Aedes mosquitoes. <i>Virology Journal</i> , 2017, 14, 161.	1.4	4
103	AMPfret: synthetic nanosensor for cellular energy states. <i>Biochemical Society Transactions</i> , 2020, 48, 103-111.	1.6	4
104	TAF8 regions important for TFIID lobe B assembly or for TAF2 interactions are required for embryonic stem cell survival. <i>Journal of Biological Chemistry</i> , 2021, 297, 101288.	1.6	4
105	The MultiBac system: a perspective. <i>Emerging Topics in Life Sciences</i> , 2019, 3, 477-482.	1.1	3
106	Multiprotein Complex Production in E. coli: The SecYEG-SecDFYajC-YidC Holotranslocon. <i>Methods in Molecular Biology</i> , 2017, 1586, 279-290.	0.4	2
107	Four-Stranded Intercalated Cytosine-Rich Molecules: Novel Insights into DNA Structure and Stability. <i>Nucleosides & Nucleotides</i> , 1999, 18, 1583-1585.	0.5	1
108	Nucleic Acid Science – The Excitement of Discovery: Annual Symposium of the Chemical Society Zürich, Zürich, October 26, 2007. <i>Chimia</i> , 2007, 61, 837.	0.3	0

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109	Architecture of the Mediator Head Module. Biophysical Journal, 2012, 102, 287a.	0.2	0
110	Editorial overview: New protein production tools for structural biology. Current Opinion in Structural Biology, 2015, 32, v-vii.	2.6	0
111	SynBac: Enhanced Baculovirus Genomes by Iterative Recombineering. Methods in Molecular Biology, 2021, 2305, 141-152.	0.4	0
112	Frontispiece: Molecular Simulations suggest Vitamins, Retinoids and Steroids as Ligands of the Free Fatty Acid Pocket of the SARS-CoV-2 Spike Protein. Angewandte Chemie - International Edition, 2021, 60, .	7.2	0