

# Steven S Plotkin

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1915980/publications.pdf>

Version: 2024-02-01

44  
papers

2,161  
citations

361413

20  
h-index

254184

43  
g-index

49  
all docs

49  
docs citations

49  
times ranked

2227  
citing authors

#	ARTICLE	IF	CITATIONS
1	First Principles Calculation of Protein-Protein Dimer Affinities of ALS-Associated SOD1 Mutants. <i>Frontiers in Molecular Biosciences</i> , 2022, 9, 845013.	3.5	5
2	Misfolding-Associated Exposure of Natively Buried Residues in Mutant SOD1 Facilitates Binding to TRAF6. <i>Journal of Molecular Biology</i> , 2022, 434, 167697.	4.2	2
3	Optimizing Epitope Conformational Ensembles Using $\beta$ -Synuclein Cyclic Peptide $\alpha$ -Glycindel-Scaffolds: A Customized Immunogen Method for Generating Oligomer-Selective Antibodies for Parkinson's Disease. <i>ACS Chemical Neuroscience</i> , 2022, 13, 2261-2280.	3.5	7
4	A method for systematically ranking therapeutic drug candidates using multiple uncertain screening criteria. <i>Statistical Methods in Medical Research</i> , 2021, 30, 1502-1522.	1.5	5
5	Therapeutic targeting of the PI4K2A/PKR lysosome network is critical for misfolded protein clearance and survival in cancer cells. <i>Oncogene</i> , 2020, 39, 801-813.	5.9	16
6	Passive immunotherapies targeting $A\beta$ and tau in Alzheimer's disease. <i>Neurobiology of Disease</i> , 2020, 144, 105010.	4.4	81
7	Epitope prediction for oligomer-selective antibodies in tau and $A\beta$ . <i>Alzheimer's and Dementia</i> , 2020, 16, e045757.	0.8	0
8	TNF receptor-associated factor 6 interacts with ALS-linked misfolded superoxide dismutase 1 and promotes aggregation. <i>Journal of Biological Chemistry</i> , 2020, 295, 3808-3825.	3.4	16
9	Purification and Structural Characterization of Aggregation-Prone Human TDP-43 Involved in Neurodegenerative Diseases. <i>IScience</i> , 2020, 23, 101159.	4.1	19
10	Emerging Developments in Targeting Proteotoxicity in Neurodegenerative Diseases. <i>CNS Drugs</i> , 2019, 33, 883-904.	5.9	23
11	A Rationally Designed Humanized Antibody Selective for Amyloid Beta Oligomers in Alzheimer's Disease. <i>Scientific Reports</i> , 2019, 9, 9870.	3.3	35
12	Prion-Like Propagation of Protein Misfolding and Aggregation in Amyotrophic Lateral Sclerosis. <i>Frontiers in Molecular Neuroscience</i> , 2019, 12, 262.	2.9	101
13	CuATSM Protects Against the <i>In Vitro</i> Cytotoxicity of Wild-Type-Like Copper-Zinc Superoxide Dismutase Mutants but not Mutants That Disrupt Metal Binding. <i>ACS Chemical Neuroscience</i> , 2019, 10, 1555-1564.	3.5	21
14	A Rational Structured Epitope Defines a Distinct Subclass of Toxic Amyloid-beta Oligomers. <i>ACS Chemical Neuroscience</i> , 2018, 9, 1591-1606.	3.5	21
15	Soft Vibrational Modes Predict Breaking Events during Force-Induced Protein Unfolding. <i>Biophysical Journal</i> , 2018, 114, 562-569.	0.5	6
16	pH dependent membrane binding of the <i>Solanum tuberosum</i> plant specific insert: An <i>in silico</i> study. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2018, 1860, 2608-2618.	2.6	4
17	Prediction of Misfolding-Specific Epitopes in SOD1 Using Collective Coordinates. <i>Journal of Physical Chemistry B</i> , 2018, 122, 11662-11676.	2.6	27
18	The unfolding mechanism of monomeric mutant SOD1 by simulated force spectroscopy. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2017, 1865, 1631-1642.	2.3	14

#	ARTICLE	IF	CITATIONS
19	As Simple As Possible, but Not Simpler: Exploring the Fidelity of Coarse-Grained Protein Models for Simulated Force Spectroscopy. <i>PLoS Computational Biology</i> , 2016, 12, e1005211.	3.2	32
20	P4â€299: A Computational Method to Predict Diseaseâ€Specific Epitopes in AÎ², and its Application to Oligomerâ€Selective Antibodies for Alzheimerâ€™S Immunotherapy. <i>Alzheimer's and Dementia</i> , 2016, 12, P1148.	0.8	1
21	Protein Transfer Free Energy Obeys Entropy-Enthalpy Compensation. <i>Journal of Physical Chemistry B</i> , 2015, 119, 14130-14144.	2.6	14
22	Intercellular propagated misfolding of wild-type Cu/Zn superoxide dismutase occurs via exosome-dependent and -independent mechanisms. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 3620-3625.	7.1	373
23	SOD1 exhibits allosteric frustration to facilitate metal binding affinity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 3871-3876.	7.1	46
24	Mechanical Probes of SOD1 Predict Systematic Trends in Metal and Dimer Affinity of ALS-Associated Mutants. <i>Journal of Molecular Biology</i> , 2013, 425, 850-874.	4.2	24
25	Polymer Uncrossing and Knotting in Protein Folding, and Their Role in Minimal Folding Pathways. <i>PLoS ONE</i> , 2013, 8, e53642.	2.5	7
26	A theory for the anisotropic and inhomogeneous dielectric properties of proteins. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 6286.	2.8	38
27	Toward a Mechanism of Prion Misfolding and Structural Models of PrP<sup>Sc</sup>: Current Knowledge and Future Directions. <i>Journal of Toxicology and Environmental Health - Part A: Current Issues</i> , 2011, 74, 154-160.	2.3	15
28	Improved Measures for the Shape of a Disordered Polymer To Test a Mean-Field Theory of Collapse. <i>Macromolecules</i> , 2011, 44, 6182-6197.	4.8	16
29	Intermolecular transmission of superoxide dismutase 1 misfolding in living cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 16398-16403.	7.1	234
30	Electrostatics in the stability and misfolding of the prion protein: salt bridges, self energy, and solvation This paper is one of a selection of papers published in this special issue entitled "Canadian Society of Biochemistry, Molecular & Cellular Biology 52nd Annual Meeting " Protein Folding: Principles and Diseases" and has undergone the Journal's usual peer review process.. <i>Biochemistry and Cell Biology</i> , 2010, 88, 371-381.	2.0	32
31	Immunological mimicry of PrPC-PrPSc interactions: antibody-induced PrP misfolding. <i>Protein Engineering, Design and Selection</i> , 2009, 22, 523-529.	2.1	21
32	Structural alignment using the generalized Euclidean distance between conformations. <i>International Journal of Quantum Chemistry</i> , 2009, 109, 3217-3228.	2.0	5
33	Minimal Folding Pathways for Coarse-Grained Biopolymer Fragments. <i>Biophysical Journal</i> , 2008, 95, 5496-5507.	0.5	4
34	Minimal distance transformations between links and polymers: principles and examples. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 244133.	1.8	4
35	Generalization of distance to higher dimensional objects. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 14899-14904.	7.1	10
36	The effects of nonnative interactions on protein folding rates: Theory and simulation. <i>Protein Science</i> , 2004, 13, 1750-1766.	7.6	158

#	ARTICLE	IF	CITATIONS
37	Buffered energy landscapes: Another solution to the kinetic paradoxes of protein folding. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 4417-4422.	7.1	29
38	Structural and energetic heterogeneity in protein folding. I. Theory. Journal of Chemical Physics, 2002, 116, 5263.	3.0	32
39	Understanding protein folding with energy landscape theory Part II: Quantitative aspects. Quarterly Reviews of Biophysics, 2002, 35, 205-286.	5.7	91
40	Understanding protein folding with energy landscape theory Part I: Basic concepts. Quarterly Reviews of Biophysics, 2002, 35, 111-167.	5.7	179
41	Speeding protein folding beyond the G $\gamma$ model: How a little frustration sometimes helps. Proteins: Structure, Function and Bioinformatics, 2001, 45, 337-345.	2.6	61
42	Non-Markovian Configurational Diffusion and Reaction Coordinates for Protein Folding. Physical Review Letters, 1998, 80, 5015-5018.	7.8	96
43	Statistical mechanics of a correlated energy landscape model for protein folding funnels. Journal of Chemical Physics, 1997, 106, 2932-2948.	3.0	145
44	Correlated energy landscape model for finite, random heteropolymers. Physical Review E, 1996, 53, 6271-6296.	2.1	88