Robert S Sinkovits

List of Publications by Year
in descending order

58 papers	2,063 citations	361296 20 h-index	289141 40 g-index
59 all docs	59 docs citations	59 times ranked	2986 citing authors

#	Article	IF	Citations
1	High frequency of shared clonotypes in human B cell receptor repertoires. Nature, 2019, 566, 398-402.	13.7	262
2	AUTO3DEM—an automated and high throughput program for image reconstruction of icosahedral particles. Journal of Structural Biology, 2007, 157, 73-82.	1.3	173
3	Controlling and Switching the Morphology of Micellar Nanoparticles with Enzymes. Journal of the American Chemical Society, 2011, 133, 8392-8395.	6.6	166
4	Structural Insight into the Unique Properties of Adeno-Associated Virus Serotype 9. Journal of Virology, 2012, 86, 6947-6958.	1.5	163
5	Overview of the Alliance for Cellular Signaling. Nature, 2002, 420, 703-706.	13.7	134
6	Nonlinear Dynamics in Granular Columns. Physical Review Letters, 1995, 74, 2686-2689.	2.9	118
7	Capsid Antibodies to Different Adeno-Associated Virus Serotypes Bind Common Regions. Journal of Virology, 2013, 87, 9111-9124.	1.5	102
8	Network Cosmology. Scientific Reports, 2012, 2, 793.	1.6	96
9	Atomic structure reveals the unique capsid organization of a dsRNA virus. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 4225-4230.	3.3	80
10	Sound propagation in impure granular columns. Physical Review E, 1996, 54, 6857-6865.	0.8	79
11	Human Bocavirus Capsid Structure: Insights into the Structural Repertoire of the *Parvoviridae*. Journal of Virology, 2010, 84, 5880-5889.	1.5	79
12	Interaction of $\alpha_V \beta_3$ and $\alpha_V \beta_6$ Integrins with Human Parechovirus 1. Journal of Virology, 2010, 84, 8509-8519.	1.5	59
13	Partitivirus Structure Reveals a 120-Subunit, Helix-Rich Capsid with Distinctive Surface Arches Formed by Quasisymmetric Coat-Protein Dimers. Structure, 2008, 16, 776-786.	1.6	58
14	Infectious myonecrosis virus has a totivirus-like, 120-subunit capsid, but with fiber complexes at the fivefold axes. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17526-17531.	3.3	57
15	Structural Analysis of Coxsackievirus A7 Reveals Conformational Changes Associated with Uncoating. Journal of Virology, 2012, 86, 7207-7215.	1.5	41
16	High Frequency of Shared Clonotypes in Human T Cell Receptor Repertoires. Cell Reports, 2020, 32, 107882.	2.9	39
17	Gateways to Discovery. , 2014, , .		34
18	Components of the antigen processing and presentation pathway revealed by gene expression microarray analysis following B cell antigen receptor (BCR) stimulation. BMC Bioinformatics, 2006, 7, 237.	1.2	33

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19	Cryo-reconstructions of P22 polyheads suggest that phage assembly is nucleated by trimeric interactions among coat proteins. Physical Biology, 2010, 7, 045004.	0.8	29
20	Scaling relations for the slippery ballistic growth model. Physica A: Statistical Mechanics and Its Applications, 1994, 209, 1-8.	1.2	26
21	Nonlinear acoustics in granular assemblies. Granular Matter, 2001, 3, 33-39.	1.1	21
22	PyIR: a scalable wrapper for processing billions of immunoglobulin and T cell receptor sequences using IgBLAST. BMC Bioinformatics, 2020, 21, 314.	1.2	21
23	The interaction of shocks and defects in Lennard-Jones crystals. Journal of Physics Condensed Matter, 1993, 5, 6357-6376.	0.7	19
24	Algebraic Relaxation Laws for Classical Particles in 1D Anharmonic Potentials. Physical Review Letters, 1996, 77, 4855-4859.	2.9	17
25	Gordon. , 2012, , .		16
26	A tale of two symmetrons: Rules for construction of icosahedral capsids from trisymmetrons and pentasymmetrons. Journal of Structural Biology, 2010, 170, 109-116.	1.3	12
27	Parallelization of direct simulation Monte Carlo method combined with monotonic Lagrangian grid. AIAA Journal, 1996, 34, 1363-1370.	1.5	10
28	Slow algebraic relaxation in quartic potentials and related results. Physical Review E, 1999, 59, 6497-6512.	0.8	10
29	Expanse: Computing without Boundaries. , 2021, , .		10
30	A Technique for Regularizing the Structure of a Monotonic Lagrangian Grid. Journal of Computational Physics, 1993, 108, 368-372.	1.9	8
31	He adsorption and intercalation in C60 fullerite crystals. Physical Review B, 1995, 51, 13841-13844.	1.1	8
32	Data intensive analysis on the gordon high performance data and compute system. , 2011, , .		8
33	Deploying Jupyter Notebooks at scale on XSEDE resources for Science Gateways and workshops. , 2018, , .		7
34	Three-dimensional reconstruction of icosahedral particles from single micrographs in real time at the microscope. Journal of Structural Biology, 2013, 183, 329-341.	1.3	6
35	Fast determination of structurally cohesive subgroups in large networks. Journal of Computational Science, 2016, 17, 62-72.	1.5	6
36	A bioinformatics roadmap for the human vaccines project. Expert Review of Vaccines, 2017, 16, 535-544.	2.0	6

#	ARTICLE	IF	CITATIONS
37	Direct simulation Monte Carlo study of H/H2and H/H2/CO mixtures for diamond chemical vapor deposition. Journal of Applied Physics, 1996, 80, 6474-6488.	1.1	5
38	FlowGate. , 2015, , .		5
39	Comet. , 2017, , .		5
40	Relaxation of classical particles in anharmonic multi-well potentials. Physica A: Statistical Mechanics and Its Applications, 1996, 224, 292-301.	1.2	4
41	Three-Dimensional Asymmetric Reconstruction of Tailed Bacteriophage. Methods in Enzymology, 2010, 482, 185-210.	0.4	4
42	Fast construction of nanosecond level snapshots of financial markets. Concurrency Computation Practice and Experience, 2014, 26, 2149-2156.	1.4	4
43	Computer simulation of random sequential adsorption of two interacting species on a lattice. Journal of Statistical Physics, 1994, 74, 457-463.	0.5	3
44	Simulations of High Knudsen Number Flows in a Channel-Wedge Configuration. AIAA Journal, 1997, 35, 1486-1492.	1.5	3
45	Evaluation of I/O technologies on a flash-based I/O sub-system for HPC. , 2011, , .		3
46	Molecular Dynamics Simulations of Shock-Defect Interactions in Two-Dimensional Nonreactive Crystals. Materials Research Society Symposia Proceedings, 1992, 296, 161.	0.1	2
47	An analysis of gas phase ethanol-water chemistry for diamond CVD. Diamond and Related Materials, 1995, 4, 1277-1288.	1.8	2
48	Kinetic effects in the chemistry of diamond CVD source gases and implications for diamond growth. Diamond and Related Materials, 1996, 5, 1344-1354.	1.8	2
49	Subset removal on massive data with Dash. , 2011, , .		2
50	Optimization and parallel load balancing of the MPAS Atmosphere Weather and Climate Code. , 2016, , .		2
51	Fast construction of nanosecond level snapshots of financial markets. , 2013, , .		1
52	Fast, Low-Memory Algorithm for Construction of Nanosecond Level Snapshots of Financial Markets. , 2014, , .		1
53	Performance of Applications using Dual-Rail InfiniBand 3D Torus network on the Gordon Supercomputer. , 2014, , .		1
54	Nonequilibrium hydrogen temperatures under diamond chemical vapor deposition conditions. Applied Physics Letters, 1997, 70, 78-80.	1.5	0

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55	A Real-Time 3D Reconstruction System for Screening Icosahedral Particles Under Different Conditions at the Microscope. Microscopy and Microanalysis, 2013, 19, 764-765.	0.2	0
56	Performance Characterization and Optimization Assessment of Bioinformatics Applications. , 2017, , .		0
57	Fast and Accurate Determination of Graph Node Connectivity Leveraging Approximate Methods. Lecture Notes in Computer Science, 2021, , 500-513.	1.0	0
58	Simulations of high Knudsen number flows in a channel-wedge configuration. AIAA Journal, 1997, 35, 1486-1492.	1.5	0