

# Frederick H Streit

## List of Publications by Citations

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32  
papers

2,337  
citations

20  
h-index

35  
g-index

35  
ext. papers

2,482  
ext. citations

4.6  
avg, IF

4.06  
L-index

#	Paper	IF	Citations
32	Effect of transition-metal elements on the superconductivity of Y-Ba-Cu-O. <i>Physical Review B</i> , <b>1987</b> , 35, 8782-8784	3.3	415
31	High-temperature superconductivity in tetragonal perovskite structures: Is oxygen-vacancy order important?. <i>Physical Review Letters</i> , <b>1988</b> , 60, 1446-1449	7.4	306
30	Electrostatic potentials for metal-oxide surfaces and interfaces. <i>Physical Review B</i> , <b>1994</b> , 50, 11996-12003	3.3	301
29	Significance of plane versus chain sites in high-temperature oxide superconductors. <i>Nature</i> , <b>1988</b> , 332, 238-240	50.4	203
28	Surface-stress effects on elastic properties. I. Thin metal films. <i>Physical Review B</i> , <b>1994</b> , 49, 10699-10706	3.3	198
27	Quantum-based atomistic simulation of materials properties in transition metals. <i>Journal of Physics Condensed Matter</i> , <b>2002</b> , 14, 2825-2857	1.8	123
26	Large-scale molecular dynamics simulations of dense plasmas: The Cimarron Project. <i>High Energy Density Physics</i> , <b>2012</b> , 8, 105-131	1.2	87
25	Electrical transport and superconductivity in a Au-YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> percolation system. <i>Physical Review B</i> , <b>1988</b> , 38, 776-779	3.3	67
24	Surface-stress effects on elastic properties. II. Metallic multilayers. <i>Physical Review B</i> , <b>1994</b> , 49, 10707-10716	3.3	66
23	Beyond finite-size scaling in solidification simulations. <i>Physical Review Letters</i> , <b>2006</b> , 96, 225701	7.4	65
22	Energetics of aluminum vacancies in gamma alumina. <i>Physical Review B</i> , <b>1999</b> , 60, 773-777	3.3	62
21	Magnetic characteristics of superconducting RBa <sub>2</sub> Cu <sub>3</sub> O <sub>6+y</sub> (R = Nd, Sm, Eu, Gd, Dy, Ho, Er, Tm and Yb). <i>Solid State Communications</i> , <b>1987</b> , 63, 817-820	1.6	54
20	Elastic properties of thin fcc films. <i>Physical Review B</i> , <b>1990</b> , 41, 12285-12287	3.3	46
19	Robust quantum-based interatomic potentials for multiscale modeling in transition metals. <i>Journal of Materials Research</i> , <b>2006</b> , 21, 563-573	2.5	42
18	Molecular dynamics simulations of electron-ion temperature equilibration in an SF <sub>6</sub> plasma. <i>Physical Review Letters</i> , <b>2009</b> , 102, 205004	7.4	40
17	Effect of noble metal buffer layers on superconducting YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> thin films. <i>Applied Physics Letters</i> , <b>1987</b> , 51, 2155-2157	3.4	40
16	Flux pinning and critical current density in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>6+y</sub> and EuBa <sub>2</sub> Cu <sub>3</sub> O <sub>6+y</sub> superconductors. <i>Physical Review B</i> , <b>1987</b> , 36, 2382-2385	3.3	36

15	High-pressure tailored compression: Controlled thermodynamic paths. <i>Journal of Applied Physics</i> , <b>2006</b> , 100, 023508	2.5	32
14	Charge transfer and bonding in metallic oxides. <i>Journal of Adhesion Science and Technology</i> , <b>1994</b> , 8, 853-864		31
13	Superconducting Au-YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> composites. <i>Applied Physics Letters</i> , <b>1988</b> , 52, 927-929	3.4	30
12	Simulating solidification in metals at high pressure: The drive to petascale computing. <i>Journal of Physics: Conference Series</i> , <b>2006</b> , 46, 254-267	0.3	18
11	Superconductivity and magnetism in transition-element-substituted YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> compounds. <i>Journal of Applied Physics</i> , <b>1988</b> , 63, 4196-4198	2.5	17
10	Electrostatic-based model for alumina surfaces. <i>Thin Solid Films</i> , <b>1994</b> , 253, 179-184	2.2	13
9	Self-diffusivity and interdiffusivity of molten aluminum-copper alloys under pressure, derived from molecular dynamics. <i>Physical Review E</i> , <b>2012</b> , 85, 031202	2.4	12
8	Calculation of optical absorption in Al across the solid-to-liquid transition. <i>Physical Review B</i> , <b>2005</b> , 71,	3.3	9
7	Molecular dynamic simulations with radiation. <i>Journal of Physics A: Mathematical and Theoretical</i> , <b>2009</b> , 42, 214030	2	6
6	Machine learning-driven multiscale modeling reveals lipid-dependent dynamics of RAS signaling proteins.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2022</b> , 119,	11.5	4
5	BlueGene/L applications: Parallelism On a Massive Scale. <i>International Journal of High Performance Computing Applications</i> , <b>2008</b> , 22, 33-51	1.8	3
4	Scaling physics and material science applications on a massively parallel Blue Gene/L system <b>2005</b> ,		3
3	ddcMD: A fully GPU-accelerated molecular dynamics program for the Martini force field. <i>Journal of Chemical Physics</i> , <b>2020</b> , 153, 045103	3.9	3
2	Large-Scale Molecular Dynamics Simulation of Charged Particle Energy Deposition in Plasmas. <i>IEEE Transactions on Plasma Science</i> , <b>2011</b> , 39, 2620-2621	1.3	2
1	Elastic interactions of defects on (111) Au surfaces. <i>Physical Review B</i> , <b>1992</b> , 45, 11433-11436	3.3	2