

# N A W Holzwarth

## List of Publications by Year in descending order

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55  
papers

2,713  
citations

218677

26  
h-index

175258

52  
g-index

58  
all docs

58  
docs citations

58  
times ranked

2320  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cubic spline solver for generalized density functional treatments of atoms and generation of atomic datasets for use with exchange-correlation functionals including meta-GGA. <i>Physical Review B</i> , 2022, 105, .	3.2	9
2	Computational study of $\text{Li}_3\text{P}_3\text{N}_9$ and $\text{Li}_3\text{P}_3\text{N}_9$ electrolyte properties of pure and doped crystals. <i>Physical Review Materials</i> , 2021, 5, .	2.4	3
3	Computational investigation of the Electrolyte Properties of $\text{Li}_4\text{P}_3\text{N}_9$ and Its High Pressure Polymorph $\text{Li}_4\text{P}_3\text{N}_9$ through First-Principles Simulations. <i>Journal of the Electrochemical Society</i> , 2020, 167, 060505.	2.9	2
4	$\text{Li}_4\text{SnS}_4$ and $\text{Li}_4\text{SnSe}_4$ : Simulations of Their Structure and Electrolyte Properties. <i>Journal of the Electrochemical Society</i> , 2017, 164, A6386-A6394.	2.9	10
5	Unraveling the electrolyte properties of $\text{Na}_3\text{Zr}_2\text{P}_3\text{O}_{12}$ through computation and experiment. <i>Physical Review Materials</i> , 2017, 1, .	2.3	2
6	First-principles simulations of the porous layered calcogenides $\text{Li}_2\text{P}_2\text{S}_6$ and $\text{Li}_2\text{P}_2\text{S}_6$ . <i>Physical Review B</i> , 2016, 94, .	3.2	12
7	Computational Study of Li Ion Electrolytes Composed of $\text{Li}_3\text{AsS}_4$ Alloyed with $\text{Li}_4\text{GeS}_4$ . <i>Journal of the Electrochemical Society</i> , 2016, 163, A2079-A2088.	2.9	10
8	Crystalline Inorganic Solid Electrolytes: Computer Simulations and Comparisons with Experiment. <i>Materials and Energy</i> , 2015, , 191-232.	0.1	1
9	Fast Lithium Ion Conduction in $\text{Li}_2\text{SnS}_3$ : Synthesis, Physicochemical Characterization, and Electronic Structure. <i>Chemistry of Materials</i> , 2015, 27, 189-196.	6.7	85
10	$\text{Cu}_2\text{ZnSnS}_4\text{O}_4$ and $\text{Cu}_2\text{ZnSnS}_4\text{Se}_4$ : First principles simulations of optimal alloy configurations and their energies. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	22
11	$\text{Li}_3\text{P}_3\text{N}_9$ and $\text{Li}_3\text{P}_3\text{N}_9$ mobilities, and interfacial properties of solid electrolytes $\text{Li}_3\text{P}_3\text{N}_9$ and $\text{Li}_3\text{P}_3\text{N}_9$ . <i>Physical Review B</i> , 2014, 89, .	3.2	138
12	Computer Modeling of Crystalline Electrolytes: Lithium Thiophosphates and Phosphates. <i>Journal of the Electrochemical Society</i> , 2012, 159, A538-A547.	2.9	41
13	Adaptation of the projector-augmented-wave formalism to the treatment of orbital-dependent exchange-correlation functionals. <i>Physical Review B</i> , 2011, 84, .	3.2	1
14	Projector augmented wave formulation of Hartree-Fock calculations of electronic structure. <i>Physical Review B</i> , 2010, 81, .	3.2	3
15	First-principles study of LiPON and related solid electrolytes. <i>Physical Review B</i> , 2010, 81, .	3.2	47
16	Effects of O vacancies and N or Si substitutions on $\text{Li}_3\text{P}_3\text{N}_9$ diffusion in $\text{Li}_3\text{P}_3\text{N}_9$ . <i>Physical Review B</i> , 2008, 78, .	3.2	22
17	Li Ion Diffusion Mechanisms in the Crystalline Electrolyte $\text{Li}_3\text{PO}_4$ . <i>Journal of the Electrochemical Society</i> , 2007, 154, A999.	2.9	66
18	Mechanisms of $\text{Li}_3\text{PO}_4$ diffusion in crystalline $\text{Li}_3\text{PO}_4$ and $\text{Li}_3\text{PO}_4$ . <i>Physical Review B</i> , 2007, 75, .	3.2	93

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19	Method for calculating electronic structures near surfaces of semi-infinite crystals. Physical Review B, 2006, 73, .	3.2	3
20	Electronic structure of oxygen-related defects in PbWO <sub>4</sub> and CaMoO <sub>4</sub> crystals. Physical Review B, 2001, 64, .	3.2	64
21	Electronic band structures of the scheelite materials CaMoO <sub>4</sub> , CaWO <sub>4</sub> , PbMoO <sub>4</sub> , and PbWO <sub>4</sub> . Physical Review B, 1998, 57, 12738-12750.	3.2	388
22	Orthogonal polynomial projectors for the projector augmented wave method of electronic structure calculations. Physical Review B, 1998, 57, 11827-11830.	3.2	18
23	Comparison of the projector augmented-wave, pseudopotential, and linearized augmented-plane-wave formalisms for density-functional calculations of solids. Physical Review B, 1997, 55, 2005-2017.	3.2	230
24	Density-functional calculation of the bulk and surface geometry of beryllium. Physical Review B, 1995, 51, 13653-13659.	3.2	33
25	Core-cancellation functions for evaluating exchange-correlation functionals in first-principles pseudopotential calculations. Physical Review B, 1994, 49, 2351-2361.	3.2	13
26	Density-functional calculation of the electronic structure and equilibrium geometry of iron pyrite (FeS <sub>2</sub> ). Physical Review B, 1994, 50, 8214-8220.	3.2	40
27	Multilayer-relaxation geometry and electronic structure of a W(111) surface. Physical Review B, 1993, 48, 12136-12145.	3.2	22
28	Electronic structure of vacancy defects in MgO crystals. Physical Review B, 1990, 41, 3211-3225.	3.2	69
29	Spectral momentum density of graphite from (e,2e) spectroscopy: Comparison with first-principles calculation. Physical Review B, 1988, 37, 3914-3923.	3.2	41
30	Electronic structure of KHgC <sub>4</sub> and related materials. Physical Review B, 1988, 38, 3722-3732.	3.2	7
31	Pseudopotential inversion scheme. Physical Review B, 1986, 33, 7139-7143.	3.2	8
32	Electronic structure of RuS <sub>2</sub> . Physical Review B, 1985, 32, 3745-3752.	3.2	38
33	Interlayer states in graphite and in alkali-metal-graphite intercalation compounds. Physical Review B, 1984, 30, 2219-2222.	3.2	55
34	Local density pseudopotential calculations for molecules: O <sub>2</sub> and Mo <sub>2</sub> O <sub>2</sub> S <sub>2</sub> (S <sub>2</sub> ) <sub>2</sub> . Journal of Chemical Physics, 1984, 81, 3987-3995.	3.0	19
35	Electron momentum distribution in graphite and lithium-intercalated graphite. Physical Review B, 1984, 30, 1062-1064.	3.2	19
36	Energy-band structure and charge distribution for BaC <sub>6</sub> . International Journal of Quantum Chemistry, 1983, 23, 1223-1230.	2.0	22

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37	Lithium-intercalated graphite: Self-consistent electronic structure for stages one, two, and three. Physical Review B, 1983, 28, 1013-1025.	3.2	113
38	Local Spin-Density Description of Multiple Metal-Metal Bonding: Mo <sub>2</sub> and Cr <sub>2</sub> . Physical Review Letters, 1983, 50, 1451-1454.	7.8	60
39	Density-functional study of interplanar binding in graphite. Physical Review B, 1983, 27, 2458-2469.	3.2	44
40	X-ray form factors and the electronic structure of graphite. Physical Review B, 1982, 26, 5382-5390.	3.2	202
41	Electronic Structure of Graphite Intercalation Compounds. Materials Research Society Symposia Proceedings, 1982, 20, 107.	0.1	0
42	Electronic Structure of Third-Stage Lithium Intercalated Graphite. Physical Review Letters, 1981, 47, 1318-1321.	7.8	16
43	Model Self-Consistent Bands for Graphite Intercalation Compounds. Springer Series in Solid-state Sciences, 1981, , 138-143.	0.3	0
44	Graphite intercalation compounds: A simple model of Fermi surface and transport properties. Physical Review B, 1980, 21, 3665-3674.	3.2	60
45	Surface electronic wave functions of a semi-infinite muffin-tin lattice. II. Application to Cu (001) and (110). Physical Review B, 1978, 18, 5365-5378.	3.2	8
46	Surface electronic wave functions of a semi-infinite muffin-tin lattice. I. The spherical-wave method. Physical Review B, 1978, 18, 5350-5364.	3.2	11
47	Theoretical study of lithium graphite. I. Band structure, density of states, and Fermi-surface properties. Physical Review B, 1978, 18, 5190-5205.	3.2	154
48	Magnetic Spin Susceptibility of AsF <sub>5</sub> -Intercalated Graphite: Determination of the Density of States at the Fermi Energy. Physical Review Letters, 1978, 41, 1417-1421.	7.8	73
49	Theoretical study of lithium graphite. II. Spatial distribution of valence electrons. Physical Review B, 1978, 18, 5206-5216.	3.2	55
50	Effects of spin-orbit interaction upon impurity scattering in dilute alloys. Physical Review B, 1976, 13, 2331-2341.	3.2	9
51	Electronic states of impurity atoms in noble-metal lattices. Physical Review B, 1976, 13, 3249-3260.	3.2	21
52	Theory of impurity scattering: Interstitial impurities. European Physical Journal B, 1975, 19, 161-170.	1.5	15
53	Theory of impurity scattering in dilute metal alloys based on the muffin-tin model. Physical Review B, 1975, 11, 3718-3738.	3.2	56
54	Nonrelativistic phase-shift analysis of impurity scattering in noble-metal hosts. Physical Review B, 1974, 10, 1213-1229.	3.2	98

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55	Mathieu function solutions to the radial Schrödinger equation for the $\hat{a}^2/r^4$ interaction. Journal of Mathematical Physics, 1973, 14, 191-204.	1.1	43