

Ilya Grinberg

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4035375/publications.pdf>

Version: 2024-02-01

79
papers

5,223
citations

136950

32
h-index

82547

72
g-index

79
all docs

79
docs citations

79
times ranked

6377
citing authors

#	ARTICLE	IF	CITATIONS
1	Perovskite oxides for visible-light-absorbing ferroelectric and photovoltaic materials. Nature, 2013, 503, 509-512.	27.8	1,110
2	Ferroelectric Phase Transition in Individual Single-Crystalline BaTiO ₃ Nanowires. Nano Letters, 2006, 6, 735-739.	9.1	371
3	Nucleation and growth mechanism of ferroelectric domain-wall motion. Nature, 2007, 449, 881-884.	27.8	340
4	Relationship between local structure and phase transitions of a disordered solid solution. Nature, 2002, 419, 909-911.	27.8	238
5	Ferroelectric polarization reversal via successive ferroelastic transitions. Nature Materials, 2015, 14, 79-86.	27.5	216
6	Slush-like polar structures in single-crystal relaxors. Nature, 2017, 546, 391-395.	27.8	201
7	Predicting morphotropic phase boundary locations and transition temperatures in Pb- and Bi-based perovskite solid solutions from crystal chemical data and first-principles calculations. Journal of Applied Physics, 2005, 98, 094111.	2.5	199
8	New Highly Polar Semiconductor Ferroelectrics through $8\langle i \rangle \langle \sup \rangle 8 \langle /sup \rangle$ Cation-O Vacancy Substitution into PbTiO ₃ : A Theoretical Study. Journal of the American Chemical Society, 2008, 130, 17409-17412.	13.7	167
9	Intrinsic ferroelectric switching from first principles. Nature, 2016, 534, 360-363.	27.8	151
10	Structure and Polarization in the HighTcFerroelectricBi(Zn,Ti)O ₃ ~PbTiO ₃ Solid Solutions. Physical Review Letters, 2007, 98, 107601.	7.8	130
11	Band gap engineering strategy via polarization rotation in perovskite ferroelectrics. Applied Physics Letters, 2014, 104, .	3.3	129
12	Local structure and macroscopic properties inPbMg ₁ ~3Nb ₂ ~3O ₃ ~PbTiO ₃ andPbZn ₁ ~3Nb ₂ ~3O ₃ ~PbTiO ₃ solid solutions. Physical Review B, 2004, 70, .	3.2	119
13	Lattice normal modes and electronic properties of the correlated metal LaNiO ₃ . Physical Review B, 2011, 84, .	3.2	110
14	CO on Pt(111) puzzle: A possible solution. Journal of Chemical Physics, 2002, 117, 2264-2270.	3.0	102
15	Transferable relativistic Dirac-Slater pseudopotentials. Physical Review B, 2000, 62, 2311-2314.	3.2	91
16	Polarization Effects on the Surface Chemistry ofPbTiO ₃ -Supported Pt Films. Physical Review Letters, 2007, 98, 166101.	7.8	86
17	Resonant domain-wall-enhanced tunable microwave ferroelectrics. Nature, 2018, 560, 622-627.	27.8	82
18	Correlations between tetragonality, polarization, and ionic displacement in ferroelectric perovskite solid solutions. Physical Review B, 2010, 82, .	3.2	76

#	ARTICLE	IF	CITATIONS
19	Anisotropic Local Correlations and Dynamics in a Relaxor Ferroelectric. <i>Physical Review Letters</i> , 2013, 110, 147602.	7.8	74
20	Photoferroelectric and Photopiezoelectric Properties of Organometal Halide Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 1460-1465.	4.6	73
21	Nonmonotonic Trends in Bi-Based Ferroelectric Perovskite Solid Solutions. <i>Physical Review Letters</i> , 2007, 98, 037603.	7.8	68
22	Molecular Dynamics Study of Dielectric Response in a Relaxor Ferroelectric. <i>Physical Review Letters</i> , 2009, 103, 197601.	7.8	62
23	Substantial bulk photovoltaic effect enhancement via nanolayering. <i>Nature Communications</i> , 2016, 7, 10419.	12.8	62
24	Relationship between Local Structure and Relaxor Behavior in Perovskite Oxides. <i>Physical Review Letters</i> , 2007, 99, 267603.	7.8	58
25	Palladium-Ceria Catalysts with Enhanced Alkaline Hydrogen Oxidation Activity for Anion Exchange Membrane Fuel Cells. <i>ACS Applied Energy Materials</i> , 2019, 2, 4999-5008.	5.1	56
26	The structural diversity of AB_3 compounds with d electronic configuration for the B -cation. <i>Journal of Chemical Physics</i> , 2014, 140, 224703.	3.0	55
27	Silver solid solution piezoelectrics. <i>Applied Physics Letters</i> , 2004, 85, 1760-1762.	3.3	53
28	Pb-free semiconductor ferroelectrics: A theoretical study of Pd-substituted $Ba_{1-x}Pb_xTi_3O_{10}$. <i>Physical Review B</i> , 2010, 82, .	3.2	48
29	Development of a bond-valence based interatomic potential for $BiFeO_3$ for accurate molecular dynamics simulations. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 102202.	1.8	47
30	Ultrafast Terahertz Gating of the Polarization and Giant Nonlinear Optical Response in $BiFeO_3$ Thin Films. <i>Advanced Materials</i> , 2015, 27, 6371-6375.	21.0	47
31	Adsorbate-Adsorbate Interactions and Chemisorption at Different Coverages Studied by Accurate ab initio Calculations: CO on Transition Metal Surfaces. <i>Journal of Physical Chemistry B</i> , 2006, 110, 3816-3822.	2.6	41
32	Quantitative criteria for transferable pseudopotentials in density functional theory. <i>Physical Review B</i> , 2001, 63, .	3.2	34
33	Atomic orbitals decomposition of piezoelectric response in tetragonal $PbTi_3O_{10}$. <i>Physical Review B</i> , 2010, 82, .	3.2	31
34	First-Principles Investigation of the Formation of Pt Nanorrafts on a Mo_2C Support and Their Catalytic Activity for Oxygen Reduction Reaction. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 2229-2234.	4.6	29
35	Orbital-Specific Analysis of CO Chemisorption on Transition-Metal Surfaces. <i>Journal of Physical Chemistry C</i> , 2008, 112, 1963-1966.	3.1	27
36	Materials Design of Visible-Light Ferroelectric Photovoltaics from First Principles. <i>Ferroelectrics</i> , 2015, 483, 1-12.	0.6	27

#	ARTICLE	IF	CITATIONS
73	First-principles Studies of Band Gap Engineering in Ferroelectric Oxides. Israel Journal of Chemistry, 2020, 60, 823-832.	2.3	3
74	A Multilevel Analytical Theory for Prediction of Ferroelectric Perovskite Oxide Properties from Composition. Advanced Materials, 2022, 34, e2106105.	21.0	3
75	Accurate construction of transition metal pseudopotentials for oxides. AIP Conference Proceedings, 2001, , .	0.4	1
76	Modelling of high-temperature order-disorder phase transitions of non-stoichiometric Mo_{2-x}C and Ti_{2-x}C from first principles. Physical Chemistry Chemical Physics, 2021, 23, 22305-22312.	2.8	1
77	Application of Poly-L-Lysine for Tailoring Graphene Oxide Mediated Contact Formation between Lithium Titanium Oxide LTO Surfaces for Batteries. Polymers, 2022, 14, 2150.	4.5	1
78	Correlations between the Structure and Dielectric Properties of $\text{Pb}(\text{Sc}_{2/3}\text{W}_{1/3})\text{O}_3$ - $\text{Pb}(\text{Ti}/\text{Zr})\text{O}_3$ Relaxors. AIP Conference Proceedings, 2003, , .	0.4	0
79	Modeling of Materials for Naval SONAR, Pollution Control and Nonvolatile Memory Application. , 2008, , .		0