

Claude Ederer

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3487399/publications.pdf>

Version: 2024-02-01

68
papers

5,203
citations

147566

31
h-index

98622

67
g-index

70
all docs

70
docs citations

70
times ranked

5710
citing authors

#	ARTICLE	IF	CITATIONS
1	Charge self-consistent electronic structure calculations with dynamical mean-field theory using Quantum ESPRESSO, Wannier 90 and TRIQS. Journal of Physics Condensed Matter, 2022, 34, 235601.	0.7	4
2	Impact of chemical disorder on magnetic exchange interactions in $L_{1-x}M_xO_3$. Physical Review B, 2022, 105, .	1.4	4
3	Evidence for Jahn-Teller-driven metal-insulator transition in strained $SrCrO_3$ from first-principles calculations. Physical Review Materials, 2022, 6, .	1.0	1
4	Oxygen vacancies in strontium titanate: A DFT+DMFT study. Physical Review Research, 2021, 3, .	1.1	1
5	Charge disproportionation and Hund's insulating behavior in a five-orbital Hubbard model applicable to perovskites. Physical Review B, 2021, 104, .	1.1	6
6	Magnetic exchange interactions in $SrMnO_3$. Physical Review B, 2020, 101, .	1.1	1
7	Prediction of a Giant Magnetoelectric Cross-Caloric Effect around a Tetracritical Point in Multiferroic $SrMnO_3$. Physical Review Letters, 2020, 124, 167201.	2.9	21
8	Interplay between chemical order and magnetic properties in $FeNi$ (tetrataenite): A first-principles study. Physical Review Materials, 2020, 4, .	0.9	9
9	Effect of charge self-consistency in DFT+DMFT calculations for complex transition metal oxides. Physical Review Research, 2020, 2, .	1.3	15
10	Magnetic and ferroelectric properties of SrO_3 from first principles. Physical Review Research, 2020, 2, .	1.3	4
11	Tailoring interfacial properties in $CaVO_3$ thin films and heterostructures with $SrTiO_3$ and $LaAlO_3$: A DFT+DMFT study. Physical Review Materials, 2020, 4, .	0.9	3
12	Hund excitations and the efficiency of Mott solar cells. Physical Review B, 2019, 100, .	1.1	16
13	DFT+DMFT study of oxygen vacancies in a Mott insulator. Physical Review B, 2019, 100, .	1.1	1
14	Buried In-Plane Ferroelectric Domains in Fe-Doped Single-Crystalline Aurivillius Thin Films. ACS Applied Electronic Materials, 2019, 1, 1019-1028.	2.0	27
15	Mechanism and control parameters of the coupled structural and metal-insulator transition in nickelates. Physical Review B, 2019, 99, .	1.1	38
16	Energetics of the coupled electronic-structural transition in the rare-earth nickelates. Npj Quantum Materials, 2019, 4, .	1.8	28
17	Electronic localization in $CaVO_3$ films via bandwidth control. Npj Quantum Materials, 2019, 4, .	1.8	16
18	Charge transfer in $LaVO_3$ multilayers: Strain-controlled dimensionality of interface metallicity between two Mott insulators. Physical Review Materials, 2019, 3, .	0.9	7

#	ARTICLE	IF	CITATIONS
19	Metal-insulator transition in CaVO_3 thin films: Interplay between epitaxial strain, dimensional confinement, and surface effects. <i>Physical Review B</i> , 2018, 97, .	1.1	20
20	The Impact of Hysteresis on the Electrocaloric Effect at First-Order Phase Transitions. <i>Physica Status Solidi (B): Basic Research</i> , 2018, 255, 1700308.	0.7	13
21	Origins of the Inverse Electrocaloric Effect. <i>Energy Technology</i> , 2018, 6, 1491-1511.	1.8	39
22	First-principles-based strain and temperature-dependent ferroic phase diagram of SrMnO_3 . <i>Physical Review Materials</i> , 2018, 2, .	1.1	16
23	Magnetic order in four-layered Aurivillius phases. <i>Physical Review B</i> , 2017, 95, .	1.1	27
24	Interplay between breathing mode distortion and magnetic order in rare-earth nickelates within RNiO_3 . <i>Physical Review B</i> , 2017, 96, .	1.1	37
25	Understanding the Effect of Doping and Epitaxial Strain on the Ferroelectric Polarization of Layered Perovskite Thin Films. <i>Microscopy and Microanalysis</i> , 2017, 23, 1606-1607.	0.2	0
26	Electrocaloric effect in BaTiO_3 at all three ferroelectric transitions: Anisotropy and inverse caloric effects. <i>Physical Review B</i> , 2017, 96, .	1.1	53
27	Tuning the metal-insulator transition in d^1 and d^2 perovskites by epitaxial strain: A first-principles-based study. <i>Physical Review B</i> , 2016, 94, .	1.1	39
28	Tuning the caloric response of BaTiO_3 by tensile epitaxial strain. <i>Europysics Letters</i> , 2016, 115, 47002.	0.7	8
29	Controlling the cation distribution and electric polarization with epitaxial strain in Aurivillius-phase $\text{Bi}_5\text{FeTi}_3\text{O}_{15}$. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	10
30	First-principles-based calculation of the electrocaloric effect in BaTiO_3 : A comparison of direct and indirect methods. <i>Physical Review B</i> , 2016, 93, .	1.1	39
31	Combined first-principles and model Hamiltonian study of the perovskite series R^2MnO_3 .		

#	ARTICLE	IF	CITATIONS
37	Strain-induced insulator-to-metal transition in LaTiO ₂ . Physical Review B, 2014, 89, .	1.1	25
38	Spin-filtering efficiency of ferrimagnetic spinels CoFe ₂ O ₄ . Physical Review B, 2014, 89, .	1.1	71
39	Rubidium superoxide: A p-electron Mott insulator. Physical Review B, 2012, 86, .	1.1	15
40	Dielectric response of epitaxially strained CoFe ₂ O ₄ spinel thin films. Physical Review B, 2012, 86, .	1.1	29
41	First-principles calculation of magnetoelastic coefficients and magnetostriction in the spinel ferrites CoFe ₂ O ₄ . Physical Review B, 2012, 86, .	1.1	103
42	Effect of Hubbard U on the construction of low-energy Hamiltonians for LaMnO ₃ via maximally localized Wannier functions. Physical Review B, 2011, 84, .	1.1	13
43	Strain effects in spinel ferrite thin films from first principles calculations. Journal of Physics: Conference Series, 2011, 292, 012014.	0.3	11
44	Effect of epitaxial strain on the cation distribution in spinel ferrites CoFe ₂ O ₄ and NiFe ₂ O ₄ : A density functional theory study. Applied Physics Letters, 2011, 99, 081916.	1.5	81
45	Epitaxial strain effects in the spinel ferrites LaCrO ₃ versus LaMnO ₃ . Physical Review B, 2010, 82, .	1.1	31
46	Calculation of model Hamiltonian parameters for LaMnO ₃ using maximally localized Wannier functions. Physical Review B, 2010, 82, .	1.1	135
47	Strain-induced isosymmetric phase transition in BiFeO ₃ . Physical Review B, 2010, 81, .	1.1	15
48	Correlation effects in p-electron magnets: Electronic structure of RbO ₂ . Physical Review B, 2009, 80, .	1.1	32
49	First principles studies of multiferroic materials. Journal of Physics Condensed Matter, 2009, 21, 303201.	0.7	164
50	Electric-field switchable magnetization via the Dzyaloshinskii-Moriya interaction: FeTiO ₃ versus BiFeO ₃ . Journal of Physics Condensed Matter, 2008, 20, 434219.	0.7	88
51	Structural distortions and model Hamiltonian parameters: From LSDA to a tight-binding description of LaMnO ₃ . Physical Review B, 2007, 76, .	1.1	29
52	Towards a microscopic theory of toroidal moments in bulk periodic crystals. Physical Review B, 2007, 76, .	1.1	173
53	Magnetic coupling in Co ₂ Cr ₂ O ₄ and MnCr ₂ O ₄ . Physical Review B, 2007, 76, .	1.1	66
54			

#	ARTICLE	IF	CITATIONS
55	Electric-field-switchable magnets: The case of BaNiF ₄ . Physical Review B, 2006, 74, .	1.1	56
56	Origin of ferroelectricity in the multiferroic barium fluorides BaMF ₄ : A first principles study. Physical Review B, 2006, 74, .	1.1	98
57	Recent progress in first-principles studies of magnetoelectric multiferroics. Current Opinion in Solid State and Materials Science, 2005, 9, 128-139.	5.6	107
58	Effect of Epitaxial Strain on the Spontaneous Polarization of Thin Film Ferroelectrics. Physical Review Letters, 2005, 95, 257601.	2.9	512
59	Influence of strain and oxygen vacancies on the magnetoelectric properties of multiferroic bismuth ferrite. Physical Review B, 2005, 71, .	1.1	339
60	Weak ferromagnetism and magnetoelectric coupling in bismuth ferrite. Physical Review B, 2005, 71, .	1.1	1,235
61	First principles study of the multiferroics BiFeO ₃ , Bi ₂ FeCrO ₆ , and BiCrO ₃ : Structure, polarization, and magnetic ordering temperature. Physical Review B, 2005, 72, .	1.1	289
62	Experimental and computational investigation of structure and magnetism in pyrite Co _{1-x} Fe _x S ₂ : Chemical bonding and half-metallicity. Physical Review B, 2004, 70, .	1.1	70
63	A new route to magnetic ferroelectrics. Nature Materials, 2004, 3, 849-851.	13.3	158
64	Anisotropy of orbital moments and magnetic dipole term in CrO ₂ : An ab initio study. Physical Review B, 2004, 69, .	1.1	12
65	Comment on the analysis of angle-dependent X-ray magnetic circular dichroism in systems with reduced dimensionality. Journal of Electron Spectroscopy and Related Phenomena, 2003, 130, 97-100.	0.8	13
66	Magnetism in systems with various dimensionalities: A comparison between Fe and Co. Physical Review B, 2003, 68, .	1.1	44
67	Theory of induced magnetic moments and x-ray magnetic circular dichroism in Co-Pt multilayers. Physical Review B, 2002, 66, .	1.1	40
68	From the bulk to monatomic wires: An ab initio study of magnetism in Co systems with various dimensionality. Physical Review B, 2002, 66, .	1.1	67