

# Evgeny Plekhanov

## List of Publications by Year in descending order

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49

papers

606

citations

759233

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times ranked

1013

citing authors

#	ARTICLE	IF	CITATIONS
1	High-Temperature Superconductivity in the Lanthanide Hydrides at Extreme Pressures. <i>Applied Sciences</i> (Switzerland), 2022, 12, 874.	2.5	4
2	Exploring the Effect of the Number of Hydrogen Atoms on the Properties of Lanthanide Hydrides by DMFT. <i>Applied Sciences</i> (Switzerland), 2022, 12, 3498.	2.5	0
3	Computational materials discovery for lanthanide hydrides at high pressure for high temperature superconductivity. <i>Physical Review Research</i> , 2022, 4, .	3.6	2
4	High-pressure structure of praseodymium revisited: In search of a uniform structural phase sequence for the lanthanide elements. <i>Physical Review B</i> , 2022, 105, .	3.2	2
5	Pressure-induced electronic transitions in samarium monochalcogenides. <i>Physical Review B</i> , 2022, 105, .	3.2	2
6	Efficient magnetic superstructure optimization with $\hat{\text{M}}\hat{\text{l}}$ . <i>Computational Materials Science</i> , 2021, 188, 110140.	3.0	3
7	High-pressure structural systematics in neodymium up to 302 GPa. <i>Physical Review B</i> , 2021, 103, .	3.2	8
8	Solid-state quantum chemistry with $\hat{\text{M}}\hat{\text{l}}$ ( ThetaPhi ): Spin-liquids , superconductors, and magnetic superstructures made computationally available. <i>Journal of Computational Chemistry</i> , 2021, 42, 1498-1513.	3.3	1
9	Calculating dynamical mean-field theory forces in <i>ab initio</i> ultrasoft pseudopotential formalism. <i>Physical Review B</i> , 2021, 104, .	3.2	6
10	$\hat{\text{M}}\hat{\text{l}}$ : Solid state package allowing Bardeenâ€“Cooperâ€“Schrieffer and magnetic superstructure electronic states. <i>Computer Physics Communications</i> , 2020, 251, 107079.	7.5	4
11	Structural phase transitions in yttrium up to 183 GPa. <i>Physical Review B</i> , 2020, 102, .	3.2	22
12	Continuous-time quantum Monte Carlo solver for dynamical mean field theory in the compact Legendre representation. <i>Physical Review B</i> , 2019, 99, .	3.2	9
13	Structure and magnetism of collapsed lanthanide elements. <i>Physical Review B</i> , 2019, 100, .	3.2	16
14	Tuning topological surface states by cleavage angle in topological crystalline insulators. <i>Physical Review B</i> , 2019, 100, .	3.2	4
15	The Mott to Kondo transition in diluted Kondo superlattices. <i>Communications Physics</i> , 2019, 2, .	5.3	11
16	Metal-Insulator Transition in Copper Oxides Induced by Apex Displacements. <i>Physical Review X</i> , 2018, 8, .	8.9	11
17	Many-body renormalization of forces in $\text{mml:math}$ $\text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"}$ $\langle \text{mml:mi} \rangle f \langle / \text{mml:mi} \rangle \langle / \text{mml:math} \rangle$ -electron materials. <i>Physical Review B</i> , 2018, 98, .	3.2	20
18	Role of spin-orbit coupling in the electronic structure of $\text{O}_{2x2}$ $\text{mml:math}$ $\text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"}$ $\langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle l_r \langle / \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{mathvariant}=\text{"normal"} \rangle O \langle / \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 2 \langle / \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle / \text{mml:mrow} \rangle \langle / \text{mml:math} \rangle$ . <i>Physical Review Materials</i> , 2018, 2, .	2.4	14

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19	Magneto-electric coupling in antiferromagnet/ferroelectric Mn <sub>2</sub> Au/BaTiO <sub>3</sub> interface. <i>Journal of Applied Physics</i> , 2016, 120, .	2.5	12
20	Robustness of Rashba and Dirac Fermions against Strong Disorder. <i>Scientific Reports</i> , 2015, 5, 11285.	3.3	11
21	Switching magnetic order at an Fe/BaTiO <sub>3</sub> interface on and off: Impact on hybrid magnetic-ferroelectric tunnel junctions., 2015, ., .	0	
22	Engineering relativistic effects in ferroelectric SnTe. <i>Physical Review B</i> , 2014, 90, .	3.2	64
23	Electric control of magnetism at the Fe/BaTiO <sub>3</sub> interface. <i>Nature Communications</i> , 2014, 5, 3404.	12.8	179
24	Emery vs. Hubbard model for cuprate superconductors: a composite operator method study. <i>European Physical Journal B</i> , 2013, 86, 1.	1.5	23
25	Exact solution of the 1D Hubbard model with NN and NNN interactions in the narrow-band limit. <i>European Physical Journal B</i> , 2013, 86, 1.	1.5	11
26	Exact solution of the 1D Hubbard model in the atomic limit with inter-site magnetic coupling. <i>European Physical Journal B</i> , 2013, 86, 1.	1.5	11
27	Composite operator candidates for a study of the p-d model. <i>Journal of Physics: Conference Series</i> , 2012, 391, 012121.	0.4	3
28	Spin and charge orderings in the atomic limit of the U-V-J model. <i>Journal of Physics: Conference Series</i> , 2012, 391, 012148.	0.4	7
29	T = 0 phase diagram of the 1D Hubbard model with magnetic interactions in the narrow band limit. <i>Open Physics</i> , 2012, 10, .	1.7	7
30	Relationship between band populations and band structure in the three-band Hubbard model. <i>Journal of Physics: Conference Series</i> , 2011, 273, 012091.	0.4	5
31	Correlation-induced band suppression in the two-orbital Hubbard model. <i>Journal of Physics: Conference Series</i> , 2011, 273, 012147.	0.4	8
32	Single-particle dispersion of the 2D d model. <i>Journal of Physics and Chemistry of Solids</i> , 2011, 72, 384-387.	4.0	6
33	Filling and temperature dependence of the spin susceptibility of the two-dimensional Hubbard model in the superconducting d-wave phase. <i>Journal of Physics and Chemistry of Solids</i> , 2011, 72, 362-365.	4.0	6
34	Analysis of the magnetic response of the edge-sharing chain cuprate Li <sub>2</sub> CuO <sub>2</sub> within TMRG. <i>Journal of Physics: Conference Series</i> , 2010, 200, 022047.	0.4	0
35	The phase diagram of the extended anisotropic ferromagnetic-antiferromagnetic Heisenberg chain. <i>European Physical Journal B</i> , 2010, 77, 381-392.	1.5	12
36	COM framework for d-wave superconductivity in the 2D Hubbard model. <i>Physica C: Superconductivity and Its Applications</i> , 2010, 470, S930-S931.	1.2	5

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37	<math>i>T</math> = 0 phase diagram of 1D extended anisotropic spin- $\frac{1}{2}$ Heisenberg model. Journal of Physics: Conference Series, 2009, 145, 012063.	0.4	3
38	Entanglement in the 1D extended anisotropic Heisenberg model. Physica B: Condensed Matter, 2008, 403, 1282-1283.	2.7	10
39	XXZ-like phase in the F-AF anisotropic Heisenberg chain. European Physical Journal B, 2008, 66, 295-299.	1.5	8
40	Frustration-Driven Quantum Phase Transition in the 1D Extended Anisotropic Heisenberg Model. Acta Physica Polonica A, 2008, 113, 429-432.	0.5	1
41	Non-Fermi liquid behavior in the 2D Hubbard model within COM(SCBA). Journal of Magnetism and Magnetic Materials, 2007, 310, 999-1001.	2.3	3
42	Ergodicity of the extended anisotropic 1D Heisenberg model: Response at low temperatures. Journal of Magnetism and Magnetic Materials, 2007, 310, e480-e482.	2.3	1
43	Nonergodic dynamics of the extended anisotropic Heisenberg chain. Physical Review B, 2006, 74, .	3.2	15
44	Ergodicity in strongly correlated systems. Condensed Matter Physics, 2006, 9, 485.	0.7	2
45	d-wave pairing in lightly doped Mott insulators. Physical Review B, 2005, 71, .	3.2	13
46	Increasingd-Wave Superconductivity by On-Site Repulsion. Physical Review Letters, 2003, 90, 187004.	7.8	33
47	Pseudogap and symmetry of superconducting order parameter in cuprates. Journal of Experimental and Theoretical Physics, 1999, 88, 356-369.	0.9	3
48	d-symmetry superconductivity due to valence bond correlations. Journal of Experimental and Theoretical Physics, 1998, 87, 534-545.	0.9	2
49	d-Symmetry superconductivity as a consequence of valence-bond type correlations. JETP Letters, 1998, 67, 369-375.	1.4	3