George Jackeli

List of Publications by Year
in descending order

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47	5,065	279487	243296
papers	citations	23 h-index	44 g-index

49	49	49	3183
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Mott Insulators in the Strong Spin-Orbit Coupling Limit: From Heisenberg to a Quantum Compass and Kitaev Models. Physical Review Letters, 2009, 102, 017205.	2.9	1,708
2	Kitaev-Heisenberg Model on a Honeycomb Lattice: Possible Exotic Phases in Iridium Oxides<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>A</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>IrO</mml:mi><mml:mn Physical Review Letters, 2010, 105, 027204.	2.9	847
3	Concept and realization of Kitaev quantum spin liquids. Nature Reviews Physics, 2019, 1, 264-280.	11.9	464
4	Zigzag Magnetic Order in the Iridium Oxide<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Na</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>IrO</mml:mi><mml:m Physical Review Letters, 2013, 110, 097204.	2.9	405
5	Direct evidence for dominant bond-directional interactions in a honeycomb lattice iridate Na2IrO3. Nature Physics, 2015, 11, 462-466.	6.5	321
6	A spinâ€“orbital-entangled quantum liquid on a honeycomb lattice. Nature, 2018, 554, 341-345.	13.7	276
7	Large Spin-Wave Energy Gap in the Bilayer Iridate<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Sr</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi>Ir</mml:mi><mml:m mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:math>: Evidence for Enhanced Dipolar Interactions Near the Mott Metal-Insulator Transition. Physical Review Letters, 2012, 109, 157402.	2.9	121
8	Dimensionality Driven Spin-Flop Transition in Layered Iridates. Physical Review Letters, 2012, 109, 037204.	2.9	117
9	Emergent <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>SU</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mn>4</mml:mn><mml:mo) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 422 Td (stretchy="false"> xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Î±</mml:mi><mml:mtext>â^’</mml:mtext><mml:msub><mml:mrow><mml:mi>ZrCl</mml:mi>	2.9	64
10	Orbital order in vanadium spinels. Physical Review B, 2005, 72, .	1.1	57
11	Valence-Bond Crystal in a Pyrochlore Antiferromagnet with Orbital Degeneracy. Physical Review Letters, 2004, 93, 077208.	2.9	56
12	Magnetically Hidden Order of Kramers Doublets ind1Systems:Sr2VO4. Physical Review Letters, 2009, 103, 067205.	2.9	56
13	Phase diagram and spin correlations of the Kitaev-Heisenberg model: Importance of quantum effects. Physical Review B, 2017, 95, .	1.1	49
14	Spin-Orbit Dimers and Noncollinear Phases in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mi>d</mml:mi><mml:mn>1</mml:mn></mml:msup></mml:math> Cubic Double Perovskites. Physical Review Letters, 2017, 118, 217202.	2.9	49
15	Classical Dimers and Dimerized Superstructure in an Orbitally Degenerate Honeycomb Antiferromagnet. Physical Review Letters, 2008, 100, 147203.	2.9	44
16	Low-energy magnetic excitations in the spin-orbital Mott insulator<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>Sr</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>n Physical Review B, 2014, 89, .	1.1	44
17	Charge- and magnetic-ordering in a two-orbital double-exchange model for manganites. Physical Review B, 2000, 62, 372-378.	1.1	43
18	Strain- and pressure-tuned magnetic interactions in honeycomb Kitaev materials. Physical Review B, 2018, 98, .	1.1	43

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19	Quantum order by disorder in the Kitaev model on a triangular lattice. Physical Review B, 2015, 92, .	1.1	35
20	Spin, Orbital, and Charge Order at the Interface between Correlated Oxides. Physical Review Letters, 2008, 101, 216804.	2.9	27
21	Frustrated Antiferromagnets at High Fields: Bose-Einstein Condensation in Degenerate Spectra. Physical Review Letters, 2004, 93, .	2.9	26
22	Dimer phases in quantum antiferromagnets with orbital degeneracy. Physical Review B, 2007, 76, .	1.1	26
23	Charge dynamics and optical conductivity of thetâ^'Jmodel. Physical Review B, 1999, 60, 5266-5275.	1.1	23
24	Valence-bond crystal and lattice distortions in a pyrochlore antiferromagnet with orbital degeneracy. Physical Review B, 2005, 72, .	1.1	21
25	Model analysis of magnetic susceptibility of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mtext>Sr</mml:mtext><mml:mn>2</mml:mn> : A two-dimensional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>Co<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>O<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>	1.1	21
26	One-dimensional dispersive magnon excitations in the frustrated spin-2 chain system Ca<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>Co<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>O<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>	1.1	17
27	Doping dependence of the exchange energies in bilayer manganites:â€ƒRole of orbital degrees of freedom. Physical Review B, 2002, 65, .	1.1	15
28	Exploring spin-orbital models with dipolar fermions in zigzag optical lattices. Physical Review B, 2012, 86, .	1.1	13
29	Microscopic model, spin-wave theory, and competing orders in double perovskites. Physical Review B, 2003, 68, .	1.1	12
30	SU(4)-symmetric quantum spin-orbital liquids on various lattices. Physical Review B, 2021, 104, .	1.1	11
31	Giant Magnetoelastic-Coupling Driven Spin-Lattice Liquid State in Molybdate Pyrochlores. Physical Review Letters, 2019, 122, 227202.	2.9	10
32	Dynamic spin susceptibility in thet-J model. Theoretical and Mathematical Physics(Russian Federation), 1998, 114, 335-344.	0.3	9
33	Effective spin-orbital Hamiltonian for the double perovskiteSr2FeWO6:Derivation of the phase diagram. Physical Review B, 2003, 67, .	1.1	9
34	Theory of spin-wave excitations of metallicA-type antiferromagnetic manganites. Physical Review B, 2001, 64, .	1.1	5
35	The ground state phases of orbitally degenerate spinel oxides. Journal of Molecular Structure, 2007, 838, 220-222.	1.8	5
36	Superfluidity of bosons on a deformable lattice. Physical Review B, 2001, 63, .	1.1	3

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37	Anisotropic exchange and noncollinear antiferromagnets on a noncentrosymmetric fcc half-Heusler structure. Physical Review B, 2022, 105, .	1.1	3
38	Normal Fermi-liquid behavior of quasiholes in the spin-polaron model for copper oxides. Physical Review B, 1997, 56, 3540-3543.	1.1	2
39	Ground-state properties and excitation spectra of non-Galilean-invariant interacting Bose systems. Physical Review B, 2001, 64, .	1.1	2
40	Magnetic and electronic properties of spin-orbit coupled Dirac electrons on a (001) thin film of double-perovskite Sr2FeMoO6. Physical Review Materials, 2020, 4, .	0.9	2
41	Renormalization Group Approach to the Oneâ€“Dimensional 1/4â€“Filled Hubbard Model with Alternating onâ€“Site Interactions. International Journal of Modern Physics B, 1997, 11, 1925-1936.	1.0	1
42	Spin and charge fluctuations in the tâ€“J model. Physica B: Condensed Matter, 1999, 259-261, 723-724.	1.3	1
43	Spin wave theory of ferrimagnetic double perovskites. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 501-502.	1.0	1
44	Quantum gap and spin-wave excitations in the Kitaev model on a triangular lattice. Physica B: Condensed Matter, 2018, 536, 350-352.	1.3	1
45	Alternating chain with Hubbard-type interactions: Renormalization group analysis. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 246, 163-171.	0.9	0
46	An effective spinâ€“orbital Hamiltonian for Sr2FeWO6. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 132-133.	1.0	0
47	Spin Dynamics of Bilayer Manganites. , 2004, , 321-382.		0