Maria Daghofer

List of Publications by Year
in descending order

84 papers	3,492 citations	136740 32 h-index	138251 58 g-index
86 all docs	86 docs citations	86 times ranked	2945 citing authors

#	Article	IF	Citations
1	Magnetic Excitation Spectra of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Sr</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>IrO</mml:mi><mml:mn> by Resonant Inelastic X-Ray Scattering: Establishing Links to Cuprate Superconductors. Physical Review Letters, 2012, 108, 177003.	2.9	408
2	Models and materials for generalized Kitaev magnetism. Journal of Physics Condensed Matter, 2017, 29, 493002.	0.7	384
3	Three orbital model for the iron-based superconductors. Physical Review B, 2010, 81, .	1.1	177
4	Model for the Magnetic Order and Pairing Channels in Fe Pnictide Superconductors. Physical Review Letters, 2008, 101, 237004.	2.9	127
5	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:mn 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
6	Excitonic quasiparticles in a spinâ€“orbit Mott insulator. Nature Communications, 2014, 5, 4453.	5.8	118
7	Breakdown of the mirror image symmetry in the optical absorption/emission spectra of oligo(para-phenylene)s. Journal of Chemical Physics, 2005, 122, 054501.	1.2	117
8	Dimensionality Driven Spin-Flop Transition in Layered Iridates. Physical Review Letters, 2012, 109, 037204.	2.9	117
9	Properties of a two-orbital model for oxypnictide superconductors: Magnetic order,B2gspin-singlet pairing channel, and its nodal structure. Physical Review B, 2009, 79, .	1.1	111
10	Phases of correlated spinless fermions on the honeycomb lattice. Physical Review B, 2014, 89, .	1.1	74
11	Fractional Quantum-Hall Liquid Spontaneously Generated by Strongly Correlated<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>t</mml:mi><mml:mrow><mml:mn>2</mml:mn><mml:mi>g</mml:mi></mml:mrow></mml:msu Physical Review Letters, 2012, 108, 126405.	2.9	71
12	Half-metallic ferromagnetism and spin polarization inCrO2. Physical Review B, 2007, 75, .	1.1	67
13	Neutron and ARPES constraints on the couplings of the multiorbital Hubbard model for the iron pnictides. Physical Review B, 2010, 82, .	1.1	65
14	Kitaev anisotropy induces mesoscopic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="double-struck">Z</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>vortex crystals in frustrated hexagonal antiferromagnets. Physical Review B, 2016, 93, .	1.1	63
15	Magnetic and metallic state at intermediate Hubbard<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>U</mml:mi></mml:math>coupling in multiorbital models for undoped iron pnictides. Physical Review B, 2009, 79, .	1.1	62
16	Probing the Unconventional Superconducting State of LiFeAs by Quasiparticle Interference. Physical Review Letters, 2012, 108, 127001.	2.9	62
17	Theory of magnetism and triplet superconductivity in LiFeAs. Physical Review B, 2011, 83, .	1.1	59
18	Low-temperature Lanczos method for strongly correlated systems. Physical Review B, 2003, 67, .	1.1	58

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19	Intrinsic Coupling of Orbital Excitations to Spin Fluctuations in Mott Insulators. Physical Review Letters, 2011, 107, 147201.	2.9	58
20	Absence of Hole Confinement in Transition-Metal Oxides with Orbital Degeneracy. Physical Review Letters, 2008, 100, 066403.	2.9	57
21	Orbital-weight redistribution triggered by spin order in the pnictides. Physical Review B, 2010, 81, .	1.1	55
22	Orbital polarons versus itinerantegelectrons in doped manganites. Physical Review B, 2004, 70, .	1.1	47
23	Proximate ferromagnetic state in the Kitaev model material Î±-RuCl3. Nature Communications, 2021, 12, 4512.	5.8	47
24	Competing Pairing Symmetries in a Generalized Two-Orbital Model for the Pnictide Superconductors. Physical Review Letters, 2011, 106, 217002.	2.9	46
25	Phase diagram and single-particle spectrum of CuO₂high-T_clayers: variational cluster approach to the three-band Hubbard model. New Journal of Physics, 2009, 11, 055066.	1.2	44
26	Fractional Chern insulator on a triangular lattice of strongly correlated<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>t</mml:mi><mml:mrow><mml:mn>2</mml:mn><mml:mi>g</mml:mi></mml:mrow></mml:msu Physical Review B, 2012, 86, .	1.1	41
27	Spectral properties of orbital polarons in Mott insulators. Physical Review B, 2008, 78, .	1.1	40
28	Interband pairing in multiorbital systems. Physical Review B, 2009, 80, .	1.1	39
29	Exact diagonalization results for resonant inelastic x-ray scattering spectra of one-dimensional Mott insulators. Physical Review B, 2012, 85, .	1.1	37
30	Switchable Quantum Anomalous Hall State in a Strongly Frustrated Lattice Magnet. Physical Review Letters, 2012, 109, 166405.	2.9	37
31	Narrowing of Topological Bands due to Electronic Orbital Degrees of Freedom. Physical Review Letters, 2011, 107, 116401.	2.9	36
32	Doping dependence of spin and orbital correlations in layered manganites. Physical Review B, 2006, 73, .	1.1	34
33	Magnetic Properties of Spin-Orbital Polarons in Lightly Doped Cobaltates. Physical Review Letters, 2006, 96, 216404.	2.9	31
34	Novel Magnetic Block States in Low-Dimensional Iron-Based Superconductors. Physical Review Letters, 2019, 123, 027203.	2.9	31
35	Unique Crystal Structure of Ca2RuO4 in the Current Stabilized Semimetallic State. Physical Review Letters, 2019, 123, 137204.	2.9	31
36	Spin-orbital physics for p orbitals in alkali RO ₂ hyperoxidesâ€"Generalization of the Goodenough-Kanamori rules. Europhysics Letters, 2011, 96, 27001.	0.7	28

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37	Combined Topological and Landau Order from Strong Correlations in Chern Bands. Physical Review Letters, 2014, 113, 216404.	2.9	28
38	Jahn-Teller Effect in Systems with Strong On-Site Spin-Orbit Coupling. Physical Review Letters, 2016, 116, 106401.	2.9	28
39	Magnetic order in orbital models of the iron pnictides. Journal of Physics Condensed Matter, 2011, 23, 246001.	0.7	26
40	Blockâ€“spiral magnetism: An exotic type of frustrated order. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16226-16233.	3.3	25
41	Femtosecond Dynamics of Momentum-Dependent Magnetic Excitations from Resonant Inelastic X-Ray Scattering in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>CaCu</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mrow><mml:mi mathvariant="normal">O</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>. Physical Review Letters, 2014, 112, 147401.	2.9	24
42	Interaction-range effects for fermions in one dimension. Physical Review B, 2012, 85, .	1.1	22
43	Macroscopic Degeneracy and Emergent Frustration in a Honeycomb Lattice Magnet. Physical Review Letters, 2011, 107, 076405.	2.9	21
44	Dynamics of a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>j</mml:mi><mml:mo>=</mml:mo><mml:mfrac	1.1	18
	quantum spin liquid. Physical Review B, 2017, 96, .		
45	Spectral density in a nematic state of iron pnictides. Physical Review B, 2012, 85, .	1.1	17
46	Nontrivial Triplon Topology and Triplon Liquid in Kitaev-Heisenberg-type Excitonic Magnets. Physical Review Letters, 2019, 122, 177201.	2.9	17
47	Excitonic magnetism at the intersection of spin-orbit coupling and crystal-field splitting. Physical Review Research, 2020, 2, .	1.3	17
48	Ferromagnetic polarons in the one-dimensional ferromagnetic Kondo model with quantum mechanicalS=3â•2core spins. Physical Review B, 2006, 73, .	1.1	16
49	Emergent dimensional reduction of the spin sector in a model for narrow-band manganites. Physical Review B, 2011, 84, .	1.1	16
50	Pairing symmetries of a hole-doped extended two-orbital model for the pnictides. Physical Review B, 2012, 85, .	1.1	16
51	Interplay between Zhang-Rice singlets and high-spin states in a model for doped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">NiO</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> planes. Physical Review B, 2021, 103, .	1.1	16
52	Role of degeneracy, hybridization, and nesting in the properties of multiorbital systems. Physical Review B, 2011, 84, .	1.1	15
53	Spin-polarized semiconductor induced by magnetic impurities in graphene. Physical Review B, 2010, 82, .	1.1	14
54	Experimentally Accessible Scheme for a Fractional Chern Insulator in Rydberg Atoms. PRX Quantum, 2022, 3, .	3.5	11

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55	Mechanism of hole propagation in the orbital compass models. Physical Review B, 2014, 89, .	1.1	10
56	Mobile orbitons in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ca</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml: : Crucial role of Hund's exchange. Physical Review B, 2020, 101, .	1.1	10
57	Polaronic aspects of the two-dimensional ferromagnetic Kondo model. Journal of Physics Condensed Matter, 2004, 16, 5469-5482.	0.7	9
58	Fractional charges and spin-charge separation in one-dimensional Wigner lattices. Physical Review B, 2007, 75, .	1.1	9
59	Orbital Correlations in Monolayer Manganites - From Spin t-J Model to Orbital t-J Model. Acta Physica Polonica A, 2007, 111, 497-512.	0.2	9
60	Comparing the influence of Floquet dynamics in various Kitaev-Heisenberg materials. Physical Review B, 2022, 105, .	1.1	9
61	Temperature effects in a spin-orbital model for manganites. Physica Status Solidi (B): Basic Research, 2006, 243, 277-280.	0.7	8
62	Onset of metallic ferromagnetism in a doped spin-orbital chain. Physica Status Solidi (B): Basic Research, 2005, 242, 311-316.	0.7	7
63	Green's function variational approach to orbital polarons inKCuF3. Physical Review B, 2016, 94, .	1.1	7
64	Constraints imposed by symmetry on pairing operators for the iron pnictides. Physical Review B, 2010, 81, .	1.1	5
65	Comment on â€œNonmagnetic Impurity Resonances as a Signature of Sign-Reversal Pairing in FeAs-Based Superconductorsâ€. Physical Review Letters, 2010, 104, 089701; author reply 089702.	2.9	5
66	Phenomenological three-orbital spin-fermion model for cuprates. Physical Review B, 2018, 98, .	1.1	5
67	Spinon-orbiton repulsion and attraction mediated by Hund's rule. Physical Review B, 2018, 98, .	1.1	5
68	Suppression of effective spin-orbit coupling by thermal fluctuations in spin-orbit coupled antiferromagnets. Physical Review B, 2021, 104, .	1.1	5
69	Character of Doped Holes in Nd1â^'xSrxNiO2. Condensed Matter, 2021, 6, 33.	0.8	5
70	Two-band ferromagnetic Kondo lattice model on a ladder with quantum S = 3/2 core spins. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 32-35.	0.8	4
71	Magnetism of one-dimensional Wigner lattices and its impact on charge order. Physical Review B, 2008, 78, .	1.1	4
72	Breaking of fourfold lattice symmetry in a model for pnictide superconductors. Superconductor Science and Technology, 2012, 25, 084003.	1.8	4

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73	Dispersion of orbital excitations in 2D quantum antiferromagnets. Journal of Physics: Conference Series, 2012, 391, 012168.	0.3	4
74	Hole Propagation in the Orbital Compass Models. Acta Physica Polonica A, 2015, 127, 263-265.	0.2	4
75	Magnetic phases for strongly correlated <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msubsup><mml:mi>t</mml:mi><mml:mrow><mml:mn>2</mml:mn><m electrons on the square lattice: Impact of spin-orbit coupling and crystal field. Physical Review B, 2021, 104, .	1.1	4
76	From frustrated to unfrustrated: Coupling two triangular-lattice itinerant quantum magnets. Physical Review B, 2017, 96, .	1.1	3
77	Perfect Tempering. AIP Conference Proceedings, 2004, , .	0.3	2
78	Single-particle spectrum of the flux phase in the FM Kondo model. Physica B: Condensed Matter, 2005, 359-361, 804-806.	1.3	2
79	Toward Fractional Quantum Hall Physics with Cold Atoms. Physics Magazine, 2013, 6, .	0.1	2
80	Reiter's Polaron Wave Function Applied to a t_{2g}Orbital t-J Model. Acta Physica Polonica A, 2009, 115, 110-113.	0.2	2
81	Variational cluster treatment of the three-band Hubbard model: Electron vs. hole doping. Physica C: Superconductivity and Its Applications, 2007, 460-462, 981-982.	0.6	1
82	Modeling Energy Confinement in Plasma Devices by Neural Networks. AIP Conference Proceedings, 2004, , .	0.3	0
83	Spin Structure and Dynamical Magnetic Response of Spin-Orbital Polarons in Lightly Doped Cobaltates. NATO Science for Peace and Security Series B: Physics and Biophysics, 2008, , 49-55.	0.2	0
84	Aspects of the FM Kondo Model: From Unbiased MC Simulations to Back-of-an-Envelope Explanations. , 0, , 31-45.		0