Jan M Tomczak

List of Publications by Year
in descending order

51	1,967	186265	243625
papers	citations	28 h-index	44 g-index

52	52	52	2241
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Phase Diagram of Nickelate Superconductors Calculated by Dynamical Vertex Approximation. Frontiers in Physics, 2022, 9, .	2.1	24
2	Hidden one-dimensional, strongly nested, and almost half-filled Fermi surface in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ba</mml:mi><mml:mn>2</mml:mn></mml:msub> superconductors. Physical Review B, 2022, 105, .	3.2	4
3	Toward Functionalized Ultrathin Oxide Films: The Impact of Surface Apical Oxygen. Advanced Electronic Materials, 2022, 8, .	5.1	5
4	Prototypical many-body signatures in transport properties of semiconductors. Physical Review B, 2022, 105, .	3.2	6
5	Designing a mechanically driven spin-crossover molecular switch via organic embedding. Nanoscale Advances, 2021, 3, 4990-4995.	4.6	8
6	Pitfalls and solutions for perovskite transparent conductors. Physical Review B, 2021, 104, .	3.2	2
7	Zoology of spin and orbital fluctuations in ultrathin oxide films. Physical Review B, 2021, 104, .	3.2	5
8	Anisotropy of electronic correlations: On the applicability of local theories to layered materials. Physical Review B, 2021, 103, .	3.2	8
9	Breaking of Thermopowerâ€“Conductivity Tradeâ€Off in LaTiO 3 Film around Mott Insulator to Metal Transition. Advanced Science, 2021, 8, 2102097.	11.2	6
10	Resistivity saturation in Kondo insulators. Communications Physics, 2021, 4, .	5.3	12
11	Large phonon drag thermopower boosted by massive electrons and phonon leaking in LaAlO₃/LaNiO₃/LaAlO₃ heterostructure. Nano Letters, 2021, 21, 9240-9246.	9.1	6
12	Isoelectronic tuning of heavy fermion systems: Proposal to synthesize Ce3Sb4Pd3. Physical Review B, 2020, 101, .	3.2	11
13	Topotactic Hydrogen in Nickelate Superconductors and Akin Infinite-Layer Oxides <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>A</mml:mi><mml:mi>B</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2020, 124, 166402.	7.8	102
14	The AbinitioDÎ“A Project v1.0: Non-local correlations beyond and susceptibilities within dynamical mean-field theory. Computer Physics Communications, 2019, 245, 106847.	7.5	11
15	Strain-engineering Mott-insulating La2CuO4. Nature Communications, 2019, 10, 786.	12.8	35
16	Towards ab initio Calculations with the Dynamical Vertex Approximation. Journal of the Physical Society of Japan, 2018, 87, 041004.	1.6	18
17	Thermoelectricity in correlated narrow-gap semiconductors. Journal of Physics Condensed Matter, 2018, 30, 183001.	1.8	58
18	Mass Enhancements and Band Shifts in Strongly Hole-Overdoped Fe-Based Pnictide Superconductors: KFe2As2 and CsFe2As2. Journal of Superconductivity and Novel Magnetism, 2018, 31, 777-783.	1.8	6

#	Article	IF	Citations
19	Strain-induced tuning of the electronic Coulomb interaction in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>3</mml:mn><mml:mi>d</mml:mi><mml:mrow transition metal oxide perovskites. Physical Review B, 2018, 98, .	3.2	18
20	Ab initio dynamical vertex approximation. Physical Review B, 2017, 95, .	3.2	64
21	Constraints on the total coupling strengthto bosons in the iron based superconductors. Physica Status Solidi (B): Basic Research, 2017, 254, 1700006.	1.5	8
22	Realizing double Dirac particles in the presence of electronic interactions. Physical Review B, 2017, 96, .	3.2	23
23	Merging GW with DMFT and non-local correlations beyond. European Physical Journal: Special Topics, 2017, 226, 2565-2590.	2.6	45
24	Separability of dynamical and nonlocal correlations in three dimensions. Physical Review B, 2015, 91, .	3.2	31
25	Route to room-temperature ferromagnetic ultrathinSrRuO3films. Physical Review B, 2015, 92, .	3.2	41
26	Unified Picture for the Colossal Thermopower Compound<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>FeSb</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></ Physical Review Letters, 2015, 114, 236603.	7.8	36
27	Electronics with Correlated Oxides:<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>SrVO</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></ a Mott Transistor. Physical Review Letters, 2015, 114, 246401.	7.8	77
28	Large Seebeck effect by charge-mobility engineering. Nature Communications, 2015, 6, 7475.	12.8	94
29	QSGW+DMFT: an electronic structure scheme for the iron pnictides and beyond. Journal of Physics: Conference Series, 2015, 592, 012055.	0.4	26
30	Protected Fe valence in quasi-two-dimensionalÎ±-FeSi₂. Journal of Physics Condensed Matter, 2015, 27, 175601.	1.8	9
31	Asymmetry in band widening and quasiparticle lifetimes in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">SrVO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>: Competition between screened exchange and local correlations from combined<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>G</mml:mi><mml:mi>W</mml:mi></mml:mrow>	3.2	74
32	Dynamical Correlations and Screened Exchange on the Experimental Bench: Spectral Properties of the Cobalt Pnictide<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>BaCo</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>As</mml:mi><mml:mi> Physical Review Letters, 2014, 113, 266403.	7.8	50
33	Electronic correlations in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Fe</mml:mi><mml:msub><mml:mi>Ga</mml:mi><mml:mn> the effect of hole doping on its magnetic properties. Physical Review B, 2014, 89, .	3.2	33
34	Rare-earth vs. heavy metal pigments and their colors from first principles. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 904-907.	7.1	43
35	Highly dispersive electron relaxation and colossal thermoelectricity in the correlated semiconductor FeSb<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review B, 2013, 88, .	3.2	28
36	Signatures of electronic correlations in iron silicide. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 3243-3246.	7.1	86

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37	Combined GW and dynamical mean-field theory: Dynamical screening effects in transition metal oxides. Europhysics Letters, 2012, 100, 67001.	2.0	86
38	Many-Body Effects in Iron Pnictides and Chalcogenides: Nonlocal Versus Dynamic Origin of Effective Masses. Physical Review Letters, 2012, 109, 237010.	7.8	81
39	Realistic many-body models for manganese monoxide under pressure. Physical Review B, 2010, 81, .	3.2	33
40	Thermopower of correlated semiconductors: Application to<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>FeAs</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:ms xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>FeSb</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:m Physical Review B, 2010, 82, .	3.2	80
41	Effective Coulomb interactions in solids under pressure. Physical Review B, 2009, 79, .	3.2	25
42	Downfolded Self-Energy of Many-Electron Systems. Physical Review Letters, 2009, 102, 176402.	7.8	37
43	Multi-orbital effects in optical properties of vanadium sesquioxide. Journal of Physics Condensed Matter, 2009, 21, 064209.	1.8	29
44	Optical properties of correlated materials â€“ Or why intelligent windows may look dirty. Physica Status Solidi (B): Basic Research, 2009, 246, 1996-2005.	1.5	32
45	Momentum-resolved spectroscopy of correlated metals: A view from dynamical mean field theory. Comptes Rendus Physique, 2009, 10, 537-547.	0.9	5
46	Materials design using correlated oxides: Optical properties of vanadium dioxide. Europhysics Letters, 2009, 86, 37004.	2.0	32
47	Optical properties of correlated materials: Generalized Peierls approach and its application to<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>VO</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:m Physical Review B, 2009, 80, .	3.2	81
48	Effective bandstructure in the insulating phase versus strong dynamical correlations in metallic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>VO</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msu Physical Review B, 2008, 78, .	3.2	76
49	Orbital ordering and orbital selective coherence induced by strong correlations in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">V</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2007, 76, .	3.2	129
50	Effective band structure of correlated materials: the case of VO₂. Journal of Physics Condensed Matter, 2007, 19, 365206.	1.8	48
51	Infrared properties of electron-doped cuprates: Tracking normal-state gaps and quantum critical behavior in Pr 2 â’ x Ce x CuO 4. Europhysics Letters, 2005, 70, 225-231.	2.0	76