

# Andriy H Nevidomskyy

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6551503/publications.pdf>

Version: 2024-02-01

63  
papers

3,246  
citations

201674

27  
h-index

144013

57  
g-index

67  
all docs

67  
docs citations

67  
times ranked

4452  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electronic nematicity above the structural and superconducting transition in $\text{BaFe}_2(\text{As}_{1-x}\text{P}_x)_2$ . Nature, 2012, 486, 382-385.	27.8	399
2	Hydrogen stabilization of metallic vanadium dioxide in single-crystal nanobeams. Nature Nanotechnology, 2012, 7, 357-362.	31.5	259
3	The role of the interlayer state in the electronic structure of superconducting graphite intercalated compounds. Nature Physics, 2005, 1, 42-45.	16.7	255
4	Chemically Active Substitutional Nitrogen Impurity in Carbon Nanotubes. Physical Review Letters, 2003, 91, 105502.	7.8	221
5	Quantum Criticality Without Tuning in the Mixed Valence Compound $\text{YbAlB}_4$ . Science, 2011, 331, 316-319.	12.6	199
6	Nematic spin correlations in the tetragonal state of uniaxial-strained $\text{BaFe}_2\text{As}_2$ NiAs. Science, 2014, 345, 657-660.	12.6	167
7	Frustration and the Kondo Effect in Heavy Fermion Materials. Journal of Low Temperature Physics, 2010, 161, 182-202.	1.4	162
8	Strongly Correlated Materials. Advanced Materials, 2012, 24, 4896-4923.	21.0	129
9	High-Pressure Polymorphism as a Step towards Destabilization of $\text{LiBH}_4$ . Angewandte Chemie - International Edition, 2008, 47, 529-532.	13.8	106
10	Experimental signatures of a three-dimensional quantum spin liquid in effective spin-1/2 $\text{Ce}_2\text{Zr}_2\text{O}_7$ pyrochlore. Nature Physics, 2019, 15, 1052-1057.	16.7	92
11	Kondo Resonance Narrowing in $\text{d}$ - and $f$ -Electron Systems. Physical Review Letters, 2009, 103, Bulk Magnetic Order in a Two-Dimensional	7.8	77
12			

#	ARTICLE	IF	CITATIONS
19	$\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ display="inline"} \rangle \langle \text{mml:mi} \rangle \hat{1}^2 \langle \text{mml:mi} \rangle \langle \text{mml:mtext} \text{ mathvariant="normal"} \rangle \hat{a} \langle \text{mml:mtext} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{YbAlB} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 4 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:math} \rangle :$ <p>Topological Weyl superconductor to diffusive thermal Hall metal crossover in the A Critical Nodal Metal. <i>Physical Review Letters</i>, 2012, 109, 176404.</p>	7.8	59
20	$\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mi} \rangle \text{B} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle \text{phase}$ <p>of <math>\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{UPt} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:math} \rangle</math> Physical Review B, 2015, 92, .</p>	3.2	55
21	<p>Magnetism and d-wave superconductivity on the half-filled square lattice with frustration. <i>Physical Review B</i>, 2008, 77, .</p> <p>Spin dynamics of a <math>\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ display="inline"} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{J} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 1 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:math} \rangle - \langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ display="inline"} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{J} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:math} \rangle - \langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ display="inline"} \rangle \langle \text{mml:mi} \rangle \text{K} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle</math> model for the paramagnetic phase of iron pnictides. A Mott insulator continuously connected to iron pnictide superconductors. <i>Nature Communications</i>, 2016, 7, 13879.</p>	3.2	52
22	<p>Three-Dimensional Crystallization of Vortex Strings in Frustrated Quantum Magnets. <i>Physical Review Letters</i>, 2015, 115, 107201.</p>	3.2	43
23	<p>Coexistence of Ferromagnetism and Superconductivity Close to a Quantum Phase Transition: The Heisenberg- to Ising-type Crossover. <i>Physical Review Letters</i>, 2005, 94, 097003.</p>	12.8	36
24	<p>An itinerant antiferromagnetic metal without magnetic constituents. <i>Nature Communications</i>, 2015, 6, 7701.</p>	12.8	33
25	<p>Impact of uniaxial pressure on structural and magnetic phase transitions in electron-doped iron pnictides. <i>Physical Review B</i>, 2016, 93, .</p>	3.2	32
26	<p>Spin Ferroquadrupolar Order in the Nematic Phase of FeSe. <i>Physical Review Letters</i>, 2016, 116, 247203.</p>	7.8	31
27	<p>Tuning magnetic confinement of spin-triplet superconductivity. <i>Npj Quantum Materials</i>, 2020, 5, .</p>	5.2	31
28	<p>Three-Dimensional Crystallization of Vortex Strings in Frustrated Quantum Magnets. <i>Physical Review Letters</i>, 2015, 115, 107201.</p>	7.8	26
29	<p>Coexistence of itinerant ferromagnetism and a nonunitary superconducting state with line nodes: Possible application to <math>\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mtext} \rangle \text{UGe} \langle \text{mml:mtext} \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:mrow} \rangle \langle \text{mml:mi} \rangle \text{NaFe} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 0.56 \langle \text{mml:mn} \rangle</math> Physical Review B, 2008, 77, .</p>	7.8	25
30	<p>Frustration and multicriticality in the antiferromagnetic spin-1 chain. <i>Physical Review B</i>, 2014, 90, .</p>	3.2	24
31	<p>Composite pairing in a mixed-valent two-channel Anderson model. <i>Physical Review B</i>, 2011, 84, .</p>	3.2	23
32	<p>Sleuthing out exotic quantum spin liquidity in the pyrochlore magnet Ce<sub>2</sub>Zr<sub>2</sub>O<sub>7</sub>. <i>Npj Quantum Materials</i>, 2022, 7, .</p>	5.2	22
33	<p>Local orthorhombic lattice distortions in the paramagnetic tetragonal phase of superconducting NaFe<sub>1-x</sub>Ni<sub>x</sub>As. <i>Nature Communications</i>, 2018, 9, 3128.</p>	12.8	20
34	<p>Coexistence of itinerant ferromagnetism and a nonunitary superconducting state with line nodes: Possible application to <math>\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mtext} \rangle \text{UGe} \langle \text{mml:mtext} \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:mrow} \rangle \langle \text{mml:mi} \rangle \text{NaFe} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 0.56 \langle \text{mml:mn} \rangle</math> Physical Review B, 2008, 77, .</p>	3.2	18
35	<p>Topological metal behavior in Ge<sub>1-x</sub>Ge<sub>x</sub> <math>\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ display="inline"} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:math} \rangle \text{Te} \langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ display="inline"} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{NaFe} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 0.56 \langle \text{mml:mn} \rangle</math> Physical Review B, 2013, 88, .</p>	3.2	16
36	<p>A Pnictide Insulating Phase Induced by On-Site Coulomb Interaction. <i>Physical Review Letters</i>, 2016, 117, 097001.</p>	7.8	16

#	ARTICLE	IF	CITATIONS
37	Tuning the Magnetic Quantum Criticality of Artificial Kondo Superlattices $\langle \mathit>mml:math} \langle \mathit{xmlns:mml=} \langle \mathit{http://www.w3.org/1998/Math/MathML} \langle \mathit{display=} \langle \mathit{"inline"} \rangle \langle \mathit{mml:mrow} \rangle \langle \mathit{mml:mrow} \rangle \langle \mathit{mml:msub} \rangle \langle \mathit{mml:mrow} \rangle \langle \mathit{mml:mi} \rangle \langle \mathit{CeRhIn} \rangle \langle \mathit{/mml:mi} \rangle \langle \mathit{/mml:mrow} \rangle \langle \mathit{mml:mrow} \rangle \langle \mathit{mml:mn} \rangle \langle \mathit{3} \rangle \langle \mathit{/mml:mn} \rangle \langle \mathit{/mml:math} \rangle \langle \mathit{/mml:mrow} \rangle \langle \mathit{/mml:math} \rangle$ Physical Review Letters, 2016, 116, 206401.	7.8	16
38	Nontrivial interplay of superconductivity and spin-orbit coupling in noncentrosymmetric ferromagnets. Physical Review B, 2008, 78, .	3.2	15
39	Anomalous Metamagnetism in the Low Carrier Density Kondo Lattice $\langle \mathit>mml:math} \langle \mathit{xmlns:mml=} \langle \mathit{http://www.w3.org/1998/Math/MathML} \langle \mathit{display=} \langle \mathit{"inline"} \rangle \langle \mathit{mml:mrow} \rangle \langle \mathit{mml:msub} \rangle \langle \mathit{mml:mrow} \rangle \langle \mathit{mml:mi} \rangle \langle \mathit{YbRh} \rangle \langle \mathit{/mml:mi} \rangle \langle \mathit{/mml:mrow} \rangle \langle \mathit{mml:mrow} \rangle \langle \mathit{mml:mn} \rangle \langle \mathit{3} \rangle \langle \mathit{/mml:mn} \rangle \langle \mathit{/mml:math} \rangle \langle \mathit{/mml:mrow} \rangle \langle \mathit{/mml:math} \rangle$ Physical Review X, 2018, 8, .	8.9	12
40	Ising-nematic order in the bilinear-biquadratic model for the iron pnictides. Physical Review B, 2015, 92, .	3.2	11
41	Orbital nematic order and interplay with magnetism in the two-orbital Hubbard model. Journal of Physics Condensed Matter, 2015, 27, 225602.	1.8	10
42	Kondo hybridization and quantum criticality in $\langle \mathit>mml:math} \langle \mathit{xmlns:mml=} \langle \mathit{http://www.w3.org/1998/Math/MathML} \rangle \langle \mathit{mml:mrow} \rangle \langle \mathit{mml:mi} \rangle \langle \mathit{\hat{I}^2} \rangle \langle \mathit{/mml:mi} \rangle \langle \mathit{mml:mo} \rangle \langle \mathit{\hat{a}''} \rangle \langle \mathit{/mml:mo} \rangle \langle \mathit{mml:msub} \rangle \langle \mathit{mml:mrow} \rangle \langle \mathit{mml:mi} \rangle \langle \mathit{O} \rangle \langle \mathit{/mml:mi} \rangle \langle \mathit{/mml:mrow} \rangle \langle \mathit{/mml:math} \rangle$ by laser ARPES. Physical Review B, 2018, 97, .	3.2	10
43	Nonsymmorphic symmetry-protected band crossings in a square-net metal PtPb <sub>4</sub> . Npj Quantum Materials, 2022, 7, .	5.2	10
44	T/Bscaling of magnetization in the mixed valent compound $\hat{I}^2$ -YbAlB <sub>4</sub> . Journal of Physics: Conference Series, 2012, 391, 012041.	0.4	9
45	Nematic spin liquid phase in a frustrated spin-1 system on the square lattice. Physical Review B, 2019, 100, .	3.2	9
46	Low-carrier density and fragile magnetism in a Kondo lattice system. Physical Review B, 2019, 99, .	3.2	9
47	Accurate tight-binding model for twisted bilayer graphene describes topological flat bands without geometric relaxation. Physical Review B, 2022, 105, .	3.2	9
48	Convexity of the self-energy functional in the variational cluster approximation. Physical Review B, 2008, 77, .	3.2	8
49	Topological Weyl magnons and thermal Hall effect in layered honeycomb ferromagnets. Physical Review B, 2021, 104, .	3.2	7
50	Charge-neutral fermions and magnetic field-driven instability in insulating Yb <sub>1-<math>\delta</math></sub> Si <sub>7</sub> . Nature Communications, 2022, 13, 394.	12.8	5
51	Possible Mott transition in layered $\langle \mathit>mml:math} \langle \mathit{xmlns:mml=} \langle \mathit{http://www.w3.org/1998/Math/MathML} \rangle \langle \mathit{mml:mrow} \rangle \langle \mathit{mml:msub} \rangle \langle \mathit{mml:mi} \rangle \langle \mathit{Sr} \rangle \langle \mathit{/mml:mi} \rangle \langle \mathit{mml:mn} \rangle \langle \mathit{2} \rangle \langle \mathit{/mml:mn} \rangle \langle \mathit{mml:mi} \rangle \langle \mathit{O} \rangle \langle \mathit{/mml:mi} \rangle \langle \mathit{mml:mn} \rangle \langle \mathit{2} \rangle \langle \mathit{/mml:mn} \rangle \langle \mathit{/mml:msub} \rangle \langle \mathit{/mml:mrow} \rangle \langle \mathit{/mml:math} \rangle$ single crystals. Physical Review B, 2019, 99, .	3.2	3
52	From two-dimensional spin vortex crystal to three-dimensional Néel order in the Mott insulator $\langle \mathit>mml:math} \langle \mathit{xmlns:mml=} \langle \mathit{http://www.w3.org/1998/Math/MathML} \rangle \langle \mathit{mml:mrow} \rangle \langle \mathit{mml:msub} \rangle \langle \mathit{mml:mi} \rangle \langle \mathit{Sr} \rangle \langle \mathit{/mml:mi} \rangle \langle \mathit{mml:mn} \rangle \langle \mathit{2} \rangle \langle \mathit{/mml:mn} \rangle \langle \mathit{/mml:mrow} \rangle \langle \mathit{/mml:math} \rangle$		

#	ARTICLE	IF	CITATIONS
55	Competing superconducting channels in iron pnictides from the strong coupling theory with biquadratic spin interactions. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 495702.	1.8	2
56	Noncollinear antiferromagnetic order and effect of spin-orbit coupling in spin-1 honeycomb lattice. <i>Physical Review Materials</i> , 2022, 6, .	2.4	2
57	Unified spin model for magnetic excitations in iron chalcogenides. <i>Physical Review B</i> , 2017, 96, .	3.2	1
58	Efficient Monte Carlo simulation of a dissipative Ising chain. <i>AIP Advances</i> , 2018, 8, 101415.	1.3	1
59	Parameters of the electron spectrum of orthorhombic indium chloride single crystals. <i>Journal of Physical Studies</i> , 2000, 4, 437-447.	0.5	1
60	Anisotropy-driven quantum criticality in an intermediate valence system. <i>Nature Communications</i> , 2022, 13, 2141.	12.8	1
61	Field-induced quantum critical point in the itinerant antiferromagnet $Ti_3Cu_4$ . <i>Communications Physics</i> , 2022, 5, .	5.3	1
62	Probing strong and weak interactions in $Mg(BH_4)_2$ and $NH_3BH_3$ by diffraction under high pressure. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2009, 65, s125-s126.	0.3	0
63	Long-range order and quantum criticality in a dissipative spin chain. <i>Physical Review B</i> , 2022, 105, .	3.2	0