Ali Yazdani

List of Publications by Year
in descending order

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97 papers	14,303 citations	41627 51 h-index	39744 98 g-index
102 all docs	102 docs citations	102 times ranked	11917 citing authors

#	Article	IF	Citations
1	Visualizing broken symmetry and topological defects in a quantum Hall ferromagnet. Science, 2022, 375, 321-326.	6.0	55
2	Evidence for a monolayer excitonic insulator. Nature Physics, 2022, 18, 87-93.	6.5	70
3	Catalogue of flat-band stoichiometric materials. Nature, 2022, 603, 824-828.	13.7	65
4	Magic, symmetry, and twisted matter. Science, 2021, 371, 1098-1099.	6.0	9
5	The marvels of moirÃ© materials. Nature Reviews Materials, 2021, 6, 201-206.	23.3	262
6	Tuning interactions between spins in a superconductor. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	28
7	Twisted bilayer graphene. IV. Exact insulator ground states and phase diagram. Physical Review B, 2021, 103, .	1.1	123
8	Spectroscopy of a tunable moirÃ© system with a correlated and topological flat band. Nature Communications, 2021, 12, 2732.	5.8	30
9	Detecting and distinguishing Majorana zero modes with the scanning tunnelling microscope. Nature Reviews Physics, 2021, 3, 541-554.	11.9	40
10	Evidence for unconventional superconductivity in twisted bilayer graphene. Nature, 2021, 600, 240-245.	13.7	134
11	Visualizing broken symmetry and topological defects in a quantum Hall ferromagnet. Science, 2021, , eabm3770.	6.0	1
12	Strongly correlated Chern insulators in magic-angle twisted bilayer graphene. Nature, 2020, 588, 610-615.	13.7	262
13	Cascade of electronic transitions in magic-angle twisted bilayer graphene. Nature, 2020, 582, 198-202.	13.7	282
14	Observation of backscattering induced by magnetism in a topological edge state. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16214-16218.	3.3	12
15	High mobility in a van der Waals layered antiferromagnetic metal. Science Advances, 2020, 6, eaay6407.	4.7	85
16	A modular ultra-high vacuum millikelvin scanning tunneling microscope. Review of Scientific Instruments, 2020, 91, 023703.	0.6	21
17	Conjuring Majorana with synthetic magnetism. Nature Materials, 2019, 18, 1036-1037.	13.3	7
18	Spectroscopic signatures of many-body correlations in magic-angle twisted bilayer graphene. Nature, 2019, 572, 101-105.	13.7	459

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19	Observation of a Majorana zero mode in a topologically protected edge channel. Science, 2019, 364, 1255-1259.	6.0	127
20	Interacting multi-channel topological boundary modes in a quantum Hall valley system. Nature, 2019, 566, 363-367.	13.7	19
21	Imaging Anyons with Scanning Tunneling Microscopy. Physical Review X, 2018, 8, .	2.8	23
22	Visualizing heavy fermion confinement and Pauli-limited superconductivity in layered CeCoIn5. Nature Communications, 2018, 9, 549.	5.8	13
23	Majorana spin in magnetic atomic chain systems. Physical Review B, 2018, 97, .	1.1	27
24	Ferroelectric quantum Hall phase revealed by visualizing Landau level wavefunction interference. Nature Physics, 2018, 14, 796-800.	6.5	11
25	Higher-order topology in bismuth. Nature Physics, 2018, 14, 918-924.	6.5	590
26	Distinguishing a Majorana zero mode using spin-resolved measurements. Science, 2017, 358, 772-776.	6.0	191
27	High-resolution studies of the Majorana atomic chain platform. Nature Physics, 2017, 13, 286-291.	6.5	180
28	Sn-doped Bi1.1Sb0.9Te2S bulk crystal topological insulator with excellent properties. Nature Communications, 2016, 7, 11456.	5.8	94
29	Quasi-particle interference of heavy fermions in resonant x-ray scattering. Science Advances, 2016, 2, e1601086.	4.7	4
30	Manipulating Majorana zero modes on atomic rings with an external magnetic field. Nature Communications, 2016, 7, 10395.	5.8	59
31	Large discrete jumps observed in the transition between Chern states in a ferromagnetic topological insulator. Science Advances, 2016, 2, e1600167.	4.7	59
32	Universal signatures of Fermi arcs in quasiparticle interference on the surface of Weyl semimetals. Physical Review B, 2016, 93, .	1.1	54
33	Scanning Josephson spectroscopy on the atomic scale. Physical Review B, 2016, 93, .	1.1	44
34	Imaging electronic states on topological semimetals using scanning tunneling microscopy. New Journal of Physics, 2016, 18, 105003.	1.2	23
35	Layer-dependent quantum cooperation of electron and hole states in the anomalous semimetal WTe2. Nature Communications, 2016, 7, 10847.	5.8	96
36	Observation of a nematic quantum Hall liquid on the surface of bismuth. Science, 2016, 354, 316-321.	6.0	72

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37	Spectroscopic Imaging of Strongly Correlated Electronic States. Annual Review of Condensed Matter Physics, 2016, 7, 11-33.	5.2	47
38	Quasiparticle interference of the Fermi arcs and surface-bulk connectivity of a Weyl semimetal. Science, 2016, 351, 1184-1187.	6.0	156
39	Visualizing Majorana fermions in a chain of magnetic atoms on a superconductor. Physica Scripta, 2015, T164, 014012.	1.2	7
40	Polytypism, polymorphism, and superconductivity in TaSe ₂ _{â^'x} Te _x. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E1174-80.	3.3	90
41	The Crystal and Electronic Structures of Cd₃As₂, the Three-Dimensional Electronic Analogue of Graphene. Inorganic Chemistry, 2014, 53, 4062-4067.	1.9	193
42	Ubiquitous Interplay Between Charge Ordering and High-Temperature Superconductivity in Cuprates. Science, 2014, 343, 393-396.	6.0	506
43	One-dimensional topological edge states of bismuth bilayers. Nature Physics, 2014, 10, 664-669.	6.5	320
44	Observation of Majorana fermions in ferromagnetic atomic chains on a superconductor. Science, 2014, 346, 602-607.	6.0	1,581
45	Landau quantization and quasiparticle interference in the three-dimensional DiracÂsemimetal Cd3As2. Nature Materials, 2014, 13, 851-856.	13.3	421
46	Visualizing Heavy Fermion Formation and their Unconventional Superconductivity in f-Electron Materials. Journal of the Physical Society of Japan, 2014, 83, 061008.	0.7	12
47	Visualizing nodal heavy fermion superconductivity in CeCoIn5. Nature Physics, 2013, 9, 474-479.	6.5	174
48	Visualizing Topological Surface States and their Novel Properties using Scanning Tunneling Microscopy and Spectroscopy. Contemporary Concepts of Condensed Matter Science, 2013, , 175-198.	0.5	4
49	Topological Superconductivity and Majorana Fermions in RKKY Systems. Physical Review Letters, 2013, 111, 186805.	2.9	416
50	Proposal for realizing Majorana fermions in chains of magnetic atoms on a superconductor. Physical Review B, 2013, 88, .	1.1	570
51	Design and performance of an ultra-high vacuum scanning tunneling microscope operating at dilution refrigerator temperatures and high magnetic fields. Review of Scientific Instruments, 2013, 84, 103903.	0.6	43
52	Measurements of the Magnetic-Field-Tuned Conductivity of Disordered Two-Dimensional<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Mo</mml:mi><mml:mn>43</mml:mn></mml:msub><mml:msub><mml:mi>Ge</mml:mi><mml: xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>InO</mml:mi><mml:mi>x</mml:mi></mml:msub></mml:math>Superconducting Films: Evidence for a Universal Minimum Superfluid Response. Physical Review Letters, 2013, 110, 037002.	2.9	32
53	Detection of electronic nematicity using scanning tunneling microscopy. Physical Review B, 2013, 87, .	1.1	25
54	Scattering from incipient stripe order in the high-temperature superconductor Bi<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>Sr<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>CaCu<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:	1.1	12

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55	Interplay between ferromagnetism, surface states, and quantum corrections in a magnetically doped topological insulator. Physical Review B, 2012, 86, .	1.1	133
56	Defects and high bulk resistivities in the Bi-rich tetradymite topological insulator Bi<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn><mml:mo>+</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>Te<mml:m xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn><mml:mo>â^’</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>Se. Physical Review B, 2012, 86, .	1.1	68
57	Detecting incipient stripe order in the high-temperature superconductor Bi2Sr2CaCu2O8+x. Physica C: Superconductivity and Its Applications, 2012, 481, 153-160.	0.6	2
58	Visualizing heavy fermions emerging in a quantum critical Kondo lattice. Nature, 2012, 486, 201-206.	13.7	176
59	Visualizing Critical Correlations Near the Metalâ€“Insulator Transition in Ga1â^’xMnxAs. , 2012, , 244-255.		0
60	Spatial fluctuations of helical Dirac fermions on the surface of topological insulators. Nature Physics, 2011, 7, 939-943.	6.5	283
61	Visualizing Critical Correlations Near the Metal-Insulator Transition in Ga ₁₋ _x Mn _x As. Science, 2010, 327, 665-669.	6.0	212
62	Transmission of topological surface states through surface barriers. Nature, 2010, 466, 343-346.	13.7	193
63	Fluctuating stripes at the onset of the pseudogap in the high-Tc superconductor Bi2Sr2CaCu2O8+x. Nature, 2010, 468, 677-680.	13.7	210
64	Visualizing the formation of the Kondo lattice and the hidden order in URu ₂ Si ₂. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10383-10388.	3.3	176
65	Nanoscale Proximity Effect in the High-Temperature Superconductor<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Bi</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Sr</mml:mi><mml:mn mathvariant="bold">O</mml:mi><mml:mrow><mml:mn>8</mml:mn><mml:mo>+</mml:mo><mml:mi>Î´</mml:mi></mml:mrow></m a Scanning Tunneling Microscope. Physical Review Letters, 2010, 104, 117001.	7.9	29
66	Mapping the wave function of transition metal acceptor states in the GaAs surface. Physical Review B, 2009, 80, .	1.1	29
67	Visualizing pair formation on the atomic scale and the search for the mechanism of superconductivity in high-T_ccuprates. Journal of Physics Condensed Matter, 2009, 21, 164214.	0.7	26
68	Topological surface states protected from backscattering by chiral spin texture. Nature, 2009, 460, 1106-1109.	13.7	910
69	Extending Universal Nodal Excitations Optimizes Superconductivity in Bi ₂ Sr ₂ CaCu ₂ O _{8+Î´}. Science, 2009, 324, 1689-1693.	6.0	107
70	Mapping of the formation of the pairing gap in. Journal of Physics and Chemistry of Solids, 2008, 69, 3034-3038.	1.9	5
71	Electronic Origin of the Inhomogeneous Pairing Interaction in the High- T _c Superconductor Bi ₂ Sr ₂ CaCu ₂ O _{8+Î´}. Science, 2008, 320, 196-201.	6.0	186
72	Unexpected features of branched flow through high-mobility two-dimensional electron gases. Nature Physics, 2007, 3, 841-845.	6.5	115

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73	Visualizing pair formation on the atomic scale in the high-Tc superconductor Bi2Sr2CaCu2O8+Î´. Nature, 2007, 447, 569-572.	13.7	414
74	Lean and mean superconductivity. Nature Physics, 2006, 2, 151-152.	6.5	6
75	Atom-by-atom substitution of Mn in GaAs and visualization of their hole-mediated interactions. Nature, 2006, 442, 436-439.	13.7	266
76	Spatial Structure of a Single Mn Impurity State on GaAs (110) Surface. Journal of Superconductivity and Novel Magnetism, 2005, 18, 23-28.	0.5	20
77	Pair Density Wave in the Pseudogap State of High Temperature Superconductors. Physical Review Letters, 2004, 93, 187002.	2.9	152
78	Local Ordering in the Pseudogap State of the High-Tc Superconductor Bi2Sr2CaCu2O8+Â. Science, 2004, 303, 1995-1998.	6.0	465
79	Probing the electronic structure of nanotube peapods with the scanning tunneling microscope. Applied Physics A: Materials Science and Processing, 2003, 76, 469-474.	1.1	4
80	Mapping the One-Dimensional Electronic States of Nanotube Peapod Structures. Science, 2002, 295, 828-831.	6.0	364
81	Atomic Scale Imaging and Spectroscopy of Fullerene Peapods. AIP Conference Proceedings, 2002, , .	0.3	0
82	Atomic-scale studies of impurities in superconductors with a scanning tunneling microscope. Applied Physics A: Materials Science and Processing, 2001, 72, S257-S261.	1.1	0
83	Watching an atom tunnel. Nature, 2001, 409, 471-472.	13.7	13
84	Probingd-wave pairing correlations in the pseudogap regime of the cuprate superconductors via low-energy states near impurities. Physical Review B, 2001, 64, .	1.1	6
85	Andreev interferometry as a probe of superconducting phase correlations in the pseudogap regime of the cuprates. Physical Review B, 2000, 62, 4105-4113.	1.1	4
86	Quantum conductors in a plane. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 9983-9984.	3.3	2
87	Impurity-Induced Bound Excitations on the Surface ofBi2Sr2CaCu2O8. Physical Review Letters, 1999, 83, 176-179.	2.9	163
88	Low-Energy Quasiparticle States near Extended Scatterers ind-Wave Superconductors and Their Connection with SUSY Quantum Mechanics. Physical Review Letters, 1999, 83, 5571-5574.	2.9	37
89	Resonant states and order-parameter suppression near pointlike impurities ind-wave superconductors. Physical Review B, 1999, 60, 7517-7522.	1.1	23
90	Up close and personal to atoms. Nature, 1999, 401, 227-230.	13.7	25

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91	Probing the Local Effects of Magnetic Impurities on Superconductivity. Science, 1997, 275, 1767-1770.	6.0	447
92	Off-Resonance Conduction Through Atomic Wires. Science, 1996, 272, 1921-1924.	6.0	212
93	Observation of Quantum Dissipation in the Vortex State of a Highly Disordered Superconducting Thin Film. Physical Review Letters, 1996, 76, 1529-1532.	2.9	178
94	Superconducting-Insulating Transition in Two-Dimensionala-MoGe Thin Films. Physical Review Letters, 1995, 74, 3037-3040.	2.9	331
95	Competition between pinning and melting in the two-dimensional vortex lattice. Physical Review B, 1994, 50, 16117-16120.	1.1	10
96	Studies of two-dimensional MoGe superconductors in a magnetic field. Physica B: Condensed Matter, 1994, 197, 530-539.	1.3	8
97	Observation of Kosterlitz-Thouless-type melting of the disordered vortex lattice in thin films ofa-MoGe. Physical Review Letters, 1993, 70, 505-508.	2.9	45