Ali Yazdani

List of Publications by Citations

91 papers	10,737 citations	44 h-index	102 g-index
102 ext. papers	12,768 ext. citations	19.9 avg, IF	6.22 L-index

#	Paper	IF	Citations
91	Topological matter. Observation of Majorana fermions in ferromagnetic atomic chains on a superconductor. *Science*, **2014**, 346, 602-7	33.3	1222
90	Topological surface states protected from backscattering by chiral spin texture. *Nature*, **2009**, 460, 1106-9	50.4	805
89	Proposal for realizing Majorana fermions in chains of magnetic atoms on a superconductor. *Physical Review B*, **2013**, 88,	3.3	438
88	Local ordering in the pseudogap state of the high-Tc superconductor Bi2Sr2CaCu2O(8+delta). *Science*, **2004**, 303, 1995-8	33.3	431
87	Ubiquitous interplay between charge ordering and high-temperature superconductivity in cuprates. *Science*, **2014**, 343, 393-6	33.3	425
86	Visualizing pair formation on the atomic scale in the high-Tc superconductor Bi2Sr2CaCu2O8+delta. *Nature*, **2007**, 447, 569-72	50.4	370
85	Landau quantization and quasiparticle interference in the three-dimensional Dirac semimetal Cd3As2. *Nature Materials*, **2014**, 13, 851-6	27	357
84	Probing the Local Effects of Magnetic Impurities on Superconductivity. *Science*, **1997**, 275, 1767-70	33.3	357
83	Mapping the one-dimensional electronic States of nanotube peapod structures. *Science*, **2002**, 295, 828-31	33.3	337
82	Higher-Order Topology in Bismuth. *Nature Physics*, **2018**, 14, 918-924	16.2	328
81	Topological superconductivity and Majorana fermions in RKKY systems. *Physical Review Letters*, **2013**, 111, 186805	7.4	320
80	Superconducting-insulating transition in two-dimensional a-MoGe thin films. *Physical Review Letters* , **1995**, 74, 3037-3040	7.4	289
79	Spatial fluctuations of helical Dirac fermions on the surface of topological insulators. *Nature Physics* , **2011**, 7, 939-943	16.2	259
78	Atom-by-atom substitution of Mn in GaAs and visualization of their hole-mediated interactions. *Nature*, **2006**, 442, 436-9	50.4	240
77	Spectroscopic signatures of many-body correlations in magic-angle twisted bilayer graphene. *Nature*, **2019**, 572, 101-105	50.4	239
76	One-dimensional topological edge states of bismuth bilayers. *Nature Physics*, **2014**, 10, 664-669	16.2	238
75	Off-Resonance Conduction Through Atomic Wires. *Science*, **1996**, 272, 1921-4	33.3	204

74	Fluctuating stripes at the onset of the pseudogap in the high-T(c) superconductor Bi(2)Sr(2)CaCu(2)O(8+x). *Nature*, **2010**, 468, 677-80	50.4	187
73	Visualizing critical correlations near the metal-insulator transition in Ga(1-x)Mn(x)As. *Science*, **2010**, 327, 665-9	33.3	183
72	Electronic origin of the inhomogeneous pairing interaction in the high-Tc superconductor Bi2Sr2CaCu2O8+delta. *Science*, **2008**, 320, 196-201	33.3	169
71	Transmission of topological surface states through surface barriers. *Nature*, **2010**, 466, 343-6	50.4	166
70	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, 10383-8	11.5	156
69	Impurity-Induced Bound Excitations on the Surface of Bi2Sr2CaCu2O8. *Physical Review Letters*, **1999**, 83, 176-179	7.4	151
68	Observation of quantum dissipation in the vortex state of a highly disordered superconducting thin film. *Physical Review Letters*, **1996**, 76, 1529-1532	7.4	151
67	The crystal and electronic structures of Cd(3)As(2), the three-dimensional electronic analogue of graphene. *Inorganic Chemistry*, **2014**, 53, 4062-7	5.1	149
66	Visualizing nodal heavy fermion superconductivity in CeCoIn5. *Nature Physics*, **2013**, 9, 474-479	16.2	142
65	Visualizing heavy fermions emerging in a quantum critical Kondo lattice. *Nature*, **2012**, 486, 201-6	50.4	141
64	Pair density wave in the pseudogap state of high temperature superconductors. *Physical Review Letters*, **2004**, 93, 187002	7.4	134
63	Quasiparticle interference of the Fermi arcs and surface-bulk connectivity of a Weyl semimetal. *Science*, **2016**, 351, 1184-7	33.3	130
62	High-resolution studies of the Majorana atomic chain platform. *Nature Physics*, **2017**, 13, 286-291	16.2	123
61	Distinguishing a Majorana zero mode using spin-resolved measurements. *Science*, **2017**, 358, 772-776	33.3	121
60	Cascade of electronic transitions in magic-angle twisted bilayer graphene. *Nature*, **2020**, 582, 198-202	50.4	119
59	Interplay between ferromagnetism, surface states, and quantum corrections in a magnetically doped topological insulator. *Physical Review B*, **2012**, 86,	3.3	115
58	Extending universal nodal excitations optimizes superconductivity in Bi2Sr2CaCu2O8+delta. *Science*, **2009**, 324, 1689-93	33.3	101
57	Unexpected features of branched flow through high-mobility two-dimensional electron gases. *Nature Physics*, **2007**, 3, 841-845	16.2	96

56	Strongly correlated Chern insulators in magic-angle twisted bilayer graphene. *Nature*, **2020**, 588, 610-615	50.4	81
55	Sn-doped Bi1.1Sb0.9Te2S bulk crystal topological insulator with excellent properties. *Nature Communications*, **2016**, 7, 11456	17.4	76
54	Layer-dependent quantum cooperation of electron and hole states in the anomalous semimetal WTe2. *Nature Communications*, **2016**, 7, 10847	17.4	75
53	Polytypism, polymorphism, and superconductivity in TaSe(2-x)Te(x). *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E1174-80	11.5	69
52	Observation of a Majorana zero mode in a topologically protected edge channel. *Science*, **2019**, 364, 1255-1259	33.3	64
51	Defects and high bulk resistivities in the Bi-rich tetradymite topological insulator Bi2+xTe2−xSe. *Physical Review B*, **2012**, 86,	3.3	60
50	Observation of a nematic quantum Hall liquid on the surface of bismuth. *Science*, **2016**, 354, 316-321	33.3	54
49	Universal signatures of Fermi arcs in quasiparticle interference on the surface of Weyl semimetals. *Physical Review B*, **2016**, 93,	3.3	48
48	Manipulating Majorana zero modes on atomic rings with an external magnetic field. *Nature Communications*, **2016**, 7, 10395	17.4	45
47	Large discrete jumps observed in the transition between Chern states in a ferromagnetic topological insulator. *Science Advances*, **2016**, 2, e1600167	14.3	43
46	Observation of Kosterlitz-Thouless-type melting of the disordered vortex lattice in thin films of a-MoGe. *Physical Review Letters*, **1993**, 70, 505-508	7.4	43
45	The marvels of moiré materials. *Nature Reviews Materials*, **2021**, 6, 201-206	73.3	41
44	High mobility in a van der Waals layered antiferromagnetic metal. *Science Advances*, **2020**, 6, eaay6407	14.3	40
43	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	1.7	38
42	Low-Energy Quasiparticle States near Extended Scatterers in d-Wave Superconductors and Their Connection with SUSY Quantum Mechanics. *Physical Review Letters*, **1999**, 83, 5571-5574	7.4	35
41	Scanning Josephson spectroscopy on the atomic scale. *Physical Review B*, **2016**, 93,	3.3	34
40	Spectroscopic Imaging of Strongly Correlated Electronic States. *Annual Review of Condensed Matter Physics*, **2016**, 7, 11-33	19.7	34
39	Twisted bilayer graphene. IV. Exact insulator ground states and phase diagram. *Physical Review B*, **2021**, 103,	3.3	32

38	Measurements of the magnetic-field-tuned conductivity of disordered two-dimensional Mo43Ge57 and InOx superconducting films: evidence for a universal minimum superfluid response. *Physical Review Letters*, **2013**, 110, 037002	7.4	30
37	Mapping the wave function of transition metal acceptor states in the GaAs surface. *Physical Review B*, **2009**, 80,	3.3	26
36	Nanoscale proximity effect in the high-temperature superconductor Bi{2}Sr{2}CaCu{2}O{8+delta} using a scanning tunneling microscope. *Physical Review Letters*, **2010**, 104, 117001	7.4	24
35	Visualizing pair formation on the atomic scale and the search for the mechanism of superconductivity in high-T(c) cuprates. *Journal of Physics Condensed Matter*, **2009**, 21, 164214	1.8	23
34	Detection of electronic nematicity using scanning tunneling microscopy. *Physical Review B*, **2013**, 87,	3.3	22
33	Resonant states and order-parameter suppression near pointlike impurities in d-wave superconductors. *Physical Review B*, **1999**, 60, 7517-7522	3.3	22
32	Majorana spin in magnetic atomic chain systems. *Physical Review B*, **2018**, 97,	3.3	21
31	Spatial Structure of a Single Mn Impurity State on GaAs (110) Surface. *Journal of Superconductivity and Novel Magnetism*, **2005**, 18, 23-28		18
30	Imaging electronic states on topological semimetals using scanning tunneling microscopy. *New Journal of Physics*, **2016**, 18, 105003	2.9	17
29	Evidence for unconventional superconductivity in twisted bilayer graphene. *Nature*, **2021**, 600, 240-245	50.4	16
28	Interacting multi-channel topological boundary modes in a quantum Hall valley system. *Nature*, **2019**, 566, 363-367	50.4	14
27	Scattering from incipient stripe order in the high-temperature superconductor Bi2Sr2CaCu2O8+δ *Physical Review B*, **2012**, 85,	3.3	12
26	Imaging Anyons with Scanning Tunneling Microscopy. *Physical Review X*, **2018**, 8,	9.1	11
25	A modular ultra-high vacuum millikelvin scanning tunneling microscope. *Review of Scientific Instruments*, **2020**, 91, 023703	1.7	9
24	Visualizing Heavy Fermion Formation and their Unconventional Superconductivity in f-Electron Materials. *Journal of the Physical Society of Japan*, **2014**, 83, 061008	1.5	9
23	Competition between pinning and melting in the two-dimensional vortex lattice. *Physical Review B*, **1994**, 50, 16117-16120	3.3	9
22	Visualizing broken symmetry and topological defects in a quantum Hall ferromagnet. *Science*, **2022**, 375, 321-326	33.3	9
21	Spectroscopy of a tunable moiré system with a correlated and topological flat band. *Nature Communications*, **2021**, 12, 2732	17.4	9

20	Ferroelectric quantum Hall phase revealed by visualizing Landau level wavefunction interference. *Nature Physics*, **2018**, 14, 796-800	16.2	9
19	Studies of two-dimensional MoGe superconductors in a magnetic field. *Physica B: Condensed Matter* , **1994**, 197, 530-539	2.8	8
18	Probing d-wave pairing correlations in the pseudogap regime of the cuprate superconductors via low-energy states near impurities. *Physical Review B*, **2001**, 64,	3.3	6
17	Evidence for a monolayer excitonic insulator. *Nature Physics*, **2022**, 18, 87-93	16.2	6
16	Tuning interactions between spins in a superconductor. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	6
15	Mapping of the formation of the pairing gap in. *Journal of Physics and Chemistry of Solids*, **2008**, 69, 3034-3038	3.9	5
14	Detecting and distinguishing Majorana zero modes with the scanning tunnelling microscope. *Nature Reviews Physics*, **2021**, 3, 541-554	23.6	5
13	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	11.5	4
12	Visualizing heavy fermion confinement and Pauli-limited superconductivity in layered CeCoIn. *Nature Communications*, **2018**, 9, 549	17.4	4
11	Andreev interferometry as a probe of superconducting phase correlations in the pseudogap regime of the cuprates. *Physical Review B*, **2000**, 62, 4105-4113	3.3	4
10	Quasi-particle interference of heavy fermions in resonant x-ray scattering. *Science Advances*, **2016**, 2, e1601086	14.3	4
9	Catalogue of flat-band stoichiometric materials.. *Nature*, **2022**, 603, 824-828	50.4	4
8	Visualizing Topological Surface States and their Novel Properties using Scanning Tunneling Microscopy and Spectroscopy. *Contemporary Concepts of Condensed Matter Science*, **2013**, 175-198		3
7	Visualizing Majorana fermions in a chain of magnetic atoms on a superconductor. *Physica Scripta*, **2015**, T164, 014012	2.6	3
6	Magic, symmetry, and twisted matter. *Science*, **2021**, 371, 1098-1099	33.3	3
5	Detecting incipient stripe order in the high-temperature superconductor Bi2Sr2CaCu2O8+x. *Physica C: Superconductivity and Its Applications*, **2012**, 481, 153-160	1.3	2
4	Probing the electronic structure of nanotube peapods with the scanning tunneling microscope. *Applied Physics A: Materials Science and Processing*, **2003**, 76, 469-474	2.6	2
3	Quantum conductors in a plane. *Proceedings of the National Academy of Sciences of the United States of America*, **1999**, 96, 9983-4	11.5	2

2	Visualizing broken symmetry and topological defects in a quantum Hall ferromagnet. *Science*, **2021**, eabc3770	353
1	Atomic-scale studies of impurities in superconductors with a scanning tunneling microscope. *Applied Physics A: Materials Science and Processing*, **2001**, 72, S257-S261	2.6