Takami Tohyama

List of Publications by Year in Descending Order

130 papers	3,668 citations	31 h-index	59 g-index
139 ext. papers	4,000 ext. citations	4.2 avg, IF	4.96 L-index

#	Paper	IF	Citations
130	High-Harmonic Generation Approaching the Quantum Critical Point of Strongly Correlated Systems.. *Physical Review Letters*, **2022**, 128, 047401	7.4	4
129	Multipolar nematic state of nonmagnetic FeSe based on DFT+U. *Physical Review B*, **2021**, 104,	3.3	1
128	Antiphase Oscillations in the Time-Resolved Spin Structure Factor of a Photoexcited Mott Insulator. *Physical Review Letters*, **2021**, 126, 127404	7.4	6
127	Characterization of photoexcited states in the half-filled one-dimensional extended Hubbard model assisted by machine learning. *Physical Review B*, **2020**, 101,	3.3	1
126	Gapless spin liquid in a square-kagome lattice antiferromagnet. *Nature Communications*, **2020**, 11, 3429	17.4	9
125	Analysis of time-resolved single-particle spectrum on the one-dimensional extended Hubbard model. *Physical Review B*, **2020**, 101,	3.3	2
124	Magnetic orders induced by RKKY interaction in Tsai-type quasicrystalline approximant Au-Al-Gd. *Physical Review Materials*, **2020**, 4,	3.2	6
123	Finite-temperature properties of the Kitaev-Heisenberg models on kagome and triangular lattices studied by improved finite-temperature Lanczos methods. *Physical Review Research*, **2020**, 2,	3.9	11
122	Vanishing Wilson ratio as the hallmark of quantum spin-liquid models. *Physical Review Research*, **2020**, 2,	3.9	2
121	Cluster-based Haldane states in spin-1/2 cluster chains. *Physical Review Research*, **2020**, 2,	3.9	1
120	Spin Dynamics in the t□?□ Model: Dynamical Density-Matrix Renormalization Group Study. *Journal of the Physical Society of Japan*, **2020**, 89, 124709	1.5	1
119	Observation of small Fermi pockets protected by clean CuO sheets of a high- superconductor. *Science*, **2020**, 369, 833-838	33.3	10
118	Photoinduced charge carrier dynamics in Hubbard two-leg ladders and chains. *Physical Review B*, **2019**, 99,	3.3	2
117	Syntheses and first-principles calculations of the pseudobrookite compound AlTi2O5. *Journal of Physics and Chemistry of Solids*, **2019**, 127, 252-257	3.9	4
116	Machine Learning Phase Diagram in the Half-filled One-dimensional Extended Hubbard Model. *Journal of the Physical Society of Japan*, **2019**, 88, 065001	1.5	4
115	Doublon-holon pairing mechanism via exchange interaction in two-dimensional cuprate Mott insulators. *Science Advances*, **2019**, 5, eaav2187	14.3	6
114	Biexciton in one-dimensional Mott insulators. *Communications Physics*, **2019**, 2,	5.4	2

113	Magnetization plateaus in the spin-12 antiferromagnetic Heisenberg model on a kagome-strip chain. *Physical Review B*, **2018**, 97,	3.3	9
112	Dynamical density matrix renormalization group study of spin and charge excitations in the four-leg t□J ladder. *Physical Review B*, **2018**, 97,	3.3	7
111	Spectral weight of resonant inelastic X-ray scattering in doped cuprates: Effect of core-hole lifetime. *International Journal of Modern Physics B*, **2018**, 32, 1840017	1.1	9
110	Ground state phase diagram of the Kitaev-Heisenberg model on a honeycomb-triangular lattice. *Physical Review B*, **2018**, 98,	3.3	7
109	Ground-state phase diagram of the Kitaev-Heisenberg model on a kagome lattice. *Physical Review B* , **2018**, 98,	3.3	9
108	Predicted Weyl fermions in magnetic GdBi and GdSb. *International Journal of Modern Physics B*, **2017**, 31, 1750217	1.1	6
107	Majorana Zero-Energy Mode and Fractal Structure in Fibonacci□Kitaev Chain. *Journal of the Physical Society of Japan*, **2017**, 86, 114707	1.5	5
106	Static and dynamic magnetic properties of the spin-12 inequilateral diamond-chain compounds A3Cu3AlO2(SO4)4(A=K,Rb,Cs). *Physical Review B*, **2017**, 95,	3.3	12
105	Incident-energy-dependent spectral weight of resonant inelastic x-ray scattering in doped cuprates. *Physical Review B*, **2016**, 94,	3.3	9
104	A small shoulder of optical absorption in polycrystalline HfO2 by LDA+U approach. *Solid State Communications*, **2016**, 244, 28-32	1.6	2
103	Density-Matrix Renormalization Group Study of Kitaev□Heisenberg Model on a Triangular Lattice. *Journal of the Physical Society of Japan*, **2016**, 85, 114710	1.5	13
102	Photoinduced in-gap excitations in the one-dimensional extended Hubbard model. *Physical Review B*, **2015**, 91,	3.3	18
101	Resonant inelastic X-ray scattering in strongly correlated electron systems. *Journal of Electron Spectroscopy and Related Phenomena*, **2015**, 200, 209-215	1.7	1
100	Enhanced charge excitations in electron-doped cuprates by resonant inelastic x-ray scattering. *Physical Review B*, **2015**, 92,	3.3	12
99	First-principles generalized gradient approximation (GGA)+Ud+Up studies of electronic structures and optical properties in cubic HfO2. *Computational Materials Science*, **2014**, 81, 397-401	3.2	21
98	LaPd2Sb2: A pnictide superconductor with CaBe2Ge2 type structure. *Journal of Alloys and Compounds*, **2014**, 583, 151-154	5.7	20
97	Kondo resonance from p-wave hybridization in graphene. *Journal of Physics Condensed Matter*, **2014**, 26, 415601	1.8	3
96	Optical conductivity of antiferromagnetic metallic chromium: Mean-field calculation for the multi-orbital Hubbard model. *Journal of the Korean Physical Society*, **2013**, 63, 632-635	0.6	

95	Double-pulse deexcitations in a one-dimensional strongly correlated system. *Europhysics Letters*, **2013**, 103, 57005	1.6	3
94	Enhanced charge order in a photoexcited one-dimensional strongly correlated system. *Physical Review Letters*, **2012**, 109, 197401	7.4	29
93	Parameter dependence of optical conductivity in antiferromagnetic phase of iron pnictides. *Physica C: Superconductivity and Its Applications*, **2011**, 471, 666-669	1.3	
92	Theory of resonant inelastic X-ray scattering spectrum for Ni impurities in cuprates. *Journal of Physics and Chemistry of Solids*, **2011**, 72, 354-357	3.9	0
91	Charge and spin dynamics in antiferromagnetic metallic phase of iron-based superconductors. *Journal of Physics and Chemistry of Solids*, **2011**, 72, 315-318	3.9	1
90	Pressure effects on Dirac fermions in □(BEDT-TTF)□□ *Journal of Physics Condensed Matter*, **2011**, 23, 464202	1.8	4
89	Quantum dynamics of a driven correlated system coupled to phonons. *Physical Review Letters*, **2011** , 107, 246404	7.4	33
88	Enhanced pairing correlations near oxygen dopants in cuprate superconductors. *Physical Review Letters*, **2010**, 105, 257005	7.4	7
87	Fermi surface topology effect on interlayer magnetoresistance with in-plane magnetic field in layered multiband system: Application to FeAs-based superconductors. *Physica C: Superconductivity and Its Applications*, **2010**, 470, 95-97	1.3	
86	Induced order in nonequivalent two-layer system. *Physica C: Superconductivity and Its Applications*, **2010**, 470, S921-S922	1.3	
85	Modeling of pressure effects in striped nickelates. *Physica C: Superconductivity and Its Applications*, **2010**, 470, S247-S248	1.3	1
84	Theoretical study of resonant inelastic X-ray scattering spectrum in the Hubbard ladder. *Physica C: Superconductivity and Its Applications*, **2010**, 470, S232-S233	1.3	
83	Temperature dependence of the electronic structure of Sr14Cu24O41 studied by resonant inelastic X-ray scattering. *Physica C: Superconductivity and Its Applications*, **2010**, 470, S145-S146	1.3	4
82	Resonant inelastic X-ray scattering of La2Cu0.95Ni0.05O4. *Physica C: Superconductivity and Its Applications*, **2010**, 470, S155-S157	1.3	
81	Interlayer magnetoresistance theory for layered Dirac fermion systems: Application to. *Physica E: Low-Dimensional Systems and Nanostructures*, **2010**, 42, 763-766	3	1
80	Pressure dependence of interlayer magnetoresistance in. *Physica B: Condensed Matter*, **2010**, 405, S157-S159	2.8	
79	Evolution of the hyperfine parameters of Fe in superconducting LiFeAs as observed by 57Fe M□ssbauer spectroscopy. *Solid State Communications*, **2010**, 150, 1525-1528	1.6	7
78	Bipolaron in the t-J model coupled to longitudinal and transverse quantum lattice vibrations. *Physical Review Letters*, **2009**, 103, 186401	7.4	31

77	Modeling the antiferromagnetic phase in iron pnictides: weakly ordered state. *Physical Review Letters*, **2009**, 103, 247202	7.4	30
76	Effect of Fermi Surface Topology on Inter-Layer Magnetoresistance in Layered Multiband Systems: Application to LaFeAsO1-xFx. *Journal of the Physical Society of Japan*, **2009**, 78, 114702	1.5	4
75	Nuclear Quadrupole Resonance Frequency in Multilayered Cuprates. *Journal of the Physical Society of Japan*, **2009**, 78, 123704	1.5	1
74	Origin of the spatial variation of the pairing gap in bi-based high temperature cuprate superconductors. *Physical Review Letters*, **2008**, 101, 247003	7.4	30
73	Effect of Electron-Phonon Interaction on Optical Properties in One-Dimensional Mott Insulators. *Progress of Theoretical Physics Supplement*, **2008**, 176, 165-181		1
72	Exact diagonalization study on nonmagnetic impurity effects in high- superconductors. *Journal of Physics and Chemistry of Solids*, **2008**, 69, 3365-3368	3.9	
71	Effect of electron□phonon interaction on optical response in one-dimensional cuprates. *Journal of Physics and Chemistry of Solids*, **2008**, 69, 3070-3073	3.9	
70	Momentum-resolved charge excitations in high-Tc cuprates studied by resonant inelastic X-ray scattering. *Journal of Physics and Chemistry of Solids*, **2008**, 69, 3118-3124	3.9	3
69	Spectral function and dynamical spin correlation function in the □model. *Journal of Physics and Chemistry of Solids*, **2008**, 69, 3176-3180	3.9	
68	Theoretical study of resonant inelastic X-ray scattering in ladder cuprates. *Journal of Magnetism and Magnetic Materials*, **2007**, 310, 972-974	2.8	1
67	Effect of electron□phonon coupling on spin□charge separation in one-dimensional strongly correlated electron systems. *Journal of Magnetism and Magnetic Materials*, **2007**, 310, 975-977	2.8	
66	Effect of Kondo resonance on optical third harmonic generation. *Journal of Magnetism and Magnetic Materials*, **2007**, 310, 960-962	2.8	1
65	Symmetry of magnetic excitons in two-dimensional Mott insulators. *Journal of Magnetism and Magnetic Materials*, **2007**, 310, e255-e257	2.8	
64	Effect of frustration on optical conductivity in a two-dimensional triangular Hubbard model near half filling. *Journal of Physics Condensed Matter*, **2007**, 19, 145287	1.8	
63	Distinct spinon and holon dispersions in photoemission spectral functions from one-dimensional SrCuO2. *Nature Physics*, **2006**, 2, 397-401	16.2	153
62	Theory of Cu L-edge resonant inelastic X-ray scattering in insulating cuprates. *Journal of Physics and Chemistry of Solids*, **2006**, 67, 274-276	3.9	2
61	Spectral function in hole- and electron-doped high-Tc cuprates. *Journal of Physics and Chemistry of Solids*, **2006**, 67, 632-634	3.9	
60	Numerically exact diagonatization study of Drude weight and chemical potential in two-dimensional Hubbard model. *Journal of Physics and Chemistry of Solids*, **2006**, 67, 2210-2213	3.9	3

59	Theory of RIXS in strongly correlated electron systems: Mott gap excitations in cuprates. *Journal of Physics and Chemistry of Solids*, **2005**, 66, 2139-2144	3.9	4
58	Dispersion relation of charge gap excitations in quasi-1D Mott insulators studied by resonant X-ray scattering. *Journal of Physics and Chemistry of Solids*, **2005**, 66, 2212-2215	3.9	8
57	Momentum dependence of charge excitations in the electron-doped superconductor Nd1.85 Ce0.15 CuO4: a resonant inelastic x-ray scattering study. *Physical Review Letters*, **2005**, 94, 207003	7.4	65
56	Mott gap excitations in twin-free YBa2Cu3O7-delta (Tc=93 K) studied by resonant inelastic x-ray scattering. *Physical Review Letters*, **2005**, 94, 187002	7.4	39
55	NUMERICAL STUDY OF THE ELECTRONIC STATES IN HOLE- AND ELECTRON-DOPED HIGH-TC CUPRATES. *International Journal of Modern Physics B*, **2005**, 19, 115-117	1.1	1
54	Effect of Electron Correlation on Phonon Spectra in Cuprates. *Journal of Low Temperature Physics*, **2003**, 131, 257-261	1.3	5
53	Mott gap excitations and resonant inelastic x-ray scattering in doped cuprates. *Physical Review Letters*, **2003**, 91, 117001	7.4	51
52	Nonlinear optical response in one-dimensional Mott insulators. *Journal of Physics and Chemistry of Solids*, **2002**, 63, 1599-1602	3.9	2
51	Charge dynamics in electron-underdoped high-Tc cuprates. *Journal of Physics and Chemistry of Solids*, **2002**, 63, 2357-2359	3.9	
50	Resonant two-magnon Raman scattering and photoexcited States in two-dimensional mott insulators. *Physical Review Letters*, **2002**, 89, 257405	7.4	25
49	Effect of charge stripes on electronic and magnetic properties in high-Tc cuprates. *Journal of Physics and Chemistry of Solids*, **2001**, 62, 269-271	3.9	
48	Effect of four-spin interaction on magnetic excitation in ladder and 2D insulating cuprates. *Journal of Physics and Chemistry of Solids*, **2001**, 62, 273-276	3.9	4
47	Large third-order optical nonlinearity of Cu-O chains investigated by third-harmonic generation spectroscopy. *Physical Review Letters*, **2001**, 87, 177401	7.4	55
46	Charge and spin in low-dimensional cuprates. *Reports on Progress in Physics*, **2001**, 64, 383-428	14.4	45
45	Spin Liquid State around a Doped Hole in Insulating Cuprates. *Journal of the Physical Society of Japan*, **2000**, 69, 9-12	1.5	27
44	Resonant inelastic x-ray scattering in one-dimensional copper oxides. *Physical Review B*, **2000**, 61, 7180-7182	3.3	34
43	Nonlinear optical response and spin-charge separation in one-dimensional Mott insulators. *Physical Review B*, **2000**, 62, R4769-R4773	3.3	84
42	Angle-resolved photoemission in highTccuprates from theoretical viewpoints. *Superconductor Science and Technology*, **2000**, 13, R17-R32	3.1	127

41	Electronic structure of mott insulators studied by inelastic X-ray scattering. *Science*, **2000**, 288, 1811-4	33.3	185
40	Effect of Stripes on Electronic States in Underdoped La2SrxCuO4. *Physical Review Letters*, **1999**, 82, 4910-4913	7.4	64
39	Stripe stability in the extended t model on planes and four-leg ladders. *Physical Review B*, **1999**, 59, R11649-R11652	3.3	49
38	Momentum Dependence of Resonant Inelastic X-Ray Scattering Spectrum in Insulating Cuprates. *Physical Review Letters*, **1999**, 83, 3705-3708	7.4	88
37	Interchain interactions and magnetic properties of Li2CuO2. *Physical Review B*, **1999**, 60, 6230-6233	3.3	32
36	Doping dependence of electronic excitations in high Tc superconducting cuprates. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **1999**, 63, 159-162	3.1	1
35	Role of Stripes in Spin and Charge Dynamics of Underdoped La2 Sr x CuO4. *Journal of Low Temperature Physics*, **1999**, 117, 211-215	1.3	3
34	Magnetic Interaction in Insulating Cuprates. *Journal of Low Temperature Physics*, **1999**, 117, 389-393	1.3	27
33	Finite Temperature Effects in a One-Dimensional Mott-Hubbard Insulator: Angle-Resolved Photoemission Study of Na0.96V2O5. *Physical Review Letters*, **1999**, 82, 803-806	7.4	33
32	Effect of magnetic frustration on the single-hole spectral function in the t?? model. *Physical Review B*, **1999**, 59, 1840-1844	3.3	11
31	ELECTRONIC STATES AND EXCITATION SPECTRA OF COPPER OXIDES WITH LADDER AND/OR CHAIN. *Journal of Physics and Chemistry of Solids*, **1998**, 59, 2224-2226	3.9	1
30	EFFECT OF SPIN GAP ON SINGLE-HOLE EXCITATION SPECTRUM IN THE ONE-DIMENSIONAL t?? MODEL. *Journal of Physics and Chemistry of Solids*, **1998**, 59, 1864-1866	3.9	4
29	Spin and charge excitations and photoemission spectra in 1D and 2D cuprates. *Journal of Physics and Chemistry of Solids*, **1998**, 59, 1897-1901	3.9	5
28	Systematics of the Photoemission Spectral Function of Cuprates: Insulators and Hole- and Electron-Doped Superconductors. *Physical Review Letters*, **1998**, 80, 4245-4248	7.4	218
27	Electronic states and magnetic properties of edge-sharing Cu-O chains. *Physical Review B*, **1998**, 57, 5326-5335	3.3	258
26	Superexchange interaction in cuprates. *Physical Review B*, **1998**, 58, R14713-R14716	3.3	37
25	Electronic States of Doped Spin Ladders (Sr,Ca)14Cu24O41. *Journal of the Physical Society of Japan*, **1997**, 66, 937-940	1.5	50
24	Separation of spin and charge excitations in one-dimensional SrCuO2. *Physical Review B*, **1997**, 56, 15589-15595	3.3	89

23	Approximate Decoupling of Spin and Charge Excitations in the Two-Dimensionalt-JModel. *Journal of the Physical Society of Japan*, **1996**, 65, 1902-1905	1.5	27
22	Observation of Spin-Charge Separation in One-Dimensional SrCuO2. *Physical Review Letters*, **1996**, 77, 4054-4057	7.4	317
21	Electronic States of Cuprate Superconductors with Apical Halogen. *Journal of the Physical Society of Japan*, **1996**, 65, 667-670	1.5	5
20	Anomalous spectral function of the 1D and 2Dt-J models. *European Physical Journal D*, **1996**, 46, 1953-1954		1
19	Anomalous low-energy excitations in strongly correlated electron systems. *Physica C: Superconductivity and Its Applications*, **1996**, 263, 61-65	1.3	13
18	Spin and charge dynamics of the t-J model. *Physical Review Letters*, **1995**, 74, 980-983	7.4	65
17	Correlation effects in x-ray spectra of Ni and Ni in Ni3Mo. *Physical Review B*, **1994**, 49, 14165-14171	3.3	5
16	Role of next-nearest-neighbor hopping in the t-tQJ model. *Physical Review B*, **1994**, 49, 3596-3599	3.3	147
15	Exact diagonalization study of magnetic properties at finite temperatures in the t-J model. *Physica C: Superconductivity and Its Applications*, **1993**, 215, 382-390	1.3	10
14	One-particle excitation spectra, optical conductivity and O ls x-ray absorption spectra in high-Tc cuprates: a cluster model approach. *Physica C: Superconductivity and Its Applications*, **1992**, 191, 193-198	1.3	42
13	Effects of Carrier-Doping on Optical Conductivity in HighTcCopper Oxides. *Journal of the Physical Society of Japan*, **1991**, 60, 53-56	1.5	32
12	Charge-transfer gap and superexchange interaction in insulating cuprates. *Physical Review Letters*, **1991**, 66, 1228-1231	7.4	121
11	Apex oxygen and critical temperature in copper oxide superconductors: Universal correlation with the stability of local singlets. *Physical Review B*, **1991**, 43, 2968-2982	3.3	315
10	Transition temperature in copper-oxide superconductors correlated with energy level of apical oxygen. *Physica C: Superconductivity and Its Applications*, **1990**, 166, 385-387	1.3	51
9	Physical Parameters in Copper Oxide Superconductors. *Journal of the Physical Society of Japan*, **1990**, 59, 1760-1770	1.5	68
8	Tight-binding calculations of the electronic structure and magnetic properties in ordered TPt3(T=Ti, V, Cr, Mn, Fe and Co) alloys. *Journal of Physics Condensed Matter*, **1989**, 1, 1789-1798	1.8	38
7	Magnetic properties of the pseudobinary alloy (Cr-Mn)Pt3. *Journal of Magnetism and Magnetic Materials*, **1989**, 78, 412-414	2.8	2
6	Cluster analyses of electronic states in electron-doped copper oxide superconductors. *Physica C: Superconductivity and Its Applications*, **1989**, 158, 525-530	1.3	17

5	Tight-binding calculation of the local moments in ordered FeV alloy. *Journal of Magnetism and Magnetic Materials*, **1988**, 75, 193-196	2.8	1
4	Metamagnetic transition of ScCo2and LuCo2. *Journal of Physics F: Metal Physics*, **1987**, 17, L163-L167		27
3	Magnetic properties of Y(Fe-Co)2. *Journal of Magnetism and Magnetic Materials*, **1987**, 66, 409-412	2.8	13
2	Magnetic properties of Zr(Fe-Co)2. *Journal of Magnetism and Magnetic Materials*, **1987**, 66, 413-416	2.8	8
1	The itinerant electron metamagnetism for ScCo2, YCo2 and LuCo2. *Journal of Magnetism and Magnetic Materials*, **1987**, 70, 44-46	2.8	23