

# Takahiro Tomita

## List of Publications by Year in descending order

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Version: 2024-02-01

80  
papers

2,820  
citations

304743

22  
h-index

168389

53  
g-index

81  
all docs

81  
docs citations

81  
times ranked

3075  
citing authors

#	ARTICLE	IF	CITATIONS
1	Evidence for magnetic Weyl fermions in a correlated metal. Nature Materials, 2017, 16, 1090-1095.	27.5	450
2	Large anomalous Nernst effect at room temperature in a chiral antiferromagnet. Nature Physics, 2017, 13, 1085-1090.	16.7	432
3	Magnetic and magnetic inverse spin Hall effects in a non-collinear antiferromagnet. Nature, 2019, 565, 627-630.	27.8	252
4	Giant Anomalous Hall Effect in the Chiral Antiferromagnet $Mn_3Ge$ . Physical Review Applied, 2016, 5, .	3.8	249
5	Heavy-Fermion Superconductivity in the Quadrupole Ordered State of $PrV_2$ . Physical Review Letters, 2014, 113, 267001.	7.8	157
6	Pressure-Induced Enhancement of Superconductivity and Structural Transition in $BiS_2$ -Layered $LaO_{1-x}F_x$ . Journal of the Physical Society of Japan, 2014, 83, 063704.	1.6	111
7	Field-induced quantum metal-insulator transition in the pyrochlore iridate $Nd_2Ir_2O_7$ . Nature Physics, 2016, 12, 134-138.	16.7	109
8	Anomalous transport due to Weyl fermions in the chiral antiferromagnets $Mn_3X$ , $X=Sn, Ge$ . Nature Communications, 2021, 12, 572.	12.8	90
9	Dependence of $T_c$ on hydrostatic pressure in superconducting $MgB_2$ . Physical Review B, 2001, 64, .	3.2	78
10	Slater to Mott Crossover in the Metal to Insulator Transition of $Nd_2O_7$ . Physical Review Letters, 2016, 117, 056403.	7.8	172
11	Strange metal without magnetic criticality. Science, 2015, 349, 506-509.	12.6	69
12	Dependence of the superconducting transition temperature of single and polycrystalline $MgB_2$ on hydrostatic pressure. Physica C: Superconductivity and Its Applications, 2003, 385, 105-116.	1.2	53
13	Anisotropic heavy-Fermi-liquid formation in valence-fluctuating $YbAlB_4$ . Physical Review B, 2011, 84, .	3.2	44
14	Negative thermal expansion of $MgB_2$ in the superconducting state and anomalous behavior of the bulk Gr $\frac{1}{4}$ neisen function. Physical Review B, 2005, 72, .	3.2	42
15	Giant field-like torque by the out-of-plane magnetic spin Hall effect in a topological antiferromagnet. Nature Communications, 2021, 12, 6491.	12.8	41
16	AF-FRI metamagnetic transition in itinerant $Mn_2CoSb$ system: high-field and high-pressure effects. Physica B: Condensed Matter, 2002, 318, 198-210.	2.7	38
17	Magnetic anisotropy, tunneling effects, high-frequency EPR, and molecular structure of fast-relaxation species of $Mn^{12}$ . Physical Review B, 2002, 65, .	3.2	37
18	On the origin of the double superconducting transition in overdoped $YBa_2Cu_3O_x$ . Physica C: Superconductivity and Its Applications, 2006, 434, 194-198.	1.2	37

#	ARTICLE	IF	CITATIONS
19	Development of high-pressure, high-field and multifrequency electron spin resonance system. Review of Scientific Instruments, 2007, 78, 065107.	1.3	29
20	Antichiral spin order, its soft modes, and their hybridization with phonons in the topological semimetal $\text{Mn}_3\text{P}_2$ . Physical Review B, 2020, 102, .	3.2	29
21	Selective resonance effect of the folded longitudinal phonon modes in the Raman spectra of SiC. Physical Review B, 2000, 62, 12896-12901.	3.2	28
22	Quantum valence criticality in a correlated metal. Science Advances, 2018, 4, eaao3547.	10.3	28
23	Electrical nucleation, displacement, and detection of antiferromagnetic domain walls in the chiral antiferromagnet $\text{Mn}_3\text{Sn}$ . Communications Physics, 2020, 3, .	5.3	21
24	Giant Effective Damping of Octupole Oscillation in an Antiferromagnetic Weyl Semimetal. Small Science, 2021, 1, 2000062.	9.9	20
25	Pressure-induced enhancement of the critical current density in superconducting $\text{YBa}_2\text{Cu}_3\text{O}_x$ bicrystalline rings. Physical Review B, 2006, 74, .	3.2	19
26	Anomalous Spin Dynamics Observed by High-Frequency ESR in Honeycomb Lattice Antiferromagnet $\text{InCu}_2\text{V}_1\text{VO}_3$ . Journal of the Physical Society of Japan, 2011, 80, 023705.	1.6	17
27	Anomalous pressure dependence of the superconductivity in noncentrosymmetric $\text{LaNi}_2\text{C}_2$ . Evidence of strong electronic correlations. Physical Review B, 2014, 90, .	3.2	17
28	Enhancement of the Critical Current Density of $\text{YBa}_2\text{Cu}_3\text{O}_x$ Superconductors under Hydrostatic Pressure. Physical Review Letters, 2006, 96, 077001.	7.8	16
29	Recent developments of high field ESR systems in Kobe. Journal of Physics: Conference Series, 2006, 51, 611-614.	0.4	15
30	Magnetic properties of $\text{UNiAl}$ under pressure. Physical Review B, 1999, 59, 8720-8724.	3.2	14
31	Pressure Dependence of Electrical Transport in the Triangular Antiferromagnetic Insulators $\text{FeGa}_2\text{S}_4$ and $\text{FeGa}_2\text{S}_5$ . Journal of the Physical Society of Japan, 2009, 78, 094603.	1.6	12
32	Magnetoresistance in $\text{PrInAg}_2$ at 40mK. Physica B: Condensed Matter, 2000, 281-282, 150-151.	2.7	11
33	High Pressure Measurements of the Resistivity of $\text{YbAlB}_4$ . Journal of Physics: Conference Series, 2015, 592, 012019.	0.4	11
34	The effect of pressure on the magnetic properties of the molecule-based canted metamagnet dexamethylferrocenium 2,3-dicyano-1,4-naphthoquinonide, $\text{FeCp}^*_2$ [DCNQ]. Polyhedron, 2003, 22, 2249-2252.	2.2	10
35	High-Pressure Studies for Hydrogen Substituted $\text{CaFeAsF}_{1-x}\text{H}_x$ and $\text{SmFeAsO}_{1-x}\text{H}_x$ . Journal of Superconductivity and Novel Magnetism, 2012, 25, 1293-1296.	1.8	10
36	Correlation between $T_c$ and Crystal Structure in S-Doped FeSe Superconductors under Pressure: Studied by X-ray Diffraction of $\text{FeSe}_{0.8}\text{S}_{0.2}$ at Low Temperatures. Journal of the Physical Society of Japan, 2015, 84, 024713.	1.6	10

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37	Frustrated magnetism in a Mott insulator based on a transition metal chalcogenide. <i>Journal of Physics: Conference Series</i> , 2016, 683, 012025.	0.4	10
38	X-ray study of ferroic octupole order producing anomalous Hall effect. <i>Nature Communications</i> , 2021, 12, 5582.	12.8	10
39	Precise resistivity measurement in PrInAg <sub>2</sub> down to 50 mK. <i>Physica B: Condensed Matter</i> , 2000, 284-288, 1341-1342.	2.7	8
40	Enhanced superconducting properties of bicrystalline YBa <sub>2</sub> Cu <sub>3</sub> O <sub>x</sub> and alkali metals under pressure. <i>Journal of Physics Condensed Matter</i> , 2005, 17, S921-S928.	1.8	8
41	Scanning tunneling microscopy on cleaved Mn <sub>3</sub> Sn(0001) surface. <i>Scientific Reports</i> , 2019, 9, 9677.	3.3	7
42	High-temperature antiferromagnetism in Yb based heavy fermion systems proximate to a Kondo insulator. <i>Physical Review Research</i> , 2021, 3, .	3.6	7
43	Development and application of high field and high pressure ESR system. <i>Journal of Physics: Conference Series</i> , 2006, 51, 565-568.	0.4	6
44	Low-temperature magnetization of the quantum critical heavy fermion superconductor $\text{Pr}_2\text{Ce}_2\text{AlB}_4$ . <i>Physica Status Solidi (B): Basic Research</i> , 2010, 247, 720-722.	1.5	6
45	Pronounced non-Fermi liquid behavior of the quantum critical heavy fermion superconductor $\text{Pr}_2\text{Ce}_2\text{AlB}_4$ . <i>Physica Status Solidi (B): Basic Research</i> , 2010, 247, 485-489.	1.5	6
46	Pressure-induced magnetic transition exceeding 30 K in the Yb-based heavy-fermion $\text{Pr}_2\text{Ce}_2\text{AlB}_4$ . <i>Physical Review B</i> , 2016, 94, .	3.2	6
47	Hydrostatic pressure dependence of the Curie temperature of [MnR <sub>4</sub> TPP][TCNE] for R=OC <sub>10</sub> H <sub>21</sub> , OC <sub>14</sub> H <sub>29</sub> , and F (TPP, tetraphenylporphyrin; TCNE, tetracyanoethylene). <i>Polyhedron</i> , 2003, 22, 3339-3344.	2.2	5
48	Heavy Fermion Superconductivity in Non-magnetic Cage Compound Pr <sub>2</sub> Al <sub>20</sub> . <i>Journal of Physics: Conference Series</i> , 2016, 683, 012013.	0.4	5
49	Large spontaneous Hall effects in chiral topological magnets. <i>Philosophical Magazine</i> , 2017, 97, 2815-2827.	1.6	5
50	Comparative pressure studies of the superconducting transition temperature in isotopically substituted samples of $\text{Pr}(\text{BEDT-TTF})_2\text{Cu}(\text{SCN})_2$ . <i>Physica C: Superconductivity and Its Applications</i> , 2004, 402, 17-26.	1.2	4
51	Superconducting Transitions and Crystal Structure for FeSe <sub>1-x</sub> S <sub>x</sub> (x=0.2) under Pressure. <i>Journal of Physics: Conference Series</i> , 2012, 400, 022125.	0.4	4
52	Structural Phase Transition and Possible Valence Instability of Ce <sub>4f</sub> Electron Induced by Pressure in CeCoSi. <i>Journal of the Physical Society of Japan</i> , 2022, 91, .	1.6	4
53	Pressure-dependent studies of CeSbNix (0<math>x</math>-0.35). <i>Physical Review B</i> , 2001, 65, .	3.2	3
54	High-Pressure Studies for Iron-Based Superconductors. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 05FD01.	1.5	3

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55	High-pressure studies on $T_c$ and crystal structure of iron chalcogenide superconductors. Science and Technology of Advanced Materials, 2012, 13, 054401.	6.1	3
56	High Magnetic Transition Temperature and Semiconductor like Transport Properties of Mn-doped $\text{YbAlB}_4$ . Journal of Physics: Conference Series, 2016, 683, 012009.	0.4	3
57	Experimental exploration of novel semimetal state in strong anisotropic Pyrochlore iridate $\text{Nd}_2\text{Ir}_2\text{O}_7$ under high magnetic field. Journal of Physics: Conference Series, 2016, 683, 012024.	0.4	3
58	Strong orbital fluctuations in multipolar ordered states of $\text{PrV}_2\text{Al}_{20}$ . Journal of Magnetism and Magnetic Materials, 2016, 400, 66-69.	2.3	3
59	Logarithmic criticality in transverse thermoelectric conductivity of the ferromagnetic topological semimetal $\text{CoMnSb}$ . Physical Review B, 2021, 104, .	3.2	3
60	Effect of pressure on the magnetic properties of the series $\text{Cu}_{1-x}\text{Zn}_x\text{Cr}_2\text{Se}_4$ . Journal of Magnetism and Magnetic Materials, 2004, 272-276, 826-827.	2.3	2
61	High-pressure Effect for High- $T_c$ Superconductors. TEION KOGAKU (Journal of Cryogenics and) Tj ETQq1 1 0.784314 rgBT / Overlock 107	0.15	2
62	High-pressure studies for hydrogen substituted $\text{CaFeAsF}_{1-x}\text{H}_x$ . Journal of Physics: Conference Series, 2012, 400, 022092.	0.4	2
63	Unconventional Quantum Criticality in $\text{YbAlB}_4$ Detached from Its Magnetically Ordered Phase. Physics Procedia, 2015, 75, 482-487.	1.2	2
64	Anisotropic Thermal Expansion of $\text{YbAlB}_4$ . Journal of Physics: Conference Series, 2017, 807, 022005.	0.4	2
65	Crystal Structure and Magnetic Properties of the Ferromagnet $\text{CoMnSb}$ . , 2020, , .		2
66	Multi-frequency ESR study of $S = 1/2$ frustration systems $\text{ZnCu}_4(\text{OH})_6\text{Cl}_2$ . Journal of Physics: Conference Series, 2009, 145, 012035.	0.4	1
67	X-Ray Diffraction Measurements at Low Temperature under Pressure. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 2012, 22, 222-228.	0.0	1
68	Low-temperature thermal expansion measurements in $\text{PrV}_2\text{Al}_{20}$ . Journal of Physics: Conference Series, 2016, 683, 012014.	0.4	1
69	Large Nernst Effect and Thermodynamics Properties in Weyl Antiferromagnet. , 2020, , .		1
70	X-Ray Diffraction Study of $\text{CeT}_2\text{Al}_{10}$ ( $T = \text{Ru, Os}$ ) at Low Temperatures and under Pressures. Acta Physica Polonica A, 2017, 131, 988-990.	0.5	1
71	Anomalous transport properties of the antiferromagnetic Weyl semimetals $\text{Mn}_3\text{X}$ ( $X = \text{Sn,}$ ) Tj ETQq1 1 0.784314 rgBT / Ov	0.4	1
72	Antiferroquadrupolar ordering in $\text{TmTe}$ under high magnetic fields and high pressures. Physica B: Condensed Matter, 2000, 281-282, 574-575.	2.7	0

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73	Pressure dependent studies of Ni-incorporated CeSb. Physica B: Condensed Matter, 2002, 312-313, 261-263.	2.7	0
74	ESR measurement of triple chain magnet $\text{Cu}_3(\text{OH})_4\text{SO}_4$ in millimeter wave region. , 2007, , .		0
75	Pressure-Induced Increase in $J_c$ across Single Grain Boundaries in $\text{YBa}_2\text{Cu}_3\text{O}_x$ . Journal of the Physical Society of Japan, 2007, 76, 118-119.	1.6	0
76	High frequency ESR measurements of Co- $\delta$ chain. Journal of Physics: Conference Series, 2009, 150, 042243.	0.4	0
77	Magnetic and Transport Properties of Frustrated $\hat{1}^3\text{-MnPd}$ alloys. Journal of Physics: Conference Series, 2016, 683, 012026.	0.4	0
78	Quantum Criticality Beneath the Superconducting Dome in $\hat{1}^2\text{-YbAlB}_4$ . Journal of Physics: Conference Series, 2016, 683, 012007.	0.4	0
79	Sample Quality Dependence of the Magnetic Properties in Non-Collinear Antiferromagnet $\text{Mn}_3\text{Sn}$ . , 2020, , .		0
80	High-Pressure Studies for Iron-Based Superconductors. Japanese Journal of Applied Physics, 2011, 50, 05FD01.	1.5	0