

Hidekazu tanaka

List of Publications by Year in descending order

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100
papers

5,444
citations

76326

40
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101
all docs

101
docs citations

101
times ranked

2837
citing authors

#	ARTICLE	IF	CITATIONS
1	Bose-Einstein Condensation of Dilute Magnons in TiCuCl_3 . <i>Physical Review Letters</i> , 2000, 84, 5868-5871.	7.8	615
2	Majorana quantization and half-integer thermal quantum Hall effect in a Kitaev spin liquid. <i>Nature</i> , 2018, 559, 227-231.	27.8	596
3	Successive magnetic phase transitions in $\text{Ba}_3\text{CoSb}_2\text{O}_{12}$ XY-like frustrated magnet on the honeycomb lattice. <i>Physical Review B</i> , 2015, 91, .	3.2	192
4	Experimental Realization of a Spin- $\frac{1}{2}$ Triangular-Lattice Heisenberg Antiferromagnet. <i>Physical Review Letters</i> , 2012, 108, 057205.	7.8	233
5	Magnetization plateau in the frustrated quantum spin system Cs_2CuBr_4 . <i>Physical Review B</i> , 2003, 67, .	3.2	192
6	Magnetization Process and Collective Excitations in the Heisenberg Antiferromagnet $\text{Ba}_3\text{CoSb}_2\text{O}_{12}$ Triangular-Lattice. <i>Physical Review Letters</i> , 2015, 115, 257201.	7.8	170
7	Unusual Thermal Hall Effect in a Kitaev Spin Liquid Candidate RuCl_3 . <i>Physical Review Letters</i> , 2018, 120, 217205.	7.8	158
8	Field-induced three-dimensional magnetic ordering in the spin-gap system. <i>Journal of Physics Condensed Matter</i> , 1999, 11, 265-271.	1.8	157
9	High-Field Magnetization Processes of Double Spin Chain Systems KCuCl_3 and TiCuCl_3 . <i>Journal of the Physical Society of Japan</i> , 1997, 66, 1900-1903.	1.6	151
10	Observation of Field-Induced Transverse Néel Ordering in the Spin Gap System TiCuCl_3 . <i>Journal of the Physical Society of Japan</i> , 2001, 70, 939-942.	1.6	146
11	Half-integer quantized anomalous thermal Hall effect in the Kitaev material candidate $\hat{I}_{\pm}\text{-RuCl}_3$. <i>Science</i> , 2021, 373, 568-572.	12.6	143
12	Cascade of Magnetic-Field-Induced Quantum Phase Transitions in a Spin- $\frac{1}{2}$ Triangular-Lattice Antiferromagnet. <i>Physical Review Letters</i> , 2009, 102, 257201.	7.8	119
13	Pinwheel valence-bond solid and triplet excitations in the two-dimensional deformed kagome lattice. <i>Nature Physics</i> , 2010, 6, 865-869.	16.7	104
14	Ground States of Double Spin Chain Systems TiCuCl_3 , NH_4CuCl_3 and KCuBr_3 . <i>Journal of the Physical Society of Japan</i> , 1997, 66, 1611-1614.	1.6	94
15	Field-induced magnetic ordering in the quantum spin system KCuCl_3 . <i>Physical Review B</i> , 2002, 66, .	3.2	91
16	Magnetic excitations in the spin-gap system TiCuCl_3 . <i>Physical Review B</i> , 2002, 65, .	3.2	88
17	Robustness of the thermal Hall effect close to half-quantization in $\hat{I}_{\pm}\text{-RuCl}_3$. <i>Nature Physics</i> , 2022, 18, 401-405.	16.7	85
18	Structure of the magnetic excitations in the spin-1/2 triangular-lattice Heisenberg antiferromagnet $\text{Ba}_3\text{CoSb}_2\text{O}_9$. <i>Nature Communications</i> , 2017, 8, 235.	12.8	80

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19	Sample dependence of half-integer quantized thermal Hall effect in the Kitaev spin-liquid candidate <math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>\hat{\pm}</mml:mi><mml:mtext>\hat{\sim}</mml:mtext><mml:msub></mml:msub></mml:mrow></math> Physical Review B, 2020, 102, .	3.2	71
20	Spin-resonance modes of the spin-gap magnet TlCuCl_3 . Physical Review B, 2004, 69, .	3.2	68
21	Specific heat study of the field-induced magnetic ordering in the spin-gap system TlCuCl_3 . Physical Review B, 2001, 63, .	3.2	67
22	Magnetic-Field Induced Bose-Einstein Condensation of Magnons and Critical Behavior in Interacting Spin Dimer System TlCuCl_3 . Journal of the Physical Society of Japan, 2008, 77, 013701.	1.6	66
23	Sound Attenuation Study on the Bose-Einstein Condensation of Magnons in TlCuCl_3 . Physical Review Letters, 2003, 91, 057201.	7.8	62
24	Magnetic thermal conductivity far above the Néel temperature in the Kitaev-magnet candidate <math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>\hat{\pm}</mml:mi><mml:mtext>\hat{\sim}</mml:mtext><mml:msub></mml:msub></mml:mrow></math> Physical Review B, 2017, 95, .	3.2	61
25	Neutron Diffraction Study of the Pressure-Induced Magnetic Ordering in the Spin Gap System TlCuCl_3 . Journal of the Physical Society of Japan, 2003, 72, 1026-1029.	1.6	60
26	Magnetization plateaux of the $S=1/2$ two-dimensional frustrated antiferromagnet Cs_2CuBr_4 . Journal of Physics Condensed Matter, 2004, 16, S773-S778.	1.8	58
27	Random bond effect in the quantum spin system $(\text{Tl}_{1-x}\text{K}_x)\text{CuCl}_3$. Physical Review B, 2002, 65, .	3.2	53
28	ESR Modes in CsCuCl_3 . Journal of the Physical Society of Japan, 1992, 61, 1344-1350.	1.6	52
29	Singlet Ground State and Spin Gap in $S=1/2$ Kagomé Antiferromagnet $\text{Rb}_2\text{Cu}_3\text{SnF}_{12}$. Journal of the Physical Society of Japan, 2008, 77, 043707.	1.6	51
30	ESR in Hexagonal ABX_3 -Type Antiferromagnets. I. Ground State Properties in Easy-Axis Anisotropy Case. Journal of the Physical Society of Japan, 1988, 57, 3979-4003.	1.6	50
31	Quantum Magnetization Plateau in Spin-1 Triangular-Lattice Antiferromagnet $\text{Ba}_3\text{NiSb}_2\text{O}_9$. Journal of the Physical Society of Japan, 2011, 80, 093702.	1.6	50
32	Magnetic phase diagram of the $S=12$ triangular-lattice Heisenberg antiferromagnet $\text{Ba}_3\text{CoNb}_2\text{O}_9$. Physical Review B, 2014, 90, .	3.2	49
33	Phase Transitions and Disorder Effects in Pure and Doped Frustrated Quantum Antiferromagnet Cs_2CuBr_4 . Journal of the Physical Society of Japan, 2005, 74, 135-144.	1.6	48
34	Magnetic susceptibilities in a family of $S=1$ kagome antiferromagnets. Physical Review B, 2009, 79, .	3.2	45
35	Localization of Spin Triplets in $\text{Tl}_1\text{-xK}_x\text{CuCl}_3$. Journal of the Physical Society of Japan, 2004, 73, 2642-2645.	1.6	43
36	High-field magnetization process in the $S=1$ quantum spin system $\text{Ba}_3\text{Mn}_2\text{O}_8$. Physical Review B, 2002, 66, .	3.2	42

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37	Thermodynamic evidence for a field-angle-dependent Majorana gap in a Kitaev spin liquid. Nature Physics, 2022, 18, 429-435.	16.7	42
38	Transition from Bose glass to a condensate of triplons in Tl CuCl_3 . Physical Review B, 2016, 93, .	3.2	41
39	Magnetically induced spin dimerization in a square-lattice Heisenberg antiferromagnet. Physical Review B, 2016, 93, .	3.2	41
40	Dynamics of an anisotropic spin dimer system in a strong magnetic field. Physical Review B, 2004, 70, .	3.2	40
41	Pressure-induced Magnetic Quantum Phase Transition from Gapped Ground State in TlCuCl ₃ . Journal of the Physical Society of Japan, 2004, 73, 3254-3257.	1.6	37
42	Elementary excitations of the one-dimensional antiferromagnet KCuGaF. Physical Review Letters, 2016, 117, 237203.	3.2	36
43	A Spin-1/2 Kagome Lattice Antiferromagnet. Physical Review Letters, 2016, 117, 237203.	7.8	36
44	Field-Induced Magnetic Order and Simultaneous Lattice Deformation in TlCuCl ₃ . Physical Review Letters, 2004, 92, 207202.	7.8	34
45	Pressure-Induced Successive Magnetic Phase Transitions in the Spin Gap System TlCuCl ₃ . Journal of the Physical Society of Japan, 2004, 73, 1446-1449.	1.6	33
46	High-frequency high-field ESR of quantum double spin chain systems KCuCl ₃ and TlCuCl ₃ . Physica B: Condensed Matter, 1998, 246-247, 545-548.	2.7	31
47	Pressure-Induced Magnetic Quantum Phase Transition in Gapped Spin System KCuCl ₃ . Journal of the Physical Society of Japan, 2006, 75, 064703.	1.6	30
48	Magnetic-field- and pressure-induced quantum phase transition in CsFeCl ₃ via magnetization measurements. Physical Review B, 2016, 94, .	3.2	30
49	Ferroelectricity by Bose-Einstein condensation in a quantum magnet. Nature Communications, 2016, 7, 12822.	12.8	27
50	Magnetoelastic Coupling in the Spin-Dimer System TlCuCl ₃ . Physical Review Letters, 2005, 95, 017205.	7.8	24
51	Almost Perfect Frustration in the Dimer Magnet Ba ₂ CoSi ₂ O ₆ Cl ₂ . Journal of the Physical Society of Japan, 2014, 83, 103701.	1.6	24
52	Valence-bond-glass state with a singlet gap in the spin-1/2 square-lattice random Heisenberg antiferromagnet. Physical Review B, 2018, 98, .	3.2	23
53	Field-Induced Two-Step Phase Transitions in the Singlet Ground State Triangular Antiferromagnet CsFeBr ₃ . Journal of the Physical Society of Japan, 2001, 70, 3068-3075.	1.6	22
54	Quantum magnetic properties of the spin-1/2 triangular-lattice antiferromagnet Ba ₂ O ₁₂ . Physical Review B, 2018, 98, .	3.2	21

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55	Large Negative Quantum Renormalization of Excitation Energies in the Spin-1/2 Kagome Lattice Antiferromagnet $Cs_2Cu_3SnF_{12}$. Journal of the Physical Society of Japan, 2014, 83, 043701.	1.6	20
56	Spin dynamics of the spin dimer system $TiCuCl_3$ probed by Raman spectroscopy. Physical Review B, 2003, 68, .	3.2	19
57	Triplon band splitting and topologically protected edge states in the dimerized antiferromagnet. Nature Communications, 2019, 10, 2096.	12.8	19
58	Crystal Structure and Magnetic Properties of the Quasi-One-Dimensional Quantum Spin System $Cu_2Cl_4 \cdot H_8C_4SO_2$. Journal of the Physical Society of Japan, 2003, 72, 694-697.	1.6	18
59	Thermodynamic Properties and Elementary Excitations in Quantum Sine-Gordon Spin System $KCuGaF_6$. Journal of the Physical Society of Japan, 2007, 76, 063706.	1.6	18
60	Novel excitations near quantum criticality in geometrically frustrated antiferromagnet $CsFeCl_3$. Science Advances, 2019, 5, eaaw5639.	10.3	18
61	Drastic Enhancement of Thermal Conductivity in the Bose-Einstein Condensed State of $TiCuCl_3$. Journal of the Physical Society of Japan, 2004, 73, 2358-2361.	1.6	17
62	Spinon, soliton, and breather in the spin-1/2 antiferromagnetic chain compound $KCuGaF_6$. Physical Review B, 2015, 92, .	3.2	17
63	Field-driven successive phase transitions in the quasi-two-dimensional frustrated antiferromagnet $Ba_2Cu_2O_7$. Physical Review B, 2016, 93, .	3.2	16
64	Magnetic structure and high-field magnetization of the distorted kagome lattice antiferromagnet $Cs_2Cu_2F_7$. Physical Review B, 2019, 99, .	3.2	15
65	Microscopic evidence of a quantum magnetization process in the triangular-lattice Heisenberg-like antiferromagnet Sr_2CuTeO_6 . Physical Review B, 2019, 100, .	3.2	14
66	Strong Suppression of Magnetic Ordering in an $S = 1/2$ Square-Lattice Heisenberg Antiferromagnet Sr_2CuTeO_6 . Journal of the Physical Society of Japan, 2014, 83, 115001.	1.6	13
67	Thermodynamic properties of quantum sine-Gordon spin chain system $KCuGaF_6$. Physical Review B, 2012, 85, .	3.2	12
68	Quasi-two-dimensional Bose-Einstein condensation of lattice bosons in the spin-1 XXZ ferromagnet Cu_3SnF_{12} . Physical Review B, 2017, 95, .	3.2	12
69	Successive phase transitions and magnetization plateau in the spin-1 triangular-lattice antiferromagnet $Ba_2Cu_2O_7$ with O . Physical Review B, 2017, 95, .	3.2	12
70	Quasi-two-dimensional Bose-Einstein condensation of spin triplets in the dimerized quantum magnet $Ba_2Cu_2O_7$. Physical Review B, 2016, 94, .	3.2	12
71	Quasi-two-dimensional Bose-Einstein condensation of spin triplets in the dimerized quantum magnet $Ba_2Cu_2O_7$. Physical Review B, 2016, 94, .	3.2	12
72	Quasi-two-dimensional Bose-Einstein condensation of spin triplets in the dimerized quantum magnet $Ba_2Cu_2O_7$. Physical Review B, 2016, 94, .	3.2	12

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73	Electrical Switching of the Nonreciprocal Directional Microwave Response in a Triplon Bose-Einstein Condensate. Physical Review Letters, 2020, 124, 217401.	7.8	11
74	Particle-Hole Symmetry Breaking in a Spin-Dimer System TICuCl ₃ Observed at 100Å. Physical Review Letters, 2020, 125, 267207.	7.8	11
75	Local spin structure of the honeycomb-lattice magnet observed via muon spin rotation/relaxation. Physical Review B, 2018, 97, .		
76	The Magnetization Process of the Spin-One Triangular-Lattice Heisenberg Antiferromagnet. Journal of the Physical Society of Japan, 2013, 82, 015002.	1.6	9
77	Collective and local excitations in BaCoTeO ₆ : A composite system of a spin-1/2 triangular-lattice Heisenberg antiferromagnet and a honeycomb-lattice magnetoelectric effect in the quantum spin gap system TICuCl ₃ . Physical Review B, 2017, 95, .	3.2	9
78	Magnetic quantum phase transitions from gapped spin liquid state in. Journal of Magnetism and Magnetic Materials, 2007, 310, 1343-1348.	2.3	8
79	Quantum phase transition between disordered and ordered states in the spin-12 kagome lattice antiferromagnet (Rb ^{1/3} Cs _{2/3}) ₂ Cu ₃ SnF ₁₂ . Physical Review B, 2015, 91, .	3.2	8
80	Microscopic Properties of the Pinwheel Kagome Compound Rb ₂ Cu ₃ SnF ₁₂ . Physical Review Letters, 2013, 110, 247203.	7.8	7
81	Continuous control of classical-quantum crossover by external high pressure in the coupled chain compound CsCuCl ₃ . Nature Communications, 2021, 12, 4263.	12.8	7
82	Structures of magnetic excitations in the spin-1/2 kagome-lattice antiferromagnets Cs ₂ and SrLaCuSbO ₅ . Physical Review B, 2022, 105, .	3.2	7
83	Successive phase transitions in manganese helimagnets MnX ₂ (X = I, Br) observed by symmetry breaking birefringence. Journal of Magnetism and Magnetic Materials, 1990, 90-91, 265-266.	2.3	5
84	Contrasting magnetic structures in Spin-1/2 Localized Magnetic Excitations in the Fully Frustrated Dimerized Magnet BaCoTeO ₆ . Physical Review Letters, 2019, 123, 027206.	3.2	5
85	Localized Magnetic Excitations in the Fully Frustrated Dimerized Magnet BaCoTeO ₆ . Physical Review Letters, 2019, 123, 027206.	3.2	5
86	Magnetic Field- and Pressure-Induced Quantum Phase Transitions in NH ₄ CuCl ₃ . Progress of Theoretical Physics Supplement, 2005, 159, 241-245.	0.1	3
87	Universality of magnetic-field-induced Bose-Einstein condensation of magnons. Physical Review B, 2017, 96, .	3.2	3
88	Magnons and spinons in BaCoTeO ₆ : A composite system of isolated spin-1/2 and spin-1/2. Physical Review B, 2017, 96, .	3.2	3
89	ESR in Hexagonal ABX ₃ -Type Antiferromagnets. I. Ground State Properties in Easy-Axis Anisotropy Case. Journal of the Physical Society of Japan, 1991, 60, 2484-2484.	1.6	2

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91	19F-NMR Study on Antiferromagnetic Heisenberg Chain KCuGaF6. Journal of Physics: Conference Series, 2011, 302, 012012.	0.4	2
92	Elementary excitations and specific heat in quantum sine-Gordon spin chain KCuGaF6. Physica E: Low-Dimensional Systems and Nanostructures, 2011, 43, 741-747.	2.7	2
93	Spin-driven ferroelectricity in the quantum magnet TlCuCl3 under high pressure. Physical Review B, 2020, 102.	3.2	2
94	Ground state of the $S=1$ triangular lattice Heisenberg-like antiferromagnet Ba_3CoSb_2	3.2	2
95	Spin Fluctuations in the Spin-1/2 Kagome Lattice Antiferromagnet $(Rb_{1-x}Cs_x)_2Cu_3SnF_{12}$ around the Quantum Critical Point Detected by Muon Spin Relaxation Technique. Journal of the Physical Society of Japan, 2018, 87, 074708.	1.6	1
96	Electric Dipole Active Magnetic Resonance and Nonreciprocal Directional Dichroism in Magnetolectric Multiferroic Materials in Terahertz and Millimeter Wave Regions. Applied Magnetic Resonance, 2021, 52, 363-378.	1.2	1
97	Magnetic ordering under hydrostatic pressure in doped spin gap systems and K. Journal of Magnetism and Magnetic Materials, 2007, 310, 1368-1370.	2.3	0
98	Observation of Elementary Excitations of Quantum Sine-Gordon Spin System KCuGaF6 Under High Magnetic Field. Journal of Low Temperature Physics, 2010, 159, 60-63.	1.4	0
99	Coupled spin-1 antiferromagnetic chain $Cs_2LiRuCl_6$	3.2	0
100	Localized Magnetic Excitations in the Almost Perfectly Frustrated Spin Dimer Quantum Magnet. Hamon, 2020, 30, 130-135.	0.0	0