

A quantum magnetic analogue to the critical point of water

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Simulation of three-dimensional quantum systems with projected entangled-pair states. Physical Review B, 2021, 103, .	3.2	14
2	Fluctuation-induced ferrimagnetism in sublattice-imbalanced antiferromagnets with application to SrCu_2BO_3 under pressure. Physical Review B, 2021, 104, .		
3	Time evolution of an infinite projected entangled pair state: Neighborhood tensor update. Physical Review B, 2021, 104, .	3.2	14
4	Rise and fall of plaquette order in the Shastry-Sutherland magnet revealed by pseudofermion functional renormalization group. Physical Review B, 2022, 105, .	3.2	12
5	Coexistence of spontaneous dimerization and magnetic order in a transverse-field Ising ladder with four-spin interactions. Physical Review B, 2022, 105, .	3.2	3
6	Automatic differentiation applied to excitations with projected entangled pair states. SciPost Physics, 2022, 12, .	4.9	16
7	Quantum Monte Carlo simulations in the trimer basis: first-order transitions and thermal critical points in frustrated trilayer magnets. SciPost Physics, 2022, 12, .	4.9	12
8	Simulation of many-body localization and time crystals in two dimensions with the neighborhood tensor update. Physical Review B, 2022, 105, .	3.2	6
9	Quantum criticality and spin liquid phase in the Shastry-Sutherland model. Physical Review B, 2022, 105, .	3.2	24
10	Quantum Monte Carlo simulations of highly frustrated magnets in a cluster basis: The two-dimensional Shastry-Sutherland model. Journal of Physics: Conference Series, 2022, 2207, 012032.	0.4	1
11	Strain-tunable metamagnetic critical endpoint in Mott insulating rare-earth titanates. Physical Review B, 2022, 105, .	3.2	6
12	Synthesis, structure and magnetic properties of a new spin-dimer compound $\text{CaCu}(\text{SeO}_3)_2$. Journal of Solid State Chemistry, 2022, 310, 123039.	2.9	3
13	Thermally populated versus field-induced triplon bound states in the Shastry-Sutherland lattice $\text{SrCu}_2(\text{BO}_3)_2$. Npj Quantum Materials, 2021, 6, .	5.2	2
14	Discovery of quantum phases in the Shastry-Sutherland compound $\text{SrCu}_2(\text{BO}_3)_2$ under extreme conditions of field and pressure. Nature Communications, 2022, 13, 2301.	12.8	23
15	Thermal Ising Transition in the Spin- $\frac{1}{2}$ Shastry-Sutherland Magnet. Physical Review B, 2022, 105, .	7.8	7
16	Quantum Spin Liquid Phase in the Shastry-Sutherland Model Detected by an Improved Level Heise Spectroscopic Method. Chinese Physics Letters, 2022, 39, 077502.	3.3	6
17	High-Field Calorimetric Studies on Low-Dimensional and Frustrated Quantum Magnets. Journal of the Physical Society of Japan, 2022, 91, .	1.6	3
18	Time evolution of an infinite projected entangled pair state: A gradient tensor update in the tangent space. Physical Review B, 2022, 106, .	3.2	7

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19	Magnetically Hidden State on the Ground Floor of the Magnetic Devil's Staircase. Physical Review Letters, 2022, 129, .	7.8	6
20	Finite-temperature tensor network study of the Hubbard model on an infinite square lattice. Physical Review B, 2022, 106, .	3.2	6
21	Thermal critical points from competing singlet formations in fully frustrated bilayer antiferromagnets. Physical Review B, 2022, 106, .	3.2	2
22	Scaling of the disorder operator at deconfined quantum criticality. SciPost Physics, 2022, 13, .	4.9	16
23	Phases of the spin- $\frac{1}{2}$ Heisenberg antiferromagnet on the diamond-decorated square lattice in a magnetic field. Physical Review B, 2023, 107, .	3.2	2
24	Efficient Tensor Network Algorithm for Layered Systems. Physical Review Letters, 2023, 130, .	7.8	1
25	Confirming the high pressure phase diagram of the Shastry-Sutherland model. Journal of Physics: Conference Series, 2023, 2462, 012042.	0.4	0
26	Thermal first-order phase transitions, Ising critical points, and reentrance in the Ising-Heisenberg model on the diamond-decorated square lattice in a magnetic field. Physical Review B, 2023, 107, .	3.2	2
27	Proximate deconfined quantum critical point in SrCu ₂ (BO ₃) ₂ . Physical Review Letters, 2023, 130, .	12.6	5
28	Ultrafast frustration breaking and magnetophononic driving of singlet excitations in a quantum magnet. Physical Review B, 2023, 107, .	3.2	0
29	Unveiling new quantum phases in the Shastry-Sutherland compound SrCu ₂ (BO ₃) ₂ up to the saturation magnetic field. Nature Communications, 2023, 14, .	12.8	6
30	Plaquette valence bond solid to antiferromagnet transition and deconfined quantum critical point of the Shastry-Sutherland model. Physical Review B, 2023, 107, .	3.2	1
31	Critical Point in the Curve of First-Order Magnetic Phase Transition. Journal of Experimental and Theoretical Physics, 2023, 136, 300-304.	0.9	0
32	Tangent Space Approach for Thermal Tensor Network Simulations of the 2D Hubbard Model. Physical Review Letters, 2023, 130, .	7.8	7
33	Robust Magnetism Against Pressure in Non-Superconducting Samples Prepared from Lutetium Foil and H ₂ /N ₂ Gas Mixture. Chinese Physics Letters, 2023, 40, 097401.	3.3	3
34	Measuring energy by measuring any other observable. Physical Review A, 2023, 108, .	2.5	1
35	Plaquette Singlet Transition, Magnetic Barocaloric Effect, and Spin Supersolidity in the Shastry-Sutherland Model. Physical Review Letters, 2023, 131, .	7.8	2
36	Tensor network study of the Shastry-Sutherland model with weak interlayer coupling. SciPost Physics, 2023, 15, .	4.9	0

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37	Thermal pure matrix product state in two dimensions: Tracking thermal equilibrium from paramagnet down to the Kitaev honeycomb spin liquid state. SciPost Physics, 2023, 15, .	4.9	0
38	Magneto- and barocaloric properties of the ferro-antiferromagnetic sawtooth chain. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2024, 79, 283-288.	1.5	1
39	Haldane phases and phase diagrams of the $S=1$ bilinear-biquadratic Heisenberg model on the orthogonal dimer chain. Physical Review B, 2023, 108, .	3.2	0
40	Magnetic field tuned anisotropic quantum phase transition in the distorted kagome antiferromagnet $Nd_2Mg_2Si_2O_{12}$. Physical Review B, 2023, 108, .	3.2	0
41	The minimal canonical form of a tensor network. , 2023, , .		0
42	Quantum bicritical point and phase separation in a frustrated Heisenberg ladder. Physical Review B, 2023, 108, .	3.2	0
43	Field-induced bound-state condensation and spin-nematic phase in $SrCu_2(BO_3)_2$ revealed by neutron scattering up to 25.9 T. Nature Communications, 2024, 15, .	12.8	2
44	Efficient representation of minimally entangled typical thermal states in two dimensions via projected entangled pair states. Physical Review B, 2024, 109, .	3.2	0
45	Magnetic and thermodynamic study of the interplay between magnetism and structure in $CrOCl$. Journal of Alloys and Compounds, 2024, 982, 173845.	5.5	0
46	Generating Function for Projected Entangled-Pair States. PRX Quantum, 2024, 5, .	9.2	0
47	Walking with the Atoms in a Chemical Bond: A Perspective Using Quantum Phase Transition. Entropy, 2024, 26, 230.	2.2	0
48	Field-controlled multicritical behavior and emergent universality in fully frustrated quantum magnets. Npj Quantum Materials, 2024, 9, .	5.2	0
49	Circumventing superexponential runtimes for hard instances of quantum adiabatic optimization. Physical Review Research, 2024, 6, .	3.6	0