A T M Nazmul Islam

List of Publications by Year
in descending order

70 papers	1,261 citations	394421 19 h-index	395702 33 g-index
72 all docs	72 docs citations	72 times ranked	1411 citing authors

#	Article	IF	Citations
1	Structural and magnetic properties of the quantum magnet BaCuTe2O6. Physical Review B, 2021, 103, .	3.2	3
2	Signatures for Berezinskii-Kosterlitz-Thouless critical behavior in the planar antiferromagnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>BaNi</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">V</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>8</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2021, 104, .	3.2	6
3	Weak three-dimensional coupling of Heisenberg quantum spin chains in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">SrCuTe</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>6</mml:mn></mml:msub></mml:math>. Physical Review B, 2021, 104, .	3.2	3
4	Non-Abelian statistics in light-scattering processes across interacting Haldane chains. Physical Review B, 2021, 104, .	3.2	2
5	Crystal growth, characterization, and phase transition of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>PbCuTe</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>6</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review Materials, 2021, 5, .	2.4	5
6	Spin liquid and ferroelectricity close to a quantum critical point in PbCuTe2O6. Npj Quantum Materials, 2021, 6, .	5.2	6
7	Enhanced spin correlations in the Bose-Einstein condensate compound <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Sr</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>8</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2020, 102, .	3.2	10
8	Evidence for a three-dimensional quantum spin liquid in PbCuTe2O6. Nature Communications, 2020, 11, 2348.	12.8	53
9	Pure CuBi₂O₄ Photoelectrodes with Increased Stability by Rapid Thermal Processing of Bi₂O₃/CuO Grown by Pulsed Laser Deposition. Advanced Functional Materials, 2020, 30, 1910832.	14.9	54
10	Order out of a Coulomb Phase and Higgs Transition: Frustrated Transverse Interactions of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Nd</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mrow><mml:mn>7</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>. Physical Review Letters, 2020, 124, 097203.	7.8	18
11	Dispersions of many-body Bethe strings. Nature Physics, 2020, 16, 625-630.	16.7	29
12	Magnetic structure of the quantum magnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>SrCu</mml:mi><mml:msub><mml:mrow><mml:mi>Te</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>6</mml:mn></mml:msub></mml:math>. Physical Review B, 2020, 102, .	3.2	8
13	Anisotropic exchange Hamiltonian, magnetic phase diagram, and domain inversion of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Nd</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>7</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2019, 99, .	3.2	15
14	Signatures for spinons in the quantum spin liquid candidate <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ca</mml:mi><mml:mn>10</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>28</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2019, 100, .	3.2	5
15	Experimental observation of Bethe strings. Nature, 2018, 554, 219-223.	27.8	84
16	Inverted hysteresis and negative remanence in a homogeneous antiferromagnet. Physical Review B, 2018, 98, .	3.2	12
17	Absorption Enhancement for Ultrathin Solar Fuel Devices with Plasmonic Gratings. ACS Applied Energy Materials, 2018, 1, 5810-5815.	5.1	10
18	Hamiltonian of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>S</mml:mi><mml:mo>=</mml:mo><mml:mfrac> dimerized antiferromagnetic-ferromagnetic quantum spin chain <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>BaCu</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">V</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">. Physical Review B, 2018, 98, .	3.2	6

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19	Optimization of single crystal growth of candidate quantum spin-ice Pr2Hf2O7 by optical floating-zone method. Journal of Crystal Growth, 2018, 498, 124-129.	1.5	7
20	Field-induced quantum spin- 12 chains and disorder in Nd2Zr2O7. Physical Review B, 2018, 98, .	3.2	11
21	Crystal growth, structure and magnetic properties of Ca₁₀Cr₇O₂₈. Journal of Physics Condensed Matter, 2017, 29, 225802.	1.8	13
22	Thermodynamics of Meissner effect and flux pinning behavior in the bulk of single-crystal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>La</mml:mi><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>		

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37	Multiple lattice instabilities resolved by magnetic-field and disorder sensitivities inMgV2O4. Physical Review B, 2014, 90, .	3.2	11
38	Lineshape of the singlet-triplet excitations in the dimer system Sr3Cr2O8to first order in the high-density1/zexpansion. Physical Review B, 2014, 89, .	3.2	10
39	High-field electron spin resonance spectroscopy of singlet-triplet transitions in the spin-dimer systems<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mtext>Sr</mml:mtext><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mtext>Cr</mml:mtext><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mtext>O</mml:mtext><mml:mn>8</mml:mn></mml:msub>	3.2	13
40	Low-energy magnetic excitations in the quasi-one-dimensional spin-1 chain compound SrNi<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub><mml:mi>V</mml:mi><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub><mml:mi>O</mml:mi><mml:msub><mml:mrow /><mml:mn>8</mml:mn></mml:msub></mml:math>	3.2	9
41	Excitation spectrum of the quasi-one-dimensional Haldane chain compound SrNi<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub><mml:mi>V</mml:mi><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub><mml:mi>O</mml:mi><mml:msub><mml:mrow /><mml:mn>8</mml:mn></mml:msub></mml:math>	3.2	46
42	Exciton-magnon transitions in the frustrated chromium antiferromagnets CuCrO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>,<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î±</mml:mi></mml:math>-CaCr<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub><mml:mi>O</mml:mi><mml:msub><mml:mrow /><mml:mn>4</mml:mn></mml:msub></mml:math>	3.2	12
43	Macroscopic quantum tunneling and phase diffusion in a La<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn><mml:mo>â^’</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>Sr<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mi>x</mml:mi></mml:msub></mml:math>CuO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow />	3.2	1
44	Growth and magnetic properties of stoichiometric and site-disordered single crystalline MgV2O4. Physical Review B, 2012, 85, .	3.2	12
45	Coexistence of long- and short-range magnetic order in the frustrated magnet SrYb<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub><mml:mi>O</mml:mi><mml:msub><mml:mrow /><mml:mn>4</mml:mn></mml:msub></mml:math>. Physical Review B, 2012, 86, .	3.2	34
46	Magnetic Soft Modes in the Distorted Triangular Antiferromagnetî±â^’CaCr2O4. Physical Review Letters, 2012, 109, 127203.	7.8	26
47	Softened magnetic excitations in thes= 3/2 distorted triangular antiferromagnet Î±-CaCr₂O₄. Journal of Physics Condensed Matter, 2012, 24, 435604.	1.8	10
48	Macroscopic quantum tunneling and phase diffusion in a La<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn><mml:mo>â^’</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>Sr<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mi>x</mml:mi></mml:msub></mml:math>CuO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow />	3.2	9
49	Asymmetric Thermal Line Shape Broadening in a Gapped 3D Antiferromagnet: Evidence for Strong Correlations at Finite Temperature. Physical Review Letters, 2012, 109, 127206.	7.8	19
50	120<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mo>â~</mml:mo></mml:msup></mml:math>helical magnetic order in the distorted triangular antiferromagnet<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î±</mml:mi></mml:math>-CaCr<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow />	3.2	25
51	Unconventional Growth Mechanism in Optical Traveling Solvent Floating Zone Growth of Large Î²-CuNb2O6Single Crystals. Crystal Growth and Design, 2011, 11, 154-157.	3.0	5
52	Coupled spin-lattice fluctuations in a compound with orbital degrees of freedom: The Cr-based dimer system Sr3Cr2O8. Physical Review B, 2011, 84, .	3.2	13
53	Orbital fluctuations and orbital order below the Jahn-Teller transition in Sr3Cr2O8. Physical Review B, 2011, 83, .	3.2	20
54	Fabrication of submicron La2â^’xSrxCuO4 intrinsic Josephson junction stacks. Journal of Applied Physics, 2011, 109, 033912.	2.5	5

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55	Spin and orbital order in the vanadium spinel<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>MgV</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review B, 2010, 82, .	3.2	91
56	Optical Floating-Zone Growth of Large Single Crystal of Spin Half Dimer Sr3Cr2O8. Crystal Growth and Design, 2010, 10, 465-468.	3.0	17
57	Magnetic excitations of the gapped quantum spin dimer antiferromagnet<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Sr</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review B, 2010, 81, .	3.2	41
58	Superconductor-insulator phase transition in single-crystalLa2âˆ'xSrxCuO4films grown by the liquid-phase epitaxy method. Physical Review B, 2009, 80, .	3.2	0
59	Observation of macroscopic quantum tunneling in La2-xSrxCuO4intrinsic Josephson Junctions. Journal of Physics: Conference Series, 2009, 150, 052132.	0.4	0
60	Intrinsic Josephson properties of. Physica C: Superconductivity and Its Applications, 2008, 468, 1922-1924.	1.2	5
61	Possible experimental signature of charge-orbital density waves inNd1âˆ'xCa1+xMnO4: Heat capacity and magnetization study. Physical Review B, 2007, 75, .	3.2	2
62	AgB2: Superconductivity and the role of paramagnons. Physica C: Superconductivity and Its Applications, 2007, 466, 76-81.	1.2	8
63	Growth mechanism of EuBa2Cu3Ox single-crystalline whiskers from Ca and Te doped precursors. Journal of Crystal Growth, 2006, 289, 192-196.	1.5	5
64	Growth and characterization of Ca doped Eu-123 whiskers for intrinsic Josephson junction applications. Superconductor Science and Technology, 2006, 19, 290-293.	3.5	3
65	Growth and superconducting properties of (Eu,R)Ba2Cu3O7âˆ'Î´(R = Er, Tm) single-crystalline whiskers. Superconductor Science and Technology, 2005, 18, 1238-1243.	3.5	3
66	Effect of substrates on superconductivity and composition of the IR-LPE La2âˆ'xSrxCuO4 single crystalline films. Physica C: Superconductivity and Its Applications, 2003, 392-396, 1302-1305.	1.2	0
67	Growth of Bi-2212 single crystals by the travelling solvent zone melting method. Superconductor Science and Technology, 2002, 15, 458-461.	3.5	6
68	Temperature dependent polarized XANES spectra for Zn-doped LSCO system. Physica C: Superconductivity and Its Applications, 2002, 378-381, 78-83.	1.2	2
69	MODELING OF ELIASHBERG SPECTRAL FUNCTIONS FOR HIGH-T_{c} SUPERCONDUCTORS. , 2000, , .		0
70	Eliashberg Spectral Functions for Some High-Tc Superconductors. Journal of Superconductivity and Novel Magnetism, 2000, 13, 559-564.	0.5	8