Oleg Janson

List of Publications by Year in Descending Order

56 papers	1,168 citations	21 h-index	32 g-index
60 ext. papers	1,416 ext. citations	4.3 avg, IF	4.28 L-index

#	Paper	IF	Citations
56	Phase Diagram of Nickelate Superconductors Calculated by Dynamical Vertex Approximation. *Frontiers in Physics*, **2022**, 9,	3.9	4
55	Different types of spin currents in the comprehensive materials database of nonmagnetic spin Hall effect. *Npj Computational Materials*, **2021**, 7,	10.9	1
54	How correlations change the magnetic structure factor of the kagome Hubbard model. *Physical Review B*, **2021**, 104,	3.3	2
53	Operation Mechanism in Hybrid Mg-Li Batteries with TiNbO Allowing Stable High-Rate Cycling. *ACS Applied Materials & Interfaces*, **2021**, 13, 6309-6321	9.5	10
52	Ab initio based ligand field approach to determine electronic multiplet properties. *Physical Review B*, **2021**, 104,	3.3	1
51	Frustration enhanced by Kitaev exchange in a j eff=12 triangular antiferromagnet. *Physical Review B*, **2021**, 104,	3.3	2
50	Nickelate superconductors□ renaissance of the one-band Hubbard model. *Npj Quantum Materials*, **2020**, 5,	5	52
49	Ground state and low-temperature magnetism of the quasi-two-dimensional honeycomb compound InCu2/3V1/3O3. *Physical Review B*, **2019**, 100,	3.3	1
48	Magnetoelastic couplings in the deformed kagome quantum spin lattice of volborthite. *Physical Review B*, **2019**, 99,	3.3	3
47	Electronic and magnetic state of LaMnO3 epitaxially strained on SrTiO3: Effect of local correlation and nonlocal exchange. *Physical Review B*, **2019**, 100,	3.3	6
46	Dynamical Mean Field Theory for Oxide Heterostructures. *Springer Series in Materials Science*, **2018**, 215-243	2.9	
45	Finite-temperature phase diagram of (111) nickelate bilayers. *Physical Review B*, **2018**, 98,	3.3	5
44	Frustrated spin chain physics near the Majumdar-Ghosh point in szenicsite Cu3(MoO4)(OH)4. *Physical Review B*, **2017**, 95,	3.3	12
43	Anisotropic field-induced gap in the quasi-one-dimensional antiferromagnet KCuMoO4(OH). *Physical Review B*, **2017**, 96,	3.3	5
42	Quantum Anomalous Hall State in Ferromagnetic SrRuO_{3} (111) Bilayers. *Physical Review Letters*, **2017**, 119, 026402	7.4	43
41	Magnetic Behavior of Volborthite Cu_{3}V_{2}O_{7}(OH)_{2}□2H_{2}O Determined by Coupled Trimers Rather than Frustrated Chains. *Physical Review Letters*, **2016**, 117, 037206	7.4	31
40	Interplay of magnetic sublattices in langite Cu4(OH)6SO4□2H2O. *New Journal of Physics*, **2016**, 18, 033020	2.9	4

39	Magnetic anisotropy in the frustrated spin-chain compound TeVO4. *Physical Review B*, **2016**, 94,	3.3	18
38	Intermetallic germanides with non-centrosymmetric structures derived from the Yb3Rh4Sn13 type. *Dalton Transactions*, **2015**, 44, 5638-51	4.3	13
37	Consequences of critical interchain couplings and anisotropy on a Haldane chain. *Physical Review B*, **2015**, 91,	3.3	14
36	The quantum nature of skyrmions and half-skyrmions in Cu2OSeO3. *Nature Communications*, **2014**, 5, 5376	17.4	79
35	CoBi3--the first binary compound of cobalt with bismuth: high-pressure synthesis and superconductivity. *Journal of Physics Condensed Matter*, **2014**, 26, 395701	1.8	14
34	Microscopic magnetic modeling for the S=12 alternating-chain compounds Na3Cu2SbO6 and Na2Cu2TeO6. *Physical Review B*, **2014**, 89,	3.3	22
33	Magnetic pyroxenes LiCrGe2O6 and LiCrSi2O6: Dimensionality crossover in a nonfrustrated S=32 Heisenberg model. *Physical Review B*, **2014**, 90,	3.3	11
32	Nearly compensated exchange in the dimer compound callaghanite Cu2Mg2(CO3)(oH)62H2O. *Physical Review B*, **2014**, 89,	3.3	13
31	Crystal structures and variable magnetism of PbCu2(XO3)2Cl2 with X = Se, Te. *Dalton Transactions*, **2013**, 42, 9547-54	4.3	31
30	Structure and magnetism of Cr2[BP3O12]: Towards the quantum-classical crossover in a spin-32 alternating chain. *Physical Review B*, **2013**, 87,	3.3	11
29	CoBi3: a binary cobalt-bismuth compound and superconductor. *Angewandte Chemie - International Edition*, **2013**, 52, 9853-7	16.4	33
28	Spin gap in malachite Cu2(OH)2CO3 and its evolution under pressure. *Physical Review B*, **2013**, 88,	3.3	34
27	Magnetism of CuX2 frustrated chains (X = F, Cl, Br): Role of covalency. *Physical Review B*, **2013**, 87,	3.3	18
26	Square-lattice magnetism of diaboleite Pb2Cu(OH)4Cl2. *Physical Review B*, **2013**, 87,	3.3	20
25	Magnetization and spin dynamics of the spin S=12 hourglass nanomagnet Cu5(OH)2(NIPA)410H2O. *Physical Review B*, **2013**, 87,	3.3	15
24	Electronic structure of KTi(SO4)22H2O: An S=12 frustrated chain antiferromagnet. *Physical Review B*, **2013**, 88,	3.3	3
23	Two energy scales of spin dimers in clinoclase Cu3(AsO4)(OH)3. *Physical Review B*, **2013**, 87,	3.3	15
22	Decorated Shastry-Sutherland lattice in the spin-12 magnet CdCu2(BO3)2. *Physical Review B*, **2012**, 85,	3.3	20

21	Short-range order of Br and three-dimensional magnetism in (CuBr)LaNb2O7. *Physical Review B*, **2012**, 85,	3.3	7
20	Magnetic properties of the low-dimensional spin-12 magnet Cu2As2O7. *Physical Review B*, **2011**, 84,	3.3	21
19	Magnetic model for A2CuP2O7 (A=Na, Li): One-dimensional versus two-dimensional behavior. *Physical Review B*, **2011**, 84,	3.3	21
18	CaCu2(SeO3)2Cl2: Spin-12 Heisenberg chain compound with complex frustrated interchain couplings. *Physical Review B*, **2011**, 83,	3.3	11
17	Long-range superexchange in Cu2A2O7 (A= P, As, V) as a key element of the microscopic magnetic model. *Physical Review B*, **2011**, 83,	3.3	30
16	Multistep approach to microscopic models for frustrated quantum magnets: the case of the natural mineral azurite. *Physical Review Letters*, **2011**, 106, 217201	7.4	95
15	Unusual ferromagnetic superexchange in CdVO3: The role of Cd. *Physical Review B*, **2011**, 84,	3.3	18
14	J1 2 Heisenberg model at and close to its z=4 quantum critical point. *Physical Review B*, **2011**, 84,	3.3	25
13	Electronic structure and magnetic properties of the spin-gap compound Cu2(PO3)2CH2: Magnetic versus structural dimers. *Physical Review B*, **2010**, 81,	3.3	11
12	Coupled frustrated quantum spin-12 chains with orbital order in volborthite Cu3V2O7(OH)2?2H2O. *Physical Review B*, **2010**, 82,	3.3	35
11	Antiferromagnetic spin-12 chains in (NO)Cu(NO3)3: A microscopic study. *Physical Review B*, **2010**, 82,	3.3	14
10	Cu2V2O7: A spin-12 honeycomb lattice system. *Physical Review B*, **2010**, 82,	3.3	74
9	Large quantum fluctuations in the strongly coupled spin-12 chains of green dioptase Cu6Si6O18?6H2O. *Physical Review B*, **2010**, 82,	3.3	27
8	Bridging frustrated-spin-chain and spin-ladder physics: Quasi-one-dimensional magnetism of BiCu2PO6. *Physical Review B*, **2010**, 82,	3.3	47
7	Crystal-water-induced switching of magnetically active orbitals in CuCl2. *Physical Review B*, **2009**, 79,	3.3	22
6	Electronic structure and magnetic properties of the spin-1/2 Heisenberg system CuSe2O5. *New Journal of Physics*, **2009**, 11, 113034	2.9	34
5	Intrinsic peculiarities of real material realizations of a spin-1/2 kagom lattice. *Journal of Physics: Conference Series*, **2009**, 145, 012008	0.3	9
4	Modified kagome physics in the natural spin-1/2 kagome lattice systems: kapellasite Cu3Zn(OH)6Cl2 and haydeeite Cu3Mg(OH)6Cl2. *Physical Review Letters*, **2008**, 101, 106403	7.4	63

3	CuII materials□rom crystal chemistry to magnetic model compounds. *Science and Technology of Advanced Materials*, **2007**, 8, 352-356	7.1	5
2	Electronic structure and magnetic properties of Bi2CuO4. *Physica C: Superconductivity and Its Applications*, **2007**, 460-462, 458-459	1.3	8
1	Electronic structure and magnetic properties of the spin-1□ Heisenberg magnet Bi2CuO4. *Physical Review B*, **2007**, 76,	3.3	25