

# Benjamin A Frandsen

## List of Publications by Year in descending order

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Version: 2024-02-01

59  
papers

1,119  
citations

394286

19  
h-index

434063

31  
g-index

60  
all docs

60  
docs citations

60  
times ranked

1629  
citing authors

#	ARTICLE	IF	CITATIONS
1	Local structure determination using total scattering data. , 2023, , 222-247.		1
2	Real-space visualization of short-range antiferromagnetic correlations in a magnetically enhanced thermoelectric. Matter, 2022, 5, 1853-1864.	5.0	11
3	Effect of iron vacancies on magnetic order and spin dynamics of the spin ladder $\text{BaFe}_2\text{S}_3$ . Physical Review B, 2022, 105, .		3
4	VERDI: VERSatile Diffractometer with wide-angle polarization analysis for magnetic structure studies in powders and single crystals. Review of Scientific Instruments, 2022, 93, .	0.6	6
5	Nematic fluctuations in iron-oxychalcogenide Mott insulators. Npj Quantum Materials, 2021, 6, .	1.8	4
6	Local and long-range atomic/magnetic structure of non-stoichiometric spinel iron oxide nanocrystallites. IUCr, 2021, 8, 33-45.	1.0	18
7	Neutron scattering investigation of proposed Kosterlitz-Thouless transitions in the triangular-lattice Ising antiferromagnet $\text{TmMgGaO}_4$ . Physical Review B, 2021, 103, .	1.1	16
8	<i>Ab initio</i> modeling and experimental investigation of $\text{Fe}_2\text{P}$ by DFT and spin spectroscopies. Physical Review Materials, 2021, 5, .	0.9	1
9	Superparamagnetic dynamics and blocking transition in $\text{Fe}_3\text{O}_4$ nanoparticles probed by vibrating sample magnetometry and muon spin relaxation. Physical Review B, 2021, 103, .	0.9	6
10	Uniform structural phase transition in $\text{V}_2\text{O}_3$ without short-range distortions of the local structure. Physical Review B, 2021, 104, .	1.1	3
11	Spin dynamics of the spin-chain antiferromagnet $\text{RbFeS}_2$ . Physical Review B, 2021, 104, .	1.1	1
12	Iron-Based Chalcogenide Spin Ladder $\text{BaFe}_2\text{X}_3$ (X = Se,S). Journal of Superconductivity and Novel Magnetism, 2020, 33, 143-158.	0.8	8
13	Nanoscale degeneracy lifting in a geometrically frustrated antiferromagnet. Physical Review B, 2020, 101, .	1.1	13
14	Structural, magnetic, and electronic evolution of the spin-ladder system $\text{BaFe}_2\text{S}_3$ with isoelectronic substitution. Physical Review B, 2020, 101, .	1.1	6
15	The structure of molten FLiNaK. Journal of Nuclear Materials, 2020, 537, 152219.	1.3	31
16	High-temperature magnetic anomaly in the Kitaev hyperhoneycomb compound $\text{FeTiPO}_6$ . Physical Review B, 2020, 101, .		1
17	Ground state in pressurized $\text{BaFe}_2\text{S}_3$ and $\text{BaFe}_2\text{Se}_3$ . Physical Review B, 2020, 101, .	1.1	8
18	Observation of a C-type short-range antiferromagnetic order in layer spacing expanded $\text{FeS}$ . Physical Review Materials, 2020, 4, .	0.9	3

#	ARTICLE	IF	CITATIONS
19	Spin dynamics and a nearly continuous magnetic phase transition in an entropy-stabilized oxide antiferromagnet. <i>Physical Review Materials</i> , 2020, 4, .	0.9	11
20	Large negative magnetoresistance in the antiferromagnetic rare-earth dichalcogenide $\text{EuTe}_2$ . <i>Physical Review Materials</i> , 2020, 4, .	0.9	11
21	Quantitative characterization of short-range orthorhombic fluctuations in FeSe through pair distribution function analysis. <i>Physical Review B</i> , 2019, 100, .	1.1	21
22	Incommensurate Magnetism Near Quantum Criticality in CeNiAsO. <i>Physical Review Letters</i> , 2019, 122, 197203.	2.9	3
23	$\text{Ba}(\text{Zn},\text{Co})_2\text{As}_2$ : A diluted ferromagnetic semiconductor with n -type carriers and isostructural to 122 iron-based superconductors. <i>Physical Review B</i> , 2019, 99, .	1.1	16
24	Robust block magnetism in the spin ladder compound $\text{BaFe}_2\text{Mn}_3$ under hydrostatic pressure. <i>Physical Review B</i> , 2019, 100, .	1.1	13
25	Intertwined magnetic, structural, and electronic transitions in $\text{V}_2\text{O}_3$ . <i>Physical Review B</i> , 2019, 100, .	1.1	14
26	Probing the quantum phase transition in Mott insulator $\text{BaCoS}_2$ tuned by pressure and Ni substitution. <i>Physical Review Materials</i> , 2019, 3, .	0.9	5
27	Control of dopant crystallinity in electrochemically treated cuprate thin films. <i>Physical Review Materials</i> , 2019, 3, .	0.9	5
28	Widespread orthorhombic fluctuations in the family of superconductors. <i>Physical Review B</i> , 2018, 98, .	1.1	19
29	Gradual enhancement of stripe-type antiferromagnetism in the spin-ladder material $\text{BaFe}_2\text{Mn}_3\text{S}$ under pressure. <i>Physical Review B</i> , 2018, 98, .	1.1	19
30	Spectral Evidence for Emergent Order in $\text{BaFe}_2\text{Mn}_3$ . <i>Physical Review Letters</i> , 2018, 121, 127001.	2.9	11
31	$^{1/4}$ SR study of spin freezing and persistent spin dynamics in $\text{NaCaNi}_2\text{F}_7$ . <i>Journal of Physics Condensed Matter</i> , 2018, 30, 385802.	0.7	3
32	Disentangling superconducting and magnetic orders in $\text{NaFe}_2\text{Mn}_3$ using muon spin rotation. <i>Physical Review B</i> , 2018, 97, .	1.1	19
33	Uniaxial pressure effect on the magnetic ordered moment and transition temperatures in $\text{BaFe}_2\text{Mn}_3$ .		

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37	Real space investigation of short-range magnetic correlations in fluoride pyrochlores $\text{NaCaCo}_2\text{F}_7$ and $\text{NaSrCo}_2\text{F}_7$ . <i>Physical Review B</i> , 2016, 94, .	0.9	15
38	The synthesis and characterization of 1 1 1 1 type diluted ferromagnetic semiconductor $(\text{La}_{1-x}\text{Ca}_x)(\text{Zn}_{1-x}\text{Mn}_x)\text{AsO}$ . <i>Journal of Physics Condensed Matter</i> , 2016, 28, 026003.	0.7	5
39	$^{51}\text{V}$ NMR investigation of a new diluted magnetic semiconductor $\text{Li}(\text{Zn},\text{Mn},\text{Cu})\text{As}$ with Mn and Cu codoping at the same Zn sites. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 366001.	0.7	5
40	New Fluoride-arsenide Diluted Magnetic Semiconductor $(\text{Ba},\text{K})\text{F}(\text{Zn},\text{Mn})\text{As}$ with Independent Spin and Charge Doping. <i>Scientific Reports</i> , 2016, 6, 36578.	1.6	17
41	Volume-wise destruction of the antiferromagnetic Mott insulating state through quantum tuning. <i>Nature Communications</i> , 2016, 7, 12519.	5.8	36
42	Local atomic and magnetic structure of dilute magnetic semiconductor $\text{Ba}_{1-x}\text{Mn}_x\text{As}$ . <i>Physical Review B</i> , 2016, 94, .	1.1	30
43	Investigating short-range magnetic correlations in real space with the magnetic pair distribution function (mPDF). <i>Neutron News</i> , 2016, 27, 14-16.	0.1	1
44	Antiferromagnetism and hidden order in isoelectronic doping of $\text{URu}_2\text{Si}_2$ . <i>Physical Review B</i> , 2016, 93, .	1.1	29
45	Verification of Anderson Superexchange in MnO via Magnetic Pair Distribution Function Analysis and <i>ab initio</i> Theory. <i>Physical Review Letters</i> , 2016, 116, 197204.	2.9	34
46	$^{51}\text{V}$ NMR and magnetometry study of superconducting 5% Pt-doped IrTe <sub>2</sub> . <i>Physical Review B</i> , 2016, 94, .	1.1	4
47	Non-Fermi Liquid Behavior Close to a Quantum Critical Point in a Ferromagnetic State without Local Moments. <i>Physical Review X</i> , 2015, 5, .	2.8	11
48	Magnetic structure determination from the magnetic pair distribution function (mPDF): ground state of MnO. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015, 71, 325-334.	0.0	42
49	An itinerant antiferromagnetic metal without magnetic constituents. <i>Nature Communications</i> , 2015, 6, 7701.	5.8	33
50	Superconducting properties of noncentrosymmetric superconductor $\text{CaIrSi}_3$ investigated by $\mu\text{SR}$ spin relaxation and rotation. <i>Physical Review B</i> , 2015, 91, .	1.1	12
51	Overdoped Li in the diluted ferromagnetic semiconductor $\text{Li}_{1-x}\text{Mn}_x\text{As}$ . <i>Physical Review B</i> , 2015, 91, .	1.1	12

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55	Magnetic pair distribution function analysis of local magnetic correlations. Acta Crystallographica Section A: Foundations and Advances, 2014, 70, 3-11.	0.0	52
56	Ferromagnetic Ordering in Superatomic Solids. Journal of the American Chemical Society, 2014, 136, 16926-16931.	6.6	58
57	Diluted ferromagnetic semiconductor Li(Zn,Mn)P with decoupled charge and spin doping. Physical Review B, 2013, 88, 114407. Mu <sub>+</sub> spin relaxation and electron/neutron diffraction studies of BaTi <sub>2</sub> As <sub>2</sub> .	1.1	71

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