

Sergei Zvyagin

List of Publications by Year in descending order

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124
papers

3,395
citations

126858

33
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155592

55
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125
all docs

125
docs citations

125
times ranked

4141
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetic-field-induced phase transition in BiFeO ₃ observed by high-field electron spin resonance: Cycloidal to homogeneous spin order. Physical Review B, 2004, 69, .	1.1	378
2	Magnetic-Field-Induced Condensation of Triplons in Han Purple Pigment BaCuSi ₂ O ₆ . Physical Review Letters, 2004, 93, 087203.	2.9	260
3	Origin of magnetic moments in defective TiO_2 crystals. Physical Review B, 2009, 79, .	1.1	176
4	Magnetic Excitations in the Spin-1 Anisotropic Heisenberg Antiferromagnetic Chain System NiCl ₂ ·4SC(NH ₂) ₂ . Physical Review Letters, 2007, 98, 047205.	2.9	114
5	Definitive Spectroscopic Determination of Zero-Field Splitting in High-Spin Cobalt(II). Journal of the American Chemical Society, 2004, 126, 2148-2155.	6.6	107
6	Tunable-frequency high-field electron paramagnetic resonance. Journal of Magnetic Resonance, 2006, 178, 174-183.	1.2	101
7	Synthesis, Characterization, and Physicochemical Properties of Manganese(III) and Manganese(V) Oxo Corrolazines. Inorganic Chemistry, 2005, 44, 4485-4498.	1.9	94
8	Electronic Structure of Four-Coordinate Nickel(II) Scorpionate Complexes: Investigation by High-Frequency and -Field Electron Paramagnetic Resonance and Electronic Absorption Spectroscopies. Inorganic Chemistry, 2006, 45, 8930-8941.	1.9	93
9	[GdNi ₆] and [LaNi ₆]: High-Field EPR Spectroscopy and Magnetic Studies of Exchange-Coupled Octahedral Clusters. Angewandte Chemie - International Edition, 2005, 44, 1997-2001.	7.2	71
10	Excitation Hierarchy of the Quantum Sine-Gordon Spin Chain in a Strong Magnetic Field. Physical Review Letters, 2004, 93, 027201.	2.9	69
11	High-field ESR study of the dimerized-incommensurate phase transition in the spin-Peierls compound CuGeO ₃ . Physica B: Condensed Matter, 2004, 346-347, 1-5.	1.3	68
12	Cobalt(II) Scorpionate Complexes as Models for Cobalt-Substituted Zinc Enzymes: Electronic Structure Investigation by High-Frequency and -Field Electron Paramagnetic Resonance Spectroscopy. Journal of the American Chemical Society, 2010, 132, 5241-5253.	6.6	66
13	Pseudooctahedral Complexes of Vanadium(III): Electronic Structure Investigation by Magnetic and Electronic Spectroscopy. Inorganic Chemistry, 2004, 43, 5645-5658.	1.9	64
14	Direct Determination of Exchange Parameters in Cs ₂ CuBr ₄ and Cs ₂ CuCl ₄ : High-Field Electron-Spin-Resonance Studies. Physical Review Letters, 2014, 112, 077206.	2.9	63
15	Unconventional spin dynamics in the honeycomb-lattice material $\text{Mn}_2\text{As}_2\text{O}_{10}$: High-field electron spin resonance studies. Physical Review B, 2017, 96, .	1.1	61
16	Observation of a node in the quantum oscillations induced by microwave radiation. Solid State Communications, 2004, 130, 379-381.	0.9	62
17	Crossover in the surface anisotropy contributions of ferromagnetic films on rippled Si surfaces. Physical Review B, 2013, 87, .	1.1	61
18	Terahertz-range free-electron laser electron spin resonance spectroscopy: Techniques and applications in high magnetic fields. Review of Scientific Instruments, 2009, 80, 073102.	0.6	55

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19	Low-Spin Hexacoordinate Mn(III): Synthesis and Spectroscopic Investigation of Homoleptic Tris(pyrazolyl)borate and Tris(carbene)borate Complexes. <i>Inorganic Chemistry</i> , 2013, 52, 144-159.	1.9	55
20	Spin relaxation and resonant phonon trapping in $\langle \text{mml:math} \text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"} \rangle$		

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55	ESR of coupled spin-1/2 chains in copper pyrazine dinitrate: unveiling geometrical frustration. Journal of Physics Condensed Matter, 2014, 26, 026003.	0.7	15
56	High-field behavior of the spin gap compound Sr ₂ Cu(BO ₃) ₂ . Physical Review B, 2005, 71, .	1.1	14
57	Magnetic excitations in the spin-1 anisotropic antiferromagnet NiCl ₂ ·4SC(NH ₄) ₂ . Physical Review B, 2003, 67, .	1.1	14
58	Controllable Broadband Absorption in the Mixed Phase of Metamagnets. Advanced Functional Materials, 2015, 25, 3634-3640.	7.8	14
59	High-field electron spin resonance spectroscopy of singlet-triplet transitions in the spin-dimer systems SrCr ₃ As ₂ Br ₁₀ . Physical Review B, 2014, 89, .	1.1	13
60	Field-induced structural evolution in the spin-Peierls compound CuGeO ₃ : High-field ESR study. Physical Review B, 2003, 67, .	1.1	12
61	Magnetic excitations in the spin-1/2 triangular-lattice antiferromagnet Cs ₂ CuBr ₄ . New Journal of Physics, 2015, 17, 113059.	1.2	12
62	Electron spin resonance insight into broadband absorption of the Cu ₃ Bi(SeO ₃) ₂ O ₂ Br metamagnet. AIP Advances, 2016, 6, .	0.6	12
63	Dynamical properties of the sine-Gordon quantum spin magnet Cu-PM at zero and finite temperature. Physical Review B, 2016, 93, .	1.1	12
64	Magnetic structure and spin waves in the frustrated ferro-antiferromagnet Pb ₂ VO(PO ₄) ₂ . Physical Review B, 2019, 99, .	1.1	11
65	Magnetic excitation spectrum in large-D chain NENC. European Physical Journal D, 1996, 46, 1937-1938.	0.4	10
66	Low-dimensional compounds containing cyanido groups. XXI. Crystal structure, spectroscopic, thermal and magnetic properties of two polymorphous modifications of [Cu(men) ₂ Pt(CN) ₄] _n complex (men=N-methyl-1,2-diaminoethane). Polyhedron, 2011, 30, 269-278.	1.0	10
67	Magnetic resonances and magnetization in the spin ladder compound (VO) ₂ P ₂ O ₇ . Solid State Communications, 1996, 100, 381-384.	1.1	10
68	Science at the Dresden High Magnetic Field Laboratory. AIP Conference Proceedings, 2008, .	0.9	9
69	Spin dynamics in S=1/2 chains with next-nearest-neighbor exchange interactions. Physical Review B, 2010, 82, .	0.3	9
70	High-field ESR Studies of the Quantum Spin Dimer System Ba ₃ Cr ₂ O ₈ . Journal of Low Temperature Physics, 2013, 170, 231-235.	1.1	9
71	Experimental study of magnetic anisotropy in a layered CsNd(MoO ₄) ₂ . Journal of Alloys and Compounds, 2014, 591, 100-104.	0.6	9
72		2.8	9

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73	Observation of two-magnon bound states in the spin-1 anisotropic Heisenberg antiferromagnetic chain system. <i>Physica B: Condensed Matter</i> , 2008, 403, 1497-1499.	1.3	8
74	Spin dynamics of $S=1/2$ Heisenberg chains with a staggered transverse field: electron spin resonance studies (Review Article). <i>Low Temperature Physics</i> , 2012, 38, 819-825.	0.2	8
75	Quantum criticality in the coupled two-leg spin ladder $\langle \mathbf{m}_i \cdot \mathbf{m}_{i+1} \rangle$. <i>Physical Review B</i> , 2017, 95, .		
76	Extremely well isolated two-dimensional spin-1 antiferromagnetic Heisenberg layers with a small exchange coupling in the molecular-based magnet CuPOF. <i>Physical Review B</i> , 2020, 102, .	1.1	8
77	Understanding low-energy magnetic excitations and hydrogen bonding in $\text{VOHPO}_4 \cdot 12\text{H}_2\text{O}$. <i>Physical Review B</i> , 2005, 72, .	1.1	7
78	Quantum critical dynamics of $S = 1/2$ antiferromagnetic heisenberg chains studied in CuPzN by ESR. <i>Journal of Physics: Conference Series</i> , 2010, 200, 022070.	0.3	6
79	Electron spin resonance in a strong-rung spin-1 ladder. <i>Physical Review B</i> , 2016, 93, .		
80	Advanced Magnetic Resonance Studies of Tetraphenylporphyrinatoiron(III) Halides. <i>Applied Magnetic Resonance</i> , 2020, 51, 1411-1432.	0.6	6
81	Magnetic resonances in powder-samples of quasi-one-dimensional anisotropic $S = 1$ spin systems. <i>Journal of Magnetism and Magnetic Materials</i> , 1998, 177-181, 695-696.	1.0	5
82	Status quo of the Dresden High Magnetic Field Laboratory. <i>Journal of Physics: Conference Series</i> , 2006, 51, 619-622.	0.3	5
83	Slow spin relaxation induced by magnetic field in $[\text{NdCo}(\text{bpd})_2(\text{CN})_6] \cdot 3\text{H}_2\text{O}$. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 186003.	0.7	5
84	FELBE -Upgrades and Status of the IR1THz FEL User Facility at HZDR. , 2018, , .		5
85	Antiferromagnetic resonance in the cubic iridium hexahalides IrX_6 and NH_4IrX_6 . <i>Physical Review B</i> , 2021, 104, .	1.1	5
86	On the magnetic properties of the low-dimensional magnet $\text{Cu}(\text{C}_2\text{H}_8\text{N}_2)_2\text{Ni}(\text{CN})_4$. <i>Journal of Magnetism and Magnetic Materials</i> , 1995, 140-144, 1645-1646.	1.0	4
87	High-field magnetic resonant properties of $\text{Ir}(\text{ET})_2\text{SF}_5\text{CF}_2\text{SO}_3$. <i>Physical Review B</i> , 2003, 67, .	1.1	4
88	Field-Induced Gap in the Spin-1/2 Heisenberg Chain Compound Cu-Pyrimidine Dinitrate: ESR Studies in Magnetic Fields up to 63 T. <i>Journal of Low Temperature Physics</i> , 2013, 170, 268-273.	0.6	4
89	Evidence of one-dimensional magnetic heat transport in the triangular-lattice antiferromagnet Cs_2CuCl_4 . <i>Physical Review Research</i> , 2019, 1, .	1.3	4
90	Magnetic resonances in spin ladder systems $(\text{VO})_2\text{P}_2\text{O}_7$, SrCu_2O_3 and $\text{Sr}_2\text{Cu}_3\text{O}_5$. <i>Physica B: Condensed Matter</i> , 1997, 237-238, 115-116.	1.3	3

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91	Structural phase transition in two-dimensional tetramer-cuprate Na ₅ RbCu ₄ (AsO ₄) ₄ Cl ₂ . Low Temperature Physics, 2007, 33, 684-687.	0.2	3
92	Resonance THz spectroscopy in high magnetic fields. Comptes Rendus Physique, 2013, 14, 106-114.	0.3	3
93	Exceptional field dependence of antiferromagnetic magnons in LiFePO ₄ . Physical Review B, 2021, 103, .	1.1	3
94	Antisite disorder in the battery material LiFePO_4 . Physical Review Materials, 2020, 4, .	0.9	3
95	Microwave properties of Nd _{0.5} Sr _{0.5} MnO ₃ : a key role of the (x^2-y^2)-orbital effects. Solid State Communications, 2002, 121, 117-121.	0.9	2
96	ESR study of (C ₅ H ₁₂ N) ₂ CuBr ₄ . Physica B: Condensed Matter, 2003, 329-333, 1211-1212.	1.3	2
97	Induced Phase Transition in BiFeO ₃ by High-Field Electron Spin Resonance. Ferroelectrics, 2004, 301, 229-234.	0.3	2
98	EMR Measurements of Field-Induced Superconductor $\hat{\mu}$ -(BETS) ₂ FexGa _{1-x} Cl ₄ . Synthetic Metals, 2005, 153, 365-368.	2.1	2
99	Recent Developments at the Dresden High Magnetic Field Laboratory. , 2006, , .		2
100	Magnetic properties of the $S=1/2$ Heisenberg spin-chain material (6MAP)CuCl ₃ . Journal of Physics: Conference Series, 2009, 150, 042159.	0.3	2
101	Low-energy excitations in DTN below T_c : ESR studies. Journal of Physics: Conference Series, 2009, 150, 042244.	0.3	2
102	Electron spin resonance study of spin relaxation in the strong-leg spin ladder with nonmagnetic dilution. Physical Review B, 2019, 100, .	1.1	2
103	Ultrasonic investigation of Nd _{0.5} Sr _{0.5} MnO ₃ . Journal of Magnetism and Magnetic Materials, 2001, 226-230, 882-883.	1.0	1
104	High-Field ESR Spectroscopy of Low-Dimensional Quantum Spin Systems. , 2004, , 239-250.		1
105	The New High Magnetic Field Laboratory at Dresden: a Pulsed-Field Laboratory at an IR Free-Electron-Laser. AIP Conference Proceedings, 2006, , .	0.3	1
106	Elementary excitations in $S=1/2$ Heisenberg spin chains with alternating g -tensor and the Dzyaloshinskii-Moriya interaction. Journal of Physics: Conference Series, 2006, 51, 39-42.	0.3	1
107	Spin-triplet excitons and anisotropy effects in the gapped antiferromagnet BaCuSi ₂ O ₆ . Journal of Magnetism and Magnetic Materials, 2007, 310, 1206-1208.	1.0	1
108	Interaction of point defects with impurities in the Si δ -SiO ₂ system and its influence on the properties of the interface. Thin Solid Films, 2010, 518, 2374-2376.	0.8	1

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109	Neutron and EPR Study of $\text{Cu}(\text{tn})\text{Cl}_2$ - a Two-Dimensional Spatially Anisotropic Triangular-Lattice Antiferromagnet. Acta Physica Polonica A, 2014, 126, 232-233.	0.2	1
110	Low-dimensional compounds containing cyanido groups. XXVIII. Crystal structure, spectroscopic and magnetic properties of two copper(II) tetracyanidoplatinate complexes with 1,2-diaminopropane. Journal of Solid State Chemistry, 2015, 225, 202-208.	1.4	1
111	Spin Anisotropy in $\text{Cu}(\text{tn})\text{Cl}_2$: A Quasi-Two-Dimensional $S = 1/2$ Spatially Anisotropic Triangular-Lattice Antiferromagnet. Journal of Physics: Conference Series, 2017, 903, 012005.	0.3	1
112	EPR studies of the triangular-lattice antiferromagnet Cs_2CuBr_4 . Low Temperature Physics, 2017, 43, 1311-1314.	0.2	1
113	Spin Dynamics in Quantum Sine-Gordon Spin Chains: High-Field ESR Studies. Applied Magnetic Resonance, 2021, 52, 337-348.	0.6	1
114	Magnetic properties of a quantum spin ladder in proximity to the isotropic limit. Physical Review B, 2021, 103, .	1.1	1
115	EPR Study of the Two-Dimensional Quantum System $\text{Cu}(\text{en})(\text{H}_2\text{O})_2\text{SO}_4$. Acta Physica Polonica A, 2012, 121, 1095-1097.	0.2	1
116	Magnetic excitations in Sm_2/CuO_4 . IEEE Transactions on Magnetics, 1994, 30, 858-859.	1.2	0
117	ELECTRON-SPIN RESONANCE EVIDENCE OF THE QUANTUM SPIN GAP IN THE LiCu_2O_2 . International Journal of Modern Physics B, 2002, 16, 3373-3376.	1.0	0
118	Electron spin resonance in Heisenberg chains with alternating J -tensor and the Dzyaloshinskiiâ€Moriya interaction. Journal of Magnetism and Magnetic Materials, 2007, 310, 1209-1211.	1.0	0
119	Probing nanoscale inhomogeneities in transition metal oxides with ultrafast mid-infrared spectroscopy. Physica B: Condensed Matter, 2008, 403, 1401-1403.	1.3	0
120	Magnetic properties of the Zn-doped Haldane-gap material NENB. Journal of Physics: Conference Series, 2009, 150, 042017.	0.3	0
121	High-Field Magnetization Study of $\text{[Cu}(\text{pyz})_2(\text{HF}_2)]\text{PF}_6$: An $S = 1/2$ Quasi-two-dimensional Heisenberg Magnet. Journal of Low Temperature Physics, 2010, 159, 92-95.	0.6	0
122	Observation of Anisotropic Exchange in a Spin Ladder by ESR. Acta Physica Polonica A, 2014, 126, 238-239.	0.2	0
123	Low-temperature magnetic structure and electron paramagnetic resonance properties of the quasi-one-dimensional Heisenberg helimagnet CuCl_2 . Physical Review B, 2017, 95, .	1.1	0
124	EXCHANGE SPIN WAVES AND THEIR MANIFESTATION IN TWO-MAGNON ABSORPTION AND RAMAN SCATTERING. Journal De Physique Colloque, 1988, 49, C8-913-C8-914.	0.2	0