

Joachim Deisenhofer

List of Publications by Year in descending order

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121
papers

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117625

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docs citations

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times ranked

3681
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Observation of a Griffiths Phase in Paramagnetic $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$. Physical Review Letters, 2005, 95, 257202. | 7.8 | 315 |
| 2 | ESR study in lightly doped $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$. Physical Review B, 2000, 61, 6213-6219. | 3.2 | 169 |
| 3 | NMR Study in the Iron Selenide $\text{Rb}_{0.74}\text{Fe}_2\text{As}_2$. Determination of the Superconducting Phase as Iron Vacancy-Free. Physical Review B, 2011, 84, . | 7.8 | 113 |
| 4 | Phase separation in superconducting and antiferromagnetic $\text{Rb}_{0.8}\text{Fe}_2\text{As}_2$ by Mössbauer spectroscopy. Physical Review B, 2011, 84, . | 3.2 | 98 |
| 5 | Magnetic Resonant Mode in the Low-Energy Spin-Excitation Spectrum of Superconducting Fe_2 Crystals. Physical Review Letters, 2011, 107, 177005. | 7.8 | 98 |
| 6 | Superconductivity at $T_c = 44$ K in $\text{Li}_x\text{Fe}_2\text{Se}_2(\text{NH}_3)_y$. European Physical Journal B, 2012, 85, 1. | 1.5 | 89 |
| 7 | Competition of magnetism and superconductivity in underdoped $(\text{Ba}_{1-x}\text{K}_x)_2\text{FeAs}_2$. New Journal of Physics, 2009, 11, 025014. | 2.9 | 88 |
| 8 | Physical properties of $\text{FeSe}_{0.5}\text{Te}_{0.5}$ single crystals grown under different conditions. European Physical Journal B, 2011, 79, 289-299. | 1.5 | 83 |
| 9 | Real-space imaging of the atomic-scale magnetic structure of Fe_{1+x}Te . Science, 2014, 345, 653-656. | 12.6 | 79 |
| 10 | Evidence for Jahn-Teller Distortions at the Antiferromagnetic Transition in LaTiO_3 . Physical Review Letters, 2003, 91, 066403. | 7.8 | 73 |
| 11 | Nanoscale Layering of Antiferromagnetic and Superconducting Phases in RbFe_2 . Reciprocal-space structure and dispersion of the magnetic resonant mode in the superconducting phase of RbFe_2 . | 7.8 | 73 |
| 12 | Unconventional Magnetosubstructural Transition in RbFe_2Se_2 . Physical Review B, 2012, 85, . | 3.2 | 71 |
| 13 | Optical phonons, spin correlations, and spin-phonon coupling in the frustrated pyrochlore magnets CoCr_2O_4 and ZnCr_2O_4 at High Magnetic | 7.8 | 68 |
| 14 | Physical Review B, 2009, 80, . | 3.2 | 67 |
| 15 | On the complexity of spinels: Magnetic, electronic, and polar ground states. Physics Reports, 2021, 926, 1-86. | 25.6 | 66 |
| 16 | Anisotropic magnetism, superconductivity, and the phase diagram of RbFe_2Se_2 . | 3.2 | 56 |
| 17 | Crystal field, Dzyaloshinsky-Moriya interaction, and orbital order in $\text{La}_{0.95}\text{Sr}_{0.05}\text{MnO}_3$ probed by ESR. Physical Review B, 2002, 65, . | 3.2 | 51 |
| 18 | Raman-Scattering Detection of Nearly Degenerate s -Wave and d -Wave Pairing Channels in Iron-Based Ba | 7.8 | 51 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Structural and magnetic dimers in the spin-gapped system CuTe_2O_5 . <i>Physical Review B</i> , 2006, 74, . | 3.2 | 50 |
| 20 | Spinon confinement in the one-dimensional Ising-like antiferromagnet $\text{SrCo}_2\text{V}_2\text{O}_{10}$. <i>Physical Review B</i> , 2015, 91, . | 3.2 | 49 |
| 21 | Optical spectroscopy in CoO : Phononic, electric, and magnetic excitation spectrum within the charge-transfer gap. <i>Physical Review B</i> , 2008, 78, . | 3.2 | 47 |
| 22 | Interplay of superexchange and orbital degeneracy in Cr-doped LaMnO_3 . <i>Physical Review B</i> , 2002, 66, . | 3.2 | 46 |
| 23 | Optical Evidence for Symmetry Changes above the Néel Temperature of KCuF_3 . <i>Physical Review Letters</i> , 2008, 101, 157406. | 7.8 | 46 |
| 24 | Large and small polaron excitations in $\text{La}_{2/3}(\text{Sr}/\text{Ca})_{1/3}\text{MnO}_3$ films. <i>Physical Review B</i> , 2004, 69, . | 3.2 | 45 |
| 25 | Anomalous optical phonons in FeTe chalcogenides: Spin state, magnetic order, and lattice anharmonicity. <i>Physical Review B</i> , 2011, 83, . | 3.2 | 44 |
| 26 | Anisotropic colossal magnetoresistance effects in $\text{Fe}_{1-x}\text{Cu}_x\text{Cr}_2\text{S}_4$. <i>Physical Review B</i> , 2003, 67, . | 3.2 | 41 |
| 27 | Melanin in the extracellular matrix of germlings of <i>Botrytis cinerea</i> . <i>Phytochemistry</i> , 2003, 63, 687-691. | 2.9 | 40 |
| 28 | Structural anomalies and the orbital ground state in FeCr_2O_7 . <i>Physical Review B</i> , 2010, 81, . | 3.2 | 39 |
| 29 | Improvement of superconducting properties of $\text{FeSe}_{0.5}\text{Te}_{0.5}$ single crystals by Mn substitution. <i>Superconductor Science and Technology</i> , 2011, 24, 045009. | 3.5 | 37 |
| 30 | Wüstite: electric, thermodynamic and optical properties of FeO . <i>European Physical Journal B</i> , 2012, 85, 1. | 1.5 | 36 |
| 31 | Orbital-selective metal-insulator transition and gap formation above T_C in superconducting RbFe_2Se_2 . <i>Nature Communications</i> , 2014, 5, 3202. | 12.8 | 36 |
| 32 | FeCr_2S_4 in magnetic fields: possible evidence for a multiferroic ground state. <i>Scientific Reports</i> , 2014, 4, 6079. | 3.3 | 36 |
| 33 | Critical conductivity of superconducting $\text{Rb}_2\text{Fe}_2\text{O}_7$. <i>Physical Review B</i> , 2013, 87, 040407. | 3.2 | 35 |
| 34 | From confined spinons to emergent fermions: Observation of elementary magnetic excitations in a transverse-field Ising chain. <i>Physical Review B</i> , 2016, 94, . | 3.2 | 35 |
| 35 | Spatial inhomogeneity of the superconducting gap and order parameter in $\text{FeSe}_{0.4}\text{Te}_{0.6}$. <i>Physical Review B</i> , 2013, 87, 040407. | 3.2 | 34 |
| 36 | Magnetic and superconducting transitions in BaFe_2O_7 . <i>Physical Review B</i> , 2010, 81, . | 3.2 | 33 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 37 | Singlet-Triplet Excitations and Long-Range Entanglement in the Spin-Orbital Liquid Candidate FeSc_2S_4 . Physical Review Letters, 2015, 114, 097201. | 7.8 | 33 |
| 38 | Magnetic susceptibility of the frustrated spinels ZnCr_2O_4 , MgCr_2O_4 and CdCr_2O_4 . Journal of Physics: Conference Series, 2010, 200, 032032. | 0.4 | 32 |
| 39 | Dynamical Dzyaloshinsky-Moriya Interaction in KCuF_3 . Physical Review Letters, 2008, 101, 147601. | 7.8 | 31 |
| 40 | Spin dynamics in the low-dimensional magnet TiOCl . Physical Review B, 2006, 73, . | 3.2 | 29 |
| 41 | Strong reduction of the Korringa relaxation in the spin-density wave regime of EuFe_2As_2 observed by electron spin resonance. Physical Review B, 2010, 81, . | 3.2 | 29 |
| 42 | Evidence for orbital order and its relation to superconductivity in $\text{FeSe}_{0.4}\text{Te}_{0.6}$. Science Advances, 2015, 1, e1500206. | 10.3 | 28 |
| 43 | Orbital order parameter in $\text{La}_{0.95}\text{Sr}_{0.05}\text{MnO}_3$ probed by electron spin resonance. Physical Review B, 2003, 68, . | 3.2 | 27 |
| 44 | Superconductivity and magnetism in $\text{Rb}_{0.8}\text{Fe}_{1.6}\text{Se}_2$ under pressure. Physical Review B, 2012, 85, . | 3.2 | 27 |
| 45 | High-pressure versus isoelectronic doping effect on the honeycomb iridate $\text{Na}_2\text{Ir}_2\text{O}_7$. Physical Review B, 2017, 96, . | | |
| 46 | Far-infrared optical excitations in multiferroic TbMnO_3 . European Physical Journal B, 2009, 71, 411-418. | 1.5 | 26 |
| 47 | Magnetic and superconducting properties of $\text{FeSe}_{x}\text{Te}_{1-x}$ ($x=0, 0.5$, and 1.0). Low Temperature Physics, 2011, 37, 83-89. | 0.6 | 26 |
| 48 | Universal Exchange-Driven Phonon Splitting in Antiferromagnets. Physical Review Letters, 2012, 108, 177203. | 7.8 | 26 |
| 49 | Confirming the trilinear form of the optical magnetoelectric effect in the polar honeycomb antiferromagnet $\text{Co}_2\text{Mo}_3\text{O}_8$. Npj Quantum Materials, 2022, 7, . | 5.2 | 26 |
| 50 | Spin-phonon coupling in highly correlated transition-metal monoxides. European Physical Journal: Special Topics, 2009, 180, 43-59. | 2.6 | 25 |
| 51 | Spin-lattice coupling in the frustrated antiferromagnet ZnCr_2Se_4 . Physical Review B, 2012, 86, . | 3.2 | 23 |
| 52 | Structure, phonons, and orbital degrees of freedom in Fe_2O_8 . Physical Review B, 2020, 102, . | 3.2 | 23 |
| 53 | Magnetostructural Transitions in a Frustrated Magnet at High Fields. Physical Review Letters, 2011, 106, 247202. | 7.8 | 22 |
| 54 | Spin-orbital and quantum criticality in FeSc_2S_4 . Physical Review B, 2015, 91, . | 3.2 | 22 |

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| 55 | Ultra-robust high-field magnetization plateau and supersolidity in bond-frustrated MnCr_2S_4 . Science Advances, 2017, 3, e1601982. | 10.3 | 22 |
| 56 | Anisotropic Exchange in Spin Chains. NATO Science for Peace and Security Series B: Physics and Biophysics, 2008, , 193-238. | 0.3 | 22 |
| 57 | Optical properties of ZnCr_2Se_4 . European Physical Journal B, 2009, 68, 153-160. | 1.5 | 21 |
| 58 | Alternating spin-orbital order in tetragonal SrVO_4 . Physical Review B, 2011, 84, . | 3.2 | 21 |
| 59 | Orbital fluctuations and orbital order below the Jahn-Teller transition in $\text{Sr}_3\text{Cr}_2\text{O}_8$. Physical Review B, 2011, 83, . | 3.2 | 20 |
| 60 | Optical study of phonons and electronic excitations in tetragonal SrVO_4 . Physical Review B, 2011, 84, . | 3.2 | 20 |
| 61 | Spin-orbital relations and Dyzalski-Mn interaction in CuCl_2 . Physical Review B, 2012, 86, . | 3.2 | 17 |
| 62 | Korringa-like relaxation in the high-temperature phase of A-site ordered YBaMn_2O_6 . Physical Review B, 2012, 85, . | 3.2 | 16 |
| 63 | Spin-lattice coupling in a ferrimagnetic spinel: Exact phase diagram of MnCr_2S_4 up to 110 K. Physical Review B, 2020, 101, . | 3.2 | 16 |
| 64 | Magnetic fluctuations and superconductivity in iron pnictides as probed by electron spin resonance. Physical Review B, 2010, 82, . | 3.2 | 15 |
| 65 | Lattice dynamics and electronic excitations in a large family of lacunar spinels with a breathing pyrochlore lattice structure. Physical Review B, 2020, 101, . | 3.2 | 15 |
| 66 | Spin fluctuations in the quasi-two-dimensional Heisenberg ferromagnet GdI_2 studied by electron spin resonance. Physical Review B, 2004, 69, . | 3.2 | 14 |
| 67 | Spin state and orbital moments across the metal-insulator-transition of $\text{REBaCo}_2\text{O}_{5.5}$ investigated by XMCD. New Journal of Physics, 2008, 10, 123030. | 2.9 | 14 |
| 68 | $[\text{Co}_5\text{Tp}^*_4(\text{Me}_2\text{bta})_6]$: A Highly Symmetrical Pentanuclear Kuratowski Complex Featuring Tris(pyrazolyl)borate and Benzotriazolone Ligands. Inorganic Chemistry, 2016, 55, 1053-1060. | 4.0 | 14 |
| 69 | Unconventional Anisotropic Superexchange in NaV_2O_5 . Physical Review Letters, 2006, 96, 027209. | 7.8 | 13 |
| 70 | Electron spin resonance across the charge-ordering transition in YBaMn_2 . Physical Review B, 2008, 78, . | 3.2 | 13 |
| 71 | Two-dimensional orbital ordering in SrVO_4 Mott insulator. Journal of Physics: Conference Series, 2010, 200, 012219. | 0.4 | 13 |
| 72 | Coupled spin-lattice fluctuations in a compound with orbital degrees of freedom: The Cr-based dimer system $\text{Sr}_3\text{Cr}_2\text{O}_8$. Physical Review B, 2011, 84, . | 3.2 | 13 |

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| 73 | Electron spin resonance and exchange paths in the orthorhombic dimer system Sr ₂ VO ₄ . Physical Review B, 2012, 86, . | 3.2 | 13 |
| 74 | Multiple pressure-induced transitions in HgCr ₂ S ₄ . Applied Physics Letters, 2013, 103, 201908. | 3.3 | 13 |
| 75 | High-field electron spin resonance spectroscopy of singlet-triplet transitions in the spin-dimer systems Sr ₂ VO ₄ and Sr ₂ VO ₈ . Physical Review B, 2014, 89, . | 3.2 | 13 |
| 76 | Field-Induced Magnonic Liquid in the 3D Spin-Dimerized Antiferromagnet Sr ₃ Cr ₂ O ₈ . Physical Review Letters, 2016, 116, 147201. | 7.8 | 13 |
| 77 | Phonon anomalies and charge dynamics in Fe _{1-x} Cu _x Cr ₂ S ₄ single crystals. Physical Review B, 2005, 72, . | 3.2 | 12 |
| 78 | Magnetization and specific heat of the dimer system CuTe ₂ O ₅ . European Physical Journal B, 2011, 84, 391-395. | 1.5 | 12 |
| 79 | Electron spin resonance in Eu-based iron pnictides. Physical Review B, 2012, 86, . | 3.2 | 12 |
| 80 | Exciton-magnon transitions in the frustrated chromium antiferromagnets CuCrO ₂ and CuCr ₂ O ₇ . Physical Review B, 2014, 89, . | 3.2 | 12 |
| 81 | Field-induced magnetic phase transition in the dimer system CuCr ₂ O ₇ . Physical Review B, 2014, 89, . | 3.2 | 12 |
| 82 | Singlet-Triplet Excitations and High-Field Magnetization in CuTe ₂ O ₅ . Journal of the Physical Society of Japan, 2011, 80, 124707. | 1.6 | 11 |
| 83 | Infrared phonons and specific heat in the gapped quantum magnet Ba ₃ Cr ₂ O ₈ . Physical Review B, 2012, 85, . | 3.2 | 11 |
| 84 | Phase Transitions and Spin Relaxation in La _{0.95} Sr _{0.05} MnO ₃ . Modern Physics Letters B, 2003, 17, 459-467. | 1.9 | 10 |
| 85 | Griffiths phases vs magnetic polarons in the lightly doped La _{1-x} Sr _x MnO ₃ . Journal of Magnetism and Magnetic Materials, 2007, 310, 1966-1968. | 2.3 | 10 |
| 86 | Pressure effects on the magnetic susceptibility of FeTe ₂ O ₇ . Journal of Physics Condensed Matter, 2011, 23, 325701. | 1.8 | 10 |
| 87 | Magnetic properties of novel FeSe(Te) superconductors. Journal of Magnetism and Magnetic Materials, 2012, 324, 3460-3463. | 2.3 | 10 |
| 88 | Pressurizing the HgCr ₂ Se ₄ spinel at room temperature. Applied Physics Letters, 2014, 104, 011911. | 3.3 | 10 |
| 89 | Evolution of the optical properties of chromium spinels CdCr ₂ O ₄ and HgCr ₂ O ₄ . Physical Review B, 2014, 89, . | 3.2 | 10 |
| 90 | ESR investigation of the spin dynamics in (Gd _{1-x} Y _x) ₂ PdSi ₃ . Solid State Communications, 2003, 125, 327-331. | 1.9 | 9 |

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| 91 | Energy magnetic excitations in the quasi-one-dimensional spin-1 chain compound SrNi ₂ V ₂ O ₇ . Physical Review B, 2020, 102, . | 3.2 | 9 |
| 92 | Low-temperature spin excitations in frustrated ZnCr ₂ O ₄ . Physical Review B, 2020, 102, . | 3.2 | 9 |
| 93 | Magneto-elastic properties and low-energy excitations of multiferroic FeCr ₂ O ₇ . Physical Review B, 2020, 102, . | 3.2 | 9 |
| 94 | Magnetic and vibronic terahertz excitations in Zn-doped FeCr ₂ O ₇ . Physical Review B, 2020, 102, . | 3.2 | 9 |
| 95 | Anisotropic exchange interactions in CuTe ₂ O ₅ . Physics of the Solid State, 2008, 50, 283-289. | 0.6 | 8 |
| 96 | Terahertz spectroscopy in the pseudo-Kagome system Cu ₃ Bi ₂ (SeO ₄) ₂ Tl ₂ ETQqO ₁₀ . Physical Review B, 2020, 102, . | 3.2 | 8 |
| 97 | ESR evidence for partial melting of the orbital order in LaMnO ₃ below the Jahn-Teller transition. Physical Review B, 2014, 90, . | 3.2 | 7 |
| 98 | Structure, magnetic susceptibility, and specific heat of the spin-orbital-liquid candidate FeS ₂ C ₂ S ₄ . Physical Review B, 2017, 96, . | 3.2 | 7 |
| 99 | Pressure effect on superconductivity in FeSe _{0.5} Te _{0.5} . Physica Status Solidi (B): Basic Research, 2017, 254, 1600161. | 1.5 | 7 |
| 100 | Intrinsic Charge Dynamics in High- Tc AFeAs(O,F) Superconductors. Physical Review Letters, 2018, 120, 087001. | 7.8 | 7 |
| 101 | Tuning orbital-selective correlations in superconducting Rb _{0.75} S ₂ z. Physical Review B, 2016, 93, . | 3.2 | 6 |
| 102 | Unusual field-induced spin reorientation in FeCr ₂ O ₇ : Field tuning of the Jahn-Teller state. Physical Review B, 2021, 104, . | 3.2 | 6 |
| 103 | Lattice vibrations in KCuF ₃ . Annalen Der Physik, 2011, 523, 645-651. | 2.4 | 5 |
| 104 | Phononic and magnetic excitations in the quasi-one-dimensional Heisenberg antiferromagnet KCuF ₃ . Low Temperature Physics, 2012, 38, 419-427. | 0.6 | 5 |
| 105 | Infrared-active phonons in the ferrimagnetic and multiferroic phases of FeCr ₂ S ₄ : Evidence for structural distortions. Physical Review B, 2019, 100, . | 3.2 | 5 |
| 106 | High-field phase transitions in the orbitally ordered multiferroic Ge ₄ V ₄ S ₈ . Physical Review B, 2020, 101, . | 3.2 | 5 |
| 107 | Ultrasound study of FeCr ₂ S ₄ in high magnetic fields. Journal of Physics Condensed Matter, 2014, 26, 486001. | 1.8 | 4 |
| 108 | Electromagnons, magnons, and phonons in Eu _{1-x} HoxMnO ₃ . Physical Review B, 2016, 93, . | 3.2 | 3 |

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| 109 | Photoinduced long-lived state in FeSe _{0.4} Te _{0.6} . Journal of Electron Spectroscopy and Related Phenomena, 2021, 250, 147090. | 1.7 | 3 |
| 110 | Atomic-scale coexistence of short-range magnetic order and superconductivity in Fe _{1+y} Se _{0.1} Te _{0.9} . Physical Review Materials, 2019, 3, . | 2.4 | 3 |
| 111 | Resolving structural changes and symmetry lowering in spinel $S_{1-x}FeCr_x$. Physical Review B, 2022, 105, . | 3.2 | 3 |
| 112 | Microscopic State of Low Doped Manganites La _{1-x} Sr _x MnO ₃ Probed by ESR. Journal of Superconductivity and Novel Magnetism, 2002, 15, 523-525. | 0.5 | 1 |
| 113 | Chain formation by spin pentamers in \hat{I} -Na ₉ V ₁₄ O ₃₅ . Europhysics Letters, 2008, 83, 67002. | 2.0 | 1 |
| 114 | Exchange-Induced Magnetic Dipole Mechanism of Magnon Sideband. Solid State Phenomena, 0, 168-169, 113-116. | 0.3 | 1 |
| 115 | Optical Techniques for Systems with Competing Interactions. Springer Series in Solid-state Sciences, 2011, , 107-128. | 0.3 | 1 |
| 116 | Publisher's Note: Singlet-Triplet Excitations and Long-Range Entanglement in the Spin-Orbital Liquid Candidate $S_{1-x}FeSc_x$. Rev. Lett. 114 , 207201 (2015). Physical Review Letters, 2015, 115, . | 3.2 | 1 |
| 117 | Structure, superconductivity, and magnetism in $S_{1-x}Rb_x$. Physical Review B, 2020, 101, . | 3.2 | 1 |
| 118 | Orbital Order and Spin Relaxation in La _{0.95} Sr _{0.05} MnO ₃ . Modern Physics Letters B, 2003, 17, 469-477. | 1.9 | 0 |
| 119 | Jahn-Teller Polarons in Lightly Doped La _{1-x} Sr _x MnO ₃ as Studied by EPR. , 2001, , 317-321. | | 0 |
| 120 | 10.1007/s11451-008-2011-2. , 2010, 50, 283. | | 0 |
| 121 | Intrinsic spin resonance in iron pnictides. Magnetic Resonance in Solids, 2019, 21, . | 0.2 | 0 |