

Klaudia Hradil

List of Publications by Year in descending order

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91

papers

1,865

citations

279798

23

h-index

265206

42

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91

all docs

91

docs citations

91

times ranked

2227

citing authors

#	ARTICLE	IF	CITATIONS
1	Multi-scale characterisation of a ferroelectric polymer reveals the emergence of a morphological phase transition driven by temperature. <i>Nature Communications</i> , 2021, 12, 152.	12.8	34
2	Refitting an X-ray diffraction system for combined GIXRF and XRR measurements. <i>Powder Diffraction</i> , 2020, 35, S29-S33.	0.2	1
3	Flexoelectricity in polycrystalline TiO ₂ thin films. <i>Acta Materialia</i> , 2020, 190, 124-129.	7.9	14
4	A monochromatic confocal micro-x-ray fluorescence ($\text{I}^{1/4}\text{XRF}$) spectrometer for the lab. <i>Review of Scientific Instruments</i> , 2020, 91, 123107.	1.3	10
5	Ligand and support effects on the reactivity and stability of Au ₃₈ (SR) ₂₄ catalysts in oxidation reactions. <i>Catalysis Communications</i> , 2019, 130, 105768.	3.3	13
6	Pressure effects on the carbonation of MeO (Me O^- = Co , Mn, Pb, Zn) for thermochemical energy storage. <i>Applied Energy</i> , 2019, 252, 113451.	10.1	8
7	Tuning the performance of MgO for thermochemical energy storage by dehydration – From fundamentals to phase impurities. <i>Applied Energy</i> , 2019, 253, 113562.	10.1	15
8	Phonon Lifetimes throughout the Brillouin Zone at Elevated Temperatures from Experiment and <i>Ab Initio</i> . <i>Physical Review Letters</i> , 2019, 123, 235501.	7.8	20
9	Establishment of a high-capacity X-ray source in Austria for use in materials science. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2019, 75, e730-e730.	0.1	0
10	Enhanced c-axis orientation of aluminum nitride thin films by plasma-based pre-conditioning of sapphire substrates for SAW applications. <i>Applied Surface Science</i> , 2018, 435, 432-437.	6.1	6
11	Cooperativity in spin crossover materials as ligand's responsibility – investigations of the Fe($\text{Fe}(\text{phen})_3$) Cl_2 1,3-bis((1 <i>H</i> -tetrazol-1-yl)methyl)bicyclo[1.1.1]pentane system. <i>Dalton Transactions</i> , 2018, 47, 5553-5557.	3.3	5
12	Calcium Doping Facilitates Water Dissociation in Magnesium Oxide. <i>Advanced Sustainable Systems</i> , 2018, 2, 1700096.	5.3	12
13	Cycle Stability and Hydration Behavior of Magnesium Oxide and Its Dependence on the Precursor-Related Particle Morphology. <i>Nanomaterials</i> , 2018, 8, 795.	4.1	19
14	Thermochemical Energy Storage: Calcium Doping Facilitates Water Dissociation in Magnesium Oxide (Adv. Sustainable Syst. 1/2018). <i>Advanced Sustainable Systems</i> , 2018, 2, 1870004.	5.3	0
15	Canted antiferromagnetism in phase-pure CuMnSb. <i>Physical Review Materials</i> , 2018, 2, .	2.4	14
16	Analysis of short-range phenomena in novel materials using the PDF method. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2018, 74, e141-e141.	0.1	0
17	Magnetic excitations of the charge stripe electrons below half doping in La _{2-x} S _x NiO ₄ (x Å =0.45, Å0.4). <i>Physical Review B</i> , 2017, 95, .	3.2	6
18	μ XRD for the identification of pigments in cross-sections of paintings. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2017, 73, C1405-C1405.	0.1	0

#	ARTICLE	IF	CITATIONS
19	In situ and time-lapse XRD as tools for atmospheric corrosion research. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2017, 73, C1253-C1253.	0.1	0
20	In situ and time-lapse XRD as tools for atmospheric corrosion research. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2017, 73, C1406-C1406.	0.1	0
21	μ XRD for the identification of pigments in cross-sections of paintings. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2017, 73, C1346-C1346.	0.1	0
22	New insights into the manufacturing technique and corrosion of high leaded antique bronze coins. <i>Microchemical Journal</i> , 2016, 126, 181-193.	4.5	28
23	The role of niobium in improving toughness and corrosion resistance of high speed steel laser hardfacings. <i>Materials and Design</i> , 2016, 99, 509-520.	7.0	40
24	Analysis of short-range phenomena in novel materials using the PDF method. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016, 72, s427-s427.	0.1	0
25	Analysis of short-range phenomena in two novel materials using the PDF method. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015, 71, s390-s390.	0.1	0
26	Spin dynamics and spin freezing at ferromagnetic quantum phase transitions. <i>European Physical Journal: Special Topics</i> , 2015, 224, 1041-1060.	2.6	10
27	Wet chemical porosification of LTCC in phosphoric acid: Anorthite forming tapes. <i>Journal of the European Ceramic Society</i> , 2015, 35, 4181-4188.	5.7	14
28	Wet chemical porosification of LTCC in phosphoric acid: Celsian forming tapes. <i>Journal of the European Ceramic Society</i> , 2015, 35, 4465-4473.	5.7	8
29	Das RÄntgenzentrum – X-Ray Center (XRC) Der Tu Wien., 2015, , 83-86.	0	
30	Phonons and electron-phonon coupling in YNi_2 $\text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} <\text{mml:msub}> <\text{mml:mrow}> <\text{mml:mn}>2</\text{mml:mn}> </\text{mml:msub}> </\text{mml:math}> B <\text{mml:math}>$ $\text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} <\text{mml:msub}> <\text{mml:mrow}> <\text{mml:mn}>2</\text{mml:mn}> </\text{mml:msub}> </\text{mml:math}> C. \text{Physical Review B}$, 2014, 89, .	3.2	20
31	Peculiarities of temperature dependent ion beam sputtering and channeling of crystalline bismuth. <i>Nanotechnology</i> , 2014, 25, 305302.	2.6	0
32	Development of the magnetic excitations of charge-stripe ordered $La_{2-x}Sr_xNiO_4$ on doping towards checkerboard charge order. <i>Journal of the Korean Physical Society</i> , 2013, 62, 1453-1457.	0.7	3
33	Directional development of residual stress and surface fatigue during sliding contact. <i>Engineering Failure Analysis</i> , 2013, 35, 678-685.	4.0	7
34	Thermopower enhancement by encapsulating cerium in clathrate cages. <i>Nature Materials</i> , 2013, 12, 1096-1101.	27.5	78
35	RÄntgenographische Analyse von Restaustenit-Gehalten an pulvermetallurgisch hergestellten StÄhlen*. <i>HÄM - Journal of Heat Treatment and Materials</i> , 2013, 68, 267-273.	0.2	0
36	Phonon-lifetimes in demixing systems. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 255401.	1.8	1

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37	Phonon line shapes in the vortex state of the phonon-mediated superconductor $\text{YNi}_2\text{Cu}_3\text{O}_7$. Physical Review B, 2012, 85, .	3.2	2
38	Effect of temperature and compositional changes on the phonon properties of Ni-Mn-Ga shape memory alloys. Physical Review B, 2012, 86, .	3.2	21
39	Crystal field excitations in CeCu_2Ge_2 : Revisited employing a single crystal and inelastic neutron scattering. Journal of Applied Physics, 2012, 111, 07E124.	2.5	11
40	Magnetic Soft Modes in the Distorted Triangular Antiferromagnet CaCr_2O_4 . Physical Review Letters, 2012, 109, 127203.	7.8	26
41	Two Ising-like magnetic excitations in a single-layer cuprate superconductor. Nature Physics, 2012, 8, 404-410.	16.7	28
42	Electron-Phonon Coupling in the Conventional Superconductor $\text{YNi}_2\text{Cu}_3\text{O}_7$ at High Phonon Energies Studied by Time-of-Flight Neutron Spectroscopy. Physical Review Letters, 2012, 109, 057001.	7.8	25
43	Electron-Phonon Coupling in the Conventional Superconductor $\text{YNi}_2\text{Cu}_3\text{O}_7$ at High Phonon Energies Studied by Time-of-Flight Neutron Spectroscopy. Physical Review Letters, 2012, 109, 057001.	1.8	9
44	Inelastic neutron and x-ray scattering from incommensurate magnetic systems. Journal of Physics Condensed Matter, 2011, 23, 254209.	1.8	7
45	Inelastic neutron and x-ray scattering from incommensurate magnetic systems. Journal of Physics Condensed Matter, 2011, 23, 305901.	1.8	7
46	Highly Anisotropic Anomaly in the Dispersion of the Copper-Oxygen Bond-Bending Phonon in Superconducting $\text{YBa}_2\text{Cu}_3\text{O}_7$ from Inelastic Neutron Scattering. Physical Review Letters, 2011, 107, 177004.	0.4	1
47	Neutron resonance spin echo spectroscopy on split modes. Journal of Physics: Conference Series, 2010, 211, 012028.	0.3	0
48	Modification of modulated structures and nanodomains in $(\text{A})_2\text{ZnCl}_4$ mixed crystals. Acta Crystallographica Section A: Foundations and Advances, 2010, 66, s58-s58.	0.3	0
49	Hidden magnetic excitation in the pseudogap phase of a high-T _c superconductor. Nature, 2010, 468, 283-285.	27.8	110
50	Normal-state spin dynamics and temperature-dependent spin-resonance energy in optimally doped $\text{BaFe}_1.85\text{Co}_0.15\text{As}_2$. Nature Physics, 2010, 6, 178-181.	16.7	335
51	Incommensurate Magnetic Order and Dynamics Induced by Spinless Impurities in $\text{YBa}_2\text{Cu}_3\text{O}_7$. Physical Review Letters, 2010, 105, 037207.	3.2	6
52	Incommensurate Magnetic Order and Dynamics Induced by Spinless Impurities in $\text{YBa}_2\text{Cu}_3\text{O}_7$. Physical Review Letters, 2010, 105, 037207.	3.2	33
53	Two characteristic energies in the low-energy magnetic response of the electron-doped high-temperature superconductor $\text{Nd}_2\text{Ce}_x\text{CuO}_{4+\delta}$. Physical Review B, 2010, 82, .	3.2	6
54	Symmetry of spin excitation spectra in the tetragonal paramagnetic and superconducting phases of 122-ferropnictides. Physical Review B, 2010, 82, .	3.2	114
55	Magnetic resonance in the model high-temperature superconductor $\text{HgBa}_2\text{CuO}_4+\delta$. Physical Review B, 2010, 81, .	0.3	0
56	Domain redistribution in SrTiO_3 . Acta Crystallographica Section A: Foundations and Advances, 2010, 66, s175-s176.	0.3	0

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55	Kinetics of solid-state reactions/transitions investigated by real-time neutron spectroscopy. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2009, 65, s80-s80.	0.3	0
56	Phonon linewidths in YNi ₂ B ₂ C. <i>Pramana - Journal of Physics</i> , 2008, 71, 687-693.	1.8	12
57	Phonon dispersions of Ni _x Mn _{1-x} Al shape memory alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 481-482, 197-200.	5.6	4
58	Interplay of structural instability and lattice dynamics in $\text{Ni}_{x}\text{Mn}_{1-x}\text{Al}$. <i>Physical Review B</i> , 2008, 78, .	3.2	27
59	Magnetic excitations in a cycloidal magnet: the magnon spectrum of multiferroic TbMnO ₃ . <i>Journal of Physics Condensed Matter</i> , 2008, 20, 434212.	1.8	56
60	Electric field induced anomalies in ferroelectric K ₂ SeO ₄ . <i>Journal of Physics Condensed Matter</i> , 2008, 20, 415209.	1.8	8
61	Direct Observation of the Superconducting Gap in Phonon Spectra. <i>Physical Review Letters</i> , 2008, 101, 237002.	7.8	38
62	Spin reorientation and glassy dynamics in $\text{La}_{x}\text{Mn}_{1-x}\text{O}_3$. <i>Physical Review B</i> , 2008, 78, .	3.2	1155
63	Observation of phasons in the magnetic shape memory alloy Ni ₂ MnGa. <i>Europhysics Letters</i> , 2007, 77, 56004.	2.0	37
64	Dispersion of the odd magnetic resonant mode in near-optimally doped $\text{Bi}_{x}\text{Sr}_{1-x}\text{O}_3$. <i>Physical Review B</i> , 2007, 76, .	3.2	46
65	Magnetic Excitations in Multiferroic TbMnO ₃ : Evidence for a Hybridized Soft Mode. <i>Physical Review Letters</i> , 2007, 98, 137206.	7.8	128
66	Monitoring and preventing collisions for a triple axis spectrometer. , 2006, , .		0
67	Monitoring and Preventing collisions for a triple axis Spectrometer. , 2006, , .		0
68	Investigation of the local structure of nanosized CdS crystals stabilized with glutathione by the radial distribution function method. <i>Journal of Structural Chemistry</i> , 2004, 45, 427-436.	1.0	2
69	Investigations of Cd _{1-x} Mn _x Te crystals by means of ellipsometry and Auger electron spectroscopy. <i>Applied Surface Science</i> , 2003, 212-213, 110-115.	6.1	5
70	Investigation of nanocrystalline CdS-glutathione particles by radial distribution function. <i>Journal of Applied Crystallography</i> , 2003, 36, 1389-1396.	4.5	38
71	Temperature dependence of the 8-Å... superstructure in decagonal Al ₆₀ Co ₂₀ Ni ₂₀ . <i>Journal of Alloys and Compounds</i> , 2002, 342, 57-64.	5.5	11
72	Transient ordering states in decagonal Al ₆₀ Co ₂₀ Ni ₂₀ at temperatures up to 1000°C. <i>Journal of Alloys and Compounds</i> , 2002, 342, 92-95.	5.5	1

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73	Diffuse neutron scattering study of disordered Al 72 Co 16 Ni 12 quasicrystals up to 1000 °C. <i>Applied Physics A: Materials Science and Processing</i> , 2002, 74, s998-s1000.	2.3	0	
74	X-ray and neutron diffuse scattering of decagonal quasicrystals at temperatures up to 1000 °C. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2002, 58, c17-c17.	0.3	0	
75	Temperature dependence of the 8A superstructure in decagonal Al-Co-Ni phases. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2002, 58, c183-c183.	0.3	0	
76	Transient ordering states in decagonal Al-Co-Ni and Al-Cu-Co-Si phases. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2001, 81, 2375-2389.	0.6	5	
77	On the one-dimensional 8 Å periodic superstructure in decagonal phases. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2000, 80, 2375-2391.	0.6	16	
78	High resolution X-ray and neutron diffraction of super- and disorder in decagonal Al-Co-Ni. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2000, 294-296, 308-314.	5.6	3	
79	Neutron and X-ray investigation of disordered quasicrystals. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2000, 294-296, 303-307.	5.6	2	
80	A new diffractometer for materials science and imaging at HASYLAB beamline G3. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1999, 428, 570-582.	1.6	61	
81	Inelastic neutron scattering study of the dynamics of the AlNiCo decagonal phase. <i>European Physical Journal B</i> , 1999, 7, 513-516.	1.5	31	
82	Superordering in Ni-rich and Ni-poor decagonal Al-Co-Ni phases. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1999, 79, 1963-1976.	0.6	7	
83	Single crystal neutron diffraction of decagonal Al _{72.5} Co ₁₁ Ni _{16.5} . <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 1997, 212, 89-94.	0.8	4	
84	Periodic superorder and disorder of decagonal Al[Ni][Co] and Al[Co][Cu][Si] phases. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1996, 74, 45-55.	0.6	8	
85	X-ray diffuse scattering in the decagonal phases Al ₇₀ Ni ₁₅ Co ₁₅ , Al _{72.5} Ni ₁₁ Co _{16.5} and Al ₆₂ Cu ₂₀ Co ₁₅ Si ₃ up to 1150K. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1995, 71, 955-965.	0.6	17	
86	Diffuse scattering of decagonal Al ₇₀ Ni ₁₅ Co ₁₅ measured with synchrotron radiation. <i>Philosophical Magazine Letters</i> , 1995, 71, 199-205.	1.2	15	
87	Epitaxial YBa ₂ Cu ₃ O _x thin films on sapphire using a Y-stabilized ZrO ₂ buffer layer. <i>Applied Physics Letters</i> , 1991, 59, 222-224.	3.3	29	
88	Sputter deposition of epitaxial Y ₁ Ba ₂ Cu ₃ O _x -films on SrTiO ₃ , MgO, LaAlO ₃ , NdGaO ₃ and YSZ/sapphire substrates. <i>Physica C: Superconductivity and Its Applications</i> , 1991, 185-189, 2115-2116.	1.2	9	
89	Interface analysis of epitaxial YBa ₂ Cu ₃ O ₇ thin films deposited on sapphire (Al ₂ O ₃) with YSZ buffer layers. <i>Physica C: Superconductivity and Its Applications</i> , 1991, 177, 89-94.	1.2	19	
90	Sputtered YBa ₂ Cu ₃ O _y thin films on sapphire and silicon substrates using yttria stabilized ZrO ₂ buffer layers. <i>Physica C: Superconductivity and Its Applications</i> , 1991, 180, 34-37.	1.2	3	

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IF CITATIONS

- 91 RF-magnetron sputtered lanthanum aluminate buffer layers on silicon. *Superconductor Science and Technology*, 1991, 4, 371-373. 3.5 17