

Jan Rusz

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2429838/publications.pdf>

Version: 2024-02-01

174
papers

3,620
citations

147801
31
h-index

175258
52
g-index

187
all docs

187
docs citations

187
times ranked

2956
citing authors

#	ARTICLE	IF	CITATIONS
1	Evidence for a delocalization quantum phase transition without symmetry breaking in CeColn ₅. Science, 2022, 375, 76-81.	12.6	21
2	Atomically sharp domain walls in an antiferromagnet. Science Advances, 2022, 8, eabn3535.	10.3	12
3	A study on the relationship of magnetic moments orientation in L10 FePt network nanostructured film by electron energy-loss magnetic chiral dichroism using semi-core excitation spectra. Journal of Magnetism and Magnetic Materials, 2022, 558, 169522.	2.3	0
4	Simultaneous mapping of EMCD signals and crystal orientations in a transmission electron microscope. Scientific Reports, 2021, 11, 2180.	3.3	2
5	Atomic Structure and Electron Magnetic Circular Dichroism of Individual Rock Salt Structure Antiphase Boundaries in Spinel Ferrites. Advanced Functional Materials, 2021, 31, 2008306.	14.9	15
6	Angle-resolved photoemission spectroscopy view on the nature of Ce $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mn} \rangle 4 \langle /mml:mn \rangle \langle \text{mml:mi} \rangle f \langle /mml:mi \rangle \langle /mml:math \rangle$ electrons in the antiferromagnetic Kondo lattice $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{Ce} \langle /mml:mi \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{Pd} \langle /mml:mi \rangle \langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle$. Physical Review B, 2021, 103, .	3.2	5
7	Improvements towards the inclusion of magnetic effects in large-scale multislice calculations of elastic electron scattering. Microscopy and Microanalysis, 2021, 27, 3338-3339.	0.4	0
8	Simulations of spatially and angle-resolved vibrational electron energy loss spectroscopy for a system with a planar defect. Physical Review B, 2021, 104, .	3.2	7
9	Frequency-resolved frozen phonon multislice method and its application to vibrational electron energy loss spectroscopy using parallel illumination. Physical Review B, 2021, 104, .	3.2	8
10	Parameterization of magnetic vector potentials and fields for efficient multislice calculations of elastic electron scattering. Acta Crystallographica Section A: Foundations and Advances, 2021, 77, 509-518.	0.1	3
11	The 4f-Hybridization Strength in Ce_m M_n In_{3m+2n} Heavy-Fermion Compounds Studied by Angle-Resolved Photoemission Spectroscopy. Chinese Physics Letters, 2021, 38, 107402.	3.3	2
12	Evidence for a delocalization quantum phase transition without symmetry breaking in CeColn. Science, 2021, , eaaz4566.	12.6	0
13	Theory of magnon diffuse scattering in scanning transmission electron microscopy. Physical Review B, 2021, 104, .	3.2	8
14	Dynamical diffraction effects in STEM orbital angular momentum resolved electron energy-loss magnetic chiral dichroism. Physical Review B, 2020, 102, .	3.2	3
15	Three-dimensional and temperature-dependent electronic structure of the heavy-fermion compound $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{CePt} \langle /mml:mi \rangle \langle \text{mml:mn} \rangle ^{3.2} 2 \langle /mml:mn \rangle \langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle$ studied by angle-resolved photoemission spectroscopy. Physical Review B, 2020, 101, .	3.2	8
16	Efficient and Versatile Model for Vibrational STEM-EELS. Physical Review Letters, 2020, 124, 025501.	7.8	27
17	Atomic resolution energy-loss magnetic chiral dichroism measurements enabled by patterned apertures. Physical Review Research, 2020, 2, .	3.6	7
18	Quantum mechanical treatment of atomic-resolution differential phase contrast imaging of magnetic materials. Physical Review B, 2019, 99, .	3.2	13

#	ARTICLE	IF	CITATIONS
19	Electronic specific heat coefficient and magnetic properties of $\text{Fe}_{x}\text{Pt}_{1-x}$ Laves phases: A combined experimental and first-principles study. <i>Physical Review B</i> , 2019, 100, . Crystal electric field splitting and electron hybridization in heavy-fermion $\text{Ce}_{x}\text{Pt}_{1-x}$. <i>Physical Review B</i> , 2019, 100, .	3.2	2
20	Prospect for detecting magnetism of a single impurity atom using electron magnetic chiral dichroism. <i>Physical Review B</i> , 2019, 100, .	3.2	7
21	Proposal for Measuring Magnetism with Patterned Apertures in a Transmission Electron Microscope. <i>Physical Review Letters</i> , 2019, 122, 037201.	7.8	7
22	Orbital angular momentum resolved electron magnetic chiral dichroism. <i>Physical Review B</i> , 2019, 100, .	3.2	8
23	Single-pass STEM-EMCD on a zone axis using a patterned aperture: progress in experimental and data treatment methods. <i>Scientific Reports</i> , 2019, 9, 18170.	3.3	8
24	Defect driven spin state transition and the existence of half-metallicity in CoO. <i>Journal of Physics Condensed Matter</i> , 2019, 31, 115602.	1.8	7
25	Element-selective investigation of femtosecond spin dynamics in NiPd magnetic alloys using extreme ultraviolet radiation. <i>Physical Review B</i> , 2018, 97, .	3.2	14
26	Understanding electron magnetic circular dichroism in a transition potential approach. <i>Physical Review B</i> , 2018, 97, .	3.2	3
27	Local low rank denoising for enhanced atomic resolution imaging. <i>Ultramicroscopy</i> , 2018, 187, 34-42.	1.9	14
28	Atomic scale imaging of magnetic circular dichroism by achromatic electron microscopy. <i>Nature Materials</i> , 2018, 17, 221-225.	27.5	60
29	Influence of Cobalt Substitution on the Magnetic Properties of $\text{Fe}_{5-x}\text{PB}_x$. <i>Inorganic Chemistry</i> , 2018, 57, 777-784.	4.0	10
30	Probing the localization of magnetic dichroism by atomic-size astigmatic and vortex electron beams. <i>Scientific Reports</i> , 2018, 8, 4019.	3.3	16
31	Image and Spectrum Image Denoising under the local low Rank Assumption. <i>Microscopy and Microanalysis</i> , 2018, 24, 578-579.	0.4	1
32	Probing the Proximity of Magnetic Dichroic Signal in Electron Magnetics Circular Dichroism by Atomic Sized Electron Vortex Beam and Four Fold Astigmatic Beams.. <i>Microscopy and Microanalysis</i> , 2018, 24, 922-923.	0.4	1
33	Proposal for a three-dimensional magnetic measurement method with nanometer-scale depth resolution. <i>Physical Review B</i> , 2018, 98, .	3.2	4
34	Magnetocrystalline anisotropy of $\text{Fe}_{x}\text{Pt}_{1-x}$ and its alloys with Co and Mn . <i>Physical Review B</i> , 2018, 98, .	3.2	17
35	Towards topological spectroscopy in the electron microscope with atomic resolution. <i>Microscopy and Microanalysis</i> , 2018, 24, 926-927.	0.4	1

#	ARTICLE	IF	CITATIONS
37	Blind identification of magnetic signals in electron magnetic chiral dichroism using independent component analysis. Ultramicroscopy, 2018, 195, 129-135.	1.9	4
38	Magnetic anisotropy in permalloy: Hidden quantum mechanical features. Physical Review B, 2018, 97, .	3.2	12
39	Towards Nanometer-Scale Three-Dimensional Magnetic Studies with Atomic Size Electron Vortex Beams. Microscopy and Microanalysis, 2018, 24, 918-919.	0.4	2
40	Simple method for optimization of classical electron magnetic circular dichroism measurements: The role of structure factor and extinction distances. Physical Review Materials, 2018, 2, .	2.4	2
41	On the origin of perpendicular magnetic anisotropy in strained Fe-Co(X) films. Journal Physics D: Applied Physics, 2017, 50, 045003.	2.8	9
42	Modified automatic term selection v2: A faster algorithm to calculate inelastic scattering cross-sections. Ultramicroscopy, 2017, 177, 20-25.	1.9	23
43	Tensor decompositions for the analysis of atomic resolution electron energy loss spectra. Ultramicroscopy, 2017, 175, 36-45.	1.9	14
44	An in-plane magnetic chiral dichroism approach for measurement of intrinsic magnetic signals using transmitted electrons. Nature Communications, 2017, 8, 15348.	12.8	16
45	Electron tomography analysis of 3D interfacial nanostructures appearing in annealed Si rich SiC films. Nanoscale, 2017, 9, 6703-6710.	5.6	4
46	Enhanced spin-orbit coupling in tetragonally strained Fe-Co-B films. Journal of Physics Condensed Matter, 2017, 29, 275802.	1.8	11
47	Analysis of electron energy loss spectroscopy data using geometric extraction methods. Ultramicroscopy, 2017, 174, 14-26.	1.9	11
48	Magnetic properties of the $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{Fe} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 2 \langle / \text{mml:mn} \rangle \langle / \text{mml:msub} \rangle \langle / \text{mml:mrow} \rangle \langle / \text{mml:math} \rangle$ system. Physical Review B, 2017, 96, .		
49	Localization of magnetic circular dichroic spectra in transmission electron microscopy experiments with atomic plane resolution. Physical Review B, 2017, 95, .	3.2	9
50	Unmixing hyperspectral data by using signal subspace sampling. Ultramicroscopy, 2017, 182, 205-211.	1.9	13
51	Atom size electron vortex beams with selectable orbital angular momentum. Scientific Reports, 2017, 7, 934.	3.3	24
52	Towards sub-nanometer real-space observation of spin and orbital magnetism at the Fe/MgO interface. Scientific Reports, 2017, 7, 44802.	3.3	15
53	The usage of data compression for the background estimation of electron energy loss spectra. Ultramicroscopy, 2017, 181, 117-122.	1.9	12
54	Can we use PCA to detect small signals in noisy data?. Ultramicroscopy, 2017, 172, 40-46.	1.9	27

#	ARTICLE	IF	CITATIONS
55	Fully nonlocal inelastic scattering computations for spectroscopical transmission electron microscopy methods. <i>Physical Review B</i> , 2017, 96, .	3.2	4
56	Detection of magnetic circular dichroism in amorphous materials utilizing a single-crystalline overlayer. <i>Physical Review Materials</i> , 2017, 1, .	2.4	6
57	Quantifying Magnetism on the nm Scale: EMCD on Individual FePt Nanoparticles. <i>Microscopy and Microanalysis</i> , 2016, 22, 1674-1675.	0.4	0
58	Mapping Magnetic Ordering With Aberrated Electron Probes in STEM. <i>Microscopy and Microanalysis</i> , 2016, 22, 1676-1677.	0.4	2
59	Communication: Visualization and spectroscopy of defects induced by dehydrogenation in individual silicon nanocrystals. <i>Journal of Chemical Physics</i> , 2016, 144, 241102.	3.0	3
60	Magnetic properties of single nanomagnets: Electron energy-loss magnetic chiral dichroism on FePt nanoparticles. <i>Ultramicroscopy</i> , 2016, 171, 186-194.	1.9	25
61	Detection of electron magnetic circular dichroism signals under zone axial diffraction geometry. <i>Ultramicroscopy</i> , 2016, 169, 44-54.	1.9	18
62	Aberrated electron probes for magnetic spectroscopy with atomic resolution: Theory and practical aspects. <i>Physical Review B</i> , 2016, 93, .	3.2	12
63	Elastic Scattering of Electron Vortex Beams in Magnetic Matter. <i>Physical Review Letters</i> , 2016, 116, 127203.	7.8	44
64	Magnetic properties ofFe its alloys with P, S, and Co. <i>Physical Review B</i> , 2016, 93, .		
65	Vorticity in electron beams: Definition, properties, and its relationship with magnetism. <i>Physical Review B</i> , 2016, 94, .	3.2	3
66	Magnetic effects in the paraxial regime of elastic electron scattering. <i>Physical Review B</i> , 2016, 94, .	3.2	17
67	Magnetic measurements with atomic-plane resolution. <i>Nature Communications</i> , 2016, 7, 12672.	12.8	43
68	Detection of magnetic circular dichroism with subnanometer convergent electron beams. <i>Physical Review B</i> , 2016, 94, .	3.2	32
69	Detecting magnetic ordering with atomic size electron probes. <i>Advanced Structural and Chemical Imaging</i> , 2016, 2, .	4.0	36
70	Influence of nuclear quantum effects on frozen phonon simulations of electron vortex beam HAADF-STEM images. <i>Ultramicroscopy</i> , 2016, 164, 62-69.	1.9	9
71	Mapping of Defects in Individual Silicon Nanocrystals Using Real-Space Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 1047-1054.	4.6	9
72	Mapping Magnetic Properties of Materials At Atomic Spatial Resolution. <i>Microscopy and Microanalysis</i> , 2015, 21, 499-500.	0.4	2

#	ARTICLE	IF	CITATIONS
73	Band alignment switching and the interaction between neighboring silicon nanocrystals embedded in a SiC matrix. Physical Review B, 2015, 91, .	3.2	1
74	Nature of the bias-dependent symmetry reduction of iron phthalocyanine on Cu(111). Physical Review B, 2015, 92, .	3.2	22
75	Jacob's ladder of approximations to paraxial dynamic electron scattering. Physical Review B, 2015, 92, .	3.2	6
76	Influence of dimensionality and interface type on optical and electronic properties of CdS/ZnS core-shell nanocrystals—A first-principles study. Journal of Chemical Physics, 2015, 143, 164701.	3.0	7
77	Quantitative analysis of magnetic spin and orbital moments from an oxidized iron (1 1 0) surface using electron magnetic circular dichroism. Scientific Reports, 2015, 5, 13012.	3.3	27
78	B11-O-13A New Atomic Scale EMCD Measurement Scheme by STEM-EELS under 3-beam Diffraction Condition. Microscopy (Oxford, England), 2015, 64, i16.2-i16.	1.5	0
79	Electron Vortex Beams for Magnetic Measurements on Ferromagnetic Samples via STEM. Microscopy and Microanalysis, 2015, 21, 505-506.	0.4	1
80	Spin-Multislice Applied to the Electron Spin Interaction with Materials. Microscopy and Microanalysis, 2015, 21, 1961-1962.	0.4	0
81	B11-P-01 Magnetocrystalline anisotropy of hexagonal Co by relative intensities of electron magnetic circular dichroic signals. Microscopy (Oxford, England), 2015, 64, i78.1-i78.	1.5	0
82	From soft to hard magnetic Fe–Co–B by spontaneous strain: a combined first principles and thin film study. Journal of Physics Condensed Matter, 2015, 27, 476002.	1.8	29
83	A multislice theory of electron scattering in crystals including backscattering and inelastic effects. Ultramicroscopy, 2015, 159, 11-18.	1.9	3
84	First-principles study of the influence of different interfaces and core types on the properties of CdSe/CdS core-shell nanocrystals. Scientific Reports, 2015, 5, 10865. <i>Magnetic Polarization of the Americium</i> $\times \text{mml:math}$ $\text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"}$ $\text{display}=\text{"inline"}><\text{mml:mi}\text{J}</\text{mml:mi}<\text{mml:mo}>=<\text{mml:mo}<\text{mml:mn}0</\text{mml:mn}></\text{mml:math}>$ Ground	3.3	20
85	State in mml:math $\text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"}$ $\text{display}=\text{"inline"}><\text{mml:mrow}<\text{mml:msub}<\text{mml:mrow}<\text{mml:mi}AmFe</\text{mml:mi}></\text{mml:mrow}><\text{mml:mrow}>2</\text{mml:mn}></\text{mml:math}>$ <i>Physical Review Letters</i> , 2015, 114, 097203	7.8	13
86	Toward Rare-Earth-Free Permanent Magnets: A Combinatorial Approach Exploiting the Possibilities of Modeling, Shape Anisotropy in Elongated Nanoparticles, and Combinatorial Thin-Film Approach. Jom, 2015, 67, 1318-1328.	1.9	34
87	Size dependence of the stability, electronic structure, and optical properties of silicon nanocrystals with various surface impurities. Physical Review B, 2015, 91, .	3.2	10
88	Magnetic anisotropy of La ₂ Co ₇ . Journal of Applied Physics, 2015, 118, .	2.5	14
89	Magnetic properties of mml:math $\text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"}$ $\text{display}=\text{"block"}><\text{mml:mrow}<\text{mml:mo}>(<\text{mml:mo}<\text{mml:msub}<\text{mml:mi}Fe</\text{mml:mi}><\text{mml:mo}>)</\text{mml:math}>$ $\text{mml:mn}2</\text{mml:mn}><\text{mml:msub}<\text{mml:mi}mathvariant="normal">B</\text{mml:mi}></\text{mml:mrow}></\text{mml:math}>$ alloys and the effect of doping by mml:math $\text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"}$. Physical Review B, 2015, 92, .	3.2	62
90	Electron vortex beams prepared by a spiral aperture with the goal to measure EMCD on ferromagnetic films via STEM. Ultramicroscopy, 2015, 150, 16-22.	1.9	26

#	ARTICLE	IF	CITATIONS
91	Toward Single Mode, Atomic Size Electron Vortex Beams. <i>Microscopy and Microanalysis</i> , 2014, 20, 832-836.	0.4	16
92	Microscopic description of the evolution of the local structure and an evaluation of the chemical pressure concept in a solid solution. <i>Physical Review B</i> , 2014, 89, .	3.2	26
93	Magnetocrystalline anisotropy in x-ray magnetic linear dichroism at the 3pedges of crystalline Fe thin films. <i>Physical Review B</i> , 2014, 89, .	3.2	6
94	Electronic structure and magnetic properties of$\text{Fe}_{x}\text{Co}_{y}\text{C}_{z}$ alloys. <i>Physical Review B</i> , 2014, 90, .	3.2	10
95	Scattering of electron vortex beams on a magnetic crystal: Towards atomic-resolution magnetic measurements. <i>Physical Review B</i> , 2014, 89, .	3.2	51
96	Increased magnetocrystalline anisotropy in epitaxial Fe-Co-C thin films with spontaneous strain. <i>Journal of Applied Physics</i> , 2014, 116, .	2.5	42
97	Quantitative characterization of nanoscale polycrystalline magnets with electron magnetic circular dichroism. <i>Nature Communications</i> , 2014, 5, 3138.	12.8	45
98	Exceptional Ising magnetic behavior of itinerant spin-polarized carriers in$\text{Fe}_{x}\text{Co}_{y}\text{C}_{z}$. <i>Physical Review B</i> , 2014, 90, .	3.2	10
99	Achieving Atomic Resolution Magnetic Dichroism by Controlling the Phase Symmetry of an Electron Probe. <i>Physical Review Letters</i> , 2014, 113, 145501.	7.8	54
100	Unified approach to electronic, thermodynamical, and transport properties of$\text{Fe}_{x}\text{Co}_{y}\text{C}_{z}$. <i>Physical Review B</i> , 2014, 90, .	3.2	15
101	$\text{Co}_{x}\text{Mn}_{y}\text{C}_{z}$ alloys by C impurities: A potential new permanent magnet. <i>Physical Review B</i> , 2014, 89, .	3.2	60
102	Signal enhancement of electron magnetic circular dichroism by ultra-high-voltage TEM, toward quantitative nano-magnetism measurements. <i>Microscopy (Oxford, England)</i> , 2014, 63, 243-247.	1.5	11
103	X-ray absorption spectra: Graphene, $\text{h}-\text{BN}$, and their alloy. <i>Physical Review B</i> , 2013, 87, .	3.2	5
104	Boundaries for Efficient Use of Electron Vortex Beams to Measure Magnetic Properties. <i>Physical Review Letters</i> , 2013, 111, 105504.	7.8	72
105	Transition between direct and indirect band gap in silicon nanocrystals. <i>Physical Review B</i> , 2013, 87, .	3.2	40
106	Parameter-free extraction of EMCD from an energy-filtered diffraction datacube using multivariate curve resolution. <i>Ultramicroscopy</i> , 2013, 125, 89-96.	1.9	23
107	New algorithm for efficient Bloch-waves calculations of orientation-sensitive ELNES. <i>Ultramicroscopy</i> , 2013, 125, 81-88.	1.9	31
108	Unified character of correlation effects in unconventional Pu-based superconductors and$\text{Fe}_{x}\text{Co}_{y}\text{C}_{z}$. <i>Physical Review B</i> , 2013, 87, .	3.2	27

#	ARTICLE	IF	CITATIONS
109	X-ray magnetic circular dichroism experiments and theory of transuranium Laves phase compounds. Physical Review B, 2013, 88, .	3.2	22
110	Experimental and theoretical study of electronic structure of lutetium bi-phthalocyanine. Journal of Chemical Physics, 2013, 138, 234701.	3.0	15
111	Energy Loss by Channeled Electrons: A Quantitative Study on Transition Metal Oxides. Microscopy and Microanalysis, 2013, 19, 1586-1594.	0.4	9
112	Electronic structure and Fermi surface of paramagnetic and antiferromagnetic UPt ₃ . Physical Review B, 2012, 86, .	3.2	9
113	Formation and Structure of Graphene Waves on Fe(110). Physical Review Letters, 2012, 109, 026101.	7.8	122
114	Detection of Magnetic Circular Dichroism Using TEM and EELS. NATO Science for Peace and Security Series B: Physics and Biophysics, 2012, , 419-427. <i>First principles investigation of higher states of uranium and neptunium:</i>	0.3	0
115	$\text{U}_{\langle \text{mml:mi} \rangle} \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle^3 \langle / \text{mml:mn} \rangle \langle / \text{mml:mrow} \rangle \langle / \text{mml:msub} \rangle \langle / \text{mml:mrow} \rangle \langle / \text{mml:math} \rangle$ Physical Review B, 2012, 86, .	3.2	43
116	Atomic site sensitivity of the energy loss magnetic chiral dichroic spectra of complex oxides. Journal of Applied Physics, 2011, 109, 07D328.	2.5	12
117	Local electronic structure information contained in energy-filtered diffraction patterns. Physical Review B, 2011, 84, .	3.2	36
118	Influence of plural scattering on the quantitative determination of spin and orbital moments in electron magnetic chiral dichroism measurements. Physical Review B, 2011, 83, .	3.2	24
119	Spin and orbital hybridization at specifically nested Fermi surfaces in URu ₂ Si ₂ . Physical Review B, 2011, 84, . <i>Theoretical investigation of electronic structure, electric field gradients, and photoemission of PuCoGa₃:</i>	3.2	51
120	$\text{PuRhGa}_{\langle \text{mml:math} \rangle}$ Physical Review B, 2011, 84, .	3.2	8
121	Reciprocal and real space maps for EMCD experiments. Ultramicroscopy, 2010, 110, 1380-1389.	1.9	38
122	Quantitative magnetic measurements with transmission electron microscope. Journal of Magnetism and Magnetic Materials, 2010, 322, 1478-1480.	2.3	12
123	Momentum-resolved EELS and EMCD spectra from the atomic multiplet theory: Application to magnetite. Ultramicroscopy, 2010, 110, 1042-1045.	1.9	17
124	Asymmetry of the two-beam geometry in EMCD experiments. Journal of Microscopy, 2010, 237, 465-468.	1.8	19
125	Anisotropy of the L _{2,3} x-ray magnetic linear dichroism of Fe films on GaAs: Experiment and ab initio theory. Physical Review B, 2010, 82, .	3.2	16
126	Simulation of magnetic circular dichroism in the electron microscope. Journal Physics D: Applied Physics, 2010, 43, 474005.	2.8	14

#	ARTICLE	IF	CITATIONS
127	Site-specific electronic configurations of Fe ϵ 3d states by energy loss by channeled electrons. Applied Physics Letters, 2010, 96, .	3.3	16
128	Quadratic X-Ray Magneto-Optical Effect upon Reflection in a Near-Normal-Incidence Configuration at the $M_{3/2}$ Edge of Transition Metals. Physical Review B, 2010, 82, 104401.	7.8	32
129	Electronic structure theory of the hidden-order material URu ₂ Si ₂ . Physical Review B, 2010, 82, 094411.	3.2	91
130	Positron annihilation study of the electronic structure of URu ₂ Si ₂ . Fermi surface and hidden order parameter. Physical Review B, 2009, 79, .	3.2	11
131	Quantitative Magnetic Information from Reciprocal Space Maps in Transmission Electron Microscopy. Physical Review Letters, 2009, 102, 037201.	7.8	61
132	Hidden order in URu ₂ Si ₂ originates from Fermi surface gapping induced by dynamic symmetry-breaking. Nature Materials, 2009, 8, 337-341.	27.5	134
133	Magnetic circular dichroism in EELS: Towards 10nm resolution. Ultramicroscopy, 2008, 108, 433-438.	1.9	59
134	Optimal aperture sizes and positions for EMCD experiments. Ultramicroscopy, 2008, 108, 865-872.	1.9	31
135	Magnetic circular dichroism in electron energy loss spectrometry. Ultramicroscopy, 2008, 108, 277-284.	1.9	30
136	Spin and orbital moment sum-rules for the electron energy loss chiral magnetic dichroism. Physica B: Condensed Matter, 2008, 403, 1614-1615.	2.7	2
137	High-kinetic-energy photoemission spectroscopy of Ni at the $M_{3/2}$ edge. Journal of Physics: Condensed Matter, 2008, 20, 105601.	3.2	20
138	Probing the electronic structure of pure and doped URu ₂ Si ₂ by EELSDOS. Journal of Physics: Condensed Matter, 2008, 20, 105602.	3.2	19

#	ARTICLE	IF	CITATIONS
145	EMCD: Magnetic Chiral Dichroism in the Electron Microscope. Materials Research Society Symposia Proceedings, 2007, 1026, 1.	0.1	0
146	Origin of the negative volume magnetostriction of the intermetallic compound GdAl2. Journal of Alloys and Compounds, 2007, 431, 37-41.	5.5	10
147	Positron wave-function effects in the measurement of the two-dimensional angular correlation of the annihilation radiation of a spin-polarized system. Physical Review B, 2007, 75, .	3.2	6
148	First-principles theory of chiral dichroism in electron microscopy applied to 3d ferromagnets. Physical Review B, 2007, 75, .	3.2	86
149	The electronic structure and crystal field of RPt3Si (R=Pr, Nd, Sm) compounds. Physica B: Condensed Matter, 2007, 400, 114-118.	2.7	5
150	Exchange interactions and correlations in Heusler alloys. Journal of Magnetism and Magnetic Materials, 2007, 310, 1654-1656.	2.3	6
151	Fermi surface changes due to localized-delocalized f-state transitions in Ce-115 and Pu-115 compounds. Journal of Magnetism and Magnetic Materials, 2007, 310, 1684-1690.	2.3	14
152	Ab initio calculations of Curie temperatures in GdX compounds. Journal of Alloys and Compounds, 2006, 408-412, 930-933.	5.5	8
153	Cancellation of probe effects in measurements of spin-polarized momentum density by electron-positron annihilation. Journal of Physics Condensed Matter, 2006, 18, L289-L295.	1.8	9
154	Detection of magnetic circular dichroism using a transmission electron microscope. Nature, 2006, 441, 486-488.	27.8	331
155	Exchange interactions and crystal-field effects in HoX (Cd, Cu, Mg, Rh, Zn) intermetallic compounds. Physica B: Condensed Matter, 2006, 381, 265-270.	2.7	4
156	Calculations of magnetic transition temperatures of Gd-based compounds. Physica B: Condensed Matter, 2006, 378-380, 1079-1080.	2.7	5
157	Magnetism of GdCr and GdAl. $\text{Magnetism of } \text{GdCr and GdAl}$. $\text{ xmlns:xocs= "http://www.elsevier.com/xml/xocs/dtd" xmlns:xs= "http://www.w3.org/2001/XMLSchema" xmlns: xsi= "http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja= "http://www.elsevier.com/xml/ja/dtd" xmlns:mm= "http://www.w3.org/1998/Math/MathML" xmlns:tb= "http://www.elsevier.com/xml/common/table/dtd" xmlns:ce= "http://www.elsevier.com/xml/common/struct/ib/ib" }$	2.3	5
158	Magnetism in DyFe2Si2-a single-crystal study. Physica B: Condensed Matter, 2005, 367, 19-28.	2.7	12
159	Nature off-electrons in CeIn3: Theoretical analysis of positron annihilation data. Physical Review B, 2005, 71, .	3.2	17
160	Magnetic properties of NdNi2B2C from first principles calculations. Journal of Alloys and Compounds, 2005, 403, 29-33.	5.5	29
161	Electronic structure and magnetic properties of selected UTX compounds: LDA +U approach. Journal of Physics Condensed Matter, 2004, 16, 6675-6684.	1.8	8
162	Anisotropic magnetic properties and specific-heat study of a TbFe2Si2 single crystal. Physical Review B, 2004, 70, .	3.2	23

#	ARTICLE	IF	CITATIONS
163	Positron Annihilation Studies of the f-Electron Character in Actinides. <i>Physical Review Letters</i> , 2004, 93, 156405.	7.8	29
164	Theory of Spontaneous Volume Magnetostriction in Rare-earth-based Systems. <i>European Physical Journal D</i> , 2004, 54, 279-282.	0.4	0
165	Magnetic Properties of Selected RFe ₂ Si ₂ Compounds. <i>European Physical Journal D</i> , 2004, 54, 283-286.	0.4	0
166	On the Usefulness of the LDA+U Calculations of the Crystal Field in Insulators. <i>European Physical Journal D</i> , 2004, 54, 291-294.	0.4	3
167	LSDA+U Calculations of UIrAl and UPtAl. <i>European Physical Journal D</i> , 2004, 54, 363-366.	0.4	1
168	Electronic Structure and Lattice Geometry of LaPtSn.. <i>ChemInform</i> , 2004, 35, no.	0.0	0
169	Unconventional metallic magnetism in LaCrSb ₃ . <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, E251-E252.	2.3	10
170	Magnetism in RECo ₂ compounds under pressure. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, E383-E385.	2.3	3
171	Electronic structure and lattice geometry of LaPtSn. <i>Journal of Alloys and Compounds</i> , 2004, 376, 28-33.	5.5	7
172	Inelastic neutron scattering spectra in f-electron compounds: first-principles calculations. <i>Applied Physics A: Materials Science and Processing</i> , 2002, 74, s772-s774.	2.3	1
173	Electronic Structure of RCo ₂ (R = Y, Nd, Ho, Er). <i>European Physical Journal D</i> , 2002, 52, 247-252.	0.4	9
174	First Principles Calculation of the Crystal Field Splitting in Rare Earth Borocarbides. <i>European Physical Journal D</i> , 2002, 52, 283-286.	0.4	18