

M W Haverkort

List of Publications by Year in descending order

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docs citations

125
times ranked

7005
citing authors

#	ARTICLE	IF	CITATIONS
1	Spin State Transition in LaCoO ₃ Studied Using Soft X-ray Absorption Spectroscopy and Magnetic Circular Dichroism. Physical Review Letters, 2006, 97, 176405.	2.9	471
2	Intense paramagnon excitations in a large family of high-temperature superconductors. Nature Physics, 2011, 7, 725-730.	6.5	349
3	Orbital-Assisted Metal-Insulator Transition in VO ₂ . Physical Review Letters, 2005, 95, 196404.	2.9	335
4	Multiplet ligand-field theory using Wannier orbitals. Physical Review B, 2012, 85, .	1.1	299
5	Transfer of Spectral Weight and Symmetry across the Metal-Insulator Transition in VO ₂ . Physical Review Letters, 2006, 97, 116402.	2.9	271
6	Spin-orbital separation in the quasi-one-dimensional Mott insulator Sr ₂ CuO ₃ . Nature, 2012, 485, 82-85.	13.7	267
7	Spin-State Transition in LaCoO ₃ : Direct Neutron Spectroscopic Evidence of Excited Magnetic States. Physical Review Letters, 2006, 97, 247208.	2.9	222
8	Orbital reflectometry of oxide heterostructures. Nature Materials, 2011, 10, 189-193.	13.3	215
9	Strong Spin-Orbit Coupling Effects on the Fermi Surface of RuO_2 . Physical Review Letters, 2008, 101, 026406.	2.9	201
10	Different Look at the Spin State of Co ³⁺ Ions in a CoO ₅ Pyramidal Coordination. Physical Review Letters, 2004, 92, 207402.	2.9	170
11	Local electronic structure and magnetic properties of $La_{1-x}Mn_{0.5x}Co_{0.5x}O_3$. Physical Review Letters, 2005, 95, 187205.	1.1	167
12	Controlling Orbital Moment and Spin Orientation in CoO Layers by Strain. Physical Review Letters, 2005, 95, 187205.	2.9	165
13	Nature of Magnetism in Ca ₃ Co ₂ O ₆ . Physical Review Letters, 2005, 95, 186401.	2.9	137
14	Theory of Resonant Inelastic X-Ray Scattering by Collective Magnetic Excitations. Physical Review Letters, 2010, 105, 167404.	2.9	137
15	Efficient real-frequency solver for dynamical mean-field theory. Physical Review B, 2014, 90, .	1.1	135
16	Spin-Orbital Entanglement and the Breakdown of Singlets and Triplets in Sr_2CuO_3 by Spin- and Angle-Resolved Photoemission Spectroscopy. Physical Review Letters, 2014, 112, 127002.	2.9	123
17	Orbital Control of Noncollinear Magnetic Order in Nickel Oxide Heterostructures. Physical Review Letters, 2013, 111, 106804.	2.9	110
18	Layer-By-Layer Entangled Spin-Orbital Texture of the Topological Surface State in Bi_2Se_3 . Physical Review Letters, 2013, 110, 216401.	2.9	107

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19	Strain and composition dependence of orbital polarization in nickel oxide superlattices. Physical Review B, 2013, 88, .	1.1	107
20	Maximal Rashba-like spin splitting via kinetic-energy-coupled inversion-symmetry breaking. Nature, 2017, 549, 492-496.	13.7	105
21	Valence, spin, and orbital state of Co ions in one-dimensional Ca ₃ Co ₂ O ₆ : An x-ray absorption and magnetic circular dichroism study. Physical Review B, 2006, 74, .	1.1	103
22	Bond disproportionation and dynamical charge fluctuations in the perovskite rare-earth nickelates. Physical Review B, 2016, 94, .	1.1	103
23	Magnetic versus crystal-field linear dichroism in NiO thin films. Physical Review B, 2004, 69, .	1.1	89
24	Photoelectron Spin-Polarization Control in the Topological Insulator Bi_2Te_3 . Physical Review Letters, 2014, 112, 076802.	2.9	87
25	Nonresonant Inelastic X-Ray Scattering Involving Excitonic Excitations: The Examples of NiO and CoO. Physical Review Letters, 2007, 99, 257401.	2.9	84
26	Bands, resonances, edge singularities and excitons in core level spectroscopy investigated within the dynamical mean-field theory. Europhysics Letters, 2014, 108, 57004.	0.7	78
27	Direct Observation of Mn^{2+} Ordering in Magnetite. Physical Review Letters, 2008, 100, 026406.	1.1	77
28	High multipole transitions in NIXS: Valence and hybridization in 4f systems. Europhysics Letters, 2008, 81, 26004.	0.7	74
29	Nature of the magnetism of iridium in the double perovskite Sr_2IrO_7 . Physical Review B, 2019, 100, .	1.1	72
30	Quantum for core level spectroscopy - excitons, resonances and band excitations in time and frequency domain. Journal of Physics: Conference Series, 2016, 712, 012001.	0.3	71
31	Zero-Field Incommensurate Spin-Peierls Phase with Interchain Frustration in TiOCl. Physical Review Letters, 2005, 95, 097203.	2.9	66
32	Inequivalent Routes across the Mott Transition in VO_3 Explored by X-Ray Absorption. Physical Review Letters, 2010, 104, 047401.	2.9	66
33	Determination of the Orbital Moment and Crystal-Field Splitting in LaTiO ₃ . Physical Review Letters, 2005, 94, 056401.	2.9	64
34	Crystal-field ground state of the orthorhombic Kondo insulator CeRu ₂ Al ₁₀ . Physical Review B, 2012, 86, .	1.1	61
35	Element Specific Monolayer Depth Profiling. Advanced Materials, 2014, 26, 6554-6559.	11.1	58
36	Determining the Crystal-Field Ground State in Rare Earth Heavy Fermion Materials Using Soft-X-Ray Absorption Spectroscopy. Physical Review Letters, 2008, 100, 066405.	2.9	55

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37	Optical study of orbital excitations in transition-metal oxides. <i>New Journal of Physics</i> , 2005, 7, 144-144.	1.2	54
38	Impact of interface orientation on magnetic coupling in highly ordered systems: A case study of the low-indexed Fe ₃ O ₄ /NiO interfaces. <i>Physical Review B</i> , 2008, 78, .	1.1	54
39	Symmetry analysis of magneto-optical effects: The case of x-ray diffraction and x-ray absorption at the transition metal $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \langle \text{mml:msub} \langle \text{mml:mi} \rangle L \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle , \langle \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$. <i>Physical Review B</i> , 2010, 82, .	1.1	54
40	2p x-ray absorption spectroscopy of 3d transition metal systems. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2021, 249, 147061.	0.8	44
41	Microscopic origin of spin-orbital separation in Sr $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:msub} \langle \text{mml:mrow} \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \langle \text{mml:math} \rangle \text{CuO} \langle \text{mml:math} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \langle \text{mml:math} \rangle$. <i>Physical Review B</i> , 2013, 88, .	1.1	43
42	Analytical continuation of imaginary axis data for optical conductivity. <i>Physical Review B</i> , 2010, 82, .	1.1	42
43	Probing electronic correlations in actinide materials using multipolar transitions. <i>Physical Review B</i> , 2010, 81, .	1.1	41
44	Growth and properties of strained VO _x thin films with controlled stoichiometry. <i>Physical Review B</i> , 2004, 69, .	1.1	39
45	Determining the In-Plane Orientation of the Ground-State Orbital of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:msub} \langle \text{mml:mi} \rangle \text{CeCu} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \langle \text{mml:msub} \langle \text{mml:mi} \rangle \text{Si} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \langle \text{mml:math} \rangle$. <i>Physical Review Letters</i> , 2012, 109, 046401.	2.9	38
46	Quantitative determination of bond order and lattice distortions in nickel oxide heterostructures by resonant x-ray scattering. <i>Physical Review B</i> , 2016, 93, .	1.1	38
47	Anisotropic susceptibility of La _{2-x} Sr _x CoO ₄ related to the spin states of cobalt. <i>New Journal of Physics</i> , 2008, 10, 023018.	1.2	37
48	Crystal Field Ground State of the Strongly Correlated Topological Insulator $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \langle \text{mml:msub} \langle \text{mml:mrow} \langle \text{mml:mi} \rangle \text{SmB} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \langle \text{mml:mn} \rangle 6 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \langle \text{mml:math} \rangle$. <i>Physical Review Letters</i> , 2018, 120, 016402.	2.9	37
49	Analytical continuation of imaginary axis data using maximum entropy. <i>Physical Review B</i> , 2010, 81, .	1.1	36
50	Crystal-Field Level Inversion in Lightly Mn-Doped $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:msub} \langle \text{mml:mi} \rangle \text{Sr} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \langle \text{mml:msub} \langle \text{mml:mi} \rangle \text{Ru} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 5 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \langle \text{mml:math} \rangle \text{O} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 7 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \langle \text{mml:math} \rangle$. <i>Physical Review Letters</i> , 2008, 101, 016404.	1.1	35
51	$\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \langle \text{mml:msub} \langle \text{mml:mrow} \langle \text{mml:mtext} \rangle \text{YTiO} \langle \text{mml:mtext} \rangle \langle \text{mml:mrow} \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \langle \text{mml:mrow} \langle \text{mml:mtext} \rangle \text{SmTiO} \langle \text{mml:mtext} \rangle \langle \text{mml:mrow} \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \langle \text{mml:math} \rangle$. <i>Physical Review B</i> , 2008, 78, .	1.1	34
52	Crystal field ground state of the orthorhombic Kondo semiconductors CeOs ₂ Al ₁₀ and CeFe ₂ Al ₁₀ . <i>Physical Review B</i> , 2013, 87, .	1.1	34
53	Coexistence of bound and virtual-bound states in shallow-core to valence x-ray spectroscopies. <i>Physical Review B</i> , 2011, 84, .	1.1	33
54	Electronic and spin states of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:msub} \langle \text{mml:mi} \rangle \text{SrRuO} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \langle \text{mml:math} \rangle$ films: An x-ray magnetic circular dichroism study. <i>Physical Review B</i> , 2015, 91, .	1.1	33

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55	CeRu ₄ Sn ₆ : a strongly correlated material with nontrivial topology. Scientific Reports, 2016, 5, 17937.	1.6	32
56	Detection of metastable electronic states by Penning trap mass spectrometry. Nature, 2020, 581, 42-46.	13.7	31
57	Image charge screening: A new approach to enhance magnetic ordering temperatures in ultrathin correlated oxide films. Physical Review B, 2009, 79, .	1.1	30
58	Local electronic structure of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mtext} \rangle \text{Fe} \langle \text{mml:mtext} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mtext} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mtext} \rangle$ in MgO thin films: Temperature-dependent soft x-ray absorption spectroscopy study. Physical Review B, 2010, 82, .	1.1	29
59	Two-Spinon and Orbital Excitations of the Spin-Peierls System TiOCl. Physical Review Letters, 2011, 107, 107402.	2.9	29
60	Direct bulk-sensitive probe of $5f$ symmetry in URu ₂ Si ₂ . Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13989-13994.	3.3	29
61	Evidence for a temperature-induced spin-state transition of Co ³⁺ in La _{2-x} Sr _x CoO ₄ . Physical Review B, 2011, 83, .	1.1	28
62	Orientation-dependent x-ray Raman scattering from cubic crystals: Natural linear dichroism in MnO and CeO ₂ . Journal of Physics: Conference Series, 2009, 190, 012047.	0.3	26
63	Absence of orbital rotation in superconducting $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{CeCu} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mtext} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mtext} \rangle$. Physical Review B, 2015, 91, .	1.1	26
64	Crossover from Collective to Incoherent Spin Excitations in Superconducting Cuprates Probed by Detuned Resonant Inelastic X-Ray Scattering. Physical Review Letters, 2017, 119, 097001.	2.9	26
65	Site-Selective Probe of Magnetic Excitations in Rare-Earth Nickelates Using Resonant Inelastic X-ray Scattering. Physical Review X, 2018, 8, .	2.8	26
66	From antiferromagnetic and hidden order to Pauli paramagnetism in U ₂ Si ₂ compounds with $5f$ electron duality. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30220-30227.	3.3	25
67	Mott-Hubbard versus charge-transfer behavior in LaSrMnO ₄ studied via optical conductivity. Physical Review B, 2008, 77, .	1.1	24
68	Orbital superexchange and crystal field simultaneously at play in YVO ₃ : Resonant inelastic x-ray scattering at the V L edge and the O K edge. Physical Review B, 2010, 82, .	1.1	24
69	Valence-state reflectometry of complex oxide heterointerfaces. Npj Quantum Materials, 2016, 1, .	1.8	23
70	Bulk and surface electronic properties of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mtext} \rangle \text{SmB} \langle \text{mml:mtext} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mtext} \rangle$. A hard x-ray photoelectron spectroscopy study. Physical Review B, 2017, 96, .	1.1	23
71	Weak magnetism in insulating and superconducting cuprates. Physical Review B, 2010, 82, .	1.1	22
72	Evolution of the electronic structure of a Mott system across its phase diagram: X-ray absorption spectroscopy study of $(V_{1-x}Tj_x)ETQqO_{0.0}rgBT$. Overlock 10 Tf 50 77 Td	1.1	22

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73	Theory of L -edge spectroscopy of strongly correlated systems. Physical Review B, 2017, 96, .	1.1	21
74	Challenges from experiment: electronic structure of NiO. European Physical Journal: Special Topics, 2017, 226, 2445-2456.	1.2	20
75	dd excitations in three-dimensional q-space: A nonresonant inelastic X-ray scattering study on NiO. Europhysics Letters, 2011, 96, 37007.	0.7	19
76	c -Axis Dimer and Its Electronic Breakup: The Insulator-to-Metal Transition in TiO_2 . Physical Review X, 2018, 8, .	2.8	19
77	Effective operator for d -orbital transition in nonresonant inelastic x-ray scattering. Physical Review B, 2008, 77, .	1.1	18
78	Long-range interactions in the effective low-energy Hamiltonian of Sr_2IrO_4 : A core-to-core resonant inelastic x-ray scattering study. Physical Review B, 2017, 95, .	1.1	18
79	Magnetic coupling in highly ordered NiO/Fe ₃ O ₄ (110): Ultrasharp magnetic interfaces vs. long-range magnetoelastic interactions. Europhysics Letters, 2008, 81, 17005.	0.7	17
80	Mott versus Slater-type metal-insulator transition in Mn-substituted $\text{Sr}_3\text{Ru}_2\text{O}_7$. Physical Review B, 2018, 97, .	1.1	16
81	Probing the Jeff=0 ground state and the Van Vleck paramagnetism of the Ir ⁵⁺ ions in layered $\text{Sr}_2\text{Co}_0.5\text{Ir}_0.5\text{O}_4$. Physical Review B, 2018, 97, .	1.1	16
82	<i>Ab initio</i> calculation of the calorimetric electron-capture spectrum of ^{163}Ho : Intra-atomic decay into bound states. Physical Review C, 2018, 97, .	1.1	16
83	Value Determination of the $\langle I^2 \rangle$ Decay of ^{163}Ho . Physical Review B, 2018, 97, .	2.9	16
84	Quantitative study of valence and configuration interaction parameters of the Kondo semiconductors $\text{CeM}_2\text{Al}_{10}$ ($M = \text{Ru}, \text{Os}$ and Fe) by means of bulk-sensitive hard X-ray photoelectron spectroscopy. Journal of Electron Spectroscopy and Related Phenomena, 2015, 199, 56-63.	0.8	15
85	The quartet ground state in CeB_6 : An inelastic x-ray scattering study. Europhysics Letters, 2017, 117, 17003.	0.7	15
86	Direct imaging of orbitals in quantum materials. Nature Physics, 2019, 15, 559-562.	6.5	15
87	High-resolution and low-background ^{163}Ho spectrum: interpretation of the resonance tails. European Physical Journal C, 2019, 79, 1.	1.4	15
88	Origin of Ising magnetism in $\text{Ca}_3\text{Co}_2\text{O}_6$ unveiled by orbital imaging. Nature Communications, 2019, 10, 5447.	5.8	15
89	Possible multiorbital ground state in CeCu_2Si_2 . Physical Review B, 2020, 102, .	1.1	14
90	Determining the local low-energy excitations in the Kondo semimetal CeRu_4Si_2 by means of resonant inelastic x-ray scattering. Physical Review B, 2018, 98, .	1.1	14

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91	Natural-orbital impurity solver and projection approach for Green's functions. Physical Review B, 2019, 100. Atomic and itinerant effects at the transition-metal x-ray absorption	1.1	14
92	pre-edge exemplified in the case of V by directional dependence of nonresonant inelastic x-ray scattering. Physical Review B, 2018, 98, .	1.1	13
93	Dynamical Effects in Resonant X-Ray Diffraction. Physical Review Letters, 2016, 117, 115501.	2.9	13
94	Calculation of optical and absorption spectra for ferrous iron of distorted sites in oxide crystals. Physical Review B, 2016, 94, .	1.1	13
95	Crystal-field states of by directional dependence of nonresonant inelastic x-ray scattering. Physical Review B, 2018, 98, .	1.1	13
96	Probing the energy gap of high-temperature cuprate superconductors by resonant inelastic x-ray scattering. Npj Quantum Materials, 2018, 3, .	1.8	13
97	Ab initio calculation of the electron capture spectrum of ¹⁶³ Ho: Auger–Meitner decay into continuum states. New Journal of Physics, 2020, 22, 093018.	1.2	13
98	SmO thin films: A flexible route to correlated flat bands with nontrivial topology. Physical Review B, 2015, 91, .	1.1	12
99	Cross-type orbital ordering in the layered hybrid organic-inorganic compound		

