

# L Howald

## List of Publications by Year in descending order

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89  
papers

5,609  
citations

94381

37  
h-index

76872

74  
g-index

89  
all docs

89  
docs citations

89  
times ranked

5574  
citing authors

#	ARTICLE	IF	CITATIONS
1	Deterministic Coupling of Single Quantum Dots to Single Nanocavity Modes. <i>Science</i> , 2005, 308, 1158-1161.	6.0	600
2	Quantum-Dot Spin-State Preparation with Near-Unity Fidelity. <i>Science</i> , 2006, 312, 551-553.	6.0	480
3	Reaching the magnetic anisotropy limit of a 3 <i>d</i> metal atom. <i>Science</i> , 2014, 344, 988-992.	6.0	311
4	Magnetic remanence in single atoms. <i>Science</i> , 2016, 352, 318-321.	6.0	259
5	Observation of Faraday rotation from a single confined spin. <i>Nature Physics</i> , 2007, 3, 101-106.	6.5	216
6	Design of Single-Molecule Magnets: Insufficiency of the Anisotropy Barrier as the Sole Criterion. <i>Inorganic Chemistry</i> , 2015, 54, 7600-7606.	1.9	191
7	An Endohedral Single-Molecule Magnet with Long Relaxation Times: DySc <sub>2</sub> N@C <sub>80</sub> . <i>Journal of the American Chemical Society</i> , 2012, 134, 9840-9843.	6.6	188
8	Surface and domain structures of ferroelectric crystals studied with scanning force microscopy. <i>Journal of Applied Physics</i> , 1993, 74, 7461-7471.	1.1	162
9	Confluence of resonant laser excitation and bidirectional quantum-dot nuclear-spin polarization. <i>Nature Physics</i> , 2009, 5, 758-763.	6.5	160
10	Modifying the properties of 4f single-ion magnets by peripheral ligand functionalisation. <i>Chemical Science</i> , 2014, 5, 1650-1660.	3.7	159
11	X-Treme beamline at SLS: X-ray magnetic circular and linear dichroism at high field and low temperature. <i>Journal of Synchrotron Radiation</i> , 2012, 19, 661-674.	1.0	151
12	Giant Hysteresis of Single-Molecule Magnets Adsorbed on a Nonmagnetic Insulator. <i>Advanced Materials</i> , 2016, 28, 5195-5199.	11.1	137
13	Tuning photonic crystal nanocavity modes by wet chemical digital etching. <i>Applied Physics Letters</i> , 2005, 87, 021108.	1.5	125
14	Combined Magnetic Susceptibility Measurements and <sup>57</sup> Fe Mössbauer Spectroscopy on a Ferromagnetic {Fe <sup>III</sup> <sub>4</sub> Dy <sub>4</sub> } Ring. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 5185-5188.	7.2	123
15	Cyanide Single-Molecule Magnets Exhibiting Solvent Dependent Reversible "On" and "Off" Exchange Bias Behavior. <i>Journal of the American Chemical Society</i> , 2015, 137, 14406-14422.	6.6	121
16	Origin of Perpendicular Magnetic Anisotropy and Large Orbital Moment in Fe Atoms on MgO. <i>Physical Review Letters</i> , 2015, 115, 237202.	2.9	99
17	Strong Extinction of a Far-Field Laser Beam by a Single Quantum Dot. <i>Nano Letters</i> , 2007, 7, 2892-2896.	4.5	98
18	Tunneling, remanence, and frustration in dysprosium-based endohedral single-molecule magnets. <i>Physical Review B</i> , 2014, 89, .	1.1	91

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19	Superlattice of Single Atom Magnets on Graphene. Nano Letters, 2016, 16, 7610-7615.	4.5	87
20	Atomic resolution in dynamic force microscopy across steps on Si(1 1 1)7 $\times$ 7. Zeitschrift für Physik B-Condensed Matter, 1996, 100, 165-167.	1.1	85
21	Optical investigations of quantum dot spin dynamics as a function of external electric and magnetic fields. Physical Review B, 2008, 77, .	1.1	79
22	Molecular lanthanide single-ion magnets: from bulk to submonolayers. Journal of Physics Condensed Matter, 2015, 27, 183203.	0.7	79
23	Direct observation of a ferri-to-ferromagnetic transition in a fluoride-bridged 3d $\leftrightarrow$ 4f molecular cluster. Chemical Science, 2012, 3, 1024-1032.	3.7	78
24	Long-range ferrimagnetic order in a two-dimensional supramolecular Kondo lattice. Nature Communications, 2017, 8, 15388.	5.8	70
25	Three $\times$ Axis Anisotropic Exchange Coupling in the Single-Molecule Magnets NEt <sub>4</sub> [Mn <sup>III</sup> ] <sub>2</sub> (5 $\times$ BrSalen) <sub>2</sub> (MeOH) <sub>2</sub> M <sup>III</sup> (CN) <sub>6</sub> (M=Ru, Os). Chemistry - A European Journal, 2013, 19, 3693-3701.		
26	Friction on the atomic scale: An ultrahigh vacuum atomic force microscopy study on ionic crystals. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1996, 14, 1280.	1.6	65
27	The Metallofullerene Field-Induced Single-Ion Magnet HoSc <sub>2</sub> N@C <sub>80</sub> . Chemistry - A European Journal, 2014, 20, 13536-13540.	1.7	65
28	Tailoring the Magnetism of Co Atoms on Graphene through Substrate Hybridization. Physical Review Letters, 2014, 113, 177201.	2.9	62
29	Surface Aligned Magnetic Moments and Hysteresis of an Endohedral Single-Molecule Magnet on a Metal. Physical Review Letters, 2015, 114, 087201.	2.9	62
30	Magnetism of Ho and Er Atoms on Close-Packed Metal Surfaces. Physical Review Letters, 2014, 113, 237201.	2.9	55
31	Engineering On-Surface Spin Crossover: Spin-State Switching in a Self-Assembled Film of Vacuum-Sublimable Functional Molecule. Advanced Materials, 2018, 30, 1705416.	11.1	54
32	A linear single-molecule magnet based on [RuIII(CN) <sub>6</sub> ] <sup>3-</sup> . Chemical Communications, 2011, 47, 6918.	2.2	50
33	Frequency-Domain Fourier-Transform Terahertz Spectroscopy of the Single-Molecule Magnet (NEt <sub>4</sub> ) <sub>2</sub> [Mn <sub>2</sub> (5 $\times$ BrSalen) <sub>2</sub> (MeOH) <sub>2</sub> Cr(CN) <sub>6</sub> ]. Chemistry - A European Journal, 2011, 17, 7492-7498.	1.7	50
34	Spin-selective optical absorption of singly charged excitons in a quantum dot. Applied Physics Letters, 2005, 86, 221905.	1.5	49
35	Interfacial properties of $\text{LaMnO}_3$ grown along (001) and (111) orientations. Physical Review B, 2015, 92, .		
36	Magnetic Memory from Site Isolated Dy(III) on Silica Materials. ACS Central Science, 2017, 3, 244-249.	5.3	40

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37	Low Temperature Ferromagnetism in Chemically Ordered FeRh Nanocrystals. <i>Physical Review Letters</i> , 2013, 110, 087207.	2.9	39
38	Exchange Interaction of Strongly Anisotropic Tripodal Erbium Single-Ion Magnets with Metallic Surfaces. <i>ACS Nano</i> , 2014, 8, 4662-4671.	7.3	37
39	Understanding the Superior Stability of Single-Molecule Magnets on an Oxide Film. <i>Advanced Science</i> , 2019, 6, 1901736.	5.6	36
40	X-ray induced demagnetization of single-molecule magnets. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	34
41	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>4</mml:mn><mml:mi>f</mml:mi></mml:mrow></mml:math> occupancy and magnetism of rare-earth atoms adsorbed on metal substrates. <i>Physical Review B</i> , 2017, 96, .	1.1	33
42	Unconventional Spin Relaxation Involving Localized Vibrational Modes in Ho Single-Atom Magnets. <i>Physical Review Letters</i> , 2020, 124, 077204.	2.9	33
43	Magnetic hysteresis in self-assembled monolayers of Dy-fullerene single molecule magnets on gold. <i>Nanoscale</i> , 2018, 10, 11287-11292.	2.8	32
44	Magnetic Hysteresis in Er Trimers on Cu(111). <i>Nano Letters</i> , 2016, 16, 3475-3481.	4.5	28
45	Stability of metallo-porphyrin networks under oxygen reduction and evolution conditions in alkaline media. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 2587-2594.	1.3	28
46	Quantized antiferromagnetic spin waves in the molecular Heisenberg ring CsFe <sub>8</sub> . <i>Physical Review B</i> , 2010, 81, .	1.1	27
47	Out-of-Plane Alignment of Er(trensol) Easy Magnetization Axes Using Graphene. <i>ACS Nano</i> , 2016, 10, 2887-2892.	7.3	27
48	Substrate-Independent Magnetic Bistability in Monolayers of the Single-Molecule Magnet Dy <sub>2</sub> ScN@C <sub>80</sub> on Metals and Insulators. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 5756-5764.	7.2	26
49	Cluster-size dependent internal dynamics and magnetic anisotropy of Ho ions in HoM <sub>2</sub> N@C <sub>80</sub> and Ho <sub>2</sub> MN@C <sub>80</sub> families (M = Sc, Lu, Y). <i>Nanoscale</i> , 2014, 6, 11431-11438.	2.8	25
50	Magnetic Hysteresis at 10 K in Single Molecule Magnet Self-Assembled on Gold. <i>Advanced Science</i> , 2021, 8, 2000777.	5.6	25
51	X-ray Magnetic Circular Dichroism (XMCD) Study of a Methoxide-Bridged Dy <sup>III</sup> -Cr <sup>III</sup> Cluster Obtained by Fluoride Abstraction from <i>cis</i> -[Cr <sup>III</sup> F <sub>2</sub> (phen) <sub>2</sub> ] <sup>+</sup> . <i>Journal of Physical Chemistry A</i> , 2012, 116, 7842-7847.	1.1	24
52	Excited Spin-State Trapping in Spin Crossover Complexes on Ferroelectric Substrates. <i>Journal of Physical Chemistry C</i> , 2018, 122, 8202-8208.	1.5	23
53	Exceptionally High Blocking Temperature of 17 K in a Surface-Supported Molecular Magnet. <i>Advanced Materials</i> , 2021, 33, e2102844.	11.1	23
54	Correlation between Electronic Configuration and Magnetic Stability in Dysprosium Single Atom Magnets. <i>Nano Letters</i> , 2021, 21, 8266-8273.	4.5	20

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55	Noncollinear Magnetic Order in Two-Dimensional NiBr <sub>2</sub> Films Grown on Au(111). ACS Nano, 2021, 15, 14985-14995.	7.3	20
56	Magnetoelastic control of magnetism in an artificial multiferroic. Physical Review B, 2016, 94, .	1.1	17
57	Interplay of Fe and Tm moments through the spin-reorientation transition in $TmFeO_3$ . Physical Review B, 2017, 96, .	1.1	17
58	On-surface transmetalation of metalloporphyrins. Nanoscale, 2018, 10, 21116-21122.	2.8	17
59	Sum rule distortions in fluorescence-yield x-ray magnetic circular dichroism. Physical Review B, 2017, 96, .	1.1	16
60	Reduction of Mn <sub>19</sub> Coordination Clusters on a Gold Surface. Journal of Physical Chemistry C, 2015, 119, 3550-3555.	1.5	15
61	Partial magnetic ordering in one-dimensional arrays of endofullerene single-molecule magnet peapods. Nanoscale, 2018, 10, 18153-18160.	2.8	15
62	Direct Observation of Charge Transfer and Magnetism in Fe <sub>4</sub> Co <sub>4</sub> Cyanide-Bridged Molecular Cubes. Journal of Physical Chemistry Letters, 2019, 10, 1799-1804.	2.1	15
63	Magnetic properties of on-surface synthesized single-ion molecular magnets. RSC Advances, 2019, 9, 34421-34429.	1.7	14
64	Inelastic Neutron Scattering on an Mn <sub>10</sub> Supertetrahedron: Assessment of Exchange Coupling Constants, Ferromagnetic Spin Waves and an Analogy to the H <sub>2</sub> Method. Chemistry - A European Journal, 2011, 17, 9094-9106.	1.7	13
65	Interlayer exchange coupling in ordered Fe nanocluster arrays grown on Al <sub>2</sub> O <sub>3</sub> . Physical Review B, 2014, 89, .	1.1	13
66	High-Frequency Electron-Spin-Resonance Study of the Octanuclear Ferric Wheel CsFe <sub>8</sub> . Inorganic Chemistry, 2010, 49, 8729-8735.	1.9	11
67	Non-empirical calculation of X-ray magnetic circular dichroism in lanthanide compounds. Chemical Communications, 2019, 55, 2988-2991.	2.2	10
68	Study of magneto-electric coupling between ultra-thin Fe films and PMN-PT using X-ray magnetic circular dichroism. Journal of Applied Physics, 2018, 123, .	1.1	9
69	Friction force microscopy in ultrahigh vacuum: an atomic-scale study on KBr(001). Tribology Letters, 1995, 1, 129.	1.2	8
70	MnIII zero-field splitting parameters and weak exchange interactions in a cyanide-bridged {MnIII <sub>6</sub> IrIII <sub>6</sub> MnIII} cluster. Inorganic Chemistry Communication, 2012, 24, 24-28.	1.8	7
71	Single-Molecule Magnets: Giant Hysteresis of Single-Molecule Magnets Adsorbed on a Nonmagnetic Insulator (Adv. Mater. 26/2016). Advanced Materials, 2016, 28, 5142-5142.	11.1	7
72	XMCD study of the magnetic exchange coupling in a fluoride-bridged Dy-Cr molecular cluster. Journal of the Korean Physical Society, 2013, 62, 1368-1371.	0.3	6

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73	Hysteresis enhancement on a hybrid Dy(III) single molecule magnet/iron oxide nanoparticle system. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 705-714.	3.0	6
74	An oxide-bridged Dy-Re-Dy single-molecule magnet. <i>Polyhedron</i> , 2012, 46, 47-52.	1.0	5
75	Island formation of Er(trensal) single-ion magnets on graphene observed on the micrometer scale. <i>RSC Advances</i> , 2021, 11, 9421-9425.	1.7	5
76	Heterometallic Co-Dy SMMs grafted on iron oxide nanoparticles. <i>Dalton Transactions</i> , 2021, 50, 9589-9597.	1.6	5
77	Nanoscale x-ray investigation of magnetic metallofullerene peapods. <i>Nanotechnology</i> , 2017, 28, 435703.	1.3	4
78	Morphology of ultrathin lithium fluoride deposited on Ag(100): Dendrites versus islands. <i>Physical Review B</i> , 2021, 104, .	1.1	4
79	Uniaxially Aligned 1D Sandwich-Molecular Wires: Electronic Structure and Magnetism. <i>Journal of Physical Chemistry C</i> , 2022, 126, 3140-3150.	1.5	4
80	Tailoring magnetic anisotropy by graphene-induced selective skyhook effect on 4f-metals. <i>Nanoscale</i> , 2022, 14, 7682-7691.	2.8	4
81	Voltage-Controlled Electron-Hole Interaction in a Single Quantum Dot. <i>Journal of Superconductivity and Novel Magnetism</i> , 2005, 18, 245-249.	0.5	3
82	Nanotribology: an UHV-SFM study on thin films of AgBr(001). <i>Tribology Letters</i> , 1995, 1, 23-33.	1.2	2
83	Multimodeling Approach to Ferromagnetic Spin-Wave Excitations in the High-Spin Cluster $Mn_{18}Sr$ Observed by Inelastic Neutron Scattering. <i>Inorganic Chemistry</i> , 2019, 58, 11256-11268.	1.9	2
84	Substrate-independent Magnetic Bistability in Monolayers of the Single-Molecule Magnet $Dy_2ScN@C_{80}$ on Metals and Insulators. <i>Angewandte Chemie</i> , 2020, 132, 5805-5813.	1.6	1
85	Orienting dilute thin films of non-planar spin-1/2 vanadyl-phthalocyanine complexes. <i>Materials Advances</i> , 2022, 3, 4938-4946.	2.6	1
86	Observation of Faraday rotation from a single quantum-dot spin. , 2007, , .		0
87	Solid immersion lens assisted resonant light scattering from a single quantum dot. <i>Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS</i> , 2007, , .	0.0	0
88	Magnetoelectric coupling between ultra-thin Fe films and $Pb(Mg_{1/3}Nb_{2/3})O_3(1-x)-[PbTiO_3]_x$ , $x=0.32$ (001) (PMN-PT) using x-ray magnetic circular dichroism. , 2017, , .		0
89	Site-Specific Coordination Chemistry and Beyond: Novel Properties in Low Dimensional Supramolecular Architectures of Porphins at Surfaces. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0