

Ulf Wiedwald

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3932311/publications.pdf>

Version: 2024-02-01

116
papers

3,184
citations

145106

33
h-index

223390

49
g-index

118
all docs

118
docs citations

118
times ranked

5055
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetic phase diagram of $(\text{Mo}_{2/3}\text{RE}_{1/3})_2\text{AlC}$, RE = Tb and Dy, studied by magnetization, specific heat, and neutron diffraction analysis. <i>Journal of Physics Condensed Matter</i> , 2022, 34, 215801.	0.7	1
2	Cobalt Ferrite Nanoparticles for Tumor Therapy: Effective Heating versus Possible Toxicity. <i>Nanomaterials</i> , 2022, 12, 38.	1.9	19
3	Ion Implantation Enhanced Exfoliation Efficiency of V_2AlC Single Crystals: Implications for Large V_2CTz Nanosheet Production. <i>ACS Applied Nano Materials</i> , 2022, 5, 8029-8037.	2.4	1
4	From MAX Phase Carbides to Nitrides: Synthesis of V_2GaC , V_2GaN , and the Carbonitride $\text{V}_2\text{GaC}_x\text{N}_x$. <i>Inorganic Chemistry</i> , 2022, 61, 10634-10641.	1.9	11
5	Beyond Solid Solution High-Entropy Alloys: Tailoring Magnetic Properties via Spinodal Decomposition. <i>Advanced Functional Materials</i> , 2021, 31, 2007668.	7.8	51
6	Limited Elemental Mixing in Nanoparticles Generated by Ultrashort Pulse Laser Ablation of AgCu Bilayer Thin Films in a Liquid Environment: Atomistic Modeling and Experiments. <i>Journal of Physical Chemistry C</i> , 2021, 125, 2132-2155.	1.5	24
7	Structure determination and magnetic properties of the Mn-doped MAX phase Cr_2GaC . <i>Materials Chemistry Frontiers</i> , 2021, 5, 6082-6091.	3.2	12
8	Magnetic Nanoparticles as a Tool for Remote DNA Manipulations at a Single-Molecule Level. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 14458-14469.	4.0	14
9	Formation of Co-Au Core-Shell Nanoparticles with Thin Gold Shells and Soft Magnetic μ -Cobalt Cores Ruled by Thermodynamics and Kinetics. <i>Journal of Physical Chemistry C</i> , 2021, 125, 9534-9549.	1.5	25
10	Long-Range Ordering Effects in Magnetic Nanoparticles. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 21602-21612.	4.0	16
11	Pulsed laser deposition of epitaxial Cr_2AlC MAX phase thin films on $\text{MgO}(111)$ and $\text{Al}_2\text{O}_3(0001)$. <i>Materials Research Letters</i> , 2021, 9, 343-349.	4.1	8
12	Optical and magneto-optical properties of epitaxial Mn_2GaC MAX phase thin film. <i>Journal of Magnetism and Magnetic Materials</i> , 2021, 528, 167803.	1.0	6
13	Magnetic Nanoprobes for Spatio-Mechanical Manipulation in Single Cells. <i>Nanomaterials</i> , 2021, 11, 2267.	1.9	4
14	Room temperature synthesized solid solution AuFe nanoparticles and their transformation into Au/Fe Janus nanocrystals. <i>Nanoscale</i> , 2021, 13, 10402-10413.	2.8	8
15	2D Molybdenum Carbide MXenes for Enhanced Selective Detection of Humidity in Air. <i>Advanced Materials</i> , 2021, 33, e2104878.	11.1	46
16	Phase Stability of Nanolaminated Epitaxial $(\text{Cr}_x\text{Fe}_{1-x})_2\text{AlC}$ MAX Phase Thin Films on $\text{MgO}(111)$ and $\text{Al}_2\text{O}_3(0001)$ for Use as Conductive Coatings. <i>ACS Applied Nano Materials</i> , 2021, 4, 13761-13770.	2.4	6
17	The effect of the composition and pressure on the phase stability and electronic, magnetic, and elastic properties of M_2AX (M = Mn, Fe; A = Al, Ga, Si, Ge; X = C, N) phases. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 26376-26384.	1.3	5
18	Magnetic and Electronic Properties of Highly Mn-Doped $\text{Nd}_2\text{NaGdF}_4$ and $\text{Nd}_2\text{NaEuF}_4$ Nanoparticles with a Narrow Size Distribution. <i>Journal of Physical Chemistry C</i> , 2020, 124, 18194-18202.	1.5	9

#	ARTICLE	IF	CITATIONS
19	Ptychographic imaging and micromagnetic modeling of thermal melting of nanoscale magnetic domains in antidot lattices. <i>AIP Advances</i> , 2020, 10, 125122.	0.6	3
20	Unravelling the nucleation, growth, and faceting of magnetite-gold nano hybrids. <i>Journal of Materials Chemistry B</i> , 2020, 8, 3886-3895.	2.9	5
21	Temperature-controlled magnetic nanoparticles hyperthermia inhibits primary tumor growth and metastases dissemination. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2020, 25, 102171.	1.7	53
22	Manipulation of the Size and Phase Composition of Yttrium Iron Garnet Nanoparticles by Pulsed Laser Post-Processing in Liquid. <i>Molecules</i> , 2020, 25, 1869.	1.7	8
23	Direct measurement of anisotropic conductivity in a nanolaminated (Mn _{0.5} Cr _{0.5}) ₂ GaC thin film. <i>Applied Physics Letters</i> , 2019, 115, 094101.	1.5	9
24	Long-term stability and thickness dependence of magnetism in thin (Cr _{0.5} Mn _{0.5}) ₂ GaC MAX phase films. <i>Materials Research Letters</i> , 2019, 7, 159-163.	4.1	12
25	Shell-ferromagnetism and decomposition in off-stoichiometric Ni ₅₀ Mn _{50-x} Sbx Heuslers. <i>Journal of Applied Physics</i> , 2019, 125, .	1.1	9
26	Sol-gel based synthesis and enhanced processability of MAX phase Cr ₂ GaC. <i>Journal of Materials Chemistry C</i> , 2019, 7, 6034-6040.	2.7	30
27	Atomically Layered and Ordered Rare-Earth <i>MAX</i> Phases: A New Class of Magnetic Quaternary Compounds. <i>Chemistry of Materials</i> , 2019, 31, 2476-2485.	3.2	89
28	Large uniaxial magnetostriction with sign inversion at the first order phase transition in the nanolaminated Mn ₂ GaC MAX phase. <i>Scientific Reports</i> , 2018, 8, 2637.	1.6	42
29	Magnetic properties and structural characterization of layered (Cr _{0.5} Mn _{0.5}) ₂ AuC synthesized by thermally induced substitutional reaction in (Cr _{0.5} Mn _{0.5}) ₂ GaC. <i>APL Materials</i> , 2018, 6, .	2.2	25
30	Structural, magnetic and electrical transport properties of non-conventionally prepared MAX phases V ₂ AlC and (V/Mn) ₂ AlC. <i>Materials Chemistry Frontiers</i> , 2018, 2, 483-490.	3.2	36
31	Genetically Controlled Lysosomal Entrapment of Superparamagnetic Ferritin for Multimodal and Multiscale Imaging and Actuation with Low Tissue Attenuation. <i>Advanced Functional Materials</i> , 2018, 28, 1706793.	7.8	15
32	Size-selected Fe ₃ O ₄ -Au hybrid nanoparticles for improved magnetism-based theranostics. <i>Beilstein Journal of Nanotechnology</i> , 2018, 9, 2684-2699.	1.5	32
33	Magnetite-Gold nano hybrids as ideal all-in-one platforms for theranostics. <i>Scientific Reports</i> , 2018, 8, 11295.	1.6	77
34	Magnetic Fe@FeO _x , Fe@C and Fe-Fe ₂ O ₃ Single-Crystal Nanoblends Synthesized by Femtosecond Laser Ablation of Fe in Acetone. <i>Nanomaterials</i> , 2018, 8, 631.	1.9	33
35	Formation Mechanism of Laser-Synthesized Iron-Manganese Alloy Nanoparticles, Manganese Oxide Nanosheets and Nanofibers. <i>Particle and Particle Systems Characterization</i> , 2017, 34, 1600225.	1.2	36
36	Shell-ferromagnetic precipitation in martensitic off-stoichiometric Ni-Mn-In Heusler alloys produced by temper-annealing under magnetic field. <i>Acta Materialia</i> , 2017, 127, 117-123.	3.8	43

#	ARTICLE	IF	CITATIONS
37	Controlling the conductivity of $\text{Ti}_3\text{C}_2\text{MXenes}$ by inductively coupled oxygen and hydrogen plasma treatment and humidity. RSC Advances, 2017, 7, 13097-13103.	1.7	79
38	Magnetic properties of nanolaminated $(\text{Mo}_{0.5}\text{Mn}_{0.5})_2\text{GaC}$ MAX phase. Journal of Applied Physics, 2017, 121, .	1.1	31
39	Enhanced spin-orbit coupling in tetragonally strained FeCoB films. Journal of Physics Condensed Matter, 2017, 29, 275802.	0.7	11
40	Doubling of the magnetic energy product in ferromagnetic nanowires at ambient temperature by capping their tips with an antiferromagnet. Nanotechnology, 2017, 28, 295402.	1.3	7
41	Ultrasmall Yttrium Iron Garnet Nanoparticles with High Coercivity at Low Temperature Synthesized by Laser Ablation and Fragmentation of Pressed Powders. ChemPhysChem, 2017, 18, 1125-1132.	1.0	26
42	Magnetic switching of nanoscale antidot lattices. Beilstein Journal of Nanotechnology, 2016, 7, 733-750.	1.5	15
43	Orientation of FePt nanoparticles on top of $\text{a-SiO}_2/\text{Si}(001)$, $\text{MgO}(001)$ and sapphire(0001): effect of thermal treatments and influence of substrate and particle size. Beilstein Journal of Nanotechnology, 2016, 7, 591-604.	1.5	5
44	Arrangement at the nanoscale: Effect on magnetic particle hyperthermia. Scientific Reports, 2016, 6, 37934.	1.6	131
45	Thin film synthesis and characterization of a chemically ordered magnetic nanolaminate $(\text{V,Mn})_3\text{GaC}_2$. APL Materials, 2016, 4, .	2.2	28
46	A versatile large-scale and green process for synthesizing magnetic nanoparticles with tunable magnetic hyperthermia features. RSC Advances, 2016, 6, 53107-53117.	1.7	33
47	Combined first-order reversal curve and x-ray microscopy investigation of magnetization reversal mechanisms in hexagonal antidot lattices. Physical Review B, 2016, 93, .	1.1	24
48	Optimum nanoscale design in ferrite based nanoparticles for magnetic particle hyperthermia. RSC Advances, 2016, 6, 72918-72925.	1.7	17
49	Geometric control of the magnetization reversal in antidot lattices with perpendicular magnetic anisotropy. Physical Review B, 2016, 93, .	1.1	33
50	Enhanced magnetocrystalline anisotropy of $\text{Fe}_{30}\text{Co}_{70}$ nanowires by Cu additives and annealing. Nanotechnology, 2016, 27, 365704.	1.3	9
51	Solvent-surface interactions control the phase structure in laser-generated iron-gold core-shell nanoparticles. Scientific Reports, 2016, 6, 23352.	1.6	113
52	Tuning the magnetism of ferrite nanoparticles. Journal of Magnetism and Magnetic Materials, 2016, 415, 20-23.	1.0	30
53	Splenic red pulp macrophages are intrinsically superparamagnetic and contaminate magnetic cell isolates. Scientific Reports, 2015, 5, 12940.	1.6	41
54	Structure-Related Exchange Anisotropy in Oxidized $\text{Co}_{80}\text{Ni}_{20}$ Nanorods. Chemistry of Materials, 2015, 27, 4015-4022.	3.2	21

#	ARTICLE	IF	CITATIONS
55	Perpendicular magnetisation from in-plane fields in nano-scaled antidot lattices. <i>Nanotechnology</i> , 2015, 26, 225203.	1.3	19
56	Magnetic Anisotropy in the $(\text{Cr}_{0.5}\text{Mn}_{0.5})_2\text{GaC}$ MAX Phase. <i>Materials Research Letters</i> , 2015, 3, 156-160.	4.1	43
57	Combined FORC and X-ray microscopy study of magnetisation reversal in antidot lattices. , 2015, , .		0
58	Magnetic hardening of $\text{Fe}_{30}\text{Co}_{70}$ nanowires. <i>Nanotechnology</i> , 2015, 26, 415704.	1.3	32
59	Role of developing $L1_0$ chemical order on the (111) -texture formation of $(\text{Fe}_{1-x}\text{Co}_x)$ alloys. <i>Applied Physics</i> , 2015, 48, 085001.	1.3	5
60	Solid solution magnetic FeNi nanostrand-polymer composites by connecting-coarsening assembly. <i>Journal of Materials Chemistry C</i> , 2015, 3, 10699-10704.	2.7	44
61	Growth modes and epitaxy of FeAl thin films on a-cut sapphire prepared by pulsed laser and ion beam assisted deposition. <i>Journal of Applied Physics</i> , 2014, 115, 023507.	1.1	6
62	Bolometer detection of magnetic resonances in nanoscaled objects. <i>Nanotechnology</i> , 2014, 25, 425302.	1.3	3
63	Single core-shell nanoparticle probes for non-invasive magnetic force microscopy. <i>Nanotechnology</i> , 2014, 25, 255501.	1.3	8
64	Electronic structure and soft-X-ray-induced photoreduction studies of iron-based magnetic polyoxometalates of type $\{(M)M_5\}_{12}\text{Fe}_{11}\text{O}_{30}$ ($M = \text{MoVI}, \text{WVI}$). <i>Dalton Transactions</i> , 2013, 42, 7924.	1.6	14
65	Extending the $3\bar{\omega}$ method: Thermal conductivity characterization of thin films. <i>Review of Scientific Instruments</i> , 2013, 84, 084904.	0.6	22
66	Exchange bias of Ni nanoparticles embedded in an antiferromagnetic IrMn matrix. <i>Nanotechnology</i> , 2013, 24, 455702.	1.3	23
67	Super spin-glass state and exchange bias in Fe/CoO hybrid nanostructures. <i>Nanotechnology</i> , 2013, 24, 155703.	1.3	9
68	Atmospheric-pressure Microwave Torch Discharge Generated $\hat{\gamma}$ - Fe_2O_3 Nanopowder. <i>Physics Procedia</i> , 2013, 44, 206-212.	1.2	8
69	Geometry-induced spin-ice structures prepared by self-organization on the nanoscale. <i>Nanotechnology</i> , 2013, 24, 055305.	1.3	12
70	Switching modes in easy and hard axis magnetic reversal in a self-assembled antidot array. <i>Nanotechnology</i> , 2013, 24, 465709.	1.3	18
71	Structural and thermoelectric properties of TMGa_3 ($\text{TM} = \text{Fe}, \text{Co}$) thin films. <i>Beilstein Journal of Nanotechnology</i> , 2013, 4, 461-466.	1.5	2
72	Towards quantitative magnetic force microscopy: theory and experiment. <i>New Journal of Physics</i> , 2012, 14, 043044.	1.2	36

#	ARTICLE	IF	CITATIONS
73	Formation of Highly Ordered Alloy Nanoparticles Based on Precursor-Filled Latex Spheres. <i>Chemistry of Materials</i> , 2012, 24, 1048-1054.	3.2	20
74	Tuning the properties of magnetic thin films by interaction with periodic nanostructures. <i>Beilstein Journal of Nanotechnology</i> , 2012, 3, 831-842.	1.5	9
75	Precise Chemical, Electronic, and Magnetic Structure of Binuclear Complexes Studied by Means of X-ray Spectroscopies and Theoretical Methods. <i>Journal of Physical Chemistry C</i> , 2011, 115, 25030-25039.	1.5	3
76	Magnetic Ground-State and Systematic X-ray Photoreduction Studies of an Iron-Based Star-Shaped Complex. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 1491-1496.	2.1	9
77	Nanoscaled alloy formation from self-assembled elemental Co nanoparticles on top of Pt films. <i>Beilstein Journal of Nanotechnology</i> , 2011, 2, 473-485.	1.5	5
78	Effect of large mechanical stress on the magnetic properties of embedded Fe nanoparticles. <i>Beilstein Journal of Nanotechnology</i> , 2011, 2, 268-275.	1.5	19
79	Thermally driven solid-phase epitaxy of laser-ablated amorphous AlFe films on (0001)-oriented sapphire single crystals. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 102, 725-730.	1.1	17
80	Identification of magnetic properties of few nm sized FePt crystalline particles by characterizing the intrinsic atom order using aberration corrected S/TEM. <i>Ultramicroscopy</i> , 2010, 110, 820-825.	0.8	12
81	Planar Au/TiO ₂ Model Catalysts: Fabrication, Characterization and Catalytic Activity. <i>ChemPhysChem</i> , 2010, 11, 1430-1437.	1.0	16
82	Dissolution kinetics of Si into Ge (111) substrate on the nanoscale. <i>Thin Solid Films</i> , 2010, 519, 952-955.	0.8	2
83	Preparation, properties and applications of magnetic nanoparticles. <i>Beilstein Journal of Nanotechnology</i> , 2010, 1, 21-23.	1.5	13
84	Preparation and characterization of supported magnetic nanoparticles prepared by reverse micelles. <i>Beilstein Journal of Nanotechnology</i> , 2010, 1, 24-47.	1.5	46
85	Fabrication of two-dimensional Au@FePt core-shell nanoparticle arrays by photochemical metal deposition. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	21
86	Monodispersed NiO nanoflowers with anomalous magnetic behavior. <i>Nanotechnology</i> , 2010, 21, 425702.	1.3	33
87	Narrowly Size Distributed Zinc-Containing Poly(acrylamide) Latexes via Inverse Miniemulsion Polymerization. <i>Macromolecules</i> , 2010, 43, 3294-3305.	2.2	37
88	Fe oxidation versus Pt segregation in FePt nanoparticles and thin films. <i>Nanotechnology</i> , 2009, 20, 285706.	1.3	40
89	FePt Nanorods and Nanowires for Novel Ferrofluids. <i>Solid State Phenomena</i> , 2009, 154, 89-94.	0.3	1
90	Two-Dimensional Assembly of Magnetic Binuclear Complexes: a Scanning Tunneling Microscopy Study. <i>Langmuir</i> , 2009, 25, 13606-13613.	1.6	4

#	ARTICLE	IF	CITATIONS
91	Synthesis, Thermal Stability and Properties of ZnO ₂ Nanoparticles. Journal of Physical Chemistry C, 2009, 113, 1320-1324.	1.5	79
92	Transition from anomalous kinetics toward Fickian diffusion for Si dissolution into amorphous Ge. Applied Physics Letters, 2008, 92, .	1.5	23
93	Exploring structural dependence of magnetic properties in FePt nanoparticle by Cs-corrected HRTEM. , 2008, , 111-112.		0
94	Magnetic moment of Fe in oxide-free FePt nanoparticles. Physical Review B, 2007, 76, .	1.1	41
95	Lowering of the L10 ordering temperature of FePt nanoparticles by He+ ion irradiation. Applied Physics Letters, 2007, 90, 062508.	1.5	66
96	Controlling the Interparticle Spacing of Au ³⁺ Salt Loaded Micelles and Au Nanoparticles on Flat Surfaces. Langmuir, 2007, 23, 10150-10155.	1.6	36
97	Nanostructured Pt/GC Model Electrodes Prepared by the Deposition of Metal-Salt-Loaded Micelles. Langmuir, 2007, 23, 5795-5801.	1.6	21
98	A Micellar Approach to Magnetic Ultrahigh-Density Data-Storage Media: Extending the Limits of Current Colloidal Methods. Advanced Materials, 2007, 19, 406-410.	11.1	103
99	Local density of states effects at the metal-molecule interfaces in a molecular device. Nature Materials, 2006, 5, 394-399.	13.3	98
100	Enhanced Orbital Magnetism in Fe ₅₀ Pt ₅₀ Nanoparticles. Physical Review Letters, 2006, 97, 117201.	2.9	150
101	Magnetic response of nanostructured systems: A ferromagnetic resonance investigation. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2005, 23, 796-803.	0.9	3
102	Using hysteresis behaviour to determine the anisotropy and interactions in complex self-assembled Co metallic nanoparticle systems. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 161-164.	1.0	2
103	From Colloidal Co/CoO Core/Shell Nanoparticles to Arrays of Metallic Nanomagnets: Surface Modification and Magnetic Properties. ChemPhysChem, 2005, 6, 2522-2526.	1.0	39
104	Effect of an oxidic overlayer on the magnetism of Co nanoparticles. Phase Transitions, 2005, 78, 85-104.	0.6	28
105	Composition-dependent ratio of orbital-to-spin magnetic moment in structurally disordered Fe _x Pt _{1-x} nanoparticles. Physical Review B, 2004, 69, .	1.1	48
106	Frequency- and Temperature-Dependent Ferromagnetic Resonance of Co/CoO Core-Shell Nanoparticles. Materials Research Society Symposia Proceedings, 2004, 818, 194.	0.1	5
107	Temperature dependence of exchange anisotropy in monodisperse cobalt nanoparticles with a cobalt oxide shell. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 1508-1509.	1.0	31
108	Local structure of monodisperse Co nanoparticles. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E1207-E1209.	1.0	0

#	ARTICLE	IF	CITATIONS
109	Effective exchange interaction in a quasi-two-dimensional self-assembled nanoparticle array. Physical Review B, 2004, 70, .	1.1	15
110	Ratio of orbital-to-spin magnetic moment in Co core-shell nanoparticles. Physical Review B, 2003, 68, .	1.1	62
111	Structure and Magnetism of Co and CoAg Nanocrystals. Materials Research Society Symposia Proceedings, 2002, 721, 1.	0.1	12
112	Magnetic properties of arrays of interacting Co nanocrystals. Journal of Magnetism and Magnetic Materials, 2002, 240, 40-43.	1.0	48
113	Magnetization and Magnetic Anisotropy of Co/W Multilayers. Physica Status Solidi (B): Basic Research, 2001, 225, 449-457.	0.7	9
114	Ferromagnetic resonance of monodisperse Co particles. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2001, 19, 1773-1776.	0.9	59
115	Magnetic response of nanostructured systems: A ferromagnetic resonance investigation. , 0, .		2
116	Synthesis, phase purification and magnetic characterization of the $(\text{Cr}_{1-x}\text{Mn}_x)_2\text{AlC}$ MAX-phase. Journal of Materials Chemistry C, 0, , .	2.7	3