Markus Haase

List of Publications by Year
in descending order

105 papers	15,351 citations	57719 44 h-index	24961 109 g-index
117 all docs	117 docs citations	117 times ranked	14035 citing authors

#	Article	IF	Citations
1	Volume and surface effects on two-photonic and three-photonic processes in dry co-doped upconversion nanocrystals. Nano Research, 2022, 15, 2362-2373.	5.8	3
2	Thin Patterned Lithium Niobate Films by Parallel Additive Capillary Stamping of Aqueous Precursor Solutions. Advanced Engineering Materials, 2022, 24, 2101159.	1.6	3
3	Intercalation-free, fast switching of mesoporous antimony doped tin oxide with cathodically coloring electrochromic dyes. Nanoscale Advances, 2022, 4, 2144-2152.	2.2	3
4	Yb- and Er concentration dependence of the upconversion luminescence of highly doped NaYF4:Yb,Er/NaYF4:Lu core/shell nanocrystals prepared by a water-free synthesis. Nano Research, 2022, 15, 9639-9646.	5.8	14
5	LiYF4:Yb/LiYF4 and LiYF4:Yb,Er/LiYF4 core/shell nanocrystals with luminescence decay times similar to YLF laser crystals and the upconversion quantum yield of the Yb,Er doped nanocrystals. Nano Research, 2021, 14, 797-806.	5.8	26
6	Notes on thermometric artefacts by Er3+ luminescence band interference. Journal of Luminescence, 2021, 232, 117860.	1.5	19
7	Structural Evolution in the RE(OAc)3 Â· 2AcOH Structure Type. A Non-Linear, One-Dimensional Coordination Polymer with Unequal Interatomic Rare Earth Distances. Crystals, 2021, 11, 768.	1.0	1
8	Diffraction-Unlimited Photomanipulation at the Plasma Membrane via Specifically Targeted Upconversion Nanoparticles. Nano Letters, 2021, 21, 8025-8034.	4.5	2
9	On the energy transfer from Pr3+ to Gd3+ in nanosized LuPO4 particles. Journal of Luminescence, 2021, 240, 118418.	1.5	1
10	Phenolic Resin Dual-Use Stamps for Capillary Stamping and Decal Transfer Printing. ACS Applied Materials & Interfaces, 2021, 13, 49567-49579.	4.0	4
11	Photoâ€Electrochemical Device Enabling Luminescence Switching of LaPO 4 :Ce,Tb Nanoparticle Layers. Advanced Optical Materials, 2021, 9, 2001891.	3.6	2
12	Magnetic and Electronic Properties of Highly Mn-Doped Î²-NaGdF₄ and Î²-NaEuF₄ Nanoparticles with a Narrow Size Distribution. Journal of Physical Chemistry C, 2020, 124, 18194-18202.	1.5	9
13	The role of cations in hydrothermal synthesis of nonlinear optical sodium niobate nanocrystals. Nanoscale, 2020, 12, 19223-19229.	2.8	8
14	Two-dimensional spatial image control using an electrochromic graduated filter with multiple electrode configuration. Solar Energy Materials and Solar Cells, 2020, 215, 110549.	3.0	5
15	Size-Controlled Growth of Î²-NaGdF₄ and Î²-NaGdF₄:Yb,Er Nanocrystals: The Influence of the Surface Area of NaF on the Nucleation of the Î²-Phase. Chemistry of Materials, 2020, 32, 5691-5699.	3.2	6
16	Electrochromic graduated filters with symmetric electrode configuration. Optics Express, 2020, 28, 17047.	1.7	0
17	nanocrystals (0 â‰¤ x â‰¤ 1): growth, size control and shell formation on Î²-NaCeF₄:Tb core particles. CrystEngComm, 2020, 22, 8036-8044.	1.3	1
18	Characterization of Microâ€•and Nanoscale LuPO₄:Pr³⁺,Nd³⁺ with Strong UVâ€€ Emission to Reduce Xâ€Ray Doses in Radiation Therapy. Particle and Particle Systems Characterization, 2019, 36, 1900280.	1.2	16

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19	High contrast hybrid electrochromic film based on cross-linked phosphonated triarylamine on mesoporous antimony doped tin oxide. Solar Energy Materials and Solar Cells, 2019, 203, 110186.	3.0	7
20	Correlations between microstructure and crystallization of the fluorinated terpolymer of tetrafluoroethylene, hexafluoropropylene, and vinylidene fluoride. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 1402-1408.	2.4	5
21	Colloidal Crystals of NaYF₄ Upconversion Nanocrystals Studied by Smallâ€Angle Xâ€Ray Scattering (SAXS). Particle and Particle Systems Characterization, 2019, 36, 1800391.	1.2	7
22	Nonlinear optical potassium niobate nanocrystals as harmonic markers: the role of precursors and stoichiometry in hydrothermal synthesis. Nanoscale, 2018, 10, 10713-10720.	2.8	8
23	UV C luminescence of a modified zirconium silicate framework upon cathode ray and VUV excitation. Journal of Luminescence, 2018, 198, 410-417.	1.5	3
24	Colloidal LaPO₄:Gd³⁺ nanocrystals: X-ray induced single line UV emission. Nanoscale, 2018, 10, 22533-22540.	2.8	10
25	Deep Ultraviolet Emitting Scintillators for Biomedical Applications: The Hard Way of Downsizing LuPO₄:Pr³⁺. Particle and Particle Systems Characterization, 2018, 35, 1800282.	1.2	15
26	AufwÃrtskonvertierende NaYF₄:Yb,Er/NaYF₄â€Kern/Schaleâ€Nanokristalle mit hoher Lumineszenzquantenausbeute. Angewandte Chemie, 2018, 130, 8901-8905.	1.6	10
27	NaYF₄:Yb,Er/NaYF₄ Core/Shell Nanocrystals with High Upconversion Luminescence Quantum Yield. Angewandte Chemie - International Edition, 2018, 57, 8765-8769.	7.2	298
28	On the synthesis, phase optimisation and luminescence of some rare earth pyrosilicates. Journal of Luminescence, 2017, 190, 451-456.	1.5	3
29	Synthese aufwÃrtskonvertierender 10â€…nm groÃŸer Î²â€NaYF₄:Yb,Er/NaYF₄â€Kern/Schaleâ€Nanokristalle mit 5â€…nm groÃŸen Partikelkernen. Angewandte Chemie, 2016, 128, 1177-1181.	1.6	17
30	Synthesis of 10â€…nm Î²â€NaYF₄:Yb,Er/NaYF₄ Core/Shell Upconversion Nanocrystals with 5â€…nm Particle Cores. Angewandte Chemie - International Edition, 2016, 55, 1164-1167.	7.2	139
31	Engineered Upconversion Nanoparticles for Resolving Protein Interactions inside Living Cells. Angewandte Chemie - International Edition, 2016, 55, 11668-11672.	7.2	100
32	MaÃŸgeschneiderte AufwÃrtskonvertierungsnanopartikel zur Detektion von Proteinwechselwirkungen in lebenden Zellen. Angewandte Chemie, 2016, 128, 11840-11845.	1.6	14
33	Characterization of multifunctional Î²-NaEuF₄/NaGdF₄ coreâ€“shell nanoparticles with narrow size distribution. Nanoscale, 2016, 8, 2832-2843.	2.8	12
34	New NIR emitting phosphor for blue LEDs with stable light output up to 180 Â°C. Journal of Luminescence, 2016, 172, 185-190.	1.5	36
35	Study on the Intermixing of Core and Shell in NaEuF₄/NaGdF₄ Core/Shell Nanocrystals. Chemistry of Materials, 2015, 27, 8375-8386.	3.2	41
36	Synthesis of Î²-Phase NaYF₄:Yb,Er Upconversion Nanocrystals and Nanorods by Hot-Injection of Small Particles of the Î±-Phase. Zeitschrift Fur Physikalische Chemie, 2015, 229, 247-262.	1.4	9

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37	Adiabatic burst evaporation from bicontinuous nanoporous membranes. Nanoscale, 2015, 7, 9185-9193.	2.8	9
38	Size Control of Nearly Monodisperse Î²-NaGdF₄ Particles Prepared from Small Î±-NaGdF₄ Nanocrystals. Chemistry of Materials, 2015, 27, 4033-4039.	3.2	46
39	In vivo analysis of the size- and time-dependent uptake of NaYF₄:Yb,Er upconversion nanocrystals by pumpkin seedlings. Journal of Materials Chemistry B, 2015, 3, 144-150.	2.9	30
40	On the efficient luminescence of Î²-Na(La1âˆ'Pr)F4. Journal of Luminescence, 2014, 146, 302-306.	1.5	14
41	Intense up-conversion luminescence in Er3+/Yb3+ co-doped CeO2 powders. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 122, 704-710.	2.0	22
42	Ostwald-ripening and particle size focussing of sub-10 nm NaYF₄ upconversion nanocrystals. Nanoscale, 2014, 6, 14523-14530.	2.8	78
43	NIR to visible frequency upconversion in Er3+ and Yb3+ codoped ZrO2 phosphor. Applied Physics A: Materials Science and Processing, 2013, 113, 747-753.	1.1	24
44	NIR to visible frequency upconversion in Er3+ and Yb3+ co-doped BaZrO3 phosphor. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2013, 108, 141-145.	2.0	22
45	How Gold Nanoparticles Influence Crystallization of Polyethylene in Rigid Cylindrical Nanopores. Macromolecules, 2013, 46, 403-412.	2.2	21
46	Reversible Adhesion Switching of Porous Fibrillar Adhesive Pads by Humidity. Nano Letters, 2013, 13, 5541-5548.	4.5	67
47	Intrinsic Focusing of the Particle Size Distribution in Colloids Containing Nanocrystals of Two Different Crystal Phases. ACS Nano, 2013, 7, 11242-11254.	7.3	53
48	Vacuum-UV excitation and visible luminescence of nano-scale and micro-scale NaLnF4:Pr3+ (Ln=Y, Lu). Optical Materials, 2013, 35, 2062-2067.	1.7	10
49	Photoluminescence study of nanocrystalline Y2O3:Ho3+ phosphor. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2013, 109, 206-212.	2.0	34
50	Effect of the crystal structure of small precursor particles on the growth of Î²-NaREF₄(RE) Tj ETQq0 0 0 rgBT /Overlock 10 T	2.8	46
51	Labeling of Anti-MUC-1 Binding Single Chain Fv Fragments to Surface Modified Upconversion Nanoparticles for an Initial in Vivo Molecular Imaging Proof of Principle Approach. International Journal of Molecular Sciences, 2012, 13, 4153-4167.	1.8	9
52	Intense green and red upconversion emission of Er3+,Yb3+ co-doped CaZrO3 obtained by a solution combustion reaction. Journal of Applied Physics, 2012, 112, .	1.1	45
53	Facile Synthesis of the High-Pressure Polymorph of Nanocrystalline LiFePO4 at Ambient Pressure and Low Temperature. Chemistry of Materials, 2012, 24, 633-635.	3.2	12
54	An Electron Paramagnetic Resonance Spectroscopic Investigation on the Growth Mechanism of NaYF₄:Gd Nanocrystals. Angewandte Chemie - International Edition, 2012, 51, 6506-6510.	7.2	47

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55	Synthesis, characterisation, luminescence and defect centres in solution combustion synthesised CaZrO3:Tb3+ phosphor. Journal of Luminescence, 2012, 132, 2036-2042.	1.5	53
56	Surface Modification of Luminescent Lanthanide Phosphate Nanorods with Cationic â€œQuat-primerâ€• Polymers. Langmuir, 2011, 27, 10174-10183.	1.6	12
57	Influence of Different Ligand Isomers on the Growth of Lanthanide Phosphate Nanoparticles. Crystal Growth and Design, 2011, 11, 1033-1039.	1.4	18
58	Synthesis of Bifunctional Au/Pt/Au Core/Shell Nanoraspberries for in Situ SERS Monitoring of Platinum-Catalyzed Reactions. Journal of the American Chemical Society, 2011, 133, 19302-19305.	6.6	286
59	NIR to visible upconversion in Er3+/Yb3+ co-doped CaYAl3O7 phosphor obtained by solution combustion process. Journal of Luminescence, 2011, 131, 2679-2682.	1.5	53
60	3D Selfâ€Assembled Plasmonic Superstructures of Gold Nanospheres: Synthesis and Characterization at the Singleâ€Particle Level. Small, 2011, 7, 3445-3451.	5.2	77
61	Upconverting Nanoparticles. Angewandte Chemie - International Edition, 2011, 50, 5808-5829.	7.2	2,230
62	Size-dependent magnetic ordering and spin dynamics in DyPO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>4</mml:mn></mml:msub></mml:math>and GdPO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>4</mml:mn></mml:msub></mml:math>nanoparticles. Physical Review B, 2011, 84, .	1.1	14
63	Dye sensitized membranes within mesoporous TiO2: Photocurrents in aqueous solution. Journal of Photochemistry and Photobiology A: Chemistry, 2010, 216, 35-43.	2.0	14
64	Crystal Phase Control of NaGdF₄:Eu³⁺ Nanocrystals: Influence of the Fluoride Concentration and Molar Ratio between NaF and GdF₃. Crystal Growth and Design, 2010, 10, 2434-2438.	1.4	33
65	Synthesis and Characterization of Upconversion Fluorescent Yb3+, Er3+ Doped RbY2F7 Nano- and Microcrystals. Crystal Growth and Design, 2010, 10, 2202-2208.	1.4	25
66	<I>In-Vivo</I> Imaging of the Uptake of Upconversion Nanoparticles by Plant Roots. Journal of Biomedical Nanotechnology, 2009, 5, 278-284.	0.5	72
67	Synthesis and Characterization of Upconversion Fluorescent<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mtext>Yb</mml:mtext><mml:mrow><mml:mn mathvariant="bold">3</mml:mn><mml:mo mathvariant="bold">+</mml:mo></mml:mrow></mml:msup></mml:math>,<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mtext>Er</mml:mtext><mml:mrow><mml:mn mathvariant="bold">3</mml:mn><mml:mo mathvariant="bold">+</mml:mo></mml:mrow></mml:msup></mml:math>-Doped RbY2F7 Nano- and Microcrystals. Crystal Growth and Design, 2010, 10, 2202-2208.	1.5	5
68	Synthesis of Hexagonal Yb³⁺,Er³⁺â€Doped NaYF₄ Nanocrystals at Low Temperature. Advanced Functional Materials, 2009, 19, 3091-3097.	7.8	144
69	Investigation of the Early Stages of Growth of Monazite-Type Lanthanide Phosphate Nanoparticles. Journal of Physical Chemistry C, 2009, 113, 4763-4767.	1.5	17
70	Photonic Properties of Inverse Opals Fabricated from Lanthanide-Doped LaPO4 Nanocrystals. Chemistry of Materials, 2009, 21, 3883-3888.	3.2	29
71	The Role of Amines in the Growth of Terbium(III)â€Doped Cerium Phosphate Nanoparticles. Small, 2008, 4, 2136-2139.	5.2	15
72	Synthesis and Optical Properties of KYF₄/Yb, Er Nanocrystals, and their Surface Modification with Undoped KYF₄. Advanced Functional Materials, 2008, 18, 2913-2918.	7.8	209

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73	Lanthanide-Doped NaYF4Nanocrystals in Aqueous Solution Displaying Strong Up-Conversion Emission. Chemistry of Materials, 2007, 19, 1396-1400.	3.2	214
74	Spectroscopic Distinction of Surface and Volume Ions in Cerium(III)- and Terbium(III)-Containing Core and Core/Shell Nanoparticles. Chemistry of Materials, 2006, 18, 4442-4446.	3.2	41
75	Visible light emission upon near-infrared excitation in a transparent solution of nanocrystalline Î²-NaGdF4: Yb3+, Er3+. Chemical Physics Letters, 2005, 407, 124-128.	1.2	111
76	Highly Efficient Multicolour Upconversion Emission in Transparent Colloids of Lanthanide-Doped NaYF4Nanocrystals. Advanced Materials, 2004, 16, 2102-2105.	11.1	1,233
77	Green-Emitting CePO4:Tb/LaPO4 Core-Shell Nanoparticles with 70% Photoluminescence Quantum Yield.. ChemInform, 2004, 35, no.	0.1	0
78	Synthesis of Eu3+-Doped Core and Core/Shell Nanoparticles and Direct Spectroscopic Identification of Dopant Sites at the Surface and in the Interior of the Particles. Journal of the American Chemical Society, 2004, 126, 14935-14942.	6.6	230
79	Blaue, grÃ¼ne und rote Upconversion-Emission von Lanthanoid-dotierten LuPO4- und YbPO4-Nanokristallen in transparenter kolloidaler LÃ¶sung. Angewandte Chemie, 2003, 115, 3288-3291.	1.6	31
80	Etching of Colloidal InP Nanocrystals with Fluorides: Photochemical Nature of the Process Resulting in High Photoluminescence Efficiency.. ChemInform, 2003, 34, no.	0.1	2
81	Blue, Green, and Red Upconversion Emission from Lanthanide-Doped LuPO4 and YbPO4 Nanocrystals in a Transparent Colloidal Solution.. ChemInform, 2003, 34, no.	0.1	1
82	Study of Nucleation and Growth in the Organometallic Synthesis of Magnetic Alloy Nanocrystals: The Role of Nucleation Rate in Size Control of CoPt3 Nanocrystals.. ChemInform, 2003, 34, no.	0.1	2
83	Blue, Green, and Red Upconversion Emission from Lanthanide-Doped LuPO4 and YbPO4 Nanocrystals in a Transparent Colloidal Solution. Angewandte Chemie - International Edition, 2003, 42, 3179-3182.	7.2	441
84	Green-Emitting CePO4:Tb/LaPO4 Coreâ€“Shell Nanoparticles with 70â€‰% Photoluminescence Quantum Yield. Angewandte Chemie - International Edition, 2003, 42, 5513-5516.	7.2	398
85	Study of Nucleation and Growth in the Organometallic Synthesis of Magnetic Alloy Nanocrystals:â€‰ The Role of Nucleation Rate in Size Control of CoPt3 Nanocrystals. Journal of the American Chemical Society, 2003, 125, 9090-9101.	6.6	484
86	One-Pot Synthesis of Highly Luminescent CdSe/CdS Coreâ^'Shell Nanocrystals via Organometallic and â€œGreenerâ€•Chemical Approachesâ€. Journal of Physical Chemistry B, 2003, 107, 7454-7462.	1.2	357
87	Investigation of ZnS Passivated InP Nanocrystals by XPS. Nano Letters, 2002, 2, 151-154.	4.5	79
88	Dynamic Distribution of Growth Rates within the Ensembles of Colloidal IIâ^'VI and IIIâ^'V Semiconductor Nanocrystals as a Factor Governing Their Photoluminescence Efficiency. Journal of the American Chemical Society, 2002, 124, 5782-5790.	6.6	471
89	Etching of Colloidal InP Nanocrystals with Fluorides:â€‰ Photochemical Nature of the Process Resulting in High Photoluminescence Efficiency. Journal of Physical Chemistry B, 2002, 106, 12659-12663.	1.2	209
90	Colloidal Synthesis and Self-Assembly of CoPt3 Nanocrystals. Journal of the American Chemical Society, 2002, 124, 11480-11485.	6.6	533

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91	Synthesis and surface modification of amino-stabilized CdSe, CdTe and InP nanocrystals. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2002, 202, 145-154.	2.3	224
92	A Novel Organometallic Synthesis of Highly Luminescent CdTe Nanocrystals. Journal of Physical Chemistry B, 2001, 105, 2260-2263.	1.2	339
93	Evolution of an Ensemble of Nanoparticles in a Colloidal Solution:Â Theoretical Study. Journal of Physical Chemistry B, 2001, 105, 12278-12285.	1.2	463
94	Highly Luminescent Monodisperse CdSe and CdSe/ZnS Nanocrystals Synthesized in a Hexadecylamineâ^'Trioctylphosphine Oxideâ^'Trioctylphospine Mixture. Nano Letters, 2001, 1, 207-211.	4.5	1,423
95	Strongly Luminescent InP/ZnS Core-Shell Nanoparticles. ChemPhysChem, 2001, 2, 331-334.	1.0	165
96	Liquid-Phase Synthesis of Colloids and Redispersible Powders of Strongly Luminescing LaPO4:Ce,Tb Nanocrystals. Angewandte Chemie - International Edition, 2001, 40, 573-576.	7.2	349
97	Low-temperature synthesis of pure and Mn-doped willemite phosphor (Zn2SiO4:Mn) in aqueous medium. Materials Research Bulletin, 2000, 35, 1869-1879.	2.7	78
98	Wet-Chemical Synthesis of Doped Nanoparticles:â€‰ Optical Properties of Oxygen-Deficient and Antimony-Doped Colloidal SnO2. Journal of Physical Chemistry B, 2000, 104, 8430-8437.	1.2	133
99	Wet-chemical synthesis of doped nanoparticles: Blue-colored colloids of n-doped SnO2:Sb. Journal of Chemical Physics, 1999, 110, 12142-12150.	1.2	131
100	Wet-Chemical Synthesis of Doped Colloidal Nanomaterials: Particles and Fibers of LaPO4:Eu, LaPO4:Ce, and LaPO4:Ce,Tb. Advanced Materials, 1999, 11, 840-844.	11.1	428
101	Phosphor degradation under electron excitation with varying anode voltage. Journal of the Society for Information Display, 1996, 4, 219.	0.8	6
102	Photochemistry and radiation chemistry of colloidal semiconductors. 23. Electron storage on zinc oxide particles and size quantization. The Journal of Physical Chemistry, 1988, 92, 482-487.	2.9	416
103	Photochemistry of colloidal semiconductors. 26. Photoelectron emission from cadmium sulfide particles and related chemical effects. The Journal of Physical Chemistry, 1988, 92, 4706-4712.	2.9	114
104	Photochemistry of Colloidal Semiconductors 28. Photo-Electron Emission from Cadmium Phosphide Particles in Aqueous Solution. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1988, 92, 1103-1107.	0.9	14
105	Photochemistry of colloidal semiconductors. 20. Surface modification and stability of strong luminescing CdS particles. Journal of the American Chemical Society, 1987, 109, 5649-5655.	6.6	1,233