Markus Haase

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Upconverting Nanoparticles. Angewandte Chemie - International Edition, 2011, 50, 5808-5829.	7.2	2,230
2	Highly Luminescent Monodisperse CdSe and CdSe/ZnS Nanocrystals Synthesized in a Hexadecylamineâˆ’Trioctylphosphine Oxideâˆ’Trioctylphospine Mixture. Nano Letters, 2001, 1, 207-211.	4.5	1,423
3	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
4	Highly Efficient Multicolour Upconversion Emission in Transparent Colloids of Lanthanide-Doped NaYF4Nanocrystals. Advanced Materials, 2004, 16, 2102-2105.	11.1	1,233
5	Colloidal Synthesis and Self-Assembly of CoPt3 Nanocrystals. Journal of the American Chemical Society, 2002, 124, 11480-11485.	6.6	533
6	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
7	Dynamic Distribution of Growth Rates within the Ensembles of Colloidal IIâˆ’VI and IIIâˆ’V Semiconductor Nanocrystals as a Factor Governing Their Photoluminescence Efficiency. Journal of the American Chemical Society, 2002, 124, 5782-5790.	6.6	471
8	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
9	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
10	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
11	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
12	Green-Emitting CePO4:Tb/LaPO4 Coreâ€"Shell Nanoparticles with 70â€‰% Photoluminescence Quantum Yield. Angewandte Chemie - International Edition, 2003, 42, 5513-5516.	7.2	398
13	One-Pot Synthesis of Highly Luminescent CdSe/CdS Coreâˆ’Shell Nanocrystals via Organometallic and â€œGreenerâ€•Chemical Approachesâ€. Journal of Physical Chemistry B, 2003, 107, 7454-7462.	1.2	357
14	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
15	A Novel Organometallic Synthesis of Highly Luminescent CdTe Nanocrystals. Journal of Physical Chemistry B, 2001, 105, 2260-2263.	1.2	339
16	NaYF₄:Yb,Er/NaYF₄ Core/Shell Nanocrystals with High Upconversion Luminescence Quantum Yield. Angewandte Chemie - International Edition, 2018, 57, 8765-8769.	7.2	298
17	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
18	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

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19	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
20	Lanthanide-Doped NaYF4Nanocrystals in Aqueous Solution Displaying Strong Up-Conversion Emission. Chemistry of Materials, 2007, 19, 1396-1400.	3.2	214
21	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
22	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
23	Strongly Luminescent InP/ZnS Core-Shell Nanoparticles. ChemPhysChem, 2001, 2, 331-334.	1.0	165
24	Synthesis of Hexagonal Yb³⁺,Er³⁺â€Doped NaYF₄ Nanocrystals at Low Temperature. Advanced Functional Materials, 2009, 19, 3091-3097.	7.8	144
25	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
26	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
27	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
28	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
29	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
30	Engineered Upconversion Nanoparticles for Resolving Protein Interactions inside Living Cells. Angewandte Chemie - International Edition, 2016, 55, 11668-11672.	7.2	100
31	Investigation of ZnS Passivated InP Nanocrystals by XPS. Nano Letters, 2002, 2, 151-154.	4.5	79
32	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
33	Ostwald-ripening and particle size focussing of sub-10 nm NaYF₄ upconversion nanocrystals. Nanoscale, 2014, 6, 14523-14530.	2.8	78
34	3D Selfâ€Assembled Plasmonic Superstructures of Gold Nanospheres: Synthesis and Characterization at the Singleâ€Particle Level. Small, 2011, 7, 3445-3451.	5.2	77
35	<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
36	Reversible Adhesion Switching of Porous Fibrillar Adhesive Pads by Humidity. Nano Letters, 2013, 13, 5541-5548.	4.5	67

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37	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
38	Synthesis, characterisation, luminescence and defect centres in solution combustion synthesised CaZrO3:Tb3+ phosphor. Journal of Luminescence, 2012, 132, 2036-2042.	1.5	53
39	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
40	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
41	Effect of the crystal structure of small precursor particles on the growth of Î²-NaREF₄(RE) Tj ETQq1 1 0.784314 rgBT /Ov	2.8	46
42	Size Control of Nearly Monodisperse Î²-NaGdF₄ Particles Prepared from Small Î±-NaGdF₄ Nanocrystals. Chemistry of Materials, 2015, 27, 4033-4039.	3.2	46
43	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
44	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
45	Study on the Intermixing of Core and Shell in NaEuF₄/NaGdF₄ Core/Shell Nanocrystals. Chemistry of Materials, 2015, 27, 8375-8386.	3.2	41
46	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
47	Photoluminescence study of nanocrystalline Y2O3:Ho3+ phosphor. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2013, 109, 206-212.	2.0	34
48	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
49	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
50	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
51	Photonic Properties of Inverse Opals Fabricated from Lanthanide-Doped LaPO4 Nanocrystals. Chemistry of Materials, 2009, 21, 3883-3888.	3.2	29
52	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
53	Synthesis and Characterization of Upconversion Fluorescent Yb3+, Er3+ Doped RbY2F7 Nano- and Microcrystals. Crystal Growth and Design, 2010, 10, 2202-2208.	1.4	25
54	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

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55	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
56	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
57	How Gold Nanoparticles Influence Crystallization of Polyethylene in Rigid Cylindrical Nanopores. Macromolecules, 2013, 46, 403-412.	2.2	21
58	Notes on thermometric artefacts by Er3+ luminescence band interference. Journal of Luminescence, 2021, 232, 117860.	1.5	19
59	Influence of Different Ligand Isomers on the Growth of Lanthanide Phosphate Nanoparticles. Crystal Growth and Design, 2011, 11, 1033-1039.	1.4	18
60	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
61	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
62	Characterization of Microâ€•and Nanoscale LuPO₄:Pr³⁺,Nd³⁺ with Strong UVâ€C Emission to Reduce Xâ€Ray Doses in Radiation Therapy. Particle and Particle Systems Characterization, 2019, 36, 1900280.	1.2	16
63	The Role of Amines in the Growth of Terbium(III)â€Doped Cerium Phosphate Nanoparticles. Small, 2008, 4, 2136-2139.	5.2	15
64	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
65	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
66	Dye sensitized membranes within mesoporous TiO2: Photocurrents in aqueous solution. Journal of Photochemistry and Photobiology A: Chemistry, 2010, 216, 35-43.	2.0	14
67	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
68	On the efficient luminescence of Î²-Na(La1âˆ'Pr)F4. Journal of Luminescence, 2014, 146, 302-306.	1.5	14
69	MaÃŸgeschneiderte AufwÃrtskonvertierungsnanopartikel zur Detektion von Proteinwechselwirkungen in lebenden Zellen. Angewandte Chemie, 2016, 128, 11840-11845.	1.6	14
70	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
71	Surface Modification of Luminescent Lanthanide Phosphate Nanorods with Cationic â€œQuat-primerâ€• Polymers. Langmuir, 2011, 27, 10174-10183.	1.6	12
72	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

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73	Characterization of multifunctional Î²-NaEuF₄/NaGdF₄ coreâ€“shell nanoparticles with narrow size distribution. Nanoscale, 2016, 8, 2832-2843.	2.8	12
74	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
75	Colloidal LaPO₄:Gd³⁺ nanocrystals: X-ray induced single line UV emission. Nanoscale, 2018, 10, 22533-22540.	2.8	10
76	AufwÃ¤rtskonvertierende NaYF₄:Yb,Er/NaYF₄â€Kern/Schaleâ€Nanokristalle mit hoher Lumineszenzquantenausbeute. Angewandte Chemie, 2018, 130, 8901-8905.	1.6	10
77	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
78	Synthesis of <i>Î²</i>-Phase NaYF₄:Yb,Er Upconversion Nanocrystals and Nanorods by Hot-Injection of Small Particles of the <i>Î±</i>-Phase. Zeitschrift Fur Physikalische Chemie, 2015, 229, 247-262.	1.4	9
79	Adiabatic burst evaporation from bicontinuous nanoporous membranes. Nanoscale, 2015, 7, 9185-9193.	2.8	9
80	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
81	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
82	The role of cations in hydrothermal synthesis of nonlinear optical sodium niobate nanocrystals. Nanoscale, 2020, 12, 19223-19229.	2.8	8
83	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
84	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
85	Phosphor degradation under electron excitation with varying anode voltage. Journal of the Society for Information Display, 1996, 4, 219.	0.8	6
86	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
87	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	1.5	5
88	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
89	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
90	Phenolic Resin Dual-Use Stamps for Capillary Stamping and Decal Transfer Printing. ACS Applied Materials & Interfaces, 2021, 13, 49567-49579.	4.0	4

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91	On the synthesis, phase optimisation and luminescence of some rare earth pyrosilicates. Journal of Luminescence, 2017, 190, 451-456.	1.5	3
92	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
93	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
94	Thin Patterned Lithium Niobate Films by Parallel Additive Capillary Stamping of Aqueous Precursor Solutions. Advanced Engineering Materials, 2022, 24, 2101159.	1.6	3
95	Intercalation-free, fast switching of mesoporous antimony doped tin oxide with cathodically coloring electrochromic dyes. Nanoscale Advances, 2022, 4, 2144-2152.	2.2	3
96	Etching of Colloidal InP Nanocrystals with Fluorides: Photochemical Nature of the Process Resulting in High Photoluminescence Efficiency.. ChemInform, 2003, 34, no.	0.1	2
97	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
98	Diffraction-Unlimited Photomanipulation at the Plasma Membrane via Specifically Targeted Upconversion Nanoparticles. Nano Letters, 2021, 21, 8025-8034.	4.5	2
99	Photoâ€Electrochemical Device Enabling Luminescence Switching of LaPO 4 :Ce,Tb Nanoparticle Layers. Advanced Optical Materials, 2021, 9, 2001891.	3.6	2
100	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
101	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
102	On the energy transfer from Pr3+ to Gd3+ in nanosized LuPO4 particles. Journal of Luminescence, 2021, 240, 118418.	1.5	1
103	nanocrystals (0 â‰ <i>x</i> â‰ 1): growth, size control and shell formation on Î²-NaCeF₄:Tb core particles. CrystEngComm, 2020, 22, 8036-8044.	1.3	1
104	Green-Emitting CePO4:Tb/LaPO4 Core-Shell Nanoparticles with 70% Photoluminescence Quantum Yield.. ChemInform, 2004, 35, no.	0.1	0
105	Electrochromic graduated filters with symmetric electrode configuration. Optics Express, 2020, 28, 17047.	1.7	0