Christian P Wrth

List of Publications by Year in Descending Order

62 papers	3,439 citations	33 h-index	58 g-index
69 ext. papers	4,100 ext. citations	7 avg, IF	5.43 L-index

#	Paper	IF	Citations
62	Lumineszenzmessungen --Standards und die Vergleichbarkeit der Ergebnisse. *Nachrichten Aus Der Chemie*, **2021**, 69, 45-48	0.1	
61	Efficient Luminescent Solar Concentrators Based on Environmentally Friendly Cd-Free Ternary AIS/ZnS Quantum Dots. *Advanced Optical Materials*, **2021**, 9, 2100587	8.1	4
60	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	10	11
59	Multiband emission from single □NaYF4(Yb,Er) nanoparticles at high excitation power densities and comparison to ensemble studies. *Nano Research*, **2021**, 14, 4107	10	3
58	Time-resolved luminescence spectroscopy for monitoring the stability and dissolution behaviour of upconverting nanocrystals with different surface coatings. *Nanoscale*, **2020**, 12, 12589-12601	7.7	10
57	Upconversion properties of SrF2:Yb3+,Er3+ single crystals. *Journal of Materials Chemistry C*, **2020**, 8, 4093-4101	7.1	30
56	Efficient sub-15 nm cubic-phase core/shell upconversion nanoparticles as reporters for ensemble and single particle studies. *Nanoscale*, **2020**, 12, 10592-10599	7.7	3
55	Metasurface Enhanced Sensitized Photon Upconversion: Toward Highly Efficient Low Power Upconversion Applications and Nanoscale E-Field Sensors. *Nano Letters*, **2020**, 20, 6682-6689	11.5	8
54	Fluorescence Quantum Yield and Single-Particle Emission of CdSe Dot/CdS Rod Nanocrystals. *Journal of Physical Chemistry C*, **2019**, 123, 24338-24346	3.8	7
53	Sensitization of upconverting nanoparticles with a NIR-emissive cyanine dye using a micellar encapsulation approach. *Methods and Applications in Fluorescence*, **2019**, 7, 014003	3.1	15
52	Explaining the influence of dopant concentration and excitation power density on the luminescence and brightness of □NaYF4:Yb3+,Er3+ nanoparticles: Measurements and simulations. *Nano Research*, **2019**, 12, 1871-1879	10	31
51	Simple Self-Referenced Luminescent pH Sensors Based on Upconversion Nanocrystals and pH-Sensitive Fluorescent BODIPY Dyes. *Analytical Chemistry*, **2019**, 91, 7756-7764	7.8	26
50	Colour-optimized quantum yields of Yb, Tm Co-doped upconversion nanocrystals. *Methods and Applications in Fluorescence*, **2019**, 7, 024001	3.1	14
49	Yb,Nd,Er-doped upconversion nanoparticles: 980 nm versus 808 nm excitation. *Nanoscale*, **2019**, 11, 13440-13449	7.7	49
48	On the decay time of upconversion luminescence. *Nanoscale*, **2019**, 11, 4959-4969	7.7	41
47	Inherently Broadband Photoluminescence in AgInS□/ZnS Quantum Dots Observed in Ensemble and Single-Particle Studies. *Journal of Physical Chemistry C*, **2019**, 123, 2632-2641	3.8	35
46	Quantum Yields, Surface Quenching, and Passivation Efficiency for Ultrasmall Core/Shell Upconverting Nanoparticles. *Journal of the American Chemical Society*, **2018**, 140, 4922-4928	16.4	132

45	Synthesis of NIR-Emitting InAs-Based Core/Shell Quantum Dots with the Use of Tripyrazolylarsane as Arsenic Precursor. *Particle and Particle Systems Characterization*, **2018**, 35, 1800175	3.1	5
44	Aufwärtskonvertierende NaYF4:Yb,Er/NaYF4-Kern/Schale-Nanokristalle mit hoher Lumineszenzquantenausbeute. *Angewandte Chemie*, **2018**, 130, 8901-8905	3.6	10
43	NaYF :Yb,Er/NaYF Core/Shell Nanocrystals with High Upconversion Luminescence Quantum Yield. *Angewandte Chemie - International Edition*, **2018**, 57, 8765-8769	16.4	197
42	Particle-size-dependent upconversion luminescence of NaYF4: Yb, Er nanoparticles in organic solvents and water at different excitation power densities. *Nano Research*, **2018**, 11, 6360-6374	10	50
41	Absolute upconversion quantum yields of blue-emitting LiYF:Yb,Tm upconverting nanoparticles. *Physical Chemistry Chemical Physics*, **2018**, 20, 22556-22562	3.6	43
40	Evolution of Size and Optical Properties of Upconverting Nanoparticles during High-Temperature Synthesis. *Journal of Physical Chemistry C*, **2018**, 122, 28958-28967	3.8	23
39	Excitation power dependent population pathways and absolute quantum yields of upconversion nanoparticles in different solvents. *Nanoscale*, **2017**, 9, 4283-4294	7.7	90
38	Excitation wavelength dependence of the photoluminescence quantum yield and decay behavior of CdSe/CdS quantum dot/quantum rods with different aspect ratios. *Physical Chemistry Chemical Physics*, **2017**, 19, 12509-12516	3.6	39
37	Power-dependent upconversion quantum yield of NaYF:Yb,Er nano- and micrometer-sized particles - measurements and simulations. *Nanoscale*, **2017**, 9, 10051-10058	7.7	96
36	Particle-Size-Dependent Förster Resonance Energy Transfer from Upconversion Nanoparticles to Organic Dyes. *Analytical Chemistry*, **2017**, 89, 4868-4874	7.8	125
35	Optically Detected Degradation of NaYF:Yb,Tm-Based Upconversion Nanoparticles in Phosphate Buffered Saline Solution. *Langmuir*, **2017**, 33, 553-560	4	47
34	Four- and Five-Component Syntheses and Photophysical Properties of Emission Solvatochromic 3-Aminovinylquinoxalines. *Journal of Organic Chemistry*, **2017**, 82, 567-578	4.2	31
33	Beam-profile-compensated quantum yield measurements of upconverting nanoparticles. *Physical Chemistry Chemical Physics*, **2017**, 19, 22016-22022	3.6	12
32	Bioimaging: Shaping Luminescent Properties of Yb3+ and Ho3+ Co-Doped Upconverting Core–Shell β-NaYF4 Nanoparticles by Dopant Distribution and Spacing (Small 47/2017). *Small*, **2017**, 13, 1770246	11	6
31	Shaping Luminescent Properties of Yb and Ho Co-Doped Upconverting Core-Shell β-NaYF Nanoparticles by Dopant Distribution and Spacing. *Small*, **2017**, 13, 1701635	11	40
30	A protected excitation-energy reservoir for efficient upconversion luminescence. *Nanoscale*, **2017**, 10, 250-259	7.7	33
29	Industrially scalable and cost-effective Mn2+ doped ZnxCd1−xS/ZnS nanocrystals with 70% photoluminescence quantum yield, as efficient down-shifting materials in photovoltaics. *Energy and Environmental Science*, **2016**, 9, 1083-1094	35.4	53
28	Tuning the Surface of Nanoparticles: Impact of Poly(2-ethyl-2-oxazoline) on Protein Adsorption in Serum and Cellular Uptake. *Macromolecular Bioscience*, **2016**, 16, 1287-300	5.5	34

27	Quenching of the upconversion luminescence of NaYF4:Yb3+,Er3+ and NaYF4:Yb3+,Tm3+ nanophosphors by water: the role of the sensitizer Yb3+ in non-radiative relaxation. *Nanoscale*, **2015**, 7, 11746-57	7.7	207
26	Water dispersible upconverting nanoparticles: effects of surface modification on their luminescence and colloidal stability. *Nanoscale*, **2015**, 7, 1403-10	7.7	172
25	Absolute photoluminescence quantum yields of IR26 and IR-emissive Cd(1-x)Hg(x)Te and PbS quantum dots--method- and material-inherent challenges. *Nanoscale*, **2015**, 7, 133-43	7.7	58
24	Critical review of the determination of photoluminescence quantum yields of luminescent reporters. *Analytical and Bioanalytical Chemistry*, **2015**, 407, 59-78	4.4	51
23	Determination of photoluminescence quantum yields of scattering media with an integrating sphere: direct and indirect illumination. *Applied Spectroscopy*, **2015**, 69, 749-59	3.1	13
22	Quantification of Anisotropy-Related Uncertainties in Relative Photoluminescence Quantum Yield Measurements of Nanomaterials Semiconductor Quantum Dots and Rods. *Zeitschrift Fur Physikalische Chemie*, **2015**, 229, 153-165	3.1	12
21	Relative and absolute determination of fluorescence quantum yields of transparent samples. *Nature Protocols*, **2013**, 8, 1535-50	18.8	622
20	New life of ancient pigments: application in high-performance optical sensing materials. *Analytical Chemistry*, **2013**, 85, 9371-7	7.8	50
19	Target-specific nanoparticles containing a broad band emissive NIR dye for the sensitive detection and characterization of tumor development. *Biomaterials*, **2013**, 34, 160-70	15.6	48
18	Simple strategies towards bright polymer particles via one-step staining procedures. *Dyes and Pigments*, **2012**, 94, 247-257	4.6	46
17	Synthesis and characterisation of highly fluorescent core shell nanoparticles based on Alexa dyes. *Journal of Nanoparticle Research*, **2012**, 14, 1	2.3	16
16	Integrating sphere setup for the traceable measurement of absolute photoluminescence quantum yields in the near infrared. *Analytical Chemistry*, **2012**, 84, 1345-52	7.8	75
15	Spectroscopic characterization of coumarin-stained beads: quantification of the number of fluorophores per particle with solid-state 19F-NMR and measurement of absolute fluorescence quantum yields. *Analytical Chemistry*, **2012**, 84, 3654-61	7.8	25
14	Determination of the absolute fluorescence quantum yield of rhodamine 6G with optical and photoacoustic methods--providing the basis for fluorescence quantum yield standards. *Talanta*, **2012**, 90, 30-7	6.2	82
13	Fluorescent magnetoliposomes as a platform technology for functional and molecular MR and optical imaging. *Contrast Media and Molecular Imaging*, **2012**, 7, 59-67	3.2	15
12	Scope and limitations of surface functional group quantification methods: exploratory study with poly(acrylic acid)-grafted micro- and nanoparticles. *Journal of the American Chemical Society*, **2012**, 134, 8268-76	16.4	72
11	Targeted luminescent near-infrared polymer-nanoprobes for in vivo imaging of tumor hypoxia. *Analytical Chemistry*, **2011**, 83, 9039-46	7.8	118
10	Femtosecond broadband fluorescence upconversion spectroscopy: improved setup and photometric correction. *Review of Scientific Instruments*, **2011**, 82, 063108	1.7	67

9	Comparison of methods and achievable uncertainties for the relative and absolute measurement of photoluminescence quantum yields. *Analytical Chemistry*, **2011**, 83, 3431-9	7.8	141
8	Encapsulation of hydrophobic dyes in polystyrene micro- and nanoparticles via swelling procedures. *Journal of Fluorescence*, **2011**, 21, 937-44	2.4	77
7	Polymer-and glass-based fluorescence standards for the near infrared (NIR) spectral region. *Journal of Fluorescence*, **2011**, 21, 953-61	2.4	11
6	Fluorophore-Labeled Siloxane-Based Nanoparticles for Biomedical Applications. *Macromolecular Symposia*, **2011**, 309-310, 141-146	0.8	3
5	The toolbox of fluorescence standards: flexible calibration tools for the standardization of fluorescence-based measurements **2010**,		2
4	Evaluation of a commercial integrating sphere setup for the determination of absolute photoluminescence quantum yields of dilute dye solutions. *Applied Spectroscopy*, **2010**, 64, 733-41	3.1	59
3	Mechanistic insights into seeded growth processes of gold nanoparticles. *Nanoscale*, **2010**, 2, 2463-9	7.7	45
2	Metasurface-Enhanced Photon Upconversion upon 1550 nm Excitation. *Advanced Optical Materials*,2101885	8.5	2
1	Volume and surface effects on two-photonic and three-photonic processes in dry co-doped upconversion nanocrystals. *Nano Research*,1	10	