

# Christian P Wrth

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/2492878/christian-p-wurth-publications-by-citations.pdf>

**Version:** 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Relative and absolute determination of fluorescence quantum yields of transparent samples. <i>Nature Protocols</i> , <b>2013</b> , 8, 1535-50	18.8	622
61	Quenching of the upconversion luminescence of NaYF <sub>4</sub> :Yb <sup>3+</sup> ,Er <sup>3+</sup> and NaYF <sub>4</sub> :Yb <sup>3+</sup> ,Tm <sup>3+</sup> nanophosphors by water: the role of the sensitizer Yb <sup>3+</sup> in non-radiative relaxation. <i>Nanoscale</i> , <b>2015</b> , 7, 11746-57	7.7	207
60	NaYF <sub>4</sub> :Yb,Er/NaYF <sub>4</sub> Core/Shell Nanocrystals with High Upconversion Luminescence Quantum Yield. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 8765-8769	16.4	197
59	Water dispersible upconverting nanoparticles: effects of surface modification on their luminescence and colloidal stability. <i>Nanoscale</i> , <b>2015</b> , 7, 1403-10	7.7	172
58	Comparison of methods and achievable uncertainties for the relative and absolute measurement of photoluminescence quantum yields. <i>Analytical Chemistry</i> , <b>2011</b> , 83, 3431-9	7.8	141
57	Quantum Yields, Surface Quenching, and Passivation Efficiency for Ultrasmall Core/Shell Upconverting Nanoparticles. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 4922-4928	16.4	132
56	Particle-Size-Dependent Förster Resonance Energy Transfer from Upconversion Nanoparticles to Organic Dyes. <i>Analytical Chemistry</i> , <b>2017</b> , 89, 4868-4874	7.8	125
55	Targeted luminescent near-infrared polymer-nanoprobes for in vivo imaging of tumor hypoxia. <i>Analytical Chemistry</i> , <b>2011</b> , 83, 9039-46	7.8	118
54	Power-dependent upconversion quantum yield of NaYF <sub>4</sub> :Yb,Er nano- and micrometer-sized particles - measurements and simulations. <i>Nanoscale</i> , <b>2017</b> , 9, 10051-10058	7.7	96
53	Excitation power dependent population pathways and absolute quantum yields of upconversion nanoparticles in different solvents. <i>Nanoscale</i> , <b>2017</b> , 9, 4283-4294	7.7	90
52	Determination of the absolute fluorescence quantum yield of rhodamine 6G with optical and photoacoustic methods--providing the basis for fluorescence quantum yield standards. <i>Talanta</i> , <b>2012</b> , 90, 30-7	6.2	82
51	Encapsulation of hydrophobic dyes in polystyrene micro- and nanoparticles via swelling procedures. <i>Journal of Fluorescence</i> , <b>2011</b> , 21, 937-44	2.4	77
50	Integrating sphere setup for the traceable measurement of absolute photoluminescence quantum yields in the near infrared. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 1345-52	7.8	75
49	Scope and limitations of surface functional group quantification methods: exploratory study with poly(acrylic acid)-grafted micro- and nanoparticles. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 8268-76	16.4	72
48	Femtosecond broadband fluorescence upconversion spectroscopy: improved setup and photometric correction. <i>Review of Scientific Instruments</i> , <b>2011</b> , 82, 063108	1.7	67
47	Evaluation of a commercial integrating sphere setup for the determination of absolute photoluminescence quantum yields of dilute dye solutions. <i>Applied Spectroscopy</i> , <b>2010</b> , 64, 733-41	3.1	59
46	Absolute photoluminescence quantum yields of IR26 and IR-emissive Cd(1-x)Hg(x)Te and PbS quantum dots--method- and material-inherent challenges. <i>Nanoscale</i> , <b>2015</b> , 7, 133-43	7.7	58

45	Industrially scalable and cost-effective Mn <sup>2+</sup> doped ZnxCd <sub>1-x</sub> S/ZnS nanocrystals with 70% photoluminescence quantum yield, as efficient down-shifting materials in photovoltaics. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 1083-1094	35.4	53
44	Critical review of the determination of photoluminescence quantum yields of luminescent reporters. <i>Analytical and Bioanalytical Chemistry</i> , <b>2015</b> , 407, 59-78	4.4	51
43	Particle-size-dependent upconversion luminescence of NaYF <sub>4</sub> : Yb, Er nanoparticles in organic solvents and water at different excitation power densities. <i>Nano Research</i> , <b>2018</b> , 11, 6360-6374	10	50
42	New life of ancient pigments: application in high-performance optical sensing materials. <i>Analytical Chemistry</i> , <b>2013</b> , 85, 9371-7	7.8	50
41	Target-specific nanoparticles containing a broad band emissive NIR dye for the sensitive detection and characterization of tumor development. <i>Biomaterials</i> , <b>2013</b> , 34, 160-70	15.6	48
40	Optically Detected Degradation of NaYF <sub>4</sub> :Yb,Tm-Based Upconversion Nanoparticles in Phosphate Buffered Saline Solution. <i>Langmuir</i> , <b>2017</b> , 33, 553-560	4	47
39	Simple strategies towards bright polymer particles via one-step staining procedures. <i>Dyes and Pigments</i> , <b>2012</b> , 94, 247-257	4.6	46
38	Mechanistic insights into seeded growth processes of gold nanoparticles. <i>Nanoscale</i> , <b>2010</b> , 2, 2463-9	7.7	45
37	Absolute upconversion quantum yields of blue-emitting LiYF <sub>4</sub> :Yb,Tm upconverting nanoparticles. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 22556-22562	3.6	43
36	On the decay time of upconversion luminescence. <i>Nanoscale</i> , <b>2019</b> , 11, 4959-4969	7.7	41
35	Yb,Nd,Er-doped upconversion nanoparticles: 980 nm versus 808 nm excitation. <i>Nanoscale</i> , <b>2019</b> , 11, 13440-13448	7.7	40
34	Shaping Luminescent Properties of Yb and Ho Co-Doped Upconverting Core-Shell NaYF <sub>4</sub> Nanoparticles by Dopant Distribution and Spacing. <i>Small</i> , <b>2017</b> , 13, 1701635	11	40
33	Excitation wavelength dependence of the photoluminescence quantum yield and decay behavior of CdSe/CdS quantum dot/quantum rods with different aspect ratios. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 12509-12516	3.6	39
32	Inherently Broadband Photoluminescence in AgInS/ZnS Quantum Dots Observed in Ensemble and Single-Particle Studies. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 2632-2641	3.8	35
31	Tuning the Surface of Nanoparticles: Impact of Poly(2-ethyl-2-oxazoline) on Protein Adsorption in Serum and Cellular Uptake. <i>Macromolecular Bioscience</i> , <b>2016</b> , 16, 1287-300	5.5	34
30	A protected excitation-energy reservoir for efficient upconversion luminescence. <i>Nanoscale</i> , <b>2017</b> , 10, 250-259	7.7	33
29	Four- and Five-Component Syntheses and Photophysical Properties of Emission Solvatochromic 3-Aminovinylquinoxalines. <i>Journal of Organic Chemistry</i> , <b>2017</b> , 82, 567-578	4.2	31
28	Explaining the influence of dopant concentration and excitation power density on the luminescence and brightness of NaYF <sub>4</sub> :Yb <sup>3+</sup> ,Er <sup>3+</sup> nanoparticles: Measurements and simulations. <i>Nano Research</i> , <b>2019</b> , 12, 1871-1879	10	31

27	Upconversion properties of SrF <sub>2</sub> :Yb <sup>3+</sup> ,Er <sup>3+</sup> single crystals. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 4093-4101	3.1	10
26	Simple Self-Referenced Luminescent pH Sensors Based on Upconversion Nanocrystals and pH-Sensitive Fluorescent BODIPY Dyes. <i>Analytical Chemistry</i> , <b>2019</b> , 91, 7756-7764	7.8	26
25	Spectroscopic characterization of coumarin-stained beads: quantification of the number of fluorophores per particle with solid-state <sup>19</sup> F-NMR and measurement of absolute fluorescence quantum yields. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 3654-61	7.8	25
24	Evolution of Size and Optical Properties of Upconverting Nanoparticles during High-Temperature Synthesis. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 28958-28967	3.8	23
23	Synthesis and characterisation of highly fluorescent core-shell nanoparticles based on Alexa dyes. <i>Journal of Nanoparticle Research</i> , <b>2012</b> , 14, 1	2.3	16
22	Sensitization of upconverting nanoparticles with a NIR-emissive cyanine dye using a micellar encapsulation approach. <i>Methods and Applications in Fluorescence</i> , <b>2019</b> , 7, 014003	3.1	15
21	Fluorescent magnetoliposomes as a platform technology for functional and molecular MR and optical imaging. <i>Contrast Media and Molecular Imaging</i> , <b>2012</b> , 7, 59-67	3.2	15
20	Colour-optimized quantum yields of Yb, Tm Co-doped upconversion nanocrystals. <i>Methods and Applications in Fluorescence</i> , <b>2019</b> , 7, 024001	3.1	14
19	Determination of photoluminescence quantum yields of scattering media with an integrating sphere: direct and indirect illumination. <i>Applied Spectroscopy</i> , <b>2015</b> , 69, 749-59	3.1	13
18	Beam-profile-compensated quantum yield measurements of upconverting nanoparticles. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 22016-22022	3.6	12
17	Quantification of Anisotropy-Related Uncertainties in Relative Photoluminescence Quantum Yield Measurements of Nanomaterials Semiconductor Quantum Dots and Rods. <i>Zeitschrift Fur Physikalische Chemie</i> , <b>2015</b> , 229, 153-165	3.1	12
16	Polymer- and glass-based fluorescence standards for the near infrared (NIR) spectral region. <i>Journal of Fluorescence</i> , <b>2011</b> , 21, 953-61	2.4	11
15	LiYF <sub>4</sub> :Yb/LiYF <sub>4</sub> and LiYF <sub>4</sub> :Yb,Er/LiYF <sub>4</sub> core/shell nanocrystals with luminescence decay times similar to YLF laser crystals and the upconversion quantum yield of the Yb,Er doped nanocrystals. <i>Nano Research</i> , <b>2021</b> , 14, 797-806	10	11
14	Time-resolved luminescence spectroscopy for monitoring the stability and dissolution behaviour of upconverting nanocrystals with different surface coatings. <i>Nanoscale</i> , <b>2020</b> , 12, 12589-12601	7.7	10
13	Aufwandskonvertierende NaYF <sub>4</sub> :Yb,Er/NaYF <sub>4</sub> -Kern/Schale-Nanokristalle mit hoher Lumineszenzquantenausbeute. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 8901-8905	3.6	10
12	Metasurface Enhanced Sensitized Photon Upconversion: Toward Highly Efficient Low Power Upconversion Applications and Nanoscale E-Field Sensors. <i>Nano Letters</i> , <b>2020</b> , 20, 6682-6689	11.5	8
11	Fluorescence Quantum Yield and Single-Particle Emission of CdSe Dot/CdS Rod Nanocrystals. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 24338-24346	3.8	7
10	Bioimaging: Shaping Luminescent Properties of Yb <sup>3+</sup> and Ho <sup>3+</sup> Co-Doped Upconverting Core-Shell NaYF <sub>4</sub> Nanoparticles by Dopant Distribution and Spacing (Small 47/2017). <i>Small</i> , <b>2017</b> , 13, 1770246	11	6

9	Synthesis of NIR-Emitting InAs-Based Core/Shell Quantum Dots with the Use of Tripyrazolylarsane as Arsenic Precursor. <i>Particle and Particle Systems Characterization</i> , <b>2018</b> , 35, 1800175	3.1	5
8	Efficient Luminescent Solar Concentrators Based on Environmentally Friendly Cd-Free Ternary AlS/ZnS Quantum Dots. <i>Advanced Optical Materials</i> , <b>2021</b> , 9, 2100587	8.1	4
7	Efficient sub-15 nm cubic-phase core/shell upconversion nanoparticles as reporters for ensemble and single particle studies. <i>Nanoscale</i> , <b>2020</b> , 12, 10592-10599	7.7	3
6	Fluorophore-Labeled Siloxane-Based Nanoparticles for Biomedical Applications. <i>Macromolecular Symposia</i> , <b>2011</b> , 309-310, 141-146	0.8	3
5	Multiband emission from single [NaYF <sub>4</sub> (Yb,Er) nanoparticles at high excitation power densities and comparison to ensemble studies. <i>Nano Research</i> , <b>2021</b> , 14, 4107	10	3
4	The toolbox of fluorescence standards: flexible calibration tools for the standardization of fluorescence-based measurements <b>2010</b> ,		2
3	Metasurface-Enhanced Photon Upconversion upon 1550nm Excitation. <i>Advanced Optical Materials</i> , <b>2018</b> , 10, 1800085		2
2	Lumineszenzmessungen --Standards und die Vergleichbarkeit der Ergebnisse. <i>Nachrichten Aus Der Chemie</i> , <b>2021</b> , 69, 45-48	0.1	
1	Volume and surface effects on two-photon and three-photon processes in dry co-doped upconversion nanocrystals. <i>Nano Research</i> , <b>2021</b> , 14, 10592-10599	10	