Thomas Pons

List of Publications by Citations

87 papers	6,871 citations	40 h-index	82 g-index
107 ext. papers	7,446 ext. citations	8.8 avg, IF	5.53 L-index

#	Paper	IF	Citations
87	Cadmium-free CuInS2/ZnS quantum dots for sentinel lymph node imaging with reduced toxicity. *ACS Nano*, **2010**, 4, 2531-8	16.7	449
86	On the quenching of semiconductor quantum dot photoluminescence by proximal gold nanoparticles. *Nano Letters*, **2007**, 7, 3157-64	11.5	443
85	Energy Transfer with Semiconductor Quantum Dot Bioconjugates: A Versatile Platform for Biosensing, Energy Harvesting, and Other Developing Applications. *Chemical Reviews*, **2017**, 117, 536-711	68.1	439
84	Enhancing the stability and biological functionalities of quantum dots via compact multifunctional ligands. *Journal of the American Chemical Society*, **2007**, 129, 13987-96	16.4	439
83	Biosensing with Luminescent Semiconductor Quantum Dots. *Sensors*, **2006**, 6, 925-953	3.8	332
82	Effects of (multi)branching of dipolar chromophores on photophysical properties and two-photon absorption. *Journal of Physical Chemistry A*, **2005**, 109, 3024-37	2.8	311
81	Hydrodynamic dimensions, electrophoretic mobility, and stability of hydrophilic quantum dots. *Journal of Physical Chemistry B*, **2006**, 110, 20308-16	3.4	259
80	Solution-phase single quantum dot fluorescence resonance energy transfer. *Journal of the American Chemical Society*, **2006**, 128, 15324-31	16.4	240
79	Enhanced two-photon absorption with novel octupolar propeller-shaped fluorophores derived from triphenylamine. *Organic Letters*, **2004**, 6, 47-50	6.2	231
78	Kinetics of Metal-Affinity Driven Self-Assembly between Proteins or Peptides and CdSeZnS Quantum Dots. *Journal of Physical Chemistry C*, **2007**, 111, 11528-11538	3.8	221
77	Self-assembled quantum dot-peptide bioconjugates for selective intracellular delivery. *Bioconjugate Chemistry*, **2006**, 17, 920-7	6.3	219
76	Small and stable sulfobetaine zwitterionic quantum dots for functional live-cell imaging. *Journal of the American Chemical Society*, **2010**, 132, 4556-7	16.4	206
75	A reactive peptidic linker for self-assembling hybrid quantum dot-DNA bioconjugates. *Nano Letters*, **2007**, 7, 1741-8	11.5	172
74	Synthesis and Characterization of Near-Infrared CuInSe/ZnS Core/Shell Quantum Dots for In vivo Imaging. *Chemistry of Materials*, **2010**, 22, 6117-6124	9.6	152
73	Intracellular delivery of quantum dot-protein cargos mediated by cell penetrating peptides. *Bioconjugate Chemistry*, **2008**, 19, 1785-95	6.3	141
72	Synthesis, encapsulation, purification and coupling of single quantum dots in phospholipid micelles for their use in cellular and in vivo imaging. *Nature Protocols*, **2007**, 2, 2383-90	18.8	139
71	Design of new quantum dot materials for deep tissue infrared imaging. *Advanced Drug Delivery Reviews*, **2013**, 65, 719-31	18.5	125

70	Two-Photon Excitation of Quantum-Dot-Based Fluorescence Resonance Energy Transfer and Its Applications. *Advanced Materials*, **2007**, 19, 1921-1926	24	112
69	Fluorine-18-labeled phospholipid quantum dot micelles for in vivo multimodal imaging from whole body to cellular scales. *Bioconjugate Chemistry*, **2008**, 19, 1921-6	6.3	104
68	Interactions between redox complexes and semiconductor quantum dots coupled via a peptide bridge. *Journal of the American Chemical Society*, **2008**, 130, 16745-56	16.4	103
67	Resonance Energy Transfer Between Luminescent Quantum Dots and Diverse Fluorescent Protein Acceptors. *Journal of Physical Chemistry C*, **2009**, 113, 18552-18561	3.8	101
66	Synthesis and two-photon absorption of highly soluble three-branched fluorenylene-vinylene derivatives. *Tetrahedron Letters*, **2003**, 44, 8121-8125	2	99
65	PEGylated Luminescent Gold Nanoclusters: Synthesis, Characterization, Bioconjugation, and Application to One- and Two-Photon Cellular Imaging. *Particle and Particle Systems Characterization* , **2013**, 30, 453-466	3.1	95
64	Strong modulation of two-photon excited fluorescence of quadripolar dyes by (de)protonation. *Journal of the American Chemical Society*, **2004**, 126, 16294-5	16.4	95
63	Colloidal CdSe/CdS dot-in-plate nanocrystals with 2D-polarized emission. *ACS Nano*, **2012**, 6, 6741-50	16.7	93
62	Highly enhanced affinity of multidentate versus bidentate zwitterionic ligands for long-term quantum dot bioimaging. *Langmuir*, **2012**, 28, 15177-84	4	88
61	Synthesis of Near-Infrared-Emitting, Water-Soluble CdTeSe/CdZnS Core/Shell Quantum Dots. *Chemistry of Materials*, **2009**, 21, 1418-1424	9.6	77
60	Designer variable repeat length polypeptides as scaffolds for surface immobilization of quantum dots. *Journal of Physical Chemistry B*, **2006**, 110, 10683-90	3.4	70
59	Mechanisms of membrane potential sensing with second-harmonic generation microscopy. *Journal of Biomedical Optics*, **2003**, 8, 428-31	3.5	63
58	Investigating biological processes at the single molecule level using luminescent quantum dots. *Annals of Biomedical Engineering*, **2009**, 37, 1934-59	4.7	56
57	Spectrally resolved energy transfer using quantum dot donors: Ensemble and single-molecule photoluminescence studies. *Physical Review B*, **2006**, 73,	3.3	56
56	Raman- and IR-Active Phonons in CdSe/CdS Core/Shell Nanocrystals in the Presence of Interface Alloying and Strain. *Journal of Physical Chemistry C*, **2013**, 117, 18225-18233	3.8	55
55	Electro-optic response of second-harmonic generation membrane potential sensors. *Optics Letters*, **2003**, 28, 625-7	3	55
54	Quantum dots-DNA bioconjugates: synthesis to applications. *Interface Focus*, **2016**, 6, 20160064	3.9	54
53	Influence of luminescence quantum yield, surface coating, and functionalization of quantum dots on the sensitivity of time-resolved FRET bioassays. *ACS Applied Materials & Interfaces*, **2013**, 5, 2881-92	9.5	53

52	Zwitterionic polymer ligands: an ideal surface coating to totally suppress protein-nanoparticle corona formation?. *Biomaterials*, **2019**, 219, 119357	15.6	50
51	Multimodal Mn-doped I-III-VI quantum dots for near infrared fluorescence and magnetic resonance imaging: from synthesis to in vivo application. *Nanoscale*, **2014**, 6, 9264-72	7.7	50
50	Binding and neutralization of lipopolysaccharides by plant proanthocyanidins. *Journal of Natural Products*, **2007**, 70, 1718-24	4.9	46
49	Sulfobetaine-Vinylimidazole Block Copolymers: A Robust Quantum Dot Surface Chemistry Expanding Bioimaging's Horizons. *ACS Nano*, **2015**, 9, 11479-89	16.7	44
48	Visualisation of sentinel lymph node with indium-based near infrared emitting Quantum Dots in a murine metastatic breast cancer model. *PLoS ONE*, **2012**, 7, e44433	3.7	42
47	Fluorescence imaging and whole-body biodistribution of near-infrared-emitting quantum dots after subcutaneous injection for regional lymph node mapping in mice. *Molecular Imaging and Biology*, **2010**, 12, 394-405	3.8	40
46	Two-photon absorption and fluorescence in nanoscale multipolar chromophores: effect of dimensionality and charge-symmetry. *Journal of Molecular Structure*, **2004**, 704, 17-24	3.4	39
45	Comparing intracellular stability and targeting of sulfobetaine quantum dots with other surface chemistries in live cells. *Small*, **2012**, 8, 1029-37	11	38
44	In Vivo Imaging of Single Tumor Cells in Fast-Flowing Bloodstream Using Near-Infrared Quantum Dots and Time-Gated Imaging. *ACS Nano*, **2019**, 13, 3125-3131	16.7	35
43	Fast, Efficient, and Stable Conjugation of Multiple DNA Strands on Colloidal Quantum Dots. *Bioconjugate Chemistry*, **2015**, 26, 1582-9	6.3	35
42	Oriented Bioconjugation of Unmodified Antibodies to Quantum Dots Capped with Copolymeric Ligands as Versatile Cellular Imaging Tools. *ACS Applied Materials & Interfaces*, **2015**, 7, 26904-13	9.5	34
41	Doping as a Strategy to Tune Color of 2D Colloidal Nanoplatelets. *ACS Applied Materials & Interfaces*, **2019**, 11, 10128-10134	9.5	32
40	On the characterization of the surface chemistry of quantum dots. *Nano Letters*, **2013**, 13, 5075-8	11.5	31
39	Compact tridentate ligands for enhanced aqueous stability of quantum dots and in vivo imaging. *Chemical Science*, **2013**, 4, 411-417	9.4	31
38	Enhancing fluorescence in vivo imaging using inorganic nanoprobes. *Current Opinion in Biotechnology*, **2015**, 34, 65-72	11.4	30
37	Clickable-Zwitterionic Copolymer Capped-Quantum Dots for in Vivo Fluorescence Tumor Imaging. *ACS Applied Materials & Interfaces*, **2018**, 10, 17107-17116	9.5	29
36	Reduced Carrier Recombination in PbS - CuInS2 Quantum Dot Solar Cells. *Scientific Reports*, **2015**, 5, 10626	4.9	29
35	Examining the Polyproline Nanoscopic Ruler in the Context of Quantum Dots. *Chemistry of Materials*, **2015**, 27, 6222-6237	9.6	25

34	Time-gated cell imaging using long lifetime near-infrared-emitting quantum dots for autofluorescence rejection. *Journal of Biomedical Optics*, **2014**, 19, 051208	3.5	25
33	Engineering Bicolor Emission in 2D Core/Crown CdSe/CdSe1−xTex Nanoplatelet Heterostructures Using Band-Offset Tuning. *Journal of Physical Chemistry C*, **2017**, 121, 24816-24823	3.8	20
32	Quantum dot-loaded PEGylated poly(alkyl cyanoacrylate) nanoparticles for in vitro and in vivo imaging. *Soft Matter*, **2011**, 7, 6187	3.6	20
31	Pulsed-laser irradiation of multifunctional gold nanoshells to overcome trastuzumab resistance in HER2-overexpressing breast cancer. *Journal of Experimental and Clinical Cancer Research*, **2019**, 38, 306	12.8	17
30	Single-molecule colocalization studies shed light on the idea of fully emitting versus dark single quantum dots. *Small*, **2011**, 7, 2101-8	11	17
29	Photoinduced flip-flop of amphiphilic molecules in lipid bilayer membranes. *Physical Review Letters*, **2002**, 89, 288104	7.4	17
28	Adaptive optics for fluorescence wide-field microscopy using spectrally independent guide star and markers. *Journal of Biomedical Optics*, **2011**, 16, 076019	3.5	14
27	Surface Modification of CdE (E: S, Se, and Te) Nanoplatelets to Reach Thicker Nanoplatelets and Homostructures with Confinement-Induced Intraparticle Type I Energy Level Alignment. *Journal of the American Chemical Society*, **2021**, 143, 1863-1872	16.4	14
26	Near-Infrared Emitting AgInTe2 and Zn-Ag-In-Te Colloidal Nanocrystals. *Nanoscale Research Letters*, **2015**, 10, 951	5	12
25	The targeting ability of fluorescent quantum dots to the folate receptor rich tumors. *Photodiagnosis and Photodynamic Therapy*, **2019**, 26, 150-156	3.5	10
24	Fluorescent Nanoparticles for the Guided Surgery of Ovarian Peritoneal Carcinomatosis. *Nanomaterials*, **2018**, 8,	5.4	10
23	Zwitterionic Silane Copolymer for Ultra-Stable and Bright Biomolecular Probes Based on Fluorescent Quantum Dot Nanoclusters. *ACS Applied Materials & Interfaces*, **2017**, 9, 18161-18169	9.5	9
22	Membrane potential detection with second-harmonic generation and two-photon excited fluorescence: A theoretical comparison. *Optics Communications*, **2006**, 258, 203-209	2	9
21	Microcavity-Enhanced Fluorescence Energy Transfer from Quantum Dot Excited Whispering Gallery Modes to Acceptor Dye Nanoparticles. *ACS Nano*, **2021**, 15, 1445-1453	16.7	9
20	TWO-PHOTON ABSORPTION AND FLUORESCENCE WITH QUADRUPOLAR AND BRANCHED CHROMOPHORES□FFECT OF STRUCTURE AND BRANCHING. *Journal of Nonlinear Optical Physics and Materials*, **2004**, 13, 451-460	0.8	7
19	A novel type of quantum dot-transferrin conjugate using DNA hybridization mimics intracellular recycling of endogenous transferrin. *Nanoscale*, **2017**, 9, 15453-15460	7.7	6
18	Autoconfocal microscopy with nonlinear transmitted light detection. *Journal of the Optical Society of America B: Optical Physics*, **2004**, 21, 1486	1.7	5
17	Compensatory ion transport buffers daily protein rhythms to regulate osmotic balance and cellular physiology. *Nature Communications*, **2021**, 12, 6035	17.4	5

16	NIR Imaging of the Integrin-Rich Head and Neck Squamous Cell Carcinoma Using Ternary Copper Indium Selenide/Zinc Sulfide-Based Quantum Dots. *Cancers*, **2020**, 12,	6.6	4
15	Real-Space Investigation of Energy Transfer through Electron Tomography. *Journal of Physical Chemistry C*, **2017**, 121, 28395-28402	3.8	4
14	Compensatory ion transport buffers daily protein rhythms to regulate osmotic balance and cellular physiology		4
13	pH-Sensitive Visible or Shortwave Infrared Quantum Dot Nanoprobes Using Conformation-Switchable Copolymeric Ligands. *ACS Applied Materials & Interfaces*, **2019**, 11, 25008-25016	9.5	3
12	Imaging of Red-Shifted Light From Bioluminescent Tumors Using Fluorescence by Unbound Excitation From Luminescence. *Frontiers in Bioengineering and Biotechnology*, **2019**, 7, 73	5.8	3
11	NanoPaint: A Tool for Rapid and Dynamic Imaging of Membrane Structural Plasticity at the Nanoscale. *Small*, **2019**, 15, e1902796	11	2
10	Delivery of quantum dot bioconjugates to the cellular cytosol: release from the endolysosomal system **2010**,		2
9	Fluorescence properties of self assembled colloidal supraparticles from CdSe/CdS/ZnS nanocrystals. *New Journal of Physics*, **2020**, 22, 113026	2.9	2
8	Luminescent Semiconductor Quantum Dots in Biology141-157		1
7	Hydrodynamic sizes of functional hydrophilic QDs **2006**, 6096, 281		1
6	Molecular engineering of nanoscale quadrupolar chromophores for two-photon absorption **2003**, 4797, 284		1
5	Imaging of red-shifted photons from bioluminescent tumours using fluorescence by unbound excitation from luminescence		1
4	Designing the Surface Chemistry of Inorganic Nanocrystals for Cancer Imaging and Therapy. *Cancers*, **2022**, 14, 2456	6.6	0
3	Single-Molecule Applications **2013**, 323-356		
2	Le projet DOT-IMAGER. *Irbm*, **2010**, 31, 70-72	4.8	
1	Probing the effects of spectral overlap on quantum-dot-based FRET: Ensemble and single molecule studies **2006**, 6096, 91		