Thomas Pons

List of Publications by Year
in descending order

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Version: 2024-02-01

100 papers	7,921 citations	57719 44 h-index	58549 82 g-index
107 all docs	107 docs citations	107 times ranked	9254 citing authors

#	Article	IF	Citations
1	Designing the Surface Chemistry of Inorganic Nanocrystals for Cancer Imaging and Therapy. Cancers, 2022, 14, 2456.	1.7	4
2	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.	6.6	23
3	Microcavity-Enhanced Fluorescence Energy Transfer from Quantum Dot Excited Whispering Gallery Modes to Acceptor Dye Nanoparticles. ACS Nano, 2021, 15, 1445-1453.	7.3	19
4	Compensatory ion transport buffers daily protein rhythms to regulate osmotic balance and cellular physiology. Nature Communications, 2021, 12, 6035.	5.8	26
5	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, 3727.	1.7	14
6	Fluorescence properties of self assembled colloidal supraparticles from CdSe/CdS/ZnS nanocrystals. New Journal of Physics, 2020, 22, 113026.	1.2	6
7	Zwitterionic polymer ligands: an ideal surface coating to totally suppress protein-nanoparticle corona formation?. Biomaterials, 2019, 219, 119357.	5.7	110
8	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.	3.5	27
9	NanoPaint: A Tool for Rapid and Dynamic Imaging of Membrane Structural Plasticity at the Nanoscale. Small, 2019, 15, e1902796.	5.2	4
10	pH-Sensitive Visible or Shortwave Infrared Quantum Dot Nanoprobes Using Conformation-Switchable Copolymeric Ligands. ACS Applied Materials & Interfaces, 2019, 11, 25008-25016.	4.0	3
11	Imaging of Red-Shifted Light From Bioluminescent Tumors Using Fluorescence by Unbound Excitation From Luminescence. Frontiers in Bioengineering and Biotechnology, 2019, 7, 73.	2.0	3
12	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.	7.3	48
13	The targeting ability of fluorescent quantum dots to the folate receptor rich tumors. Photodiagnosis and Photodynamic Therapy, 2019, 26, 150-156.	1.3	15
14	Doping as a Strategy to Tune Color of 2D Colloidal Nanoplatelets. ACS Applied Materials & Interfaces, 2019, 11, 10128-10134.	4.0	48
15	Clickable-Zwitterionic Copolymer Capped-Quantum Dots for in Vivo Fluorescence Tumor Imaging. ACS Applied Materials & Interfaces, 2018, 10, 17107-17116.	4.0	43
16	Fluorescent Nanoparticles for the Guided Surgery of Ovarian Peritoneal Carcinomatosis. Nanomaterials, 2018, 8, 572.	1.9	17
17	Energy Transfer with Semiconductor Quantum Dot Bioconjugates: A Versatile Platform for Biosensing, Energy Harvesting, and Other Developing Applications. Chemical Reviews, 2017, 117, 536-711.	23.0	575
18	Zwitterionic Silane Copolymer for Ultra-Stable and Bright Biomolecular Probes Based on Fluorescent Quantum Dot Nanoclusters. ACS Applied Materials & Interfaces, 2017, 9, 18161-18169.	4.0	12

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19	Long lifetime near-infrared-emitting quantum dots for time-gated in vivo imaging of rare circulating cells (Conference Presentation). , 2017, , .		0
20	A novel type of quantum dotâ€“transferrin conjugate using DNA hybridization mimics intracellular recycling of endogenous transferrin. Nanoscale, 2017, 9, 15453-15460.	2.8	7
21	Engineering Bicolor Emission in 2D Core/Crown CdSe/CdSe_{1â€“x}Te_x Nanoplatelet Heterostructures Using Band-Offset Tuning. Journal of Physical Chemistry C, 2017, 121, 24816-24823.	1.5	26
22	Real-Space Investigation of Energy Transfer through Electron Tomography. Journal of Physical Chemistry C, 2017, 121, 28395-28402.	1.5	7
23	Quantum dotsâ€“DNA bioconjugates: synthesis to applications. Interface Focus, 2016, 6, 20160064.	1.5	78
24	Fast, Efficient, and Stable Conjugation of Multiple DNA Strands on Colloidal Quantum Dots. Bioconjugate Chemistry, 2015, 26, 1582-1589.	1.8	42
25	Reduced Carrier Recombination in PbS - CuInS2 Quantum Dot Solar Cells. Scientific Reports, 2015, 5, 10626.	1.6	44
26	Examining the Polyproline Nanoscopic Ruler in the Context of Quantum Dots. Chemistry of Materials, 2015, 27, 6222-6237.	3.2	30
27	Sulfobetaineâ€“Vinylimidazole Block Copolymers: A Robust Quantum Dot Surface Chemistry Expanding Bioimagingâ€™s Horizons. ACS Nano, 2015, 9, 11479-11489.	7.3	62
28	Near-infrared emitting AgInTe2 and Zn-Ag-In-Te colloidal nanocrystals. Nanoscale Research Letters, 2015, 10, 951.	3.1	14
29	Oriented Bioconjugation of Unmodified Antibodies to Quantum Dots Capped with Copolymeric Ligands as Versatile Cellular Imaging Tools. ACS Applied Materials & Interfaces, 2015, 7, 26904-26913.	4.0	37
30	Enhancing fluorescence in vivo imaging using inorganic nanoprobes. Current Opinion in Biotechnology, 2015, 34, 65-72.	3.3	36
31	Time-gated cell imaging using long lifetime near-infrared-emitting quantum dots for autofluorescence rejection. Journal of Biomedical Optics, 2014, 19, 051208.	1.4	28
32	Time-gated imaging of near-infrared quantum dots forin vivocell tracking. , 2014, , .		0
33	Multidentate polymeric ligands for long-term bioimaging using highly stable and functionalized quantum dots. Proceedings of SPIE, 2014, , .	0.8	0
34	Multimodal Mn-doped Iâ€“IIIâ€“VI quantum dots for near infrared fluorescence and magnetic resonance imaging: from synthesis to in vivo application. Nanoscale, 2014, 6, 9264-9272.	2.8	56
35	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.	1.5	60
36	On the Characterization of the Surface Chemistry of Quantum Dots. Nano Letters, 2013, 13, 5075-5078.	4.5	37

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37	PEGylated Luminescent Gold Nanoclusters: Synthesis, Characterization, Bioconjugation, and Application to Oneâ€•and Twoâ€Photon Cellular Imaging. Particle and Particle Systems Characterization, 2013, 30, 453-466.	1.2	108
38	Design of new quantum dot materials for deep tissue infrared imaging. Advanced Drug Delivery Reviews, 2013, 65, 719-731.	6.6	139
39	Compact tridentate ligands for enhanced aqueous stability of quantum dots and in vivo imaging. Chemical Science, 2013, 4, 411-417.	3.7	32
40	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, 2881-2892.	4.0	60
41	Colloidal CdSe/CdS Dot-in-Plate Nanocrystals with 2D-Polarized Emission. ACS Nano, 2012, 6, 6741-6750.	7.3	106
42	Highly Enhanced Affinity of Multidentate versus Bidentate Zwitterionic Ligands for Long-Term Quantum Dot Bioimaging. Langmuir, 2012, 28, 15177-15184.	1.6	105
43	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.	1.1	47
44	Comparing Intracellular Stability and Targeting of Sulfobetaine Quantum Dots with Other Surface Chemistries in Live Cells. Small, 2012, 8, 1029-1037.	5.2	45
45	Quantum dot-loaded PEGylated poly(alkyl cyanoacrylate) nanoparticles for in vitro and in vivo imaging. Soft Matter, 2011, 7, 6187.	1.2	23
46	Singleâ€Molecule Colocalization Studies Shed Light on the Idea of Fully Emitting versus Dark Single Quantum Dots. Small, 2011, 7, 2101-2108.	5.2	18
47	Adaptive optics for fluorescence wide-field microscopy using spectrally independent guide star and markers. Journal of Biomedical Optics, 2011, 16, 076019.	1.4	18
48	Delivery of quantum dot bioconjugates to the cellular cytosol: release from the endolysosomal system. , 2010, , .		2
49	Le projet DOT-IMAGER. Irbm, 2010, 31, 70-72.	3.7	0
50	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.	1.3	43
51	Small and Stable Sulfobetaine Zwitterionic Quantum Dots for Functional Live-Cell Imaging. Journal of the American Chemical Society, 2010, 132, 4556-4557.	6.6	223
52	Synthesis and Characterization of Near-Infrared Cuâˆ'Inâˆ'Se/ZnS Core/Shell Quantum Dots for In vivo Imaging. Chemistry of Materials, 2010, 22, 6117-6124.	3.2	167
53	Cadmium-Free CuInS₂/ZnS Quantum Dots for Sentinel Lymph Node Imaging with Reduced Toxicity. ACS Nano, 2010, 4, 2531-2538.	7.3	491
54	Investigating Biological Processes at the Single Molecule Level Using Luminescent Quantum Dots. Annals of Biomedical Engineering, 2009, 37, 1934-1959.	1.3	59

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55	Synthesis of Near-Infrared-Emitting, Water-Soluble CdTeSe/CdZnS Core/Shell Quantum Dots. Chemistry of Materials, 2009, 21, 1418-1424.	3.2	83
56	Resonance Energy Transfer Between Luminescent Quantum Dots and Diverse Fluorescent Protein Acceptors. Journal of Physical Chemistry C, 2009, 113, 18552-18561.	1.5	109
57	Using metal complex-labeled peptides for charge transfer-based biosensing with semiconductor quantum dots. Proceedings of SPIE, 2009, , .	0.8	0
58	Intracellular delivery of and sensing with quantum dot bioconjugates. Proceedings of SPIE, 2009, , .	0.8	0
59	Specific cellular delivery and intracellular fate of quantum dot- peptide and quantum dot-polymer nanoassemblies. , 2008, , .		0
60	Fluorine-18-Labeled Phospholipid Quantum Dot Micelles for in Vivo Multimodal Imaging from Whole Body to Cellular Scales. Bioconjugate Chemistry, 2008, 19, 1921-1926.	1.8	113
61	Assembly and intracellular delivery of quantum dot-fluorescent protein bioconjugates. Proceedings of SPIE, 2008, , .	0.8	0
62	Intracellular Delivery of Quantum Dotâˆ’Protein Cargos Mediated by Cell Penetrating Peptides. Bioconjugate Chemistry, 2008, 19, 1785-1795.	1.8	155
63	Interactions between Redox Complexes and Semiconductor Quantum Dots Coupled via a Peptide Bridge. Journal of the American Chemical Society, 2008, 130, 16745-16756.	6.6	115
64	Self-assembled quantum dot-bioconjugates: characterization and use for sensing proteolytic activity. Proceedings of SPIE, 2008, , .	0.8	0
65	Quantum dot-DNA bioconjugates for fluorescence-resonance-energy-transfer-based biosensing. , 2007, 6448, 63.		0
66	Single quantum dot fluorescence resonant energy transfer: probing the heterogeneity in macroscopic samples. , 2007, , .		0
67	Selective cellular delivery of self-assembled quantum dot-peptide bioconjugates. , 2007, , .		0
68	Enhancing the Stability and Biological Functionalities of Quantum Dots via Compact Multifunctional Ligands. Journal of the American Chemical Society, 2007, 129, 13987-13996.	6.6	486
69	A Reactive Peptidic Linker for Self-Assembling Hybrid Quantum Dotâˆ’DNA Bioconjugates. Nano Letters, 2007, 7, 1741-1748.	4.5	189
70	Binding and Neutralization of Lipopolysaccharides by Plant Proanthocyanidins. Journal of Natural Products, 2007, 70, 1718-1724.	1.5	58
71	Kinetics of Metal-Affinity Driven Self-Assembly between Proteins or Peptides and CdSeâˆ’ZnS Quantum Dots. Journal of Physical Chemistry C, 2007, 111, 11528-11538.	1.5	257
72	On the Quenching of Semiconductor Quantum Dot Photoluminescence by Proximal Gold Nanoparticles. Nano Letters, 2007, 7, 3157-3164.	4.5	480

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73	Two-Photon Excitation of Quantum-Dot-Based Fluorescence Resonance Energy Transfer and Its Applications. Advanced Materials, 2007, 19, 1921-1926.	11.1	117
74	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, 2383-2390.	5.5	155
75	Solution-Phase Single Quantum Dot Fluorescence Resonance Energy Transfer. Journal of the American Chemical Society, 2006, 128, 15324-15331.	6.6	272
76	Self-Assembled Quantum Dotâˆ'Peptide Bioconjugates for Selective Intracellular Delivery. Bioconjugate Chemistry, 2006, 17, 920-927.	1.8	246
77	Hydrodynamic Dimensions, Electrophoretic Mobility, and Stability of Hydrophilic Quantum Dots. Journal of Physical Chemistry B, 2006, 110, 20308-20316.	1.2	280
78	Designer Variable Repeat Length Polypeptides as Scaffolds for Surface Immobilization of Quantum Dots. Journal of Physical Chemistry B, 2006, 110, 10683-10690.	1.2	81
79	Hydrodynamic sizes of functional hydrophilic QDs. , 2006, 6096, 281.		1
80	Membrane potential detection with second-harmonic generation and two-photon excited fluorescence: A theoretical comparison. Optics Communications, 2006, 258, 203-209.	1.0	10
81	Biosensing with Luminescent Semiconductor Quantum Dots. Sensors, 2006, 6, 925-953.	2.1	381
82	Probing the effects of spectral overlap on quantum-dot-based FRET: Ensemble and single molecule studies. , 2006, 6096, 91.		0
83	Spectrally resolved energy transfer using quantum dot donors: Ensemble and single-molecule photoluminescence studies. Physical Review B, 2006, 73, .	1.1	60
84	Effects of (Multi)branching of Dipolar Chromophores on Photophysical Properties and Two-Photon Absorption. Journal of Physical Chemistry A, 2005, 109, 3024-3037.	1.1	341
85	TWO-PHOTON ABSORPTION AND FLUORESCENCE WITH QUADRUPOLAR AND BRANCHED CHROMOPHORESâ€"EFFECT OF STRUCTURE AND BRANCHING. Journal of Nonlinear Optical Physics and Materials, 2004, 13, 451-460.	1.1	8
86	Synthesis and Two-Photon Absorption of Highly Soluble Three-Branched Fluorenylene-vinylene Derivatives.. ChemInform, 2004, 35, no.	0.1	0
87	Two-photon absorption and fluorescence in nanoscale multipolar chromophores: effect of dimensionality and charge-symmetry. Journal of Molecular Structure, 2004, 704, 17-24.	1.8	43
88	Enhanced Two-Photon Absorption with Novel Octupolar Propeller-Shaped Fluorophores Derived from Triphenylamine. Organic Letters, 2004, 6, 47-50.	2.4	244
89	Strong Modulation of Two-Photon Excited Fluorescence of Quadripolar Dyes by (De)Protonation. Journal of the American Chemical Society, 2004, 126, 16294-16295.	6.6	98
90	Nanoscale multipolar chromophores for optical limiting in the visible-NIR range based on multiphoton absorption. , 2004, , .		0

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91	Autoconfocal microscopy with nonlinear transmitted light detection. Journal of the Optical Society of America B: Optical Physics, 2004, 21, 1486.	0.9	11
92	Synthesis and two-photon absorption of highly soluble three-branched fluorenylene-vinylene derivatives. Tetrahedron Letters, 2003, 44, 8121-8125.	0.7	103
93	Electro-optic response of second-harmonic generation membrane potential sensors. Optics Letters, 2003, 28, 625.	1.7	62
94	Mechanisms of membrane potential sensing with second-harmonic generation microscopy. Journal of Biomedical Optics, 2003, 8, 428.	1.4	71
95	Photo-induced flip-flop of membrane markers monitored by SHG microscopy. , 2003, , .		0
96	Molecular engineering of nanoscale quadrupolar chromophores for two-photon absorption. , 2003, 4797, 284.		1
97	Photo-induced flip-flop of amphiphilic membrane markers. , 2003, , .		0
98	Photoinduced Flip-Flop of Amphiphilic Molecules in Lipid Bilayer Membranes. Physical Review Letters, 2002, 89, 288104.	2.9	23
99	Microscopy with femtosecond lasers. European Physical Journal Special Topics, 2002, 12, 53-57.	0.2	1
100	Luminescent Semiconductor Quantum Dots in Biology. , 0, , 141-157.		1