W Russ Algar

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8828875/publications.pdf

Version: 2024-02-01

28 papers	860 citations	516710 16 h-index	501196 28 g-index
28 all docs	28 docs citations	28 times ranked	1025 citing authors

#	Article	IF	Citations
1	Photoluminescent Nanoparticles for Chemical and Biological Analysis and Imaging. Chemical Reviews, 2021, 121, 9243-9358.	47.7	162
2	Concurrent Modulation of Quantum Dot Photoluminescence Using a Combination of Charge Transfer and FÃ¶rster Resonance Energy Transfer: Competitive Quenching and Multiplexed Biosensing Modality. Journal of the American Chemical Society, 2017, 139, 363-372.	13.7	64
3	Time-Gated FRET and DNA-Based Photonic Molecular Logic Gates: AND, OR, NAND, and NOR. ACS Sensors, 2017, 2, 1205-1214.	7.8	58
4	Nearâ€Infraredâ€Emitting Boronâ€Difluorideâ€Curcuminoidâ€Based Polymers Exhibiting Thermally Activated Delayed Fluorescence as Biological Imaging Probes. Angewandte Chemie - International Edition, 2021, 60, 18630-18638.	13.8	56
5	Color-Tunable Thermally Activated Delayed Fluorescence in Oxadiazole-Based Acrylic Copolymers: Photophysical Properties and Applications in Ratiometric Oxygen Sensing. ACS Applied Materials & Interfaces, 2020, 12, 6525-6535.	8.0	52
6	Comparison of Semiconducting Polymer Dots and Semiconductor Quantum Dots for Smartphone-Based Fluorescence Assays. Analytical Chemistry, 2019, 91, 10955-10960.	6.5	45
7	Intracellularly Actuated Quantum Dotâ€“Peptideâ€“Doxorubicin Nanobioconjugates for Controlled Drug Delivery via the Endocytic Pathway. Bioconjugate Chemistry, 2018, 29, 136-148.	3.6	44
8	Red-Emissive Cell-Penetrating Polymer Dots Exhibiting Thermally Activated Delayed Fluorescence for Cellular Imaging. Journal of the American Chemical Society, 2021, 143, 13342-13349.	13.7	41
9	Small Surface, Big Effects, and Big Challenges: Toward Understanding Enzymatic Activity at the Inorganic Nanoparticleâ€“Substrate Interface. Langmuir, 2019, 35, 7067-7091.	3.5	39
10	Supraparticle Assemblies of Magnetic Nanoparticles and Quantum Dots for Selective Cell Isolation and Counting on a Smartphone-Based Imaging Platform. Analytical Chemistry, 2019, 91, 11963-11971.	6.5	34
11	More Than a Light Switch: Engineering Unconventional Fluorescent Configurations for Biological Sensing. ACS Chemical Biology, 2018, 13, 1752-1766.	3.4	31
12	Polymer Dots with Enhanced Photostability, Quantum Yield, and Two-Photon Cross-Section using Structurally Constrained Deep-Blue Fluorophores. Journal of the American Chemical Society, 2021, 143, 16976-16992.	13.7	29
13	Nanoparticleâ€“Peptideâ€“Drug Bioconjugates for Unassisted Defeat of Multidrug Resistance in a Model Cancer Cell Line. Bioconjugate Chemistry, 2019, 30, 525-530.	3.6	23
14	Dextran-Functionalized Semiconductor Quantum Dot Bioconjugates for Bioanalysis and Imaging. Bioconjugate Chemistry, 2020, 31, 861-874.	3.6	21
15	Optimization and Changes in the Mode of Proteolytic Turnover of Quantum Dotâ€“Peptide Substrate Conjugates through Moderation of Interfacial Adsorption. ACS Applied Materials & Interfaces, 2017, 9, 30359-30372.	8.0	20
16	Fully Self-Assembled Silica Nanoparticleâ€“Semiconductor Quantum Dot Supra-Nanoparticles and Immunoconjugates for Enhanced Cellular Imaging by Microscopy and Smartphone Camera. ACS Applied Materials & Interfaces, 2020, 12, 33530-33540.	8.0	20
17	Dextran Functionalization of Semiconducting Polymer Dots and Conjugation with Tetrameric Antibody Complexes for Bioanalysis and Imaging. ACS Applied Bio Materials, 2020, 3, 432-440.	4.6	16
18	Mimicking Cell Surface Enhancement of Protease Activity on the Surface of a Quantum Dot Nanoparticle. Bioconjugate Chemistry, 2018, 29, 3783-3792.	3.6	15

#	Article	IF	Citations
19	Utility of PEGylated dithiolane ligands for direct synthesis of water-soluble Au, Ag, Pt, Pd, Cu and AuPt nanoparticles. Chemical Communications, 2018, 54, 1956-1959.	4.1	12
20	Investigation of the Energy Transfer Mechanism Between Semiconducting Polymer Dots and Organic Dyes. Journal of Physical Chemistry C, 2020, 124, 17387-17400.	3.1	12
21	Heroes or Villains? How Nontraditional Luminescent Materials Do and Do Not Enhance Bioanalysis and Imaging. Chemistry of Materials, 2020, 32, 4863-4883.	6.7	12
22	Cucurbituril-mediated quantum dot aggregates formed by aqueous self-assembly for sensing applications. Chemical Communications, 2019, 55, 5495-5498.	4.1	11
23	Affinity Immobilization of Semiconductor Quantum Dots and Metal Nanoparticles on Cellulose Paper Substrates. ACS Applied Materials & Interfaces, 2020, 12, 53462-53474.	8.0	9
24	A Dendrimer-Based Time-Gated Concentric FRET Configuration for Multiplexed Sensing. ACS Nano, 2022, , .	14.6	9
25	Nearâ€Infraredâ€Emitting Boronâ€Difluorideâ€Curcuminoidâ€Based Polymers Exhibiting Thermally Activated Delayed Fluorescence as Biological Imaging Probes. Angewandte Chemie, 2021, 133, 18778-18786.	2.0	8
26	Polyacrylamide gel electrophoresis of semiconductor quantum dots and their bioconjugates: materials characterization and physical insights from spectrofluorimetric detection. Analyst, The, 2018, 143, 1104-1116.	3.5	6
27	Prototype Smartphone-Based Device for Flow Cytometry with Immunolabeling via Supra-nanoparticle Assemblies of Quantum Dots. ACS Measurement Science Au, 2022, 2, 57-66.	4.4	6
28	Yellow fluorescent protein-based label-free tension sensors for monitoring integrin tension. Chemical Communications, 2020, 56, 5556-5559.	4.1	5