Jan Linnros

List of Publications by Year in descending order

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49 papers	1,134 citations	361388 20 h-index	395678 33 g-index
52 all docs	52 docs citations	52 times ranked	1359 citing authors

#	Article	IF	Citations
1	Near-Unity Internal Quantum Efficiency of Luminescent Silicon Nanocrystals with Ligand Passivation. ACS Nano, 2015, 9, 7097-7104.	14.6	118
2	Luminescent Transparent Wood. Advanced Optical Materials, 2017, 5, 1600834.	7.3	116
3	Ultranarrow Luminescence Linewidth of Silicon Nanocrystals and Influence of Matrix. ACS Photonics, 2014, 1, 998-1005.	6.6	67
4	Lightâ€Emission Performance of Silicon Nanocrystals Deduced from Single Quantum Dot Spectroscopy. Advanced Functional Materials, 2008, 18, 2666-2672.	14.9	64
5	Light-Converting Polymer/Si Nanocrystal Composites with Stable 60â€“70% Quantum Efficiency and Their Glass Laminates. ACS Applied Materials & Interfaces, 2017, 9, 30267-30272.	8.0	57
6	Label-Free Surface Protein Profiling of Extracellular Vesicles by an Electrokinetic Sensor. ACS Sensors, 2019, 4, 1399-1408.	7.8	54
7	Luminescence blinking of a Si quantum dot in aSiO2shell. Physical Review B, 2005, 71, .	3.2	52
8	Photodegradation of Organometal Hybrid Perovskite Nanocrystals: Clarifying the Role of Oxygen by Single-Dot Photoluminescence. Journal of Physical Chemistry Letters, 2019, 10, 864-869.	4.6	45
9	Probing silicon quantum dots by single-dot techniques. Nanotechnology, 2017, 28, 072002.	2.6	41
10	Exciton lifetime measurements on single silicon quantum dots. Nanotechnology, 2013, 24, 225204.	2.6	40
11	Single-dot absorption spectroscopy and theory of silicon nanocrystals. Physical Review B, 2016, 93, .	3.2	39
12	Controlled fabrication of individual silicon quantum rods yielding high intensity, polarized light emission. Nanotechnology, 2009, 20, 505301.	2.6	34
13	Highâ€resolution xâ€ray imaging using a structured scintillator. Medical Physics, 2016, 43, 696-701.	3.0	34
14	Multiparametric Profiling of Single Nanoscale Extracellular Vesicles by Combined Atomic Force and Fluorescence Microscopy: Correlation and Heterogeneity in Their Molecular and Biophysical Features. Small, 2021, 17, e2008155.	10.0	31
15	Thermophoresis-Controlled Size-Dependent DNA Translocation through an Array of Nanopores. ACS Nano, 2018, 12, 4574-4582.	14.6	28
16	Nanocrystals brighten transistors. Nature Materials, 2005, 4, 117-119.	27.5	25
17	Photostable Polymer/Si Nanocrystal Bulk Hybrids with Tunable Photoluminescence. ACS Photonics, 2016, 3, 1575-1580.	6.6	22
18	Absence of redshift in the direct bandgap of silicon nanocrystals with reduced size. Nature Nanotechnology, 2017, 12, 930-932.	31.5	22

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19	Low-Cost Synthesis of Silicon Quantum Dots with Near-Unity Internal Quantum Efficiency. Journal of Physical Chemistry Letters, 2021, 12, 8909-8916.	4.6	21
20	Nanopore arrays in a silicon membrane for parallel single-molecule detection: fabrication. Nanotechnology, 2015, 26, 314001.	2.6	20
21	Rapid Trapping as the Origin of Nonradiative Recombination in Semiconductor Nanocrystals. ACS Photonics, 2018, 5, 2990-2996.	6.6	20
22	Large-Area Transparent â€œQuantum Dot Glassâ€•for Building-Integrated Photovoltaics. ACS Photonics, 2022, 9, 2499-2509.	6.6	19
23	Fabricating single silicon quantum rods for repeatable single dot photoluminescence measurements. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 631-634.	1.8	16
24	Electrokinetic effect for molecular recognition: A label-free approach for real-time biosensing. Biosensors and Bioelectronics, 2016, 82, 55-63.	10.1	14
25	Transition from silicon nanowires to isolated quantum dots: Optical and structural evolution. Physical Review B, 2013, 87, .	3.2	13
26	Nanopore arrays in a silicon membrane for parallel single-molecule detection: DNA translocation. Nanotechnology, 2015, 26, 314002.	2.6	12
27	Exploiting Electrostatic Interaction for Highly Sensitive Detection of Tumor-Derived Extracellular Vesicles by an Electrokinetic Sensor. ACS Applied Materials & Interfaces, 2021, 13, 42513-42521.	8.0	12
28	Strong Absorption Enhancement in Si Nanorods. Nano Letters, 2016, 16, 7937-7941.	9.1	11
29	Influence of molecular size and zeta potential in electrokinetic biosensing. Biosensors and Bioelectronics, 2020, 152, 112005.	10.1	10
30	Multiplexed electrokinetic sensor for detection and therapy monitoring of extracellular vesicles from liquid biopsies of non-small-cell lung cancer patients. Biosensors and Bioelectronics, 2021, 193, 113568.	10.1	10
31	Electrokinetic sandwich assay and DNA mediated charge amplification for enhanced sensitivity and specificity. Biosensors and Bioelectronics, 2021, 176, 112917.	10.1	9
32	Avalanche breakdown in surface modified silicon nanowires. Applied Physics Letters, 2007, 91, .	3.3	8
33	Recombinant Spider Silk as Mediator for Oneâ€Step, Chemicalâ€Free Surface Biofunctionalization. Advanced Functional Materials, 2018, 28, 1800206.	14.9	8
34	Polarization of photoluminescence excitation and emission spectra of silicon nanorods within single Si/SiO2 nanowires. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1017-1020.	0.8	7
35	Integration of a Droplet-Based Microfluidic System and Silicon Nanoribbon FET Sensor. Micromachines, 2016, 7, 134.	2.9	7
36	Comparison and optimization of nanoscale extracellular vesicle imaging by scanning electron microscopy for accurate size-based profiling and morphological analysis. Nanoscale Advances, 2021, 3, 3053-3063.	4.6	7

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37	Strong photoacoustic oscillations in layered TlGaSe₂ semiconductor. Physica Status Solidi (B): Basic Research, 2007, 244, 4624-4628.	1.5	5
38	Wafer-scale fabrication of isolated luminescent silicon quantum dots using standard CMOS technology. Nanotechnology, 2020, 31, 505204.	2.6	4
39	Multifunctional silicon inspired by a wing of male Papilio ulysse. Applied Physics Letters, 2012, 100, 033109.	3.3	3
40	X-ray radiation hardness and influence on blinking in Si and CdSe quantum dots. Applied Physics Letters, 2018, 113, .	3.3	3
41	Tight-binding calculations of the optical properties of Si nanocrystals in a SiO2 matrix. Faraday Discussions, 2020, 222, 258-273.	3.2	3
42	Effect of Xâ€ray irradiation on the blinking of single silicon nanocrystals. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2692-2695.	1.8	2
43	Photoluminescence Intensity Enhancement of Single Silicon Quantum Dots on a Metal Membrane with a Spacer. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900575.	1.8	1
44	Silicon at the nanoscale using lithography control: Nanowires, nanopores and quantum dots. , 2016, , .		0
45	Transparent Wood: Luminescent Transparent Wood (Advanced Optical Materials 1/2017). Advanced Optical Materials, 2017, 5, .	7.3	0
46	Impact of Hâ€Uptake from Forming Gas Annealing and Ion Implantation on the Photoluminescence of Si Nanoparticles. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700444.	1.8	0
47	Non-stationary analysis of molecule capture and translocation in nanopore arrays. Journal of Chemical Physics, 2019, 150, 084904.	3.0	0
48	(Invited) Silicon Quantum Dots: From Single-Dot Studies to Highly Luminescent Ensembles. ECS Meeting Abstracts, 2016, , .	0.0	0
49	Large-Sized Nanocrystalline Ultrathin Î²-Ga2O3 Membranes Fabricated by Surface Charge Lithography. Nanomaterials, 2022, 12, 689.	4.1	0