Jan Linnros

List of Publications by Year in descending order

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	Large-Sized Nanocrystalline Ultrathin Î²-Ga2O3 Membranes Fabricated by Surface Charge Lithography. Nanomaterials, 2022, 12, 689.	4.1	0
2	Large-Area Transparent â€œQuantum Dot Glassâ€•for Building-Integrated Photovoltaics. ACS Photonics, 2022, 9, 2499-2509.	6.6	19
3	Electrokinetic sandwich assay and DNA mediated charge amplification for enhanced sensitivity and specificity. Biosensors and Bioelectronics, 2021, 176, 112917.	10.1	9
4	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
5	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
6	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
7	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
8	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
9	Tight-binding calculations of the optical properties of Si nanocrystals in a SiO2 matrix. Faraday Discussions, 2020, 222, 258-273.	3.2	3
10	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
11	Influence of molecular size and zeta potential in electrokinetic biosensing. Biosensors and Bioelectronics, 2020, 152, 112005.	10.1	10
12	Wafer-scale fabrication of isolated luminescent silicon quantum dots using standard CMOS technology. Nanotechnology, 2020, 31, 505204.	2.6	4
13	Label-Free Surface Protein Profiling of Extracellular Vesicles by an Electrokinetic Sensor. ACS Sensors, 2019, 4, 1399-1408.	7.8	54
14	Non-stationary analysis of molecule capture and translocation in nanopore arrays. Journal of Chemical Physics, 2019, 150, 084904.	3.0	0
15	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
16	Thermophoresis-Controlled Size-Dependent DNA Translocation through an Array of Nanopores. ACS Nano, 2018, 12, 4574-4582.	14.6	28
17	Recombinant Spider Silk as Mediator for Oneâ€Step, Chemicalâ€Free Surface Biofunctionalization. Advanced Functional Materials, 2018, 28, 1800206.	14.9	8
18	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

#	Article	IF	Citations
19	X-ray radiation hardness and influence on blinking in Si and CdSe quantum dots. Applied Physics Letters, 2018, 113, .	3.3	3
20	Rapid Trapping as the Origin of Nonradiative Recombination in Semiconductor Nanocrystals. ACS Photonics, 2018, 5, 2990-2996.	6.6	20
21	Transparent Wood: Luminescent Transparent Wood (Advanced Optical Materials 1/2017). Advanced Optical Materials, 2017, 5, .	7.3	0
22	Probing silicon quantum dots by single-dot techniques. Nanotechnology, 2017, 28, 072002.	2.6	41
23	Absence of redshift in the direct bandgap of silicon nanocrystals with reduced size. Nature Nanotechnology, 2017, 12, 930-932.	31.5	22
24	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
25	Luminescent Transparent Wood. Advanced Optical Materials, 2017, 5, 1600834.	7.3	116
26	Integration of a Droplet-Based Microfluidic System and Silicon Nanoribbon FET Sensor. Micromachines, 2016, 7, 134.	2.9	7
27	Highâ€resolution xâ€ray imaging using a structured scintillator. Medical Physics, 2016, 43, 696-701.	3.0	34
28	Silicon at the nanoscale using lithography control: Nanowires, nanopores and quantum dots. , 2016, , .		0
29	Electrokinetic effect for molecular recognition: A label-free approach for real-time biosensing. Biosensors and Bioelectronics, 2016, 82, 55-63.	10.1	14
30	Photostable Polymer/Si Nanocrystal Bulk Hybrids with Tunable Photoluminescence. ACS Photonics, 2016, 3, 1575-1580.	6.6	22
31	Single-dot absorption spectroscopy and theory of silicon nanocrystals. Physical Review B, 2016, 93, .	3.2	39
32	Strong Absorption Enhancement in Si Nanorods. Nano Letters, 2016, 16, 7937-7941.	9.1	11
33	(Invited) Silicon Quantum Dots: From Single-Dot Studies to Highly Luminescent Ensembles. ECS Meeting Abstracts, 2016, , .	0.0	0
34	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
35	Near-Unity Internal Quantum Efficiency of Luminescent Silicon Nanocrystals with Ligand Passivation. ACS Nano, 2015, 9, 7097-7104.	14.6	118
36	Nanopore arrays in a silicon membrane for parallel single-molecule detection: fabrication. Nanotechnology, 2015, 26, 314001.	2.6	20

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37	Nanopore arrays in a silicon membrane for parallel single-molecule detection: DNA translocation. Nanotechnology, 2015, 26, 314002.	2.6	12
38	Ultranarrow Luminescence Linewidth of Silicon Nanocrystals and Influence of Matrix. ACS Photonics, 2014, 1, 998-1005.	6.6	67
39	Transition from silicon nanowires to isolated quantum dots: Optical and structural evolution. Physical Review B, 2013, 87, .	3.2	13
40	Exciton lifetime measurements on single silicon quantum dots. Nanotechnology, 2013, 24, 225204.	2.6	40
41	Multifunctional silicon inspired by a wing of male Papilio ulysse. Applied Physics Letters, 2012, 100, 033109.	3.3	3
42	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
43	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
44	Controlled fabrication of individual silicon quantum rods yielding high intensity, polarized light emission. Nanotechnology, 2009, 20, 505301.	2.6	34
45	Lightâ€Emission Performance of Silicon Nanocrystals Deduced from Single Quantum Dot Spectroscopy. Advanced Functional Materials, 2008, 18, 2666-2672.	14.9	64
46	Avalanche breakdown in surface modified silicon nanowires. Applied Physics Letters, 2007, 91, .	3.3	8
47	Strong photoacoustic oscillations in layered TlGaSe₂ semiconductor. Physica Status Solidi (B): Basic Research, 2007, 244, 4624-4628.	1.5	5
48	Nanocrystals brighten transistors. Nature Materials, 2005, 4, 117-119.	27.5	25
49	Luminescence blinking of a Si quantum dot in aSiO2shell. Physical Review B, 2005, 71, .	3.2	52