Roey Elnathan

List of Publications by Year
in descending order

54 papers	2,696 citations	136950 32 h-index	189892 50 g-index
59 all docs	59 docs citations	59 times ranked	3626 citing authors

#	Article	IF	Citations
1	Supersensitive Detection of Explosives by Silicon Nanowire Arrays. Angewandte Chemie - International Edition, 2010, 49, 6830-6835.	13.8	254
2	Biorecognition Layer Engineering: Overcoming Screening Limitations of Nanowire-Based FET Devices. Nano Letters, 2012, 12, 5245-5254.	9.1	197
3	Supersensitive fingerprinting of explosives by chemically modified nanosensors arrays. Nature Communications, 2014, 5, 4195.	12.8	169
4	Engineering vertically aligned semiconductor nanowire arrays for applications in the life sciences. Nano Today, 2014, 9, 172-196.	11.9	125
5	Maximizing Transfection Efficiency of Vertically Aligned Silicon Nanowire Arrays. Advanced Functional Materials, 2015, 25, 7215-7225.	14.9	103
6	Si Nanowires Forest-Based On-Chip Biomolecular Filtering, Separation and Preconcentration Devices: Nanowires Do it All. Nano Letters, 2012, 12, 4748-4756.	9.1	102
7	Fully Tunable Silicon Nanowire Arrays Fabricated by Soft Nanoparticle Templating. Nano Letters, 2016, 16, 157-163.	9.1	98
8	Advances in Porous Siliconâ€“Based Nanomaterials for Diagnostic and Therapeutic Applications. Advanced Therapeutics, 2019, 2, 1800095.	3.2	92
9	Following Aptamerâ˜Thrombin Binding by Force Measurements. Analytical Chemistry, 2006, 78, 3638-3642.	6.5	90
10	Knocking Down Highly-Ordered Large-Scale Nanowire Arrays. Nano Letters, 2010, 10, 1202-1208.	9.1	87
11	Porous Silicon Nanodiscs for Targeted Drug Delivery. Advanced Functional Materials, 2015, 25, 1137-1145.	14.9	82
12	Confinement-Guided Shaping of Semiconductor Nanowires and Nanoribbons: â€œWriting with Nanowiresâ€• Nano Letters, 2012, 12, 7-12.	9.1	77
13	Compression and deposition of microgel monolayers from fluid interfaces: particle size effects on interface microstructure and nanolithography. Physical Chemistry Chemical Physics, 2017, 19, 8671-8680.	2.8	66
14	A MACEing silicon: Towards single-step etching of defined porous nanostructures for biomedicine. Progress in Materials Science, 2021, 116, 100636.	32.8	65
15	Cellular Deformations Induced by Conical Silicon Nanowire Arrays Facilitate Gene Delivery. Small, 2019, 15, e1904819.	10.0	58
16	Endonuclease-Based Logic Gates and Sensors Using Magnetic Force-Amplified Readout of DNA Scission on Cantilevers. Journal of the American Chemical Society, 2005, 127, 12666-12672.	13.7	54
17	Surface-assisted laser desorption/ionization mass spectrometry using ordered silicon nanopillar arrays. Analyst, The, 2014, 139, 5999-6009.	3.5	54
18	Highly Ordered Large-Scale Neuronal Networks of Individual Cells â€“ Toward Single Cell to 3D Nanowire Intracellular Interfaces. ACS Applied Materials & Interfaces, 2012, 4, 3542-3549.	8.0	51

#	Article	IF	Citations
19	Siliconâ€Nanotubeâ€Mediated Intracellular Delivery Enables Ex Vivo Gene Editing. Advanced Materials, 2020, 32, e2000036.	21.0	51
20	The Aggregation of Au Nanoparticles by an Autonomous DNA Machine Detects Viruses. Small, 2007, 3, 375-379.	10.0	50
21	Versatile Particle-Based Route to Engineer Vertically Aligned Silicon Nanowire Arrays and Nanoscale Pores. ACS Applied Materials & Interfaces, 2015, 7, 23717-23724.	8.0	49
22	Dense Arrays of Uniform Submicron Pores in Silicon and Their Applications. ACS Applied Materials & Interfaces, 2015, 7, 1160-1169.	8.0	48
23	Non-covalent Monolayer-Piercing Anchoring of Lipophilic Nucleic Acids: Preparation, Characterization, and Sensing Applications. Journal of the American Chemical Society, 2012, 134, 280-292.	13.7	47
24	Tutorial: using nanoneedles for intracellular delivery. Nature Protocols, 2021, 16, 4539-4563.	12.0	47
25	Emerging Roles of 1D Vertical Nanostructures in Orchestrating Immune Cell Functions. Advanced Materials, 2020, 32, e2001668.	21.0	45
26	Ordered Silicon Pillar Arrays Prepared by Electrochemical Micromachining: Substrates for High-Efficiency Cell Transfection. ACS Applied Materials & Interfaces, 2016, 8, 29197-29202.	8.0	45
27	Tunable 2D binary colloidal alloys for soft nanotemplating. Nanoscale, 2018, 10, 22189-22195.	5.6	44
28	Precision Surface Microtopography Regulates Cell Fate via Changes to Actomyosin Contractility and Nuclear Architecture. Advanced Science, 2021, 8, 2003186.	11.2	41
29	Engineered nano-bio interfaces for intracellular delivery and sampling: Applications, agency and artefacts. Materials Today, 2020, 33, 87-104.	14.2	40
30	Jellyfishâ€Based Smart Wound Dressing Devices Containing In Situ Synthesized Antibacterial Nanoparticles. Advanced Functional Materials, 2019, 29, 1902783.	14.9	39
31	Antibacterial properties of silver dendrite decorated silicon nanowires. RSC Advances, 2016, 6, 65976-65987.	3.6	36
32	Stable White Lightâ€Emitting Biocomposite Films. Advanced Functional Materials, 2018, 28, 1706967.	14.9	32
33	Synthesis of Hybrid Multicomponent Disklike Nanoparticles. Nano Letters, 2008, 8, 3964-3972.	9.1	28
34	Realization of Molecularâ€Based Transistors. Advanced Materials, 2018, 30, e1706941.	21.0	22
35	Vertically configured nanostructure-mediated electroporation: a promising route for intracellular regulations and interrogations. Materials Horizons, 2020, 7, 2810-2831.	12.2	22
36	Engineering Microâ€“Nanomaterials for Biomedical Translation. Advanced NanoBiomed Research, 2021, 1, 2100002.	3.6	20

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37	Magnetomechanical Detection of the Specific Activities of Endonucleases by Cantilevers. Nano Letters, 2005, 5, 741-744.	9.1	19
38	Efficient Transmission Electron Microscopy Characterization of Cellâ€“Nanostructure Interfacial Interactions. Journal of the American Chemical Society, 2020, 142, 15649-15653.	13.7	18
39	Optically transparent vertical silicon nanowire arrays for live-cell imaging. Journal of Nanobiotechnology, 2021, 19, 51.	9.1	15
40	Polymeric Nanoneedle Arrays Mediate Stiffnessâ€•independent Intracellular Delivery. Advanced Functional Materials, 0, , 2104828.	14.9	15
41	Next Generation Cell Culture Tools Featuring Microâ€•and Nanotopographies for Biological Screening. Advanced Functional Materials, 2022, 32, 2100881.	14.9	14
42	Vertically Aligned Nanostructured Topographies for Human Neural Stem Cell Differentiation and Neuronal Cell Interrogation. Advanced Therapeutics, 2021, 4, 2100061.	3.2	13
43	Controlled Synthesis of Ferromagnetic Semiconducting Silicon Nanotubes. Journal of Physical Chemistry C, 2012, 116, 8000-8007.	3.1	10
44	Monitoring the Activity of Tyrosinase on a Tyramine/Dopamine-Functionalized Surface by Force Microscopy. Nano Letters, 2007, 7, 2030-2036.	9.1	9
45	Changing Fate: Reprogramming Cells via Engineered Nanoscale Delivery Materials. Advanced Materials, 2022, 34, e2108757.	21.0	9
46	Cellular nanotechnologies: Orchestrating cellular processes by engineering silicon nanowires architectures. , 2022, , 231-278.		7
47	The start-ups taking nanoneedles into the clinic. Nature Nanotechnology, 0, , .	31.5	6
48	Reprint of: A MACEing silicon: Towards single-step etching of defined porous nanostructures for biomedicine. Progress in Materials Science, 2021, 120, 100817.	32.8	5
49	Lightâ€Emitting Biocomposites: Stable White Lightâ€Emitting Biocomposite Films (Adv. Funct. Mater.) Tj ETQq1 1 0.784314 rgBT /Ov	14.9	2
50	Cover Picture: Supersensitive Detection of Explosives by Silicon Nanowire Arrays (Angew. Chem. Int.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	15.8	1
51	Next Generation Cell Culture Tools Featuring Microâ€•and Nanotopographies for Biological Screening (Adv. Funct. Mater. 3/2022). Advanced Functional Materials, 2022, 32, .	14.9	1
52	Hierarchical hollow metal nanostructure arrays for selective CO2 conversion. Materials Advances, 0, , .	5.4	1
53	Polymeric Nanoneedle Arrays Mediate Stiffnessâ€•independent Intracellular Delivery (Adv. Funct. Mater.) Tj ETQq1 1 0.784314 rgBT /O	14.9	1
54	The Australian National Fabrication Facility: Micro/nanotechnologies from Concept to Translation to End Users. Advanced Functional Materials, 2022, 32, .	14.9	0