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	Next Generation Cell Culture Tools Featuring Microâ€•and Nanotopographies for Biological Screening. Advanced Functional Materials, 2022, 32, 2100881.	14.9	14
2	Cellular nanotechnologies: Orchestrating cellular processes by engineering silicon nanowires architectures. , 2022, , 231-278.		7
3	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
4	The Australian National Fabrication Facility: Micro/nanotechnologies from Concept to Translation to End Users. Advanced Functional Materials, 2022, 32, .	14.9	0
5	Polymeric Nanoneedle Arrays Mediate Stiffnessâ€Independent Intracellular Delivery (Adv. Funct. Mater.) Tj ETQq1 1 0.784314 rgBT /Ove	14.9	1
6	Changing Fate: Reprogramming Cells via Engineered Nanoscale Delivery Materials. Advanced Materials, 2022, 34, e2108757.	21.0	9
7	A MACEing silicon: Towards single-step etching of defined porous nanostructures for biomedicine. Progress in Materials Science, 2021, 116, 100636.	32.8	65
8	Precision Surface Microtopography Regulates Cell Fate via Changes to Actomyosin Contractility and Nuclear Architecture. Advanced Science, 2021, 8, 2003186.	11.2	41
9	Optically transparent vertical silicon nanowire arrays for live-cell imaging. Journal of Nanobiotechnology, 2021, 19, 51.	9.1	15
10	Vertically Aligned Nanostructured Topographies for Human Neural Stem Cell Differentiation and Neuronal Cell Interrogation. Advanced Therapeutics, 2021, 4, 2100061.	3.2	13
11	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
12	Engineering Microâ€“Nanomaterials for Biomedical Translation. Advanced NanoBiomed Research, 2021, 1, 2100002.	3.6	20
13	Tutorial: using nanoneedles for intracellular delivery. Nature Protocols, 2021, 16, 4539-4563.	12.0	47
14	Engineered nano-bio interfaces for intracellular delivery and sampling: Applications, agency and artefacts. Materials Today, 2020, 33, 87-104.	14.2	40
15	Vertically configured nanostructure-mediated electroporation: a promising route for intracellular regulations and interrogations. Materials Horizons, 2020, 7, 2810-2831.	12.2	22
16	Efficient Transmission Electron Microscopy Characterization of Cellâ€“Nanostructure Interfacial Interactions. Journal of the American Chemical Society, 2020, 142, 15649-15653.	13.7	18
17	Emerging Roles of 1D Vertical Nanostructures in Orchestrating Immune Cell Functions. Advanced Materials, 2020, 32, e2001668.	21.0	45
18	Siliconâ€Nanotubeâ€Mediated Intracellular Delivery Enables Ex Vivo Gene Editing. Advanced Materials, 2020, 32, e2000036.	21.0	51

#	Article	IF	Citations
19	Jellyfishâ€Based Smart Wound Dressing Devices Containing In Situ Synthesized Antibacterial Nanoparticles. Advanced Functional Materials, 2019, 29, 1902783.	14.9	39
20	Cellular Deformations Induced by Conical Silicon Nanowire Arrays Facilitate Gene Delivery. Small, 2019, 15, e1904819.	10.0	58
21	Advances in Porous Siliconâ€“Based Nanomaterials for Diagnostic and Therapeutic Applications. Advanced Therapeutics, 2019, 2, 1800095.	3.2	92
22	Stable White Lightâ€Emitting Biocomposite Films. Advanced Functional Materials, 2018, 28, 1706967.	14.9	32
23	Tunable 2D binary colloidal alloys for soft nanotemplating. Nanoscale, 2018, 10, 22189-22195.	5.6	44
24	Realization of Molecularâ€Based Transistors. Advanced Materials, 2018, 30, e1706941.	21.0	22
25	Lightâ€Emitting Biocomposites: Stable White Lightâ€Emitting Biocomposite Films (Adv. Funct. Mater.) Tj ETQq1 1 0.784314 rgBT /Over	14.9	2
26	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
27	Antibacterial properties of silver dendrite decorated silicon nanowires. RSC Advances, 2016, 6, 65976-65987.	3.6	36
28	Fully Tunable Silicon Nanowire Arrays Fabricated by Soft Nanoparticle Templating. Nano Letters, 2016, 16, 157-163.	9.1	98
29	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
30	Maximizing Transfection Efficiency of Vertically Aligned Silicon Nanowire Arrays. Advanced Functional Materials, 2015, 25, 7215-7225.	14.9	103
31	Dense Arrays of Uniform Submicron Pores in Silicon and Their Applications. ACS Applied Materials & Interfaces, 2015, 7, 1160-1169.	8.0	48
32	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
33	Porous Silicon Nanodiscs for Targeted Drug Delivery. Advanced Functional Materials, 2015, 25, 1137-1145.	14.9	82
34	Surface-assisted laser desorption/ionization mass spectrometry using ordered silicon nanopillar arrays. Analyst, The, 2014, 139, 5999-6009.	3.5	54
35	Supersensitive fingerprinting of explosives by chemically modified nanosensors arrays. Nature Communications, 2014, 5, 4195.	12.8	169
36	Engineering vertically aligned semiconductor nanowire arrays for applications in the life sciences. Nano Today, 2014, 9, 172-196.	11.9	125

#	Article	IF	Citations
37	Controlled Synthesis of Ferromagnetic Semiconducting Silicon Nanotubes. Journal of Physical Chemistry C, 2012, 116, 8000-8007.	3.1	10
38	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
39	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
40	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
41	Biorecognition Layer Engineering: Overcoming Screening Limitations of Nanowire-Based FET Devices. Nano Letters, 2012, 12, 5245-5254.	9.1	197
42	Confinement-Guided Shaping of Semiconductor Nanowires and Nanoribbons: â€œWriting with Nanowiresâ€• Nano Letters, 2012, 12, 7-12.	9.1	77
43	Supersensitive Detection of Explosives by Silicon Nanowire Arrays. Angewandte Chemie - International Edition, 2010, 49, 6830-6835.	13.8	254
44	Cover Picture: Supersensitive Detection of Explosives by Silicon Nanowire Arrays (Angew. Chem. Int.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	13.8	1
45	Knocking Down Highly-Ordered Large-Scale Nanowire Arrays. Nano Letters, 2010, 10, 1202-1208.	9.1	87
46	Synthesis of Hybrid Multicomponent Disklike Nanoparticles. Nano Letters, 2008, 8, 3964-3972.	9.1	28
47	Monitoring the Activity of Tyrosinase on a Tyramine/Dopamine-Functionalized Surface by Force Microscopy. Nano Letters, 2007, 7, 2030-2036.	9.1	9
48	The Aggregation of Au Nanoparticles by an Autonomous DNA Machine Detects Viruses. Small, 2007, 3, 375-379.	10.0	50
49	Following Aptamerâ^'Thrombin Binding by Force Measurements. Analytical Chemistry, 2006, 78, 3638-3642.	6.5	90
50	Magnetomechanical Detection of the Specific Activities of Endonucleases by Cantilevers. Nano Letters, 2005, 5, 741-744.	9.1	19
51	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
52	Polymeric Nanoneedle Arrays Mediate Stiffnessâ€‐independent Intracellular Delivery. Advanced Functional Materials, 0, , 2104828.	14.9	15
53	Hierarchical hollow metal nanostructure arrays for selective CO2 conversion. Materials Advances, 0, , .	5.4	1
54	The start-ups taking nanoneedles into the clinic. Nature Nanotechnology, 0, , .	31.5	6