

Radha Boya

List of Publications by Year in descending order

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Version: 2024-02-01

49
papers

3,402
citations

257429

24
h-index

206102

48
g-index

49
all docs

49
docs citations

49
times ranked

4617
citing authors

#	ARTICLE	IF	CITATIONS
1	Anomalously low dielectric constant of confined water. <i>Science</i> , 2018, 360, 1339-1342.	12.6	627
2	Molecular transport through capillaries made with atomic-scale precision. <i>Nature</i> , 2016, 538, 222-225.	27.8	483
3	Size effect in ion transport through angstrom-scale slits. <i>Science</i> , 2017, 358, 511-513.	12.6	418
4	Sieving hydrogen isotopes through two-dimensional crystals. <i>Science</i> , 2016, 351, 68-70.	12.6	247
5	Complete steric exclusion of ions and proton transport through confined monolayer water. <i>Science</i> , 2019, 363, 145-148.	12.6	207
6	Molecular streaming and its voltage control in Ångström-scale channels. <i>Nature</i> , 2019, 567, 87-90.	27.8	170
7	Ballistic molecular transport through two-dimensional channels. <i>Nature</i> , 2018, 558, 420-424.	27.8	139
8	Large-area molecular patterning with polymer pen lithography. <i>Nature Protocols</i> , 2013, 8, 2548-2560.	12.0	88
9	Functionalized Au ₂₂ Clusters: Synthesis, Characterization, and Patterning. <i>ACS Applied Materials & Interfaces</i> , 2009, 1, 2199-2210.	8.0	81
10	Metal hierarchical patterning by direct nanoimprint lithography. <i>Scientific Reports</i> , 2013, 3, 1078.	3.3	80
11	Flexible Palladium-Based H ₂ Sensor with Fast Response and Low Leakage Detection by Nanoimprint Lithography. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 7274-7281.	8.0	62
12	Water friction in nanofluidic channels made from two-dimensional crystals. <i>Nature Communications</i> , 2021, 12, 3092.	12.8	59
13	Capacitance of Basal Plane and Edge-Oriented Highly Ordered Pyrolytic Graphite: Specific Ion Effects. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 617-623.	4.6	50
14	Flexible and Semitransparent Strain Sensors Based on Micromolded Pd Nanoparticle-Carbon 1/4-Stripes. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 2173-2178.	8.0	48
15	A Real Time Microscopy Study of the Growth of Giant Au Microplates. <i>Crystal Growth and Design</i> , 2011, 11, 320-327.	3.0	39
16	Movable Au microplates as fluorescence enhancing substrates for live cells. <i>Nano Research</i> , 2010, 3, 738-747.	10.4	38
17	Reconstitutable Nanoparticle Superlattices. <i>Nano Letters</i> , 2014, 14, 2162-2167.	9.1	38
18	Langmuir Analysis of Nanoparticle Polyvalency in DNA-Mediated Adsorption. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 9532-9538.	13.8	36

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19	Enhanced nanofluidic transport in activated carbon nanoconduits. <i>Nature Materials</i> , 2022, 21, 696-702.	27.5	36
20	Metal Anion-Alkyl Ammonium Complexes as Direct Write Precursors to Produce Nanopatterns of Metals, Nitrides, Oxides, Sulfides, And Alloys. <i>Journal of the American Chemical Society</i> , 2011, 133, 12706-12713.	13.7	33
21	A cantilever-free approach to dot-matrix nanoprinting. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 12921-12924.	7.1	33
22	A Modified Micromolding Method for Sub-100-nm Direct Patterning of Pd Nanowires. <i>Small</i> , 2009, 5, 2271-2275.	10.0	32
23	Patterned Synthesis of Pd ₄ S: Chemically Robust Electrodes and Conducting Etch Masks. <i>Advanced Functional Materials</i> , 2010, 20, 879-884.	14.9	30
24	Dewetting Assisted Patterning of Polystyrene by Soft Lithography to Create Nanotrenches for Nanomaterial Deposition. <i>ACS Applied Materials & Interfaces</i> , 2009, 1, 257-260.	8.0	25
25	Metal nanowire grating patterns. <i>Nanoscale</i> , 2010, 2, 2035.	5.6	25
26	Gas flow through atomic-scale apertures. <i>Science Advances</i> , 2020, 6, .	10.3	22
27	Translocation of DNA through Ultrathin Nanoslits. <i>Advanced Materials</i> , 2021, 33, e2007682.	21.0	22
28	Pd-Assisted Growth of InAs Nanowires. <i>Crystal Growth and Design</i> , 2010, 10, 4197-4202.	3.0	21
29	Layer-by-Layer Assembly of a Metallomesogen by Dip-Pen Nanolithography. <i>ACS Nano</i> , 2013, 7, 2602-2609.	14.6	21
30	Metallic Conduction in NiS ₂ Nanocrystalline Structures. <i>Journal of Physical Chemistry C</i> , 2011, 115, 10462-10467.	3.1	20
31	Coexistence of Vapor-Liquid-Solid and Vapor-Solid-Solid Growth Modes in Pd-Assisted InAs Nanowires. <i>Small</i> , 2010, 6, 1935-1941.	10.0	19
32	Abnormal Dielectric Constant of Nanoconfined Water between Graphene Layers in the Presence of Salt. <i>Journal of Physical Chemistry B</i> , 2021, 125, 1604-1610.	2.6	19
33	Angstrofluidics: Walking to the Limit. <i>Annual Review of Materials Research</i> , 2022, 52, 189-218.	9.3	16
34	Inkjet printing of palladium alkanethiolates for facile fabrication of metal interconnects and surface-enhanced Raman scattering substrates. <i>Micro and Nano Letters</i> , 2010, 5, 296.	1.3	15
35	Gas permeation through graphdiyne-based nanoporous membranes. <i>Nature Communications</i> , 2022, 13, .	12.8	15
36	Micro- and nanostripes of self-assembled Au nanocrystal superlattices by direct micromolding. <i>Nano Research</i> , 2010, 3, 537-544.	10.4	13

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37	Dithieno[2,3-d;2,3-d]benzo[2,1-b;3,4-b]dithiophene: a novel building-block for a planar copolymer. <i>Polymer Chemistry</i> , 2016, 7, 1545-1548.	3.9	13
38	Gas Permeability and Selectivity of a Porous WS ₂ Monolayer. <i>Journal of Physical Chemistry C</i> , 2021, 125, 25055-25066.	3.1	11
39	An Electrical Rectifier Based on Au Nanoparticle Array Fabricated Using Direct-Write Electron Beam Lithography. <i>Advanced Functional Materials</i> , 2012, 22, 2837-2845.	14.9	9
40	Large-Area Ohmic Top Contact to Vertically Grown Nanowires Using a Free-Standing Au Microplate Electrode. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 1860-1864.	8.0	7
41	Metal-organic molecular device for non-volatile memory storage. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	7
42	Hydrocarbon contamination in angstrom-scale channels. <i>Nanoscale</i> , 2021, 13, 9553-9560.	5.6	7
43	Intricate nature of Pd nanocrystal-hydrogen interaction investigated using thermolysed Pd hexadecylthiolate films. <i>Sensors and Actuators B: Chemical</i> , 2010, 149, 345-351.	7.8	6
44	Direct Micromolding of Bimetals and Transparent Conducting Oxide Using Metal-TOABr Complexes as Single-Source Precursors. <i>ACS Omega</i> , 2020, 5, 20739-20745.	3.5	5
45	Solution-processed soldering of carbon nanotubes for flexible electronics. <i>Nanotechnology</i> , 2013, 24, 075301.	2.6	4
46	Direct Micromolding of Pd Stripes for Electronic Applications. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 152-157.	0.9	3
47	Exploring Voltage Mediated Delamination of Suspended 2D Materials as a Cause of Commonly Observed Breakdown. <i>Journal of Physical Chemistry C</i> , 2020, 124, 430-435.	3.1	2
48	Chapter 3. Direct write nanolithography. <i>SPR Nanoscience</i> , 2013, , 58-80.	0.6	1
49	Direct single-step micromolding method for patterning of various nanomaterials. , 2010, , .		0