

Allon I Hochbaum

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4970468/publications.pdf>

Version: 2024-02-01

44
papers

10,419
citations

182225

30
h-index

340414

39
g-index

46
all docs

46
docs citations

46
times ranked

15345
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrically Fueled Active Supramolecular Materials. <i>Journal of the American Chemical Society</i> , 2022, 144, 7844-7851.	6.6	30
2	Electronic Structure of de Novo Peptide ACC-Hex from First Principles. <i>Journal of Physical Chemistry B</i> , 2022, 126, 4289-4298.	1.2	2
3	Cryo-EM structure of an extracellular <i>Geobacter OmcE</i> cytochrome filament reveals tetrahaem packing. <i>Nature Microbiology</i> , 2022, 7, 1291-1300.	5.9	47
4	Roadmap on emerging concepts in the physical biology of bacterial biofilms: from surface sensing to community formation. <i>Physical Biology</i> , 2021, 18, 051501.	0.8	46
5	Deep Learning Analysis of Vibrational Spectra of Bacterial Lysate for Rapid Antimicrobial Susceptibility Testing. <i>ACS Nano</i> , 2020, 14, 15336-15348.	7.3	75
6	Structural Determination of a Filamentous Chaperone to Fabricate Electronically Conductive Metalloprotein Nanowires. <i>ACS Nano</i> , 2020, 14, 6559-6569.	7.3	20
7	Surface-Enhanced Raman Scattering-Based Odor Compass: Locating Multiple Chemical Sources and Pathogens. <i>ACS Sensors</i> , 2019, 4, 2311-2319.	4.0	32
8	Structure of Microbial Nanowires Reveals Stacked Hemes that Transport Electrons over Micrometers. <i>Cell</i> , 2019, 177, 361-369.e10.	13.5	391
9	Electrical Conductivity, Selective Adhesion, and Biocompatibility in Bacteria-Inspired Peptide-Metal Self-Supporting Nanocomposites. <i>Advanced Materials</i> , 2019, 31, e1807285.	11.1	25
10	Amino-acid-encoded biocatalytic self-assembly enables the formation of transient conducting nanostructures. <i>Nature Chemistry</i> , 2018, 10, 696-703.	6.6	189
11	Longitudinal Monitoring of Biofilm Formation via Robust Surface-Enhanced Raman Scattering Quantification of <i>Pseudomonas aeruginosa</i> -Produced Metabolites. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 12364-12373.	4.0	51
12	Electronic Conductivity in Biomimetic α -Helical Peptide Nanofibers and Gels. <i>ACS Nano</i> , 2018, 12, 2652-2661.	7.3	69
13	Going the Distance: Long-Range Conductivity in Protein and Peptide Bioelectronic Materials. <i>Journal of Physical Chemistry B</i> , 2018, 122, 10403-10423.	1.2	116
14	Conformations of peptoids in nanosheets result from the interplay of backbone energetics and intermolecular interactions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 5647-5651.	3.3	43
15	Effects of Growth Surface Topography on Bacterial Signaling in Coculture Biofilms. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 18531-18539.	4.0	32
16	Driving Chemical Reactions in Plasmonic Nanogaps with Electrohydrodynamic Flow. <i>ACS Nano</i> , 2017, 11, 11317-11329.	7.3	25
17	The Phe-Ile Zipper: A Specific Interaction Motif Drives Antiparallel Coiled-Coil Hexamer Formation. <i>Biochemistry</i> , 2017, 56, 5300-5308.	1.2	13
18	<i>Geobacter sulfurreducens</i> pili support ohmic electronic conduction in aqueous solution. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 21791-21799.	1.3	56

#	ARTICLE	IF	CITATIONS
19	Metabolic fingerprinting of bacteria by fluorescence lifetime imaging microscopy. <i>Scientific Reports</i> , 2017, 7, 3743.	1.6	42
20	Self-assembled plasmonic nanogaps: Enabling early detection of biofilm formation. , 2017, , .		0
21	Robust SERS spectral analysis for quantitative detection of pyocyanin in biological fluids. , 2017, , .		2
22	X-ray Crystallographic Structure and Solution Behavior of an Antiparallel Coiled-Coil Hexamer Formed by <i>de Novo</i> Peptides. <i>Biochemistry</i> , 2016, 55, 3214-3223.	1.2	17
23	Rhamnolipids Mediate an Interspecies Biofilm Dispersal Signaling Pathway. <i>ACS Chemical Biology</i> , 2016, 11, 3068-3076.	1.6	36
24	Surface enhanced Raman scattering for detection of <i>Pseudomonas aeruginosa</i> sensing compounds. , 2015, , .		3
25	Modeling of Polarization Losses of a Microbial Fuel Cell. , 2014, , .		5
26	Control of bacterial biofilm growth on surfaces by nanostructural mechanics and geometry. <i>Nanotechnology</i> , 2011, 22, 494007.	1.3	133
27	Inhibitory Effects of <i>D</i> -Amino Acids on <i>Staphylococcus aureus</i> Biofilm Development. <i>Journal of Bacteriology</i> , 2011, 193, 5616-5622.	1.0	246
28	Semiconductor Nanowires for Energy Conversion. <i>Chemical Reviews</i> , 2010, 110, 527-546.	23.0	1,317
29	Bacteria Pattern Spontaneously on Periodic Nanostructure Arrays. <i>Nano Letters</i> , 2010, 10, 3717-3721.	4.5	265
30	Enhanced thermoelectric performance of rough silicon nanowires. , 2010, , 111-115.		2
31	Thermoelectric properties of p-type PbSe nanowires. <i>Nano Research</i> , 2009, 2, 394-399.	5.8	76
32	Field-Effect Modulation of Seebeck Coefficient in Single PbSe Nanowires. <i>Nano Letters</i> , 2009, 9, 1689-1693.	4.5	110
33	Single Crystalline Mesoporous Silicon Nanowires. <i>Nano Letters</i> , 2009, 9, 3550-3554.	4.5	310
34	Enhanced thermoelectric performance of rough silicon nanowires. <i>Nature</i> , 2008, 451, 163-167.	18.7	3,721
35	Thermal Conductance of Thin Silicon Nanowires. <i>Physical Review Letters</i> , 2008, 101, 105501.	2.9	316
36	Synthesis and Thermoelectrical Characterization of Lead Chalcogenide Nanowires. <i>Advanced Materials</i> , 2007, 19, 3047-3051.	11.1	156

#	ARTICLE	IF	CITATIONS
37	Silicon Vertically Integrated Nanowire Field Effect Transistors. Nano Letters, 2006, 6, 973-977.	4.5	730
38	Electrical Characteristics and Chemical Stability of Non-Oxidized, Methyl-Terminated Silicon Nanowires. Journal of the American Chemical Society, 2006, 128, 8990-8991.	6.6	142
39	Synthesis of High Density, Size-Controlled Si Nanowire Arrays via Porous Anodic Alumina Mask. Chemistry of Materials, 2006, 18, 988-991.	3.2	100
40	Size Fractionation of Metal Nanoparticles by Membrane Filtration. Advanced Materials, 2005, 17, 532-535.	11.1	145
41	Si Nanowire Bridges in Microtrenches: Integration of Growth into Device Fabrication. Advanced Materials, 2005, 17, 2098-2102.	11.1	140
42	Synthesis of Bifunctional Polymer Nanotubes from Silicon Nanowire Templates via Atom Transfer Radical Polymerization. Journal of the American Chemical Society, 2005, 127, 16040-16041.	6.6	66
43	Controlled Growth of Si Nanowire Arrays for Device Integration. Nano Letters, 2005, 5, 457-460.	4.5	644
44	Rational Design of Cytophilic and Cytophobic Polyelectrolyte Multilayer Thin Films. Biomacromolecules, 2003, 4, 96-106.	2.6	432