

# Allon I Hochbaum

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

40  
papers

8,948  
citations

26  
h-index

46  
g-index

46  
ext. papers

9,811  
ext. citations

15  
avg, IF

6.13  
L-index

#	Paper	IF	Citations
40	Roadmap on emerging concepts in the physical biology of bacterial biofilms: from surface sensing to community formation. <i>Physical Biology</i> , <b>2021</b> , 18,	3	16
39	Structural Determination of a Filamentous Chaperone to Fabricate Electronically Conductive Metalloprotein Nanowires. <i>ACS Nano</i> , <b>2020</b> , 14, 6559-6569	16.7	13
38	Deep Learning Analysis of Vibrational Spectra of Bacterial Lysate for Rapid Antimicrobial Susceptibility Testing. <i>ACS Nano</i> , <b>2020</b> , 14, 15336-15348	16.7	28
37	Structure of Microbial Nanowires Reveals Stacked Hemes that Transport Electrons over Micrometers. <i>Cell</i> , <b>2019</b> , 177, 361-369.e10	56.2	223
36	Surface-Enhanced Raman Scattering-Based Odor Compass: Locating Multiple Chemical Sources and Pathogens. <i>ACS Sensors</i> , <b>2019</b> , 4, 2311-2319	9.2	17
35	Electrical Conductivity, Selective Adhesion, and Biocompatibility in Bacteria-Inspired Peptide-Metal Self-Supporting Nanocomposites. <i>Advanced Materials</i> , <b>2019</b> , 31, e1807285	24	17
34	Amino-acid-encoded biocatalytic self-assembly enables the formation of transient conducting nanostructures. <i>Nature Chemistry</i> , <b>2018</b> , 10, 696-703	17.6	133
33	Longitudinal Monitoring of Biofilm Formation via Robust Surface-Enhanced Raman Scattering Quantification of <i>Pseudomonas aeruginosa</i> -Produced Metabolites. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 12364-12373	9.5	36
32	Electronic Conductivity in Biomimetic Helical Peptide Nanofibers and Gels. <i>ACS Nano</i> , <b>2018</b> , 12, 2652-2666	11.7	44
31	Going the Distance: Long-Range Conductivity in Protein and Peptide Bioelectronic Materials. <i>Journal of Physical Chemistry B</i> , <b>2018</b> , 122, 10403-10423	3.4	70
30	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> , <b>2018</b> , 115, 5647-5651	11.5	30
29	Effects of Growth Surface Topography on Bacterial Signaling in Coculture Biofilms. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 18531-18539	9.5	24
28	Driving Chemical Reactions in Plasmonic Nanogaps with Electrohydrodynamic Flow. <i>ACS Nano</i> , <b>2017</b> , 11, 11317-11329	16.7	18
27	The Phe-Ile Zipper: A Specific Interaction Motif Drives Antiparallel Coiled-Coil Hexamer Formation. <i>Biochemistry</i> , <b>2017</b> , 56, 5300-5308	3.2	8
26	<i>Geobacter sulfurreducens</i> pili support ohmic electronic conduction in aqueous solution. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 21791-21799	3.6	43
25	Metabolic fingerprinting of bacteria by fluorescence lifetime imaging microscopy. <i>Scientific Reports</i> , <b>2017</b> , 7, 3743	4.9	25
24	Robust SERS spectral analysis for quantitative detection of pyocyanin in biological fluids <b>2017</b> ,		2

23	Rhamnolipids Mediate an Interspecies Biofilm Dispersal Signaling Pathway. <i>ACS Chemical Biology</i> , <b>2016</b> , 11, 3068-3076	4.9	23
22	X-ray Crystallographic Structure and Solution Behavior of an Antiparallel Coiled-Coil Hexamer Formed by de Novo Peptides. <i>Biochemistry</i> , <b>2016</b> , 55, 3214-23	3.2	12
21	Surface enhanced Raman scattering for detection of <i>Pseudomonas aeruginosa</i> sensing compounds <b>2015</b> ,		2
20	Modeling of Polarization Losses of a Microbial Fuel Cell <b>2014</b> ,		4
19	Control of bacterial biofilm growth on surfaces by nanostructural mechanics and geometry. <i>Nanotechnology</i> , <b>2011</b> , 22, 494007	3.4	113
18	Inhibitory effects of D-amino acids on <i>Staphylococcus aureus</i> biofilm development. <i>Journal of Bacteriology</i> , <b>2011</b> , 193, 5616-22	3.5	192
17	Semiconductor nanowires for energy conversion. <i>Chemical Reviews</i> , <b>2010</b> , 110, 527-46	68.1	1220
16	Bacteria pattern spontaneously on periodic nanostructure arrays. <i>Nano Letters</i> , <b>2010</b> , 10, 3717-21	11.5	232
15	Enhanced thermoelectric performance of rough silicon nanowires <b>2010</b> , 111-115		
14	Thermoelectric properties of p-type PbSe nanowires. <i>Nano Research</i> , <b>2009</b> , 2, 394-399	10	67
13	Field-effect modulation of Seebeck coefficient in single PbSe nanowires. <i>Nano Letters</i> , <b>2009</b> , 9, 1689-93	11.5	97
12	Single crystalline mesoporous silicon nanowires. <i>Nano Letters</i> , <b>2009</b> , 9, 3550-4	11.5	294
11	Enhanced thermoelectric performance of rough silicon nanowires. <i>Nature</i> , <b>2008</b> , 451, 163-7	50.4	3293
10	Thermal conductance of thin silicon nanowires. <i>Physical Review Letters</i> , <b>2008</b> , 101, 105501	7.4	289
9	Synthesis and Thermoelectrical Characterization of Lead Chalcogenide Nanowires. <i>Advanced Materials</i> , <b>2007</b> , 19, 3047-3051	24	149
8	Silicon Vertically Integrated Nanowire Field Effect Transistors. <i>Nano Letters</i> , <b>2006</b> , 6, 973-977	11.5	663
7	Electrical characteristics and chemical stability of non-oxidized, methyl-terminated silicon nanowires. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 8990-1	16.4	134
6	Synthesis of High Density, Size-Controlled Si Nanowire Arrays via Porous Anodic Alumina Mask. <i>Chemistry of Materials</i> , <b>2006</b> , 18, 988-991	9.6	95

5	Synthesis of bifunctional polymer nanotubes from silicon nanowire templates via atom transfer radical polymerization. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 16040-1	16.4	63
4	Controlled growth of Si nanowire arrays for device integration. <i>Nano Letters</i> , <b>2005</b> , 5, 457-60	11.5	581
3	Size Fractionation of Metal Nanoparticles by Membrane Filtration. <i>Advanced Materials</i> , <b>2005</b> , 17, 532-535	5.4	133
2	Si Nanowire Bridges in Microtrenches: Integration of Growth into Device Fabrication. <i>Advanced Materials</i> , <b>2005</b> , 17, 2098-2102	24	129
1	Rational design of cytophilic and cytophobic polyelectrolyte multilayer thin films. <i>Biomacromolecules</i> , <b>2003</b> , 4, 96-106	6.9	411