Daniel A Heller

List of Publications by Citations

96 papers	8,532 citations	46 h-index	92 g-index
158 ext. papers	9,800 ext. citations	14.2 avg, IF	5.9 L-index

#	Paper	IF	Citations
96	Treating metastatic cancer with nanotechnology. *Nature Reviews Cancer*, **2011**, 12, 39-50	31.3	880
95	Near-infrared optical sensors based on single-walled carbon nanotubes. *Nature Materials*, **2005**, 4, 86-92	27	771
94	Single-Walled Carbon Nanotube Spectroscopy in Live Cells: Towards Long-Term Labels and Optical Sensors. *Advanced Materials*, **2005**, 17, 2793-2799	24	455
93	Optical detection of DNA conformational polymorphism on single-walled carbon nanotubes. *Science*, **2006**, 311, 508-11	33.3	435
92	Size-dependent cellular uptake and expulsion of single-walled carbon nanotubes: single particle tracking and a generic uptake model for nanoparticles. *ACS Nano*, **2009**, 3, 149-58	16.7	419
91	A vector-free microfluidic platform for intracellular delivery. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 2082-7	11.5	293
90	Single-particle tracking of endocytosis and exocytosis of single-walled carbon nanotubes in NIH-3T3 cells. *Nano Letters*, **2008**, 8, 1577-85	11.5	278
89	Using Raman Spectroscopy to Elucidate the Aggregation State of Single-Walled Carbon Nanotubes. *Journal of Physical Chemistry B*, **2004**, 108, 6905-6909	3.4	259
88	Multimodal optical sensing and analyte specificity using single-walled carbon nanotubes. *Nature Nanotechnology*, **2009**, 4, 114-20	28.7	255
87	Multimodal biomedical imaging with asymmetric single-walled carbon nanotube/iron oxide nanoparticle complexes. *Nano Letters*, **2007**, 7, 861-7	11.5	250
86	The rational design of nitric oxide selectivity in single-walled carbon nanotube near-infrared fluorescence sensors for biological detection. *Nature Chemistry*, **2009**, 1, 473-81	17.6	212
85	Concomitant length and diameter separation of single-walled carbon nanotubes. *Journal of the American Chemical Society*, **2004**, 126, 14567-73	16.4	210
84	Molecular recognition using corona phase complexes made of synthetic polymers adsorbed on carbon nanotubes. *Nature Nanotechnology*, **2013**, 8, 959-68	28.7	205
83	Detection of single-molecule H2O2 signalling from epidermal growth factor receptor using fluorescent single-walled carbon nanotubes. *Nature Nanotechnology*, **2010**, 5, 302-9	28.7	205
82	Understanding the Nature of the DNA-Assisted Separation of Single-Walled Carbon Nanotubes Using Fluorescence and Raman Spectroscopy. *Nano Letters*, **2004**, 4, 543-550	11.5	175
81	Single molecule detection of nitric oxide enabled by d(AT)15 DNA adsorbed to near infrared fluorescent single-walled carbon nanotubes. *Journal of the American Chemical Society*, **2011**, 133, 567-81	16.4	140
80	Resonant Raman excitation profiles of individually dispersed single walled carbon nanotubes in solution. *Applied Physics A: Materials Science and Processing*, **2004**, 78, 1147-1155	2.6	127

79	Photoelectrochemical complexes for solar energy conversion that chemically and autonomously regenerate. *Nature Chemistry*, **2010**, 2, 929-936	17.6	120
78	P-selectin is a nanotherapeutic delivery target in the tumor microenvironment. *Science Translational Medicine*, **2016**, 8, 345ra87	17.5	112
77	A Carbon Nanotube Reporter of miRNA Hybridization Events In Vivo. *Nature Biomedical Engineering* , **2017**, 1,	19	111
76	Near-infrared fluorescent sensors based on single-walled carbon nanotubes for life sciences applications. *ChemSusChem*, **2011**, 4, 848-63	8.3	102
75	Sonication-induced changes in chiral distribution: A complication in the use of single-walled carbon nanotube fluorescence for determining species distribution. *Carbon*, **2005**, 43, 651-653	10.4	98
74	Senescence-Induced Vascular Remodeling Creates Therapeutic Vulnerabilities in Pancreas Cancer. *Cell*, **2020**, 181, 424-441.e21	56.2	96
73	Quantitative self-assembly prediction yields targeted nanomedicines. *Nature Materials*, **2018**, 17, 361-368	37	87
72	Peptide secondary structure modulates single-walled carbon nanotube fluorescence as a chaperone sensor for nitroaromatics. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 8544-9	11.5	87
71	Achieving Individual-Nanotube Dispersion at High Loading in Single-Walled Carbon Nanotube Composites. *Advanced Materials*, **2005**, 17, 980-984	24	86
70	Targeted drug delivery strategies for precision medicines.. *Nature Reviews Materials*, **2021**, 6, 351-370	73.3	86
69	Hyperspectral Microscopy of Near-Infrared Fluorescence Enables 17-Chirality Carbon Nanotube Imaging. *Scientific Reports*, **2015**, 5, 14167	4.9	83
68	Mesoscale nanoparticles selectively target the renal proximal tubule epithelium. *Nano Letters*, **2015** , 15, 2358-64	11.5	82
67	Application of Nanoparticle Antioxidants to Enable Hyperstable Chloroplasts for Solar Energy Harvesting. *Advanced Energy Materials*, **2013**, 3, 881-893	21.8	80
66	Noninvasive ovarian cancer biomarker detection via an optical nanosensor implant. *Science Advances*, **2018**, 4, eaaq1090	14.3	78
65	A luciferase/single-walled carbon nanotube conjugate for near-infrared fluorescent detection of cellular ATP. *Angewandte Chemie - International Edition*, **2010**, 49, 1456-9	16.4	78
64	Stochastic analysis of stepwise fluorescence quenching reactions on single-walled carbon nanotubes: single molecule sensors. *Nano Letters*, **2008**, 8, 4299-304	11.5	76
63	Tumour-specific PI3K inhibition via nanoparticle-targeted delivery in head and neck squamous cell carcinoma. *Nature Communications*, **2017**, 8, 14292	17.4	71
62	Redox-active nanomaterials for nanomedicine applications. *Nanoscale*, **2017**, 9, 15226-15251	7.7	65

61	Exciton antennas and concentrators from core-shell and corrugated carbon nanotube filaments of homogeneous composition. *Nature Materials*, **2010**, 9, 833-9	27	63
60	A rapid, direct, quantitative, and label-free detector of cardiac biomarker troponin T using near-infrared fluorescent single-walled carbon nanotube sensors. *Advanced Healthcare Materials*, **2014**, 3, 412-23	10.1	61
59	Modular Tclick-in-emulsionTbone-targeted nanogels. *Advanced Materials*, **2013**, 25, 1449-54	24	59
58	Cell Membrane Proteins Modulate the Carbon Nanotube Optical Bandgap via Surface Charge Accumulation. *ACS Nano*, **2016**, 10, 499-506	16.7	56
57	Patterned networks of mouse hippocampal neurons on peptide-coated gold surfaces. *Biomaterials*, **2005**, 26, 883-9	15.6	56
56	Divalent Ion and Thermally Induced DNA Conformational Polymorphism on Single-walled Carbon Nanotubes. *Macromolecules*, **2007**, 40, 6731-6739	5.5	53
55	Nanomedicines for kidney diseases. *Kidney International*, **2016**, 90, 740-5	9.9	52
54	A Carbon Nanotube Optical Reporter Maps Endolysosomal Lipid Flux. *ACS Nano*, **2017**, 11, 10689-10703	16.7	52
53	Selective Nanoparticle Targeting of the Renal Tubules. *Hypertension*, **2018**, 71, 87-94	8.5	52
52	Length-dependent optical effects in single walled carbon nanotubes. *Journal of Physical Chemistry B*, **2008**, 112, 6211-3	3.4	48
51	An optical nanoreporter of endolysosomal lipid accumulation reveals enduring effects of diet on hepatic macrophages in vivo. *Science Translational Medicine*, **2018**, 10,	17.5	47
50	HIV Detection via a Carbon Nanotube RNA Sensor. *ACS Sensors*, **2019**, 4, 1236-1244	9.2	46
49	Carbon nanotube population analysis from Raman and photoluminescence intensities. *Applied Physics Letters*, **2006**, 88, 023109	3.4	46
48	A Carbon Nanotube Optical Sensor Reports Nuclear Entry via a Noncanonical Pathway. *ACS Nano*, **2017**, 11, 3875-3882	16.7	42
47	DNA-Carbon Nanotube Complexation Affinity and Photoluminescence Modulation Are Independent. *ACS Applied Materials & Interfaces*, **2017**, 9, 21397-21405	9.5	42
46	Banning carbon nanotubes would be scientifically unjustified and damaging to innovation. *Nature Nanotechnology*, **2020**, 15, 164-166	28.7	40
45	A Fluorescent Carbon Nanotube Sensor Detects the Metastatic Prostate Cancer Biomarker uPA. *ACS Sensors*, **2018**, 3, 1838-1845	9.2	36
44	Helical polycarbodiimide cloaking of carbon nanotubes enables inter-nanotube exciton energy transfer modulation. *Journal of the American Chemical Society*, **2014**, 136, 15545-50	16.4	35

43	Color-blind fluorescence detection for four-color DNA sequencing. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 5346-51	11.5	35
42	Role of adsorbed surfactant in the reaction of aryl diazonium salts with single-walled carbon nanotubes. *Langmuir*, **2012**, 28, 1309-21	4	33
41	Lipid-modified aminoglycoside derivatives for in vivo siRNA delivery. *Advanced Materials*, **2013**, 25, 4641-5	24	33
40	Measuring uptake dynamics of multiple identifiable carbon nanotube species via high-speed confocal Raman imaging of live cells. *Nano Letters*, **2012**, 12, 6170-4	11.5	31
39	Photoluminescent carbon nanotubes interrogate the permeability of multicellular tumor spheroids. *Carbon*, **2016**, 97, 99-109	10.4	30
38	Synthetic molecular recognition nanosensor paint for microalbuminuria. *Nature Communications*, **2019**, 10, 3605	17.4	30
37	Progress Towards Applications of Carbon Nanotube Photoluminescence. *ECS Journal of Solid State Science and Technology*, **2017**, 6, M3075-M3077	2	25
36	Selective nanoparticle-mediated targeting of renal tubular Toll-like receptor 9 attenuates ischemic acute kidney injury. *Kidney International*, **2020**, 98, 76-87	9.9	24
35	Advances in the clinical translation of nanotechnology. *Current Opinion in Biotechnology*, **2017**, 46, 66-73	11.4	23
34	Polymer cloaking modulates the carbon nanotube protein corona and delivery into cancer cells. *Journal of Materials Chemistry B*, **2017**, 5, 6637-6644	7.3	19
33	Long-term in vivo biocompatibility of single-walled carbon nanotubes. *PLoS ONE*, **2020**, 15, e0226791	3.7	17
32	Synthesis, pharmacokinetics, and biological use of lysine-modified single-walled carbon nanotubes. *International Journal of Nanomedicine*, **2014**, 9, 4245-55	7.3	16
31	Control of Carbon Nanotube Solvatochromic Response to Chemotherapeutic Agents. *ACS Applied Materials & Interfaces*, **2017**, 9, 37947-37953	9.5	14
30	The Chemistry of Single-Walled Nanotubes. *MRS Bulletin*, **2009**, 34, 950-961	3.2	14
29	Single Nanotube Spectral Imaging To Determine Molar Concentrations of Isolated Carbon Nanotube Species. *Analytical Chemistry*, **2017**, 89, 1073-1077	7.8	13
28	An Nanosensor Measures Compartmental Doxorubicin Exposure. *Nano Letters*, **2019**, 19, 4343-4354	11.5	12
27	A perception-based nanosensor platform to detect cancer biomarkers. *Science Advances*, **2021**, 7, eabj0852	14.3	10
26	Harnessing nanotechnology to expand the toolbox of chemical biology. *Nature Chemical Biology*, **2021**, 17, 129-137	11.7	10

25	Nanoreporter of an Enzymatic Suicide Inactivation Pathway. *Nano Letters*, **2020**, 20, 7819-7827	11.5	9
24	Electrostatic Screening Modulates Analyte Binding and Emission of Carbon Nanotubes. *Journal of Physical Chemistry C*, **2018**, 122, 10592-10599	3.8	9
23	Glutathione-S-transferase Fusion Protein Nanosensor. *Nano Letters*, **2020**, 20, 7287-7295	11.5	8
22	Dynamic manipulation of modes in an optical waveguide using dielectrophoresis. *Electrophoresis*, **2012**, 33, 2075-85	3.6	7
21	Electroporation-induced changes in tumor vasculature and microenvironment can promote the delivery and increase the efficacy of sorafenib nanoparticles. *Bioelectrochemistry*, **2019**, 130, 107328	5.6	6
20	Tumor-targeted nanoparticles improve the therapeutic index of BCL2 and MCL1 dual inhibition. *Blood*, **2021**, 137, 2057-2069	2.2	6
19	Detection of ovarian cancer via the spectral fingerprinting of quantum-defect-modified carbon nanotubes in serum by machine learning.. *Nature Biomedical Engineering*, **2022**,	19	6
18	En route to single-step, two-phase purification of carbon nanotubes facilitated by high-throughput spectroscopy. *Scientific Reports*, **2021**, 11, 10618	4.9	5
17	Optical Voltammetry of Polymer-Encapsulated Single-Walled Carbon Nanotubes. *Journal of Physical Chemistry C*, **2019**, 123, 24200-24208	3.8	4
16	Kidney-Targeted Renalase Agonist Prevents Cisplatin-Induced Chronic Kidney Disease by Inhibiting Regulated Necrosis and Inflammation.. *Journal of the American Society of Nephrology: JASN*, **2021**,	12.7	4
15	Renal proximal tubular NEMO plays a critical role in ischemic acute kidney injury. *JCI Insight*, **2020**, 5,	9.9	4
14	Single-Chirality Near-Infrared Carbon Nanotube Sub-Cellular Imaging and FRET Probes. *Nano Letters*, **2021**, 21, 6441-6448	11.5	4
13	Merging Data Curation and Machine Learning to Improve Nanomedicines.. *Advanced Drug Delivery Reviews*, **2022**, 114172	18.5	4
12	Modulating Single Walled Carbon Nanotube Fluorescence in Response to Specific Molecular Adsorption. *AIP Conference Proceedings*, **2005**,	0	3
11	Can Fish and Cell Phones Teach Us about Our Health?. *ACS Sensors*, **2019**, 4, 2566-2570	9.2	1
10	Molecular recognition using corona phase complexes made of synthetic polymers adsorbed on carbon nanotubes **2014**,		1
9	Kidney-Targeted Redox Scavenger Therapy Prevents Cisplatin-Induced Acute Kidney Injury.. *Frontiers in Pharmacology*, **2021**, 12, 790913	5.6	1
8	Near Infrared Spectral Imaging of Carbon Nanotubes for Biomedicine **2020**, 103-132		1

List of Publications

7	The IFNΕPDL1 Pathway Enhances CD8T-DCT Interaction to Promote Hypertension.. *Circulation Research*, **2022**, 101161CIRCRESAHA121320373	15.7	1
6	Drug Delivery: Lipid-Modified Aminoglycoside Derivatives for In Vivo siRNA Delivery (Adv. Mater. 33/2013). *Advanced Materials*, **2013**, 25, 4680-4680	24	
5	Non-Covalent Coatings on Carbon Nanotubes Mediate Photosensitizer Interactions. *ACS Applied Materials & Interfaces*, **2021**, 13, 51343-51350	9.5	
4	Machine Learning for Molecular Perceptron: A Perception-Based Sensing System. *ECS Meeting Abstracts*, **2020**, MA2020-01, 632-632	0	
3	Developing Ovarian Cancer Sensors Using Molecular Perceptron. *ECS Meeting Abstracts*, **2021**, MA2021-01, 538-538	0	
2	Nanotargeting to the kidney **2022**, 439-449		
1	Emerging technologies in cancer detection **2022**, 353-392		