Paul E Sheehan

List of Publications by Year
in descending order

72	13,631	87888 38	95266 68
papers	citations	h-index	g-index

72	72	72	16152
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nanobeam Mechanics: Elasticity, Strength, and Toughness of Nanorods and Nanotubes. Science, 1997, 277, 1971-1975.	12.6	4,437
2	Reduced Graphene Oxide Molecular Sensors. Nano Letters, 2008, 8, 3137-3140.	9.1	1,635
3	Properties of Fluorinated Graphene Films. Nano Letters, 2010, 10, 3001-3005.	9.1	980
4	A biosensor based on magnetoresistance technology. Biosensors and Bioelectronics, 1998, 13, 731-739.	10.1	757
5	Nanoscale Tunable Reduction of Graphene Oxide for Graphene Electronics. Science, 2010, 328, 1373-1376.	12.6	658
6	Detection Limits for Nanoscale Biosensors. Nano Letters, 2005, 5, 803-807.	9.1	612
7	The BARC biosensor applied to the detection of biological warfare agents. Biosensors and Bioelectronics, 2000, 14, 805-813.	10.1	418
8	Wafer-scale Reduced Graphene Oxide Films for Nanomechanical Devices. Nano Letters, 2008, 8, 3441-3445.	9.1	399
9	Design and performance of GMR sensors for the detection of magnetic microbeads in biosensors. Sensors and Actuators A: Physical, 2003, 107, 209-218.	4.1	330
10	Nanotribology and Nanofabrication of MoO3 Structures by Atomic Force Microscopy. Science, 1996, 272, 1158-1161.	12.6	252
11	Graphene synthesis. Diamond and Related Materials, 2014, 46, 25-34.	3.9	215
12	Thiol Diffusion and the Role of Humidity in â€œDip Pen Nanolithographyâ€• Physical Review Letters, 2002, 88, 156104.	7.8	178
13	Nanoscale deposition of solid inks via thermal dip pen nanolithography. Applied Physics Letters, 2004, 85, 1589-1591.	3.3	155
14	The Assembly of Single-Layer Graphene Oxide and Graphene Using Molecular Templates. Nano Letters, 2008, 8, 3141-3145.	9.1	145
15	Chemical Gradients on Graphene To Drive Droplet Motion. ACS Nano, 2013, 7, 4746-4755.	14.6	142
16	Fluorination of Graphene Enhances Friction Due to Increased Corrugation. Nano Letters, 2014, 14, 5212-5217.	9.1	142
17	Realâ€Time DNA Detection Using Reduced Graphene Oxide Field Effect Transistors. Advanced Materials, 2010, 22, 5297-5300.	21.0	141
18	High-Quality Uniform Dry Transfer of Graphene to Polymers. Nano Letters, 2012, 12, 102-107.	9.1	128

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19	Direct mechanochemical cleavage of functional groups from graphene. Nature Communications, 2015, 6, 6467.	12.8	111
20	Chemical Stability of Graphene Fluoride Produced by Exposure to XeF₂. Nano Letters, 2013, 13, 4311-4316.	9.1	109
21	Reduction of graphene oxide by electron beam generated plasmas produced in methane/argon mixtures. Carbon, 2010, 48, 3382-3390.	10.3	99
22	Fabrication, Optimization, and Use of Graphene Field Effect Sensors. Analytical Chemistry, 2013, 85, 509-521.	6.5	99
23	Conductance Anisotropy in Epitaxial Graphene Sheets Generated by Substrate Interactions. Nano Letters, 2010, 10, 1559-1562.	9.1	97
24	Chemically Isolated Graphene Nanoribbons Reversibly Formed in Fluorographene Using Polymer Nanowire Masks. Nano Letters, 2011, 11, 5461-5464.	9.1	79
25	Graphene as Electrophile: Reactions of Graphene Fluoride. Journal of Physical Chemistry C, 2015, 119, 10507-10512.	3.1	70
26	van der Waals Screening by Single-Layer Graphene and Molybdenum Disulfide. ACS Nano, 2014, 8, 12410-12417.	14.6	69
27	Wear-Resistant Diamond Nanoprobe Tips with Integrated Silicon Heater for Tip-Based Nanomanufacturing. ACS Nano, 2010, 4, 3338-3344.	14.6	68
28	High-Density Amine-Terminated Monolayers Formed on Fluorinated CVD-Grown Graphene. Langmuir, 2012, 28, 7957-7961.	3.5	67
29	Engineering Graphene Mechanical Systems. Nano Letters, 2012, 12, 4212-4218.	9.1	67
30	Aminated graphene for DNA attachment produced via plasma functionalization. Applied Physics Letters, 2012, 100, .	3.3	65
31	Direct Writing of a Conducting Polymer with Molecular-Level Control of Physical Dimensions and Orientation. Journal of the American Chemical Society, 2006, 128, 6774-6775.	13.7	64
32	Attomolar protein detection in complex sample matrices with semi-homogeneous fluidic force discrimination assays. Biosensors and Bioelectronics, 2009, 24, 1109-1115.	10.1	62
33	Quantifying the Magnetic Advantage in Magnetotaxis. Biophysical Journal, 2006, 91, 1098-1107.	0.5	59
34	Patterning Magnetic Regions in Hydrogenated Graphene Via Eâ€Beam Irradiation. Advanced Materials, 2015, 27, 1774-1778.	21.0	58
35	Maskless Nanoscale Writing of Nanoparticleâ^'Polymer Composites and Nanoparticle Assemblies using Thermal Nanoprobes. Nano Letters, 2010, 10, 129-133.	9.1	56
36	Chemical hydrogenation of single-layer graphene enables completely reversible removal of electrical conductivity. Carbon, 2014, 72, 348-353.	10.3	52

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37	Friction between van der Waals Solids during Lattice Directed Sliding. Nano Letters, 2017, 17, 4116-4121.	9.1	48
38	The utility of Shewanella japonica for microbial fuel cells. Bioresource Technology, 2011, 102, 290-297.	9.6	41
39	Nanoscale Reduction of Graphene Fluoride via Thermochemical Nanolithography. ACS Nano, 2013, 7, 6219-6224.	14.6	39
40	Dip-Pen Nanolithography of Chemical Templates on Silicon Oxide. Advanced Materials, 2004, 16, 1013-1016.	21.0	37
41	The wear kinetics of NaCl under dry nitrogen and at low humidities. Chemical Physics Letters, 2005, 410, 151-155.	2.6	34
42	Scanning Probe Lithography of Polymers: Tailoring Morphology and Functionality at the Nanometer Scale. Scanning, 2008, 30, 172-183.	1.5	32
43	Understanding and Manipulating Inorganic Materials with Scanning Probe Microscopes. Angewandte Chemie International Edition in English, 1996, 35, 686-704.	4.4	31
44	The nanopatterning of a stimulus-responsive polymer by thermal dip-pen nanolithography. Soft Matter, 2008, 4, 1844.	2.7	30
45	Electric Field Driven Electron Self-Exchanges in Dry Nafion Containing Mixed-Valent Osmium Bipyridine. The Journal of Physical Chemistry, 1994, 98, 5127-5134.	2.9	23
46	Robust reduction of graphene fluoride using an electrostatically biased scanning probe. Nano Research, 2013, 6, 767-774.	10.4	23
47	Nanopatterning of GeTe phase change films via heated-probe lithography. Nanoscale, 2017, 9, 8815-8824.	5.6	23
48	Low temperature elastic properties of chemically reduced and CVD-grown graphene thin films. Diamond and Related Materials, 2010, 19, 875-878.	3.9	20
49	Transfer of Chemically Modified Graphene with Retention of Functionality for Surface Engineering. Nano Letters, 2016, 16, 1455-1461.	9.1	19
50	Nanomachining, manipulation and fabrication by force microscopy. Nanotechnology, 1996, 7, 236-240.	2.6	18
51	A simple pen-spotting method for arraying biomolecules on solid substrates. Biosensors and Bioelectronics, 2003, 18, 1455-1459.	10.1	18
52	Local Peeling of Graphene. Science, 2011, 331, 1146-1147.	12.6	12
53	Protection from Below: Stabilizing Hydrogenated Graphene Using Graphene Underlayers. Langmuir, 2017, 33, 13749-13756.	3.5	12
54	Structural transformations in chemically modified graphene. Solid State Communications, 2012, 152, 1990-1998.	1.9	10

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55	Graphene veils: A versatile surface chemistry for sensors. BioTechniques, 2014, 57, 21-30.	1.8	10
56	Etch free graphene transfer to polymers. Surface and Coatings Technology, 2014, 241, 118-122.	4.8	10
57	Activation of radical addition to graphene by chemical hydrogenation. RSC Advances, 2016, 6, 93356-93362.	3.6	9
58	Direct-write polymer nanolithography in ultra-high vacuum. Beilstein Journal of Nanotechnology, 2012, 3, 52-56.	2.8	7
59	Nature Inspires Sensors To Do More with Less. ACS Nano, 2014, 8, 9729-9732.	14.6	7
60	Dry graphene transfer print to polystyrene and ultra-high molecular weight polyethylene â^' Detailed chemical, structural, morphological and electrical characterization. Carbon, 2015, 86, 288-300.	10.3	7
61	Enhanced protonic conductivity and IFET behavior in individual proton-doped electrospun chitosan fibers. Journal of Materials Chemistry C, 2019, 7, 10833-10840.	5.5	6
62	Chemistries for Making Additive Nanolithography in OrmoComp Permissive for Cell Adhesion and Growth. ACS Applied Materials & Interfaces, 2019, 11, 19793-19798.	8.0	6
63	Transferring Electronic Devices with Hydrogenated Graphene. Advanced Materials Interfaces, 2019, 6, 1801974.	3.7	6
64	Reversible electron-induced conductance in polymer nanostructures. Journal of Applied Physics, 2010, 107, .	2.5	5
65	Optimal method for efficiently removing extracellular nanofilaments from Shewanella oneidensis MR-1. Journal of Microbiological Methods, 2011, 87, 320-324.	1.6	4
66	Fluorinated Graphene Enables the Growth of Inorganic Thin Films by Chemical Bath Deposition on Otherwise Inert Substrates. ACS Applied Materials & Interfaces, 2017, 9, 677-683.	8.0	3
67	Characterizing Multi-layer Pristine Graphene, Its Contaminants, and Their Origin Using Transmission Electron Microscopy. Microscopy and Microanalysis, 2017, 23, 1740-1741.	0.4	3
68	Graphene planar lightwave circuit sensors for chemical detection. Proceedings of SPIE, 2017, , .	0.8	2
69	Hydrogen-assisted graphene transfer: surface engineering for chemical, electronic, and biological applications. , 2018, , .		1
70	Nanofabrication using heated probe tips. , 2011, , .		0
71	Hydrogenated Graphene: Transferring Electronic Devices with Hydrogenated Graphene (Adv. Mater.) Tj ETQq1 1 0.784314 rgBT /Over	3.7	0
72	Hybridized graphene materials. , 2018, , .		0