

Jeffrey A Fagan

List of Publications by Year in descending order

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94269

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all docs

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docs citations

95
times ranked

4587
citing authors

#	ARTICLE	IF	CITATIONS
1	Spontaneous Partition of Carbon Nanotubes in Polymer-Modified Aqueous Phases. <i>Journal of the American Chemical Society</i> , 2013, 135, 6822-6825.	6.6	292
2	Comparison of the Quality of Aqueous Dispersions of Single Wall Carbon Nanotubes Using Surfactants and Biomolecules. <i>Langmuir</i> , 2008, 24, 5070-5078.	1.6	225
3	Isolation of Specific Small-Diameter Single-Wall Carbon Nanotube Species via Aqueous Two-Phase Extraction. <i>Advanced Materials</i> , 2014, 26, 2800-2804.	11.1	215
4	Relationship between dispersion metric and properties of PMMA/SWNT nanocomposites. <i>Polymer</i> , 2007, 48, 4855-4866.	1.8	162
5	Length Fractionation of Carbon Nanotubes Using Centrifugation. <i>Advanced Materials</i> , 2008, 20, 1609-1613.	11.1	160
6	Differentiating Left- and Right-Handed Carbon Nanotubes by DNA. <i>Journal of the American Chemical Society</i> , 2016, 138, 16677-16685.	6.6	160
7	Length-Dependent Optical Effects in Single-Wall Carbon Nanotubes. <i>Journal of the American Chemical Society</i> , 2007, 129, 10607-10612.	6.6	138
8	Isolation of >1 nm Diameter Single-Wall Carbon Nanotube Species Using Aqueous Two-Phase Extraction. <i>ACS Nano</i> , 2015, 9, 5377-5390.	7.3	137
9	Influence of Nanotube Length on the Optical and Conductivity Properties of Thin Single-Wall Carbon Nanotube Networks. <i>ACS Nano</i> , 2008, 2, 1879-1884.	7.3	121
10	Quantification of Carbon Nanotubes in Environmental Matrices: Current Capabilities, Case Studies, and Future Prospects. <i>Environmental Science & Technology</i> , 2016, 50, 4587-4605.	4.6	104
11	DNA-directed nanofabrication of high-performance carbon nanotube field-effect transistors. <i>Science</i> , 2020, 368, 878-881.	6.0	99
12	Precise pitch-scaling of carbon nanotube arrays within three-dimensional DNA nanotrenches. <i>Science</i> , 2020, 368, 874-877.	6.0	97
13	Measuring Agglomerate Size Distribution and Dependence of Localized Surface Plasmon Resonance Absorbance on Gold Nanoparticle Agglomerate Size Using Analytical Ultracentrifugation. <i>ACS Nano</i> , 2011, 5, 8070-8079.	7.3	96
14	Redox Sorting of Carbon Nanotubes. <i>Nano Letters</i> , 2015, 15, 1642-1646.	4.5	85
15	Analyzing Surfactant Structures on Length and Chirality Resolved (6,5) Single-Wall Carbon Nanotubes by Analytical Ultracentrifugation. <i>ACS Nano</i> , 2013, 7, 3373-3387.	7.3	82
16	Centrifugal Length Separation of Carbon Nanotubes. <i>Langmuir</i> , 2008, 24, 13880-13889.	1.6	81
17	Size Separation of Single-Wall Carbon Nanotubes by Flow-Field Flow Fractionation. <i>Analytical Chemistry</i> , 2008, 80, 2514-2523.	3.2	78
18	Separation of Specific Single-Enantiomer Single-Wall Carbon Nanotubes in the Large-Diameter Regime. <i>ACS Nano</i> , 2020, 14, 948-963.	7.3	75

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19	Evidence of Multiple Electrohydrodynamic Forces Acting on a Colloidal Particle near an Electrode Due to an Alternating Current Electric Field. <i>Langmuir</i> , 2005, 21, 1784-1794.	1.6	71
20	A Multilaboratory Comparison of Calibration Accuracy and the Performance of External References in Analytical Ultracentrifugation. <i>PLoS ONE</i> , 2015, 10, e0126420.	1.1	71
21	Nanoparticle Manufacturing "Heterogeneity through Processes to Products. <i>ACS Applied Nano Materials</i> , 2018, 1, 4358-4385.	2.4	68
22	Separation of Empty and Water-Filled Single-Wall Carbon Nanotubes. <i>ACS Nano</i> , 2011, 5, 3943-3953.	7.3	65
23	Tailored Distribution of Single-Wall Carbon Nanotubes from Arc Plasma Synthesis Using Magnetic Fields. <i>ACS Nano</i> , 2010, 4, 5187-5192.	7.3	60
24	Aqueous two-polymer phase extraction of single-wall carbon nanotubes using surfactants. <i>Nanoscale Advances</i> , 2019, 1, 3307-3324.	2.2	58
25	Vertical Motion of a Charged Colloidal Particle near an AC Polarized Electrode with a Nonuniform Potential Distribution: A Theory and Experimental Evidence. <i>Langmuir</i> , 2004, 20, 4823-4834.	1.6	57
26	Measurement of Single-Wall Nanotube Dispersion by Size Exclusion Chromatography. <i>Journal of Physical Chemistry C</i> , 2007, 111, 17914-17918.	1.5	51
27	High-Resolution Length Fractionation of Surfactant-Dispersed Carbon Nanotubes. <i>Analytical Chemistry</i> , 2013, 85, 1382-1388.	3.2	51
28	Enhancing single-wall carbon nanotube properties through controlled endohedral filling. <i>Nanoscale Horizons</i> , 2016, 1, 317-324.	4.1	50
29	Vertical Oscillatory Motion of a Single Colloidal Particle Adjacent to an Electrode in an ac Electric Field. <i>Langmuir</i> , 2002, 18, 7810-7820.	1.6	48
30	Intensity Ratio of Resonant Raman Modes for (<i>n</i> , <i>m</i>) Enriched Semiconducting Carbon Nanotubes. <i>ACS Nano</i> , 2016, 10, 5252-5259.	7.3	48
31	Single-Step Total Fractionation of Single-Wall Carbon Nanotubes by Countercurrent Chromatography. <i>Analytical Chemistry</i> , 2014, 86, 3980-3984.	3.2	47
32	Electronic Durability of Flexible Transparent Films from Type-Specific Single-Wall Carbon Nanotubes. <i>ACS Nano</i> , 2012, 6, 881-887.	7.3	45
33	Carbon Nanotubes: Measuring Dispersion and Length. <i>Advanced Materials</i> , 2011, 23, 338-348.	11.1	44
34	Bright Silicon Nanocrystals from a Liquid Precursor: Quasi-Direct Recombination with High Quantum Yield. <i>ACS Nano</i> , 2020, 14, 3858-3867.	7.3	43
35	Mechanism of Rectified Lateral Motion of Particles near Electrodes in Alternating Electric Fields below 1 kHz. <i>Langmuir</i> , 2006, 22, 9846-9852.	1.6	42
36	Rod Hydrodynamics and Length Distributions of Single-Wall Carbon Nanotubes Using Analytical Ultracentrifugation. <i>Langmuir</i> , 2014, 30, 4895-4904.	1.6	40

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37	A Low Energy Route to DNA-Wrapped Carbon Nanotubes via Replacement of Bile Salt Surfactants. <i>Analytical Chemistry</i> , 2017, 89, 10496-10503.	3.2	40
38	Chromatographic Fractionation of SWNT/DNA Dispersions with On-Line Multi-Angle Light Scattering. <i>Journal of Physical Chemistry C</i> , 2008, 112, 1842-1850.	1.5	39
39	Water-Soluble DNA-Wrapped Single-Walled Carbon-Nanotube/Quantum-Dot Complexes. <i>Small</i> , 2009, 5, 2149-2155.	5.2	38
40	A facile and low-cost length sorting of single-wall carbon nanotubes by precipitation and applications for thin-film transistors. <i>Nanoscale</i> , 2016, 8, 3467-3473.	2.8	32
41	Elasticity and rigidity percolation in flexible carbon nanotube films on PDMS substrates. <i>Soft Matter</i> , 2013, 9, 11568.	1.2	31
42	Nature of Record Efficiency Fluid-Processed Nanotube-Silicon Heterojunctions. <i>Journal of Physical Chemistry C</i> , 2015, 119, 10295-10303.	1.5	31
43	Impact of SWCNT processing on nanotube-silicon heterojunctions. <i>Nanoscale</i> , 2016, 8, 7969-7977.	2.8	29
44	Salt-specific effects in aqueous dispersions of carbon nanotubes. <i>Soft Matter</i> , 2013, 9, 3712.	1.2	28
45	Size and density measurement of core-shell Si nanoparticles by analytical ultracentrifugation. <i>Nanotechnology</i> , 2013, 24, 155701.	1.3	27
46	Microscale Polymer-Nanotube Composites. <i>ACS Applied Materials & Interfaces</i> , 2009, 1, 1561-1566.	4.0	25
47	Self-Assembly of Ordered Nanowires in Biological Suspensions of Single-Wall Carbon Nanotubes. <i>ACS Nano</i> , 2009, 3, 189-196.	7.3	24
48	Asymmetric excitation profiles in the resonance Raman response of armchair carbon nanotubes. <i>Physical Review B</i> , 2015, 91, .	1.1	24
49	Optical Property Tuning of Single-Wall Carbon Nanotubes by Endohedral Encapsulation of a Wide Variety of Dielectric Molecules. <i>ACS Nano</i> , 2021, 15, 2301-2317.	7.3	24
50	Concentration Measurement of Length-Fractionated Colloidal Single-Wall Carbon Nanotubes. <i>Analytical Chemistry</i> , 2012, 84, 8733-8739.	3.2	22
51	Selective filling of n-hexane in a tight nanopore. <i>Nature Communications</i> , 2021, 12, 310.	5.8	21
52	Phonon dephasing and population decay dynamics of the G-band of semiconducting single-wall carbon nanotubes. <i>Physical Review B</i> , 2010, 82, .	1.1	20
53	Characterizing the Effect of Salt and Surfactant Concentration on the Counterion Atmosphere around Surfactant Stabilized SWCNTs Using Analytical Ultracentrifugation. <i>Langmuir</i> , 2016, 32, 3926-3936.	1.6	20
54	Structural Stability of Transparent Conducting Films Assembled from Length Purified Single-Wall Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2011, 115, 3973-3981.	1.5	19

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55	Self-assembly and soluble aggregate behavior of computationally designed coiled-coil peptide bundles. <i>Soft Matter</i> , 2018, 14, 5488-5496.	1.2	19
56	Separation and Characterization of Double-Wall Carbon Nanotube Subpopulations. <i>Journal of Physical Chemistry C</i> , 2010, 114, 11343-11351.	1.5	18
57	Global Alignment of Solution-Based Single-Wall Carbon Nanotube Films via Machine-Vision Controlled Filtration. <i>Nano Letters</i> , 2019, 19, 7256-7264.	4.5	18
58	Calculation of ac Electric Field Effects on the Average Height of a Charged Colloid: Effects of Electrophoretic and Brownian Motions. <i>Langmuir</i> , 2003, 19, 6627-6632.	1.6	17
59	Determination of moisture content of single-wall carbon nanotubes. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 402, 429-438.	1.9	17
60	Versailles project on advanced materials and standards (VAMAS) interlaboratory study on measuring the number concentration of colloidal gold nanoparticles. <i>Nanoscale</i> , 2022, 14, 4690-4704.	2.8	15
61	Brightly Luminescent CsPbBr ₃ Nanocrystals through Ultracentrifugation. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 7133-7140.	2.1	13
62	Near-infrared fluorescence as a method for determining single-wall carbon nanotube extraction conditions in aqueous two polymer phase extraction. <i>Carbon</i> , 2020, 165, 196-203.	5.4	12
63	Surfactant chemistry and polymer choice affect single-wall carbon nanotube extraction conditions in aqueous two-polymer phase extraction. <i>Carbon</i> , 2022, 191, 215-226.	5.4	12
64	Analysis of Hydrogen Trapping in Palladium by Modulated Permeation Spectroscopy. <i>Journal of the Electrochemical Society</i> , 2000, 147, 3456.	1.3	11
65	Effects of gamma irradiation for sterilization on aqueous dispersions of length sorted carbon nanotubes. <i>Nano Research</i> , 2011, 4, 393-404.	5.8	11
66	Alkane Encapsulation Induces Strain in Small-Diameter Single-Wall Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2018, 122, 11577-11585.	1.5	11
67	SPR imaging study of DNA wrapped single wall carbon nanotube (ssDNA-SWCNT) adsorption on a model biological (collagen) substrate. <i>Soft Matter</i> , 2010, 6, 5581.	1.2	9
68	Use of neutron activation analysis for the characterization of single-wall carbon nanotube materials. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2012, 291, 561-567.	0.7	9
69	Structural insights into DNA-stabilized silver clusters. <i>Soft Matter</i> , 2019, 15, 4284-4293.	1.2	9
70	A radial calibration window for analytical ultracentrifugation. <i>PLoS ONE</i> , 2018, 13, e0201529.	1.1	8
71	Diameter dependence of TO phonon frequencies and the Kohn anomaly in armchair single-wall carbon nanotubes. <i>Physical Review B</i> , 2014, 90, .	1.1	5
72	Dependence of Single-Wall Carbon Nanotube Alignment on the Filter Membrane Interface in Slow Vacuum Filtration. <i>Small</i> , 2022, 18, e2105619.	5.2	5

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73	Effect of Sorted Metallic and Semiconducting Single-Walled Carbon Nanotubes on LiFePO ₄ Cathode Material for Lithium Ion Batteries. ECS Transactions, 2017, 80, 267-274.	0.3	4
74	Defect Evolution of Ion-Exposed Single-Wall Carbon Nanotubes. Journal of Physical Chemistry C, 2019, 123, 2496-2505.	1.5	4
75	Improved Electrophoretic Deposition of Vertical Single Wall Carbon Nanotubes with Nanoscopic Electrostatic Lenses. Micromachines, 2020, 11, 324.	1.4	4
76	Colloid-like solution behavior of computationally designed coiled coil bundlemers. Journal of Colloid and Interface Science, 2022, 606, 1974-1982.	5.0	3
77	Computational Design of Homotetrameric Peptide Bundle Variants Spanning a Wide Range of Charge States. Biomacromolecules, 2022, 23, 1652-1661.	2.6	3
78	Polyvinyl acetate-based polymer host for optical and far-infrared spectroscopy of individualized nanoparticles. Journal of Applied Physics, 2021, 129, 034701.	1.1	2
79	Tuning Net Charge in Aliphatic Polycarbonates Alters Solubility and Protein Complexation Behavior. ACS Omega, 2021, 6, 22589-22602.	1.6	2
80	Chromatographic Separation of Single Wall Carbon Nanotubes. Materials Research Society Symposia Proceedings, 2006, 922, 1.	0.1	1
81	Methods for TEM analysis of NIST's single-walled carbon nanotube Standard Reference Material. Proceedings of SPIE, 2009, , .	0.8	1
82	(Invited) Controlling the Inner Dielectric Environment of Carbon Nanotubes to Tune Their Optical Properties. ECS Meeting Abstracts, 2019, , .	0.0	1
83	Carbon Nanomaterials Standards Efforts at NIST. ECS Transactions, 2009, 19, 153-159.	0.3	0
84	(Invited) Determining Surfactant Concentrations for Separation of (n,m) Chirality Swcnts in ATPE via Fluorescence Detection. ECS Meeting Abstracts, 2021, MA2021-01, 544-544.	0.0	0
85	(Invited) Molecularly Selective Filling of a Tight Nanotube Pore. ECS Meeting Abstracts, 2021, MA2021-01, 590-590.	0.0	0
86	(Invited) Modulation of Nanotube Optical Properties By Controlling the Dielectric Environment inside of Single-Wall Carbon Nanotubes. ECS Meeting Abstracts, 2017, , .	0.0	0
87	Effect of Sorted Single-Walled Carbon Nanotubes on Rate Capability of Lithium-Ion Battery Cathodes. ECS Meeting Abstracts, 2017, , .	0.0	0
88	(Invited) Endohedral Filling Effects for Single-Wall Carbon Nanotubes As a Function of Filler Molecule and Nanotube Size. ECS Meeting Abstracts, 2018, , .	0.0	0
89	Performance Study of Free-Standing Cathode Made with LiFePO ₄ and Sorted Single-Walled Carbon Nanotubes Composite Material. ECS Meeting Abstracts, 2018, , .	0.0	0
90	(Invited) Purification Using Atpe to Single (n,m) Species in the Large Diameter Single-Wall Carbon Nanotube Limit. ECS Meeting Abstracts, 2019, , .	0.0	0

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91	(Invited) DNA-Directed High-Precision Assembly of CNT FETs. ECS Meeting Abstracts, 2020, MA2020-01, 685-685.	0.0	0
92	(Invited) Determining SWCNT Partition Conditions in Aqueous Two-Polymer Phase Extraction Via Near-Infrared Fluorescence Spectroscopy. ECS Meeting Abstracts, 2020, MA2020-01, 665-665.	0.0	0
93	(Invited, Digital Presentation) Determining Surfactant Layer Composition on an (n,m) SWCNT at Extraction Conditions in Aqueous Two-Phase Extraction. ECS Meeting Abstracts, 2022, MA2022-01, 735-735.	0.0	0