

# Virginia A Davis

## 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.

68

papers

3,526

citations

23

h-index

59

g-index

81

ext. papers

3,884

ext. citations

5.9

avg, IF

5.23

L-index

#	Paper	IF	Citations
68	Getting Everyone to the Fair: Supporting Teachers in Broadening Participation in Science and Engineering Fairs. <i>Journal of Science Education and Technology</i> , <b>2021</b> , 30, 1-20	2.8	1
67	Effects of Non-covalent Functionalization and Initial Mixing Methods on SWNT/PP and SWNT/EVOH Composites. <i>ACS Omega</i> , <b>2021</b> , 6, 10618-10628	3.9	2
66	Correlations between rheological behavior and intrinsic properties of nanofibrillated cellulose from wood and soybean hulls with varying lignin content. <i>BioResources</i> , <b>2021</b> , 16, 4831-4845	1.3	1
65	Microstructure and electrochemical properties of high performance graphene/manganese oxide hybrid electrodes.. <i>RSC Advances</i> , <b>2021</b> , 11, 31608-31620	3.7	2
64	Substrate properties as controlling parameters in attached algal cultivation. <i>Applied Microbiology and Biotechnology</i> , <b>2021</b> , 105, 1823-1835	5.7	3
63	Comparison of Attachment and Antibacterial Activity of Covalent and Noncovalent Lysozyme-Functionalized Single-Walled Carbon Nanotubes. <i>ACS Omega</i> , <b>2020</b> , 5, 2254-2259	3.9	5
62	Am I an engineer yet? Perceptions of engineering and identity among first year students. <i>European Journal of Engineering Education</i> , <b>2020</b> , 45, 214-231	1.5	6
61	3D Printing of Additive-Free 2D TiCT (MXene) Ink for Fabrication of Micro-Supercapacitors with Ultra-High Energy Densities. <i>ACS Nano</i> , <b>2020</b> , 14, 640-650	16.7	142
60	The Effects of Size and Shape Dispersity on the Phase Behavior of Nanomesogen Lyotropic Liquid Crystals. <i>Crystals</i> , <b>2020</b> , 10, 715	2.3	2
59	Chiral Structure Formation during Casting of Cellulose Nanocrystalline Films. <i>Langmuir</i> , <b>2020</b> , 36, 4975-4984	4.84	4
58	Rheological and Curing Properties of Unsaturated Polyester Resin Nanocomposites <b>2019</b> , 471-488		
57	Photonic Properties and Applications of Cellulose Nanocrystal Films with Planar Anchoring. <i>ACS Applied Nano Materials</i> , <b>2018</b> , 1, 2175-2183	5.6	30
56	Phase Behavior of Acetylated Cellulose Nanocrystals and Origins of the Cross-Hatch Birefringent Texture. <i>Biomacromolecules</i> , <b>2018</b> , 19, 3435-3444	6.9	2
55	Orientation Relaxation Dynamics in Cellulose Nanocrystal Dispersions in the Chiral Liquid Crystalline Phase. <i>Langmuir</i> , <b>2018</b> , 34, 13274-13282	4	11
54	Transparent and Homogenous Cellulose Nanocrystal/Lignin UV-Protection Films. <i>ACS Omega</i> , <b>2018</b> , 3, 10679-10691	3.9	60
53	Microelectromechanical Systems from Aligned Cellulose Nanocrystal Films. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 24116-24123	9.5	8
52	Effects of Polymer Additives and Dispersion State on the Mechanical Properties of Cellulose Nanocrystal Films. <i>Macromolecular Materials and Engineering</i> , <b>2017</b> , 302, 1600351	3.9	7

51	Effects of liquid crystalline and shear alignment on the optical properties of cellulose nanocrystal films. <i>Cellulose</i> , <b>2017</b> , 24, 705-716	5.5	38
50	New insights into the flow and microstructural relaxation behavior of biphasic cellulose nanocrystal dispersions from RheoSANS. <i>Soft Matter</i> , <b>2017</b> , 13, 8451-8462	3.6	21
49	Single-Walled Carbon Nanotube Dispersion in Tryptic Soy Broth. <i>ACS Macro Letters</i> , <b>2017</b> , 6, 1228-1231	6.6	6
48	Nanoclays <b>2017</b> , 369-393		
47	High-Throughput Nanomanufacturing via Spray Processes <b>2017</b> , 101-131		1
46	Overview of Nanotechnology in Military and Aerospace Applications <b>2017</b> , 133-176		3
45	Novel Polymer Nanocomposite Ablative Technologies for Thermal Protection of Propulsion and Reentry Systems for Space Applications <b>2017</b> , 177-244		
44	Manufacture of Multiscale Composites <b>2017</b> , 245-283		1
43	Rheology of lyotropic cholesteric liquid crystal forming single-wall carbon nanotube dispersions stabilized by double-stranded DNA. <i>Rheologica Acta</i> , <b>2016</b> , 55, 717-725	2.3	8
42	Concentration of lysozyme/single-walled carbon nanotube dispersions. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2016</b> , 139, 237-43	6	5
41	Heat Treatment of Buckypaper for Use in Volatile Organic Compounds Sampling. <i>Journal of Nanomaterials</i> , <b>2016</b> , 2016, 1-6	3.2	2
40	Rheology and Shear-Induced Textures of Silver Nanowire Lyotropic Liquid Crystals. <i>Journal of Nanomaterials</i> , <b>2015</b> , 2015, 1-9	3.2	15
39	Viscoelasticity of Single-Walled Carbon Nanotubes in Unsaturated Polyester Resin: Effects of Purity and Chirality Distribution. <i>Macromolecules</i> , <b>2015</b> , 48, 8641-8650	5.5	9
38	Surface plasmon resonance properties of DC magnetron sputtered Ag nanoislands on ITO-glass and In2O3-PET substrates. <i>Electronics Letters</i> , <b>2014</b> , 50, 623-624	1.1	1
37	Free-Standing Films from Aqueous Dispersions of Lysozyme, Single-Walled Carbon Nanotubes, and Polyvinyl Alcohol. <i>ACS Macro Letters</i> , <b>2014</b> , 3, 77-79	6.6	9
36	Liquid crystalline phase behavior of silica nanorods in dimethyl sulfoxide and water. <i>Langmuir</i> , <b>2014</b> , 30, 4806-13	4	21
35	Solution-Based Fabrication of Carbon Nanotube Bumps for Flip-Chip Interconnects. <i>IEEE Nanotechnology Magazine</i> , <b>2014</b> , 13, 1118-1126	2.6	5
34	Dispersion State and Fiber Toughness: Antibacterial Lysozyme-Single Walled Carbon Nanotubes. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 6082-6090	15.6	22

33	In Situ polymerization functionalization of single-walled carbon nanotubes with polystyrene. <i>Journal of Polymer Science Part A</i> , <b>2013</b> , 51, 3716-3725	2.5	6
32	Dispersion and Rheology of Multiwalled Carbon Nanotubes in Unsaturated Polyester Resin. <i>Macromolecules</i> , <b>2013</b> , 46, 1642-1650	5.5	61
31	Lysozyme Dispersed Single-Walled Carbon Nanotubes: Interaction and Activity. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 10341-10348	3.8	52
30	A novel nano-nonwoven fabric with three-dimensionally dispersed nanofibers: entrapment of carbon nanofibers within nonwovens using the wet-lay process. <i>Nanotechnology</i> , <b>2012</b> , 23, 185601	3.4	12
29	Carbon Nanofiber Synthesis within 3-Dimensional Sintered Nickel Microfibrous Matrices: Optimization of Synthesis Conditions. <i>Journal of Nanotechnology</i> , <b>2012</b> , 2012, 1-14	3.5	3
28	Amorphous-state characterization of efavirenz-polymer hot-melt extrusion systems for dissolution enhancement. <i>Journal of Pharmaceutical Sciences</i> , <b>2012</b> , 101, 3456-64	3.9	80
27	The Effect of Melt Extrusion Process Parameters on Rotary-Evaporated Poly(propylene) Nanocomposites. <i>Macromolecular Materials and Engineering</i> , <b>2012</b> , 297, 864-874	3.9	
26	Direct and discriminative detection of organophosphate neurotoxins for food and agriculture products <b>2012</b> ,		4
25	Methylene green electrodeposited on SWNTs-based "bucky" papers for NADH and l-malate oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2011</b> , 3, 2402-9	9.5	62
24	Rheology and Phase Behavior of Lyotropic Cellulose Nanocrystal Suspensions. <i>Macromolecules</i> , <b>2011</b> , 44, 8990-8998	5.5	243
23	Thermal properties of polypropylene nanocomposites: Effects of carbon nanomaterials and processing. <i>Polymer Engineering and Science</i> , <b>2011</b> , 51, 460-473	2.3	3
22	Cholesteric and nematic liquid crystalline phase behavior of double-stranded DNA stabilized single-walled carbon nanotube dispersions. <i>ACS Nano</i> , <b>2011</b> , 5, 1450-8	16.7	50
21	Liquid crystalline assembly of nanocylinders. <i>Journal of Materials Research</i> , <b>2011</b> , 26, 140-153	2.5	37
20	Lyotropic liquid crystalline self-assembly in dispersions of silver nanowires and nanoparticles. <i>Langmuir</i> , <b>2010</b> , 26, 11176-83	4	36
19	Renewable nanocomposite layer-by-layer assembled catalytic interfaces for biosensing applications. <i>Langmuir</i> , <b>2010</b> , 26, 19114-9	4	37
18	Enhanced stability of enzyme organophosphate hydrolase interfaced on the carbon nanotubes. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2010</b> , 77, 69-74	6	110
17	Influence of initial mixing methods on melt-extruded single-walled carbon nanotube/polypropylene nanocomposites. <i>Polymer Engineering and Science</i> , <b>2010</b> , 50, 1831-1842	2.3	13
16	Rotational and translational diffusivities of germanium nanowires. <i>Rheologica Acta</i> , <b>2009</b> , 48, 589-596	2.3	17

15	True solutions of single-walled carbon nanotubes for assembly into macroscopic materials. <i>Nature Nanotechnology</i> , <b>2009</b> , 4, 830-4	28.7	417
14	Electrochemical properties of interface formed by interlaced layers of DNA- and lysozyme-coated single-walled carbon nanotubes. <i>Electrochemistry Communications</i> , <b>2009</b> , 11, 1401-1404	5.1	9
13	Viscoelasticity and Shear Stability of Single-Walled Carbon Nanotube/Unsaturated Polyester Resin Dispersions. <i>Macromolecules</i> , <b>2009</b> , 42, 6624-6632	5.5	48
12	Strong antimicrobial coatings: single-walled carbon nanotubes armored with biopolymers. <i>Nano Letters</i> , <b>2008</b> , 8, 1896-901	11.5	171
11	Simple Length Determination of Single-Walled Carbon Nanotubes by Viscosity Measurements in Dilute Suspensions. <i>Macromolecules</i> , <b>2007</b> , 40, 4043-4047	5.5	72
10	Isotropic-nematic phase transition of single-walled carbon nanotubes in strong acids. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 591-5	16.4	111
9	Phase Behavior and Rheology of SWNTs in Superacids. <i>Macromolecules</i> , <b>2004</b> , 37, 154-160	5.5	302
8	Macroscopic, neat, single-walled carbon nanotube fibers. <i>Science</i> , <b>2004</b> , 305, 1447-50	33.3	708
7	Single wall carbon nanotube fibers extruded from super-acid suspensions: Preferred orientation, electrical, and thermal transport. <i>Journal of Applied Physics</i> , <b>2004</b> , 95, 649-655	2.5	157
6	Dissolution of Pristine Single Walled Carbon Nanotubes in Superacids by Direct Protonation. <i>Journal of Physical Chemistry B</i> , <b>2004</b> , 108, 8794-8798	3.4	240
5	Nanotechnology EHS395-415		
4	Bioinspired Systems285-305		
3	Prediction of Carbon Nanotube Buckypaper Mechanical Properties with Integrated Physics-Based and Statistical Models307-333		
2	Nanocarbon Materials in Catalysis25-63		
1	Fabrication and Fatigue of Fiber-Reinforced Polymer Nanocomposites A Tool for Quality Control335-368		1