John D Fortner

List of Publications by Year
in descending order

97 papers	7,153 citations	41 h-index	83 g-index
97 all docs	97 docs citations	97 times ranked	8379 citing authors

#	Article	IF	Citations
1	The Differential Cytotoxicity of Water-Soluble Fullerenes. Nano Letters, 2004, 4, 1881-1887.	9.1	985
2	Natural Organic Matter Stabilizes Carbon Nanotubes in the Aqueous Phase. Environmental Science & Technology, 2007, 41, 179-184.	10.0	756
3	C60in Water:Â Nanocrystal Formation and Microbial Response. Environmental Science & Technology, 2005, 39, 4307-4316.	10.0	616
4	Highly efficient and selective phosphate removal from wastewater by magnetically recoverable La(OH)3/Fe3O4 nanocomposites. Water Research, 2017, 126, 179-188.	11.3	279
5	BACTERIAL CELL ASSOCIATION AND ANTIMICROBIAL ACTIVITY OF A C60 WATER SUSPENSION. Environmental Toxicology and Chemistry, 2005, 24, 2757.	4.3	254
6	Transport and Retention of Nanoscale C₆₀Aggregates in Water-Saturated Porous Media. Environmental Science & Technology, 2008, 42, 3588-3594.	10.0	191
7	Intrapore energy barriers govern ion transport and selectivity of desalination membranes. Science Advances, 2020, 6, .	10.3	161
8	Microbial fuel cell biosensor for in situ assessment of microbial activity. Biosensors and Bioelectronics, 2008, 24, 586-590.	10.1	150
9	Photochemical Production of Reactive Oxygen Species by C60in the Aqueous Phase During UV Irradiation. Environmental Science & Technology, 2007, 41, 2529-2535.	10.0	148
10	Fabrication of agricultural waste supported UiO-66 nanoparticles with high utilization in phosphate removal from water. Chemical Engineering Journal, 2019, 360, 621-630.	12.7	132
11	Reaction of Water-Stable C₆₀ Aggregates with Ozone. Environmental Science & Technology, 2007, 41, 7497-7502.	10.0	123
12	Measuring the Grafting Density of Nanoparticles in Solution by Analytical Ultracentrifugation and Total Organic Carbon Analysis. Analytical Chemistry, 2012, 84, 9238-9245.	6.5	122
13	Low risk posed by engineered and incidental nanoparticles in drinking water. Nature Nanotechnology, 2018, 13, 661-669.	31.5	118
14	The structure, composition, and dimensions of TiO2 and ZnO nanomaterials in commercial sunscreens. Journal of Nanoparticle Research, 2011, 13, 3607-3617.	1.9	110
15	Engineered Crumpled Graphene Oxide Nanocomposite Membrane Assemblies for Advanced Water Treatment Processes. Environmental Science & Technology, 2015, 49, 6846-6854.	10.0	108
16	Formation, Aggregation, and Deposition Dynamics of NOM-Iron Colloids at Anoxicâ€“Oxic Interfaces. Environmental Science & Technology, 2017, 51, 12235-12245.	10.0	105
17	Graphene Oxides in Water: Correlating Morphology and Surface Chemistry with Aggregation Behavior. Environmental Science & Technology, 2016, 50, 6964-6973.	10.0	101
18	A review of recent developments in graphene-enabled membranes for water treatment. Environmental Science: Water Research and Technology, 2016, 2, 915-922.	2.4	89

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19	Transport of Sulfide-Reduced Graphene Oxide in Saturated Quartz Sand: Cation-Dependent Retention Mechanisms. Environmental Science & Technology, 2015, 49, 11468-11475.	10.0	87
20	Facile Aerosol Synthesis and Characterization of Ternary Crumpled Grapheneâ€"TiO₂â€"Magnetite Nanocomposites for Advanced Water Treatment. ACS Applied Materials & Interfaces, 2014, 6, 11766-11774.	8.0	86
21	In Situ Photocatalytic Synthesis of Ag Nanoparticles (nAg) by Crumpled Graphene Oxide Composite Membranes for Filtration and Disinfection Applications. Environmental Science & Technology, 2016, 50, 2514-2521.	10.0	82
22	Sensing mechanism of ethanol and acetone at room temperature by SnO₂ nano-columns synthesized by aerosol routes: theoretical calculations compared to experimental results. Journal of Materials Chemistry A, 2018, 6, 2053-2066.	10.3	82
23	Effects of aqueous stable fullerene nanocrystals (nC60) on Daphnia magna: Evaluation of sub-lethal reproductive responses and accumulation. Chemosphere, 2009, 77, 1482-1487.	8.2	79
24	Transformation of Aggregated C₆₀ in the Aqueous Phase by UV Irradiation. Environmental Science & Technology, 2009, 43, 4878-4883.	10.0	79
25	Facet-Dependent Enhancement in the Activity of Bismuth Vanadate Microcrystals for the Photocatalytic Conversion of Methane to Methanol. ACS Applied Nano Materials, 2018, 1, 6683-6691.	5.0	79
26	Tetracycline Resistance Gene Maintenance under Varying Bacterial Growth Rate, Substrate and Oxygen Availability, and Tetracycline Concentration. Environmental Science & Technology, 2013, 47, 6995-7001.	10.0	77
27	Aqueous Aggregation and Surface Deposition Processes of Engineered Superparamagnetic Iron Oxide Nanoparticles for Environmental Applications. Environmental Science & Technology, 2014, 48, 11892-11900.	10.0	77
28	Formation and Transport of Cr(III)-NOM-Fe Colloids upon Reaction of Cr(VI) with NOM-Fe(II) Colloids at Anoxicâ€"Oxic Interfaces. Environmental Science & Technology, 2020, 54, 4256-4266.	10.0	73
29	Graphene oxides as nanofillers in polysulfone ultrafiltration membranes: Shape matters. Journal of Membrane Science, 2019, 581, 453-461.	8.2	72
30	Cr(VI) Adsorption on Engineered Iron Oxide Nanoparticles: Exploring Complexation Processes and Water Chemistry. Environmental Science & Technology, 2019, 53, 11913-11921.	10.0	70
31	Graphene oxides in water: assessing stability as a function of material and natural organic matter properties. Environmental Science: Nano, 2017, 4, 1484-1493.	4.3	65
32	Formation and stability of NOM-Mn(III) colloids in aquatic environments. Water Research, 2019, 149, 190-201.	11.3	64
33	Effect of reduced humic acid on the transport of ferrihydrite nanoparticles under anoxic conditions. Water Research, 2017, 109, 347-357.	11.3	61
34	Surface functionalized manganese ferrite nanocrystals for enhanced uranium sorption and separation in water. Journal of Materials Chemistry A, 2015, 3, 21930-21939.	10.3	58
35	Delineating Oxidative Processes of Aqueous C₆₀ Preparations: Role of THF Peroxide. Environmental Science & Technology, 2009, 43, 108-113.	10.0	56
36	Highly Conducting, <i>n</i>-Type Bi₁₂O₁₅Cl₆ Nanosheets with Superlattice-like Structure. Chemistry of Materials, 2015, 27, 7710-7718.	6.7	55

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37	Bioaccumulation of¹⁴C₆₀by the Earthworm<i>Eisenia fetida</i>. Environmental Science & Technology, 2010, 44, 9170-9175.	10.0	54
38	Effects of ultraviolet light on silver nanoparticle mobility and dissolution. Environmental Science: Nano, 2015, 2, 683-691.	4.3	49
39	Impact of Water Chemistry on Element Mobilization from Eagle Ford Shale. Environmental Engineering Science, 2015, 32, 310-320.	1.6	46
40	Engineering Nanoscale Iron Oxides for Uranyl Sorption and Separation: Optimization of Particle Core Size and Bilayer Surface Coatings. ACS Applied Materials & Interfaces, 2017, 9, 13163-13172.	8.0	44
41	SnO₂ Nanostructured Thin Films for Room-Temperature Gas Sensing of Volatile Organic Compounds. ACS Applied Materials & Interfaces, 2018, 10, 29972-29981.	8.0	44
42	Engineered manganese oxide nanocrystals for enhanced uranyl sorption and separation. Environmental Science: Nano, 2015, 2, 500-508.	4.3	43
43	<i>Escherichia coli</i> Inactivation by Water-Soluble, Ozonated C₆₀ Derivative: Kinetics and Mechanisms. Environmental Science & Technology, 2009, 43, 7410-7415.	10.0	41
44	Effects of aqueous stable fullerene nanocrystal (nC 60) on Scenedesmus obliquus : Evaluation of the sub-lethal photosynthetic responses and inhibition mechanism. Chemosphere, 2015, 122, 162-167.	8.2	41
45	Measurement and Surface Complexation Modeling of U(VI) Adsorption to Engineered Iron Oxide Nanoparticles. Environmental Science & Technology, 2017, 51, 9219-9226.	10.0	41
46	Element mobilization from Bakken shales as a function of water chemistry. Chemosphere, 2016, 149, 286-293.	8.2	39
47	Microbially Synthesized Repeats of Mussel Foot Protein Display Enhanced Underwater Adhesion. ACS Applied Materials & Interfaces, 2018, 10, 43003-43012.	8.0	35
48	Crumpled reduced graphene oxideâ€“amineâ€“titanium dioxide nanocomposites for simultaneous carbon dioxide adsorption and photoreduction. Catalysis Science and Technology, 2016, 6, 6187-6196.	4.1	33
49	Photo-Oxidation of Hydrogenated Fullerene (Fullerane) in Water. Environmental Science and Technology Letters, 2014, 1, 490-494.	8.7	31
50	Elucidating the Role of Sulfide on the Stability of Ferrihydrite Colloids under Anoxic Conditions. Environmental Science & Technology, 2019, 53, 4173-4184.	10.0	31
51	Towards optimizing cobalt based metal oxide nanocrystals for hydrogen generation via NaBH4 hydrolysis. Applied Catalysis A: General, 2020, 589, 117303.	4.3	31
52	Stability of Water-Stable C₆₀Clusters to OH Radical Oxidation and Hydrated Electron Reduction. Environmental Science & Technology, 2010, 44, 3786-3792.	10.0	30
53	Shape and size controlled synthesis of uniform iron oxide nanocrystals through new non-hydrolytic routes. Nanotechnology, 2016, 27, 324002.	2.6	28
54	Ultralow Protein Adsorbing Coatings from Clickable PEG Nanogel Solutions: Benefits of Attachment under Salt-Induced Phase Separation Conditions and Comparison with PEG/Albumin Nanogel Coatings. Langmuir, 2013, 29, 4128-4139.	3.5	27

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55	Surface engineering superparamagnetic nanoparticles for aqueous applications: design and characterization of tailored organic bilayers. Environmental Science: Nano, 2016, 3, 85-93.	4.3	27
56	Effects of aqueous stable fullerene nanocrystal (nC60) on copper (trace necessary nutrient metal): Enhanced toxicity and accumulation of copper in Daphnia magna. Chemosphere, 2013, 92, 1245-1252.	8.2	26
57	Real-time evaluation of natural organic matter deposition processes onto model environmental surfaces. Water Research, 2018, 129, 231-239.	11.3	26
58	Nanostructured Graphene-Titanium Dioxide Composites Synthesized by a Single-Step Aerosol Process for Photoreduction of Carbon Dioxide. Environmental Engineering Science, 2014, 31, 428-434.	1.6	25
59	Engineered superparamagnetic iron oxide nanoparticles for ultra-enhanced uranium separation and sensing. Journal of Materials Chemistry A, 2016, 4, 15022-15029.	10.3	24
60	Soil Column Evaluation of Factors Controlling Biodegradation of DNT in the Vadose Zone. Environmental Science & Technology, 2003, 37, 3382-3391.	10.0	23
61	Arsenic Removal by Nanoscale Magnetite in Guanajuato, Mexico. Environmental Engineering Science, 2014, 31, 393-402.	1.6	23
62	Reduction of Hydroxylated Fullerene (Fullerol) in Water by Zinc: Reaction and Hemiketal Product Characterization. Environmental Science & Technology, 2014, 48, 7384-7392.	10.0	22
63	Engineered superparamagnetic nanomaterials for arsenic(<scp>v</scp>) and chromium(<scp>vi</scp>) sorption and separation: quantifying the role of organic surface coatings. Environmental Science: Nano, 2018, 5, 556-563.	4.3	22
64	Highly stable superparamagnetic iron oxide nanoparticles as functional draw solutes for osmotically driven water transport. Npj Clean Water, 2020, 3, .	8.0	22
65	Yale School of Public Health Symposium: An overview of the challenges and opportunities associated with per- and polyfluoroalkyl substances (PFAS). Science of the Total Environment, 2021, 778, 146192.	8.0	22
66	Aqueous Aggregation Behavior of Engineered Superparamagnetic Iron Oxide Nanoparticles: Effects of Oxidative Surface Aging. Environmental Science & Technology, 2016, 50, 12789-12798.	10.0	21
67	Free chlorine induced phototransformation of graphene oxide in water: Reaction kinetics and product characterization. Chemical Engineering Journal, 2020, 381, 122609.	12.7	21
68	Contaminantâ€mobilizing capability of fullerene nanoparticles (<i>n</i>C₆₀): Effect of solventâ€exchange process in <i>n</i>C₆₀ formation. Environmental Toxicology and Chemistry, 2013, 32, 329-336.	4.3	20
69	Ground State Reactions of nC₆₀ with Free Chlorine in Water. Environmental Science & Technology, 2016, 50, 721-731.	10.0	20
70	Surface tunable magnetic nano-sorbents for carbon dioxide sorption and separation. Chemical Engineering Journal, 2017, 313, 1160-1167.	12.7	19
71	Engineering Graphene Oxide Laminate Membranes for Enhanced Flux and Boron Treatment with Polyethylenimine (PEI) Polymers. ACS Applied Materials & Interfaces, 2019, 11, 924-929.	8.0	19
72	(Super)paramagnetic nanoparticles as platform materials for environmental applications: From synthesis to demonstration. Frontiers of Environmental Science and Engineering, 2020, 14, 1.	6.0	19

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73	In-situ sequestration of perfluoroalkyl substances using polymer-stabilized ion exchange resin. Journal of Hazardous Materials, 2022, 422, 126960.	12.4	18
74	Research highlights: unveiling the mechanisms underlying nanoparticle-induced ROS generation and oxidative stress. Environmental Science: Nano, 2016, 3, 940-945.	4.3	15
75	Photoenhanced transformation of hydroxylated fullerene (fullerol) by free chlorine in water. Environmental Science: Nano, 2017, 4, 470-479.	4.3	14
76	Modeling performance of rhamnolipid-coated engineered magnetite nanoparticles for U(<scp>vi</scp>) sorption and separation. Environmental Science: Nano, 2020, 7, 2010-2020.	4.3	13
77	Enhanced polysulfone ultrafiltration membrane performance through fullerol Addition: A study towards optimization. Chemical Engineering Journal, 2022, 431, 134071.	12.7	13
78	Surface-optimized coreâ€“shell nanocomposites (Fe₃O₄@Mn_xFe_yO₄) for ultra-high uranium sorption and low-field separation in water. Environmental Science: Nano, 2018, 5, 2252-2256.	4.3	12
79	Complex interplay between formation routes and natural organic matter modification controls capabilities of C 60 nanoparticles (n C 60) to accumulate organic contaminants. Journal of Environmental Sciences, 2017, 51, 315-323.	6.1	11
80	Organic Functionalized Graphene Oxide Behavior in Water. Nanomaterials, 2020, 10, 1228.	4.1	11
81	A graphene oxide Cookbook: Exploring chemical and colloidal properties as a function of synthesis parameters. Journal of Colloid and Interface Science, 2021, 588, 725-736.	9.4	11
82	Photoenhanced oxidation of C60aggregates (nC60) by free chlorine in water. Environmental Science: Nano, 2017, 4, 117-126.	4.3	10
83	A Multi-Channel Stopped-Flow Reactor for Measuring Ozone Decay Rate: Instrument Development and Application. Ozone: Science and Engineering, 2007, 29, 121-129.	2.5	9
84	Photoenhanced oxidation of nC60 in water: Exploring H2O2 and hydroxyl radical based reactions. Chemical Engineering Journal, 2019, 360, 665-672.	12.7	9
85	Surface functionalized nanoscale metal oxides for arsenic(<scp>v</scp>), chromium(<scp>vi</scp>), and uranium(<scp>vi</scp>) sorption: considering single- and multi-sorbate dynamics. Environmental Science: Nano, 2020, 7, 3805-3813.	4.3	9
86	Room temperature gas sensing mechanism of SnO2 towards chloroform: Comparing first principles calculations with sensing experiments. Applied Surface Science, 2021, 554, 149603.	6.1	9
87	Photoactive Polyethylenimine-Coated Graphene Oxide Composites for Enhanced Cr(VI) Reduction and Recovery. ACS Applied Materials & Interfaces, 2021, 13, 28027-28035.	8.0	7
88	Surface-Engineered Nanomaterials in Water: Understanding Critical Dynamics of Soft Organic Coatings and Relative Aggregation Density. Environmental Science & Technology, 2020, 54, 13548-13555.	10.0	6
89	Effect of rhamnolipid biosurfactant on transport and retention of iron oxide nanoparticles in water-saturated quartz sand. Environmental Science: Nano, 2021, 8, 311-327.	4.3	6
90	Atmospheric Reactivity of Fullerene (C₆₀) Aerosols. ACS Earth and Space Chemistry, 2018, 2, 95-102.	2.7	5

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91	Delineating the Relationship between Nanoparticle Attachment Efficiency and Fluid Flow Velocity. Environmental Science & Technology, 2020, 54, 13992-13999.	10.0	5
92	Graphene oxide/mussel foot protein composites for high-strength and ultra-tough thin films. Scientific Reports, 2020, 10, 19082.	3.3	5
93	Nanotechnology as a Key Enabler for Effective Environmental Remediation Technologies. , 2020, , 197-207.		5
94	Cetyltrimethylammonium bromide â€“ Oleic acid (CTAB-OA) bilayer coated iron oxide nanocrystals for enhanced chromium (VI) photoreduction via ligand-to-metal charge transfer mechanism. Chemical Engineering Journal, 2022, 431, 133938.	12.7	4
95	Dual role of N-doped graphene film as a cathode material for anodic organic oxidation and persulfate production and as a planar carbocatalyst for non-electrochemical persulfate activation. Environmental Science: Nano, 2022, 9, 1662-1674.	4.3	4
96	Effects of rhamnolipid biosurfactant on the dissolution and transport of silver nanoparticles in porous media. Environmental Science: Nano, 2021, 8, 2492-2506.	4.3	2
97	Chemical and Photochemical Reactivity of Fullerenes in the Aqueous Phase. , 0, , 159-195.		1