John D Fortner

List of Publications by Citations

96 papers	5,759 citations	37 h-index	75 g-index
97 ext. papers	6,425 ext. citations	9.1 avg, IF	5.81 L-index

#	Paper	IF	Citations
96	The Differential Cytotoxicity of Water-Soluble Fullerenes. *Nano Letters*, **2004**, 4, 1881-1887	11.5	892
95	Natural organic matter stabilizes carbon nanotubes in the aqueous phase. *Environmental Science & Technology*, **2007**, 41, 179-84	10.3	716
94	C60 in water: nanocrystal formation and microbial response. *Environmental Science & Technology*, **2005**, 39, 4307-16	10.3	574
93	Bacterial cell association and antimicrobial activity of a C60 water suspension. *Environmental Toxicology and Chemistry*, **2005**, 24, 2757-62	3.8	227
92	Transport and retention of nanoscale C60 aggregates in water-saturated porous media. *Environmental Science & Technology*, **2008**, 42, 3588-94	10.3	171
91	Highly efficient and selective phosphate removal from wastewater by magnetically recoverable La(OH)/FeO nanocomposites. *Water Research*, **2017**, 126, 179-188	12.5	168
90	Microbial fuel cell biosensor for in situ assessment of microbial activity. *Biosensors and Bioelectronics*, **2008**, 24, 586-90	11.8	135
89	Photochemical production of reactive oxygen species by C60 in the aqueous phase during UV irradiation. *Environmental Science & Technology*, **2007**, 41, 2529-35	10.3	135
88	Reaction of water-stable C60 aggregates with ozone. *Environmental Science & Technology*, **2007**, 41, 7497-502	10.3	115
87	Engineered crumpled graphene oxide nanocomposite membrane assemblies for advanced water treatment processes. *Environmental Science & Technology*, **2015**, 49, 6846-54	10.3	96
86	The structure, composition, and dimensions of TiO2 and ZnO nanomaterials in commercial sunscreens. *Journal of Nanoparticle Research*, **2011**, 13, 3607-3617	2.3	96
85	Graphene Oxides in Water: Correlating Morphology and Surface Chemistry with Aggregation Behavior. *Environmental Science & Technology*, **2016**, 50, 6964-73	10.3	85
84	Measuring the grafting density of nanoparticles in solution by analytical ultracentrifugation and total organic carbon analysis. *Analytical Chemistry*, **2012**, 84, 9238-45	7.8	81
83	Facile aerosol synthesis and characterization of ternary crumpled graphene-TiO2-magnetite nanocomposites for advanced water treatment. *ACS Applied Materials & Interfaces*, **2014**, 6, 11766-74	9.5	78
82	A review of recent developments in graphene-enabled membranes for water treatment. *Environmental Science: Water Research and Technology*, **2016**, 2, 915-922	4.2	76
81	Transport of Sulfide-Reduced Graphene Oxide in Saturated Quartz Sand: Cation-Dependent Retention Mechanisms. *Environmental Science & Technology*, **2015**, 49, 11468-75	10.3	74
80	Transformation of aggregated C60 in the aqueous phase by UV irradiation. *Environmental Science & Technology*, **2009**, 43, 4878-83	10.3	74

79	Low risk posed by engineered and incidental nanoparticles in drinking water. *Nature Nanotechnology*, **2018**, 13, 661-669	28.7	73
78	Effects of aqueous stable fullerene nanocrystals (nC60) on Daphnia magna: evaluation of sub-lethal reproductive responses and accumulation. *Chemosphere*, **2009**, 77, 1482-7	8.4	72
77	Fabrication of agricultural waste supported UiO-66 nanoparticles with high utilization in phosphate removal from water. *Chemical Engineering Journal*, **2019**, 360, 621-630	14.7	72
76	Aqueous aggregation and surface deposition processes of engineered superparamagnetic iron oxide nanoparticles for environmental applications. *Environmental Science & Technology*, **2014**, 48, 11892-900	10.3	65
75	In Situ Photocatalytic Synthesis of Ag Nanoparticles (nAg) by Crumpled Graphene Oxide Composite Membranes for Filtration and Disinfection Applications. *Environmental Science & Technology*, **2016**, 50, 2514-21	10.3	64
74	Formation, Aggregation, and Deposition Dynamics of NOM-Iron Colloids at Anoxic-Oxic Interfaces. *Environmental Science & Technology*, **2017**, 51, 12235-12245	10.3	58
73	Intrapore energy barriers govern ion transport and selectivity of desalination membranes. *Science Advances*, **2020**, 6,	14.3	58
72	Tetracycline resistance gene maintenance under varying bacterial growth rate, substrate and oxygen availability, and tetracycline concentration. *Environmental Science & Technology*, **2013**, 47, 6995-7001	10.3	55
71	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	13	54
70	Delineating oxidative processes of aqueous C60 preparations: role of THF peroxide. *Environmental Science & Technology*, **2009**, 43, 108-13	10.3	53
69	Graphene oxides in water: assessing stability as a function of material and natural organic matter properties. *Environmental Science: Nano*, **2017**, 4, 1484-1493	7.1	52
68	Bioaccumulation of 14C60 by the earthworm Eisenia fetida. *Environmental Science & Technology*, **2010**, 44, 9170-5	10.3	50
67	Surface functionalized manganese ferrite nanocrystals for enhanced uranium sorption and separation in water. *Journal of Materials Chemistry A*, **2015**, 3, 21930-21939	13	49
66	Effect of reduced humic acid on the transport of ferrihydrite nanoparticles under anoxic conditions. *Water Research*, **2017**, 109, 347-357	12.5	44
65	Highly Conducting, n-Type Bi12O15Cl6 Nanosheets with Superlattice-like Structure. *Chemistry of Materials*, **2015**, 27, 7710-7718	9.6	44
64	Graphene oxides as nanofillers in polysulfone ultrafiltration membranes: Shape matters. *Journal of Membrane Science*, **2019**, 581, 453-461	9.6	43
63	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	5.6	41
62	Escherichia coli inactivation by water-soluble, ozonated C60 derivative: kinetics and mechanisms. *Environmental Science & Technology*, **2009**, 43, 7410-5	10.3	40

61	Engineered manganese oxide nanocrystals for enhanced uranyl sorption and separation. *Environmental Science: Nano*, **2015**, 2, 500-508	7.1	38
60	Cr(VI) Adsorption on Engineered Iron Oxide Nanoparticles: Exploring Complexation Processes and Water Chemistry. *Environmental Science & Technology*, **2019**, 53, 11913-11921	10.3	37
59	Impact of Water Chemistry on Element Mobilization from Eagle Ford Shale. *Environmental Engineering Science*, **2015**, 32, 310-320	2	37
58	Measurement and Surface Complexation Modeling of U(VI) Adsorption to Engineered Iron Oxide Nanoparticles. *Environmental Science & Technology*, **2017**, 51, 9219-9226	10.3	36
57	Formation and stability of NOM-Mn(III) colloids in aquatic environments. *Water Research*, **2019**, 149, 190-201	12.5	36
56	Effects of ultraviolet light on silver nanoparticle mobility and dissolution. *Environmental Science: Nano*, **2015**, 2, 683-691	7.1	35
55	Effects of aqueous stable fullerene nanocrystal (nC60) on Scenedesmus obliquus: evaluation of the sub-lethal photosynthetic responses and inhibition mechanism. *Chemosphere*, **2015**, 122, 162-167	8.4	35
54	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	9.5	31
53	Crumpled reduced graphene oxide□mine□itanium dioxide nanocomposites for simultaneous carbon dioxide adsorption and photoreduction. *Catalysis Science and Technology*, **2016**, 6, 6187-6196	5.5	29
52	Element mobilization from Bakken shales as a function of water chemistry. *Chemosphere*, **2016**, 149, 286-93	8.4	29
51	Formation and Transport of Cr(III)-NOM-Fe Colloids upon Reaction of Cr(VI) with NOM-Fe(II) Colloids at Anoxic-Oxic Interfaces. *Environmental Science & Technology*, **2020**, 54, 4256-4266	10.3	27
50	SnO Nanostructured Thin Films for Room-Temperature Gas Sensing of Volatile Organic Compounds. *ACS Applied Materials & Interfaces*, **2018**, 10, 29972-29981	9.5	27
49	Stability of water-stable C60 clusters to OH radical oxidation and hydrated electron reduction. *Environmental Science & Technology*, **2010**, 44, 3786-92	10.3	27
48	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, 1245-52	8.4	26
47	Photo-Oxidation of Hydrogenated Fullerene (Fullerane) in Water. *Environmental Science and Technology Letters*, **2014**, 1, 490-494	11	25
46	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, 4128-39	4	25
45	Surface engineering superparamagnetic nanoparticles for aqueous applications: design and characterization of tailored organic bilayers. *Environmental Science: Nano*, **2016**, 3, 85-93	7.1	24
44	Nanostructured Graphene-Titanium Dioxide Composites Synthesized by a Single-Step Aerosol Process for Photoreduction of Carbon Dioxide. *Environmental Engineering Science*, **2014**, 31, 428-434	2	24

43	Shape and size controlled synthesis of uniform iron oxide nanocrystals through new non-hydrolytic routes. *Nanotechnology*, **2016**, 27, 324002	3.4	24
42	Engineered superparamagnetic iron oxide nanoparticles for ultra-enhanced uranium separation and sensing. *Journal of Materials Chemistry A*, **2016**, 4, 15022-15029	13	22
41	Real-time evaluation of natural organic matter deposition processes onto model environmental surfaces. *Water Research*, **2018**, 129, 231-239	12.5	22
40	Microbially Synthesized Repeats of Mussel Foot Protein Display Enhanced Underwater Adhesion. *ACS Applied Materials & Interfaces*, **2018**, 10, 43003-43012	9.5	22
39	Reduction of hydroxylated fullerene (fullerol) in water by zinc: reaction and hemiketal product characterization. *Environmental Science & Technology*, **2014**, 48, 7384-92	10.3	21
38	Soil column evaluation of factors controlling biodegradation of DNT in the vadose zone. *Environmental Science & Technology*, **2003**, 37, 3382-91	10.3	21
37	Towards optimizing cobalt based metal oxide nanocrystals for hydrogen generation via NaBH4 hydrolysis. *Applied Catalysis A: General*, **2020**, 589, 117303	5.1	21
36	Engineered superparamagnetic nanomaterials for arsenic(V) and chromium(VI) sorption and separation: quantifying the role of organic surface coatings. *Environmental Science: Nano*, **2018**, 5, 556-563	7.1	19
35	Contaminant-mobilizing capability of fullerene nanoparticles (nC60): Effect of solvent-exchange process in nC60 formation. *Environmental Toxicology and Chemistry*, **2013**, 32, 329-36	3.8	19
34	Arsenic Removal by Nanoscale Magnetite in Guanajuato, Mexico. *Environmental Engineering Science*, **2014**, 31, 393-402	2	19
33	Elucidating the Role of Sulfide on the Stability of Ferrihydrite Colloids under Anoxic Conditions. *Environmental Science & Technology*, **2019**, 53, 4173-4184	10.3	17
32	Ground State Reactions of nC60 with Free Chlorine in Water. *Environmental Science & Technology*, **2016**, 50, 721-31	10.3	16
31	Surface tunable magnetic nano-sorbents for carbon dioxide sorption and separation. *Chemical Engineering Journal*, **2017**, 313, 1160-1167	14.7	15
30	Aqueous Aggregation Behavior of Engineered Superparamagnetic Iron Oxide Nanoparticles: Effects of Oxidative Surface Aging. *Environmental Science & Technology*, **2016**, 50, 12789-12798	10.3	15
29	Free chlorine induced phototransformation of graphene oxide in water: Reaction kinetics and product characterization. *Chemical Engineering Journal*, **2020**, 381, 122609	14.7	13
28	Photoenhanced transformation of hydroxylated fullerene (fullerol) by free chlorine in water. *Environmental Science: Nano*, **2017**, 4, 470-479	7.1	12
27	Research highlights: unveiling the mechanisms underlying nanoparticle-induced ROS generation and oxidative stress. *Environmental Science: Nano*, **2016**, 3, 940-945	7.1	12
26	Engineering Graphene Oxide Laminate Membranes for Enhanced Flux and Boron Treatment with Polyethylenimine (PEI) Polymers. *ACS Applied Materials & Interfaces*, **2019**, 11, 924-929	9.5	12

25	Surface-optimized core–shell nanocomposites (Fe3O4@MnxFeyO4) for ultra-high uranium sorption and low-field separation in water. *Environmental Science: Nano*, **2018**, 5, 2252-2256	7.1	11
24	(Super)paramagnetic nanoparticles as platform materials for environmental applications: From synthesis to demonstration. *Frontiers of Environmental Science and Engineering*, **2020**, 14, 1	5.8	10
23	Highly stable superparamagnetic iron oxide nanoparticles as functional draw solutes for osmotically driven water transport. *Npj Clean Water*, **2020**, 3,	11.2	10
22	Photoenhanced oxidation of C60 aggregates (nC60) by free chlorine in water. *Environmental Science: Nano*, **2017**, 4, 117-126	7.1	10
21	Complex interplay between formation routes and natural organic matter modification controls capabilities of C nanoparticles (nC) to accumulate organic contaminants. *Journal of Environmental Sciences*, **2017**, 51, 315-323	6.4	8
20	A Multi-Channel Stopped-Flow Reactor for Measuring Ozone Decay Rate: Instrument Development and Application. *Ozone: Science and Engineering*, **2007**, 29, 121-129	2.4	7
19	Modeling performance of rhamnolipid-coated engineered magnetite nanoparticles for U(VI) sorption and separation. *Environmental Science: Nano*, **2020**, 7, 2010-2020	7.1	6
18	Photoenhanced oxidation of nC60 in water: Exploring H2O2 and hydroxyl radical based reactions. *Chemical Engineering Journal*, **2019**, 360, 665-672	14.7	6
17	Organic Functionalized Graphene Oxide Behavior in Water. *Nanomaterials*, **2020**, 10,	5.4	4
16	Nanotechnology as a Key Enabler for Effective Environmental Remediation Technologies **2020**, 197-207		4
15	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	9.3	4
14	Effect of rhamnolipid biosurfactant on transport and retention of iron oxide nanoparticles in water-saturated quartz sand. *Environmental Science: Nano*, **2021**, 8, 311-327	7.1	4
13	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	10.2	4
12	In-situ sequestration of perfluoroalkyl substances using polymer-stabilized ion exchange resin. *Journal of Hazardous Materials*, **2022**, 422, 126960	12.8	4
11	Delineating the Relationship between Nanoparticle Attachment Efficiency and Fluid Flow Velocity. *Environmental Science & Technology*, **2020**, 54, 13992-13999	10.3	3
10	Graphene oxide/mussel foot protein composites for high-strength and ultra-tough thin films. *Scientific Reports*, **2020**, 10, 19082	4.9	3
9	Atmospheric Reactivity of Fullerene (C60) Aerosols. *ACS Earth and Space Chemistry*, **2018**, 2, 95-102	3.2	3
8	Surface functionalized nanoscale metal oxides for arsenic(V), chromium(VI), and uranium(VI) sorption: considering single- and multi-sorbate dynamics. *Environmental Science: Nano*, **2020**, 7, 3805-3813	7.1	2

List of Publications

7	Photoactive Polyethylenimine-Coated Graphene Oxide Composites for Enhanced Cr(VI) Reduction and Recovery. *ACS Applied Materials & Interfaces*, **2021**, 13, 28027-28035	9.5	2
6	Room temperature gas sensing mechanism of SnO2 towards chloroform: Comparing first principles calculations with sensing experiments. *Applied Surface Science*, **2021**, 554, 149603	6.7	2
5	Enhanced polysulfone ultrafiltration membrane performance through fullerol Addition: A study towards optimization. *Chemical Engineering Journal*, **2022**, 431, 134071	14.7	1
4	Surface-Engineered Nanomaterials in Water: Understanding Critical Dynamics of Soft Organic Coatings and Relative Aggregation Density. *Environmental Science & Technology*, **2020**, 54, 13548-13555	10.3	1
3	Effects of rhamnolipid biosurfactant on the dissolution and transport of silver nanoparticles in porous media. *Environmental Science: Nano*, **2021**, 8, 2492-2506	7.1	0
2	Chemical and Photochemical Reactivity of Fullerenes in the Aqueous Phase159-195		
1	Cetyltrimethylammonium bromide □Oleic acid (CTAB-OA) bilayer coated iron oxide nanocrystals for enhanced chromium (VI) photoreduction via ligand-to-metal charge transfer mechanism. *Chemical Engineering Journal*, **2021**, 431, 133938	14.7	