David M Cwiertny

List of Publications by Year
in descending order

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Version: 2024-02-01

94 papers	4,793 citations	93792 39 h-index	111975 67 g-index
95 all docs	95 docs citations	95 times ranked	7118 citing authors

#	Article	IF	Citations
1	Combining Experimental Sorption Parameters with QSAR to Predict Neonicotinoid and Transformation Product Sorption to Carbon Nanotubes and Granular Activated Carbon. ACS ES&T Water, 2022, 2, 247-258.	2.3	4
2	School and childcare center drinking water: Copper chemistry, health effects, occurrence, and remediation. AWWA Water Science, 2022, 4, .	1.0	3
3	Acid- and Base-Mediated Hydrolysis of Dichloroacetamide Herbicide Safeners. Environmental Science & Technology, 2022, 56, 325-334.	4.6	4
4	Scalable Reactor Design for Electrocatalytic Nitrite Reduction with Minimal Mass Transfer Limitations. ACS ES&T Engineering, 2021, 1, 204-215.	3.7	8
5	Web-based data analytics framework for well forecasting and groundwater quality. Science of the Total Environment, 2021, 761, 144121.	3.9	16
6	Carbonâ€"titanium dioxide (C/TiO2) nanofiber composites for chemical oxidation of emerging organic contaminants in reactive filtration applications. Environmental Science: Nano, 2021, 8, 711-722.	2.2	10
7	Linking Solid-State Reduction Mechanisms to Size-Dependent Reactivity of Metal Oxide Oxygen Carriers for Chemical Looping Combustion. ACS Applied Energy Materials, 2021, 4, 1163-1172.	2.5	14
8	Phosphate removal using surface enriched hematite and tetra-n-butylammonium bromide incorporated polyacrylonitrile composite nanofibers. Science of the Total Environment, 2021, 770, 145364.	3.9	20
9	Computational Approaches for the Prediction of Environmental Transformation Products: Chlorination of Steroidal Enones. Environmental Science & Technology, 2021, 55, 14658-14666.	4.6	6
10	A Comprehensive Statewide Spatiotemporal Stream Assessment of Per- and Polyfluoroalkyl Substances (PFAS) in an Agricultural Region of the United States. Environmental Science and Technology Letters, 2021, 8, 981-988.	3.9	20
11	Functionalized electrospun polymer nanofibers for treatment of water contaminated with uranium. Environmental Science: Water Research and Technology, 2020, 6, 622-634.	1.2	22
12	Editorial Perspectives: what is â€œsafeâ€• drinking water, anyway?. Environmental Science: Water Research and Technology, 2020, 6, 12-14.	1.2	3
13	Photolysis of Trenbolone Acetate Metabolites in the Presence of Nucleophiles: Evidence for Metastable Photoaddition Products and Reversible Associations with Dissolved Organic Matter. Environmental Science & Technology, 2020, 54, 12181-12190.	4.6	3
14	Estimating Consumers at Risk from Drinking Elevated Lead Concentrations: An Iowa Case Study. Environmental Science and Technology Letters, 2020, 7, 948-953.	3.9	3
15	Benoxacor is enantioselectively metabolized by rat liver subcellular fractions. Chemico-Biological Interactions, 2020, 330, 109247.	1.7	6
16	Considerations for large building water quality after extended stagnation. AWWA Water Science, 2020, 2, e1186.	1.0	85
17	Structural Dependence of Reductive Defluorination of Linear PFAS Compounds in a UV/Electrochemical System. Environmental Science & Technology, 2020, 54, 10668-10677.	4.6	62
18	Differences in Neonicotinoid and Metabolite Sorption to Activated Carbon Are Driven by Alterations to the Insecticidal Pharmacophore. Environmental Science & Technology, 2020, 54, 14694-14705.	4.6	29

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19	Polymeric Nanofiber-Carbon Nanotube Composite Mats as Fast-Equilibrium Passive Samplers for Polar Organic Contaminants. Environmental Science & Technology, 2020, 54, 6703-6712.	4.6	9
20	A critical review on the potential impacts of neonicotinoid insecticide use: current knowledge of environmental fate, toxicity, and implications for human health. Environmental Sciences: Processes and Impacts, 2020, 22, 1315-1346.	1.7	187
21	Developing leaders to tackle wicked problems at the nexus of food, energy, and water systems. Elementa, 2020, 8, .	1.1	8
22	Uranyl Speciation on the Surface of Amidoximated Polyacrylonitrile Mats. Inorganic Chemistry, 2020, 59, 8134-8145.	1.9	8
23	Use of real-time sensors for compliance monitoring of nitrate in finished drinking water. Water Science and Technology, 2020, 82, 2725-2736.	1.2	4
24	Intramolecular [2 + 2] Photocycloaddition of Altrenogest: Confirmation of Product Structure, Theoretical Mechanistic Insight, and Bioactivity Assessment. Journal of Organic Chemistry, 2019, 84, 11366-11371.	1.7	6
25	Detection and quantification of metastable photoproducts of trenbolone and altrenogest using liquid chromatographyâ€“tandem mass spectrometry. Journal of Chromatography A, 2019, 1603, 150-159.	1.8	8
26	Potential-Driven Electron Transfer Lowers the Dissociation Energy of the Câ€“F Bond and Facilitates Reductive Defluorination of Perfluorooctane Sulfonate (PFOS). ACS Applied Materials & Interfaces, 2019, 11, 33913-33922.	4.0	67
27	Sorption and transport of trenbolone and altrenogest photoproducts in soilâ€“water systems. Environmental Sciences: Processes and Impacts, 2019, 21, 1650-1663.	1.7	5
28	Photochemical Transformations of Dichloroacetamide Safeners. Environmental Science & Technology, 2019, 53, 6738-6746.	4.6	20
29	Bioactive Rearrangement Products from Aqueous Photolysis of Pharmaceutical Steroids. Organic Letters, 2019, 21, 3568-3571.	2.4	3
30	Methane Dissociation on Î±-Fe₂O₃(0001) and Fe₃O₄(111) Surfaces: First-Principles Insights into Chemical Looping Combustion. Journal of Physical Chemistry C, 2019, 123, 6450-6463.	1.5	23
31	Chlorinated Byproducts of Neonicotinoids and Their Metabolites: An Unrecognized Human Exposure Potential?. Environmental Science and Technology Letters, 2019, 6, 98-105.	3.9	70
32	Performance comparison of hematite (Î±-Fe2O3)-polymer composite and core-shell nanofibers as point-of-use filtration platforms for metal sequestration. Water Research, 2019, 148, 492-503.	5.3	41
33	Surfactant-assisted fabrication of porous polymeric nanofibers with surface-enriched iron oxide nanoparticles: composite filtration materials for removal of metal cations. Environmental Science: Nano, 2018, 5, 669-681.	2.2	22
34	A new year at <i>Environmental Science: Water Research & Technology</i>. Environmental Science: Water Research and Technology, 2018, 4, 7-8.	1.2	1
35	Reduction of PCE and TCE by magnetite revisited. Environmental Sciences: Processes and Impacts, 2018, 20, 1340-1349.	1.7	29
36	Matrix-Independent Surface-Enhanced Raman Scattering Detection of Uranyl Using Electrospun Amidoximated Polyacrylonitrile Mats and Gold Nanostars. Analytical Chemistry, 2018, 90, 6766-6772.	3.2	26

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37	Î±-Fe₂O₃ Nanoparticles as Oxygen Carriers for Chemical Looping Combustion: An Integrated Materials Characterization Approach to Understanding Oxygen Carrier Performance, Reduction Mechanism, and Particle Size Effects. Energy & Fuels, 2018, 32, 7959-7970.	2.5	33
38	Co3O4 nanoparticles as oxygen carriers for chemical looping combustion: A materials characterization approach to understanding oxygen carrier performance. Chemical Engineering Journal, 2017, 319, 279-287.	6.6	64
39	Formation of bioactive transformation products during glucocorticoid chlorination. Environmental Science: Water Research and Technology, 2017, 3, 450-461.	1.2	13
40	Occurrence of Neonicotinoid Insecticides in Finished Drinking Water and Fate during Drinking Water Treatment. Environmental Science and Technology Letters, 2017, 4, 168-173.	3.9	206
41	Functionalized polymer-iron oxide hybrid nanofibers: Electrospun filtration devices for metal oxyanion removal. Water Research, 2017, 117, 207-217.	5.3	50
42	Environmental photochemistry of dienogest: phototransformation to estrogenic products and increased environmental persistence <i>via</i> reversible photohydration. Environmental Sciences: Processes and Impacts, 2017, 19, 1414-1426.	1.7	11
43	Emerging investigator series: development and application of polymeric electrospun nanofiber mats as equilibrium-passive sampler media for organic compounds. Environmental Sciences: Processes and Impacts, 2017, 19, 1445-1456.	1.7	12
44	Environmental Photochemistry of Altrenogest: Photoisomerization to a Bioactive Product with Increased Environmental Persistence via Reversible Photohydration. Environmental Science & Technology, 2016, 50, 7480-7488.	4.6	21
45	Synthesis, Optimization, and Performance Demonstration of Electrospun Carbon Nanofiberâ€"Carbon Nanotube Composite Sorbents for Point-of-Use Water Treatment. ACS Applied Materials & Interfaces, 2016, 8, 11431-11440.	4.0	54
46	Formation of trihalomethanes and haloacetic acids during chlorination of functionalized carbon nanotubes. Environmental Science: Nano, 2016, 3, 1327-1339.	2.2	4
47	Electrospun hematite nanofiber/mesoporous silica core/shell nanomaterials as an efficient adsorbent for heavy metals. RSC Advances, 2016, 6, 90516-90525.	1.7	17
48	Role of Atmospheric CO₂ and H₂O Adsorption on ZnO and CuO Nanoparticle Aging: Formation of New Surface Phases and the Impact on Nanoparticle Dissolution. Journal of Physical Chemistry C, 2016, 120, 19195-19203.	1.5	57
49	Sulfate formation catalyzed by coal fly ash, mineral dust and iron(iii) oxide: variable influence of temperature and light. Environmental Sciences: Processes and Impacts, 2016, 18, 1484-1491.	1.7	17
50	Hematite decorated multi-walled carbon nanotubes (Î±-Fe2O3/MWCNTs) as sorbents for Cu(ii) and Cr(vi): comparison of hybrid sorbent performance to its nanomaterial building blocks. RSC Advances, 2016, 6, 99997-100007.	1.7	21
51	Reversible Photohydration of Trenbolone Acetate Metabolites: Mechanistic Understanding of Product-to-Parent Reversion through Complementary Experimental and Theoretical Approaches. Environmental Science & Technology, 2016, 50, 6753-6761.	4.6	14
52	Looking back while moving forward. Environmental Science: Water Research and Technology, 2016, 2, 11-12.	1.2	0
53	Synthesis and optimization of Fe2O3 nanofibers for chromate adsorption from contaminated water sources. Chemosphere, 2016, 144, 975-981.	4.2	65
54	Rates and product identification for trenbolone acetate metabolite biotransformation under aerobic conditions. Environmental Toxicology and Chemistry, 2015, 34, 1472-1484.	2.2	10

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55	Synthesis and optimization of Agâ€“TiO2 composite nanofibers for photocatalytic treatment of impaired water sources. Journal of Hazardous Materials, 2015, 299, 141-148.	6.5	51
56	Tailored Synthesis of Photoactive TiO₂ Nanofibers and Au/TiO₂ Nanofiber Composites: Structure and Reactivity Optimization for Water Treatment Applications. Environmental Science & Technology, 2015, 49, 1654-1663.	4.6	98
57	Synthesis and optimization of BiVO4 and co-catalyzed BiVO4 nanofibers for visible light-activated photocatalytic degradation of aquatic micropollutants. Journal of Molecular Catalysis A, 2015, 404-405, 18-26.	4.8	29
58	Coupled reversion and stream-hyporheic exchange processes increase environmental persistence of trenbolone metabolites. Nature Communications, 2015, 6, 7067.	5.8	12
59	Hydroxyl Radical Formation during Ozonation of Multiwalled Carbon Nanotubes: Performance Optimization and Demonstration of a Reactive CNT Filter. Environmental Science & Technology, 2015, 49, 3687-3697.	4.6	115
60	Environmental Fate and Effects of Dichloroacetamide Herbicide Safeners: â€œInertâ€•yet Biologically Active Agrochemical Ingredients. Environmental Science and Technology Letters, 2015, 2, 260-269.	3.9	49
61	To new beginnings and a better alternative. Environmental Science: Water Research and Technology, 2015, 1, 9-10.	1.2	0
62	Sorption and Mineral-Promoted Transformation of Synthetic Hormone Growth Promoters in Soil Systems. Journal of Agricultural and Food Chemistry, 2014, 62, 12277-12286.	2.4	16
63	Trenbolone acetate metabolites promote ovarian growth and development in adult Japanese medaka (Oryzias latipes). General and Comparative Endocrinology, 2014, 202, 1-7.	0.8	12
64	Deposition and disinfection of Escherichia coli O157:H7 on naturally occurring photoactive materials in a parallel plate chamber. Environmental Sciences: Processes and Impacts, 2014, 16, 194-202.	1.7	10
65	N-Functionalized Carbon Nanotubes As a Source and Precursor of <i>N</i>-Nitrosodimethylamine: Implications for Environmental Fate, Transport, and Toxicity. Environmental Science & Technology, 2014, 48, 9279-9287.	4.6	23
66	Environmental Designer Drugs: When Transformation May Not Eliminate Risk. Environmental Science & Technology, 2014, 48, 11737-11745.	4.6	75
67	Influence of organic surface coatings on the sorption of anticonvulsants on mineral surfaces. Environmental Sciences: Processes and Impacts, 2013, 15, 2038.	1.7	3
68	Horizontal Attenuated Total Reflectance Fourier Transform Infrared and X-ray Photoelectron Spectroscopy Measurements of Water Adsorption on Oxidized Tin(II) Sulfide (SnS) Surfaces. Journal of Physical Chemistry C, 2013, 117, 472-482.	1.5	6
69	Chlorinated Solvent Transformation by Palladized Zerovalent Iron: Mechanistic Insights from Reductant Loading Studies and Solvent Kinetic Isotope Effects. Environmental Science & Technology, 2013, 47, 7940-7948.	4.6	57
70	Identification and Environmental Implications of Photo-Transformation Products of Trenbolone Acetate Metabolites. Environmental Science & Technology, 2013, 47, 5031-5041.	4.6	47
71	Product-to-Parent Reversion of Trenbolone: Unrecognized Risks for Endocrine Disruption. Science, 2013, 342, 347-351.	6.0	73
72	Influence of Anionic Cosolutes and pH on Nanoscale Zerovalent Iron Longevity: Time Scales and Mechanisms of Reactivity Loss toward 1,1,1,2-Tetrachloroethane and Cr(VI). Environmental Science & Technology, 2012, 46, 8365-8373.	4.6	85

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73	Phototransformation Rates and Mechanisms for Synthetic Hormone Growth Promoters Used in Animal Agriculture. Environmental Science & Technology, 2012, 46, 13202-13211.	4.6	45
74	Lack of Influence of Extracellular Polymeric Substances (EPS) Level on Hydroxyl Radical Mediated Disinfection of <i>Escherichia coli</i>. Environmental Science & Technology, 2012, 46, 241-249.	4.6	44
75	Dissolution of Hematite Nanoparticle Aggregates: Influence of Primary Particle Size, Dissolution Mechanism, and Solution pH. Langmuir, 2012, 28, 15797-15808.	1.6	83
76	Combined Factors Influencing the Aggregation and Deposition of nano-TiO₂ in the Presence of Humic Acid and Bacteria. Environmental Science & Technology, 2012, 46, 6968-6976.	4.6	194
77	Reactivity of Alkyl Polyhalides toward Granular Iron: Development of QSARs and Reactivity Cross Correlations for Reductive Dehalogenation. Environmental Science & Technology, 2010, 44, 7928-7936.	4.6	21
78	Pharmaceuticals and personal care products in effluent matrices: A survey of transformation and removal during wastewater treatment and implications for wastewater management. Journal of Environmental Monitoring, 2010, 12, 1956.	2.1	286
79	Photoreductive dissolution of Feâ€containing mineral dust particles in acidic media. Journal of Geophysical Research, 2010, 115, .	3.3	65
80	Nanogoethite Formation from Oxidation of Fe(II) Sorbed on Aluminum Oxide: Implications for Contaminant Reduction. Environmental Science & Technology, 2010, 44, 3765-3771.	4.6	29
81	Use of Dithionite to Extend the Reactive Lifetime of Nanoscale Zero-Valent Iron Treatment Systems. Environmental Science & Technology, 2010, 44, 8649-8655.	4.6	103
82	Surface Chemistry and Dissolution of Î±-FeOOH Nanorods and Microrods: Environmental Implications of Size-Dependent Interactions with Oxalate. Journal of Physical Chemistry C, 2009, 113, 2175-2186.	1.5	120
83	Characterization and acidâ€mobilization study of ironâ€containing mineral dust source materials. Journal of Geophysical Research, 2008, 113, .	3.3	139
84	Adsorption of Organic Acids on TiO₂ Nanoparticles: Effects of pH, Nanoparticle Size, and Nanoparticle Aggregation. Langmuir, 2008, 24, 6659-6667.	1.6	230
85	Interpreting nanoscale size-effects in aggregated Fe-oxide suspensions: Reaction of Fe(II) with Goethite. Geochimica Et Cosmochimica Acta, 2008, 72, 1365-1380.	1.6	102
86	Chemistry and Photochemistry of Mineral Dust Aerosol. Annual Review of Physical Chemistry, 2008, 59, 27-51.	4.8	222
87	Adsorption of sulfur dioxide on hematite and goethite particle surfaces. Physical Chemistry Chemical Physics, 2007, 9, 5542.	1.3	303
88	1,1,2,2-Tetrachloroethane Reactions with OH-, Cr(II), Granular Iron, and a Copperâˆ'Iron Bimetal:Â Insights from Product Formation and Associated Carbon Isotope Fractionation. Environmental Science & Technology, 2007, 41, 4111-4117.	4.6	62
89	Influence of the Oxidizing Species on the Reactivity of Iron-Based Bimetallic Reductants. Environmental Science & Technology, 2007, 41, 3734-3740.	4.6	99
90	Response to Comment on â€œ1,1,2,2-Tetrachloroethane Reactions with OH⁻, Cr(II), Granular Iron, and a Copperâˆ'Iron Bimetal:â€‰ Insights from Product Formation and Associated Carbon Isotope Fractionationâ€. Environmental Science & Technology, 2007, 41, 7949-7950.	4.6	9

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91	Influence of transition metal additives and temperature on the rate of organohalide reduction by granular iron: Implications for reaction mechanisms. Applied Catalysis B: Environmental, 2007, 76, 348-356.	10.8	66
92	Influence of Copper Loading and Surface Coverage on the Reactivity of Granular Iron toward 1,1,1-Trichloroethane. Environmental Science & Technology, 2006, 40, 1485-1490.	4.6	82
93	Exploring the Influence of Granular Iron Additives on 1,1,1-Trichloroethane Reduction. Environmental Science & Technology, 2006, 40, 6837-6843.	4.6	155
94	On the Nonlinear Relationship betweenkobsand Reductant Mass Loading in Iron Batch Systems. Environmental Science & Technology, 2005, 39, 8948-8957.	4.6	47