## David L Sedlak

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Fate of Dissolved Nitrogen in a Horizontal Levee: Seasonal Fluctuations in Nitrate Removal Processes. Environmental Science & Technology, 2022, 56, 2770-2782.	10.0	10
2	Aerobic BTEX biodegradation increases yield of perfluoroalkyl carboxylic acids from biotransformation of a polyfluoroalkyl surfactant, 6:2 FtTAoS. Environmental Sciences: Processes and Impacts, 2022, 24, 439-446.	3.5	6
3	The third route: A techno-economic evaluation of extreme water and wastewater decentralization. Water Research, 2022, 218, 118408.	11.3	21
4	Membrane-Assisted Electrochlorination for Zero-Chemical-Input Point-of-Use Drinking Water Disinfection. ACS ES&T Engineering, 2022, 2, 1933-1941.	7.6	4
5	Sorption of recalcitrant phosphonates in reverse osmosis concentrates and wastewater effluents – influence of metal ions. Water Science and Technology, 2021, 83, 934-947.	2.5	17
6	Nitrate removal from reverse osmosis concentrate in pilot-scale open-water unit process wetlands. Environmental Science: Water Research and Technology, 2021, 7, 650-661.	2.4	17
7	Reactions of α,β-Unsaturated Carbonyls with Free Chlorine, Free Bromine, and Combined Chlorine. Environmental Science & Technology, 2021, 55, 3305-3312.	10.0	16
8	Regenerated Manganese-Oxide Coated Sands: The Role of Mineral Phase in Organic Contaminant Reactivity. Environmental Science & Technology, 2021, 55, 5282-5290.	10.0	8
9	Ubiquitous Production of Organosulfates during Treatment of Organic Contaminants with Sulfate Radicals. Environmental Science and Technology Letters, 2021, 8, 574-580.	8.7	27
10	Enabling Water Reuse by Treatment of Reverse Osmosis Concentrate: The Promise of Constructed Wetlands. ACS Environmental Au, 2021, 1, 7-17.	7.0	16
11	Under-reporting Potential of Perfluorooctanesulfonic Acid (PFOS) under High-Ionic Strength Conditions. Environmental Science and Technology Letters, 2021, 8, 1032-1037.	8.7	15
12	Interfacial Solar Evaporation by a 3D Graphene Oxide Stalk for Highly Concentrated Brine Treatment. Environmental Science & Technology, 2021, 55, 15435-15445.	10.0	62
13	An electrochemical advanced oxidation process for the treatment of urban stormwater. Water Research X, 2021, 13, 100127.	6.1	8
14	Chlorination of Phenols Revisited: Unexpected Formation of α,β-Unsaturated C <sub>4</sub> -Dicarbonyl Ring Cleavage Products. Environmental Science & Technology, 2020, 54, 826-834.	10.0	60
15	Hydrophilic trace organic contaminants in urban stormwater: occurrence, toxicological relevance, and the need to enhance green stormwater infrastructure. Environmental Science: Water Research and Technology, 2020, 6, 15-44.	2.4	66
16	The use of manganese oxide-coated sand for the removal of trace metal ions from stormwater. Environmental Science: Water Research and Technology, 2020, 6, 593-603.	2.4	11
17	Use of stable nitrogen isotopes to track plant uptake of nitrogen in a nature-based treatment system. Water Research X, 2020, 9, 100070.	6.1	9
18	Transformation of Trace Organic Contaminants from Reverse Osmosis Concentrate by Open-Water Unit-Process Wetlands with and without Ozone Pretreatment. Environmental Science & Technology, 2020, 54, 16176-16185.	10.0	17

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19	The third route: Using extreme decentralization to create resilient urban water systems. Water Research, 2020, 185, 116276.	11.3	39
20	Protecting the sewershed. Science, 2020, 369, 1429-1430.	12.6	6
21	Formation and Fate of Carbonyls in Potable Water Reuse Systems. Environmental Science & Technology, 2020, 54, 10895-10903.	10.0	20
22	Superselective Removal of Lead from Water by Two-Dimensional MoS <sub>2</sub> Nanosheets and Layer-Stacked Membranes. Environmental Science & Technology, 2020, 54, 12602-12611.	10.0	87
23	The horizontal levee: a multi-benefit nature-based treatment system that improves water quality and protects coastal levees from the effects of sea level rise. Water Research X, 2020, 7, 100052.	6.1	12
24	Ring-Cleavage Products Produced during the Initial Phase of Oxidative Treatment of Alkyl-Substituted Aromatic Compounds. Environmental Science & amp; Technology, 2020, 54, 8352-8361.	10.0	21
25	Sulfur Cycle in a Wetland Microcosm: Extended <sup>34</sup> S-Stable Isotope Analysis and Mass Balance. Environmental Science & Technology, 2020, 54, 5498-5508.	10.0	19
26	Impact of Peroxymonocarbonate on the Transformation of Organic Contaminants during Hydrogen Peroxide <i>in Situ</i> Chemical Oxidation. Environmental Science and Technology Letters, 2019, 6, 781-786.	8.7	28
27	Evaluation of pilot-scale biochar-amended woodchip bioreactors to remove nitrate, metals, and trace organic contaminants from urban stormwater runoff. Water Research, 2019, 154, 1-11.	11.3	125
28	The Food–Environment Nexus. Environmental Science & Technology, 2019, 53, 6597-6598.	10.0	3
29	The Role of Reactive Nitrogen Species in Sensitized Photolysis of Wastewater-Derived Trace Organic Contaminants. Environmental Science & Technology, 2019, 53, 6483-6491.	10.0	83
30	The Unintended Consequences of the Reverse Osmosis Revolution. Environmental Science & Technology, 2019, 53, 3999-4000.	10.0	19
31	<i>ES&amp;T</i> 's Best Papers of 2018. Environmental Science & Technology, 2019, 53, 3343-3344.	10.0	0
32	Polymer-clay composite geomedia for sorptive removal of trace organic compounds and metals in urban stormwater. Water Research, 2019, 157, 454-462.	11.3	63
33	Better Science by Beating Back Bias. Environmental Science and Technology Letters, 2019, 6, 112-113.	8.7	0
34	A Tale of Two Treatments: The Multiple Barrier Approach to Removing Chemical Contaminants During Potable Water Reuse. Accounts of Chemical Research, 2019, 52, 615-622.	15.6	112
35	Environmental Science & Technology Presents the 2019 Reviewer Awards. Environmental Science & Technology, 2019, 53, 12151-12152.	10.0	1
36	A mixed-methods approach to strategic planning for multi-benefit regional water infrastructure. Journal of Environmental Management, 2019, 233, 218-237.	7.8	32

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37	The Technology Horizon for Photocatalytic Water Treatment: Sunrise or Sunset?. Environmental Science & Technology, 2019, 53, 2937-2947.	10.0	493
38	Simplified Process to Determine Rate Constants for Sunlight-Mediated Removal of Trace Organic and Microbial Contaminants in Unit Process Open-Water Treatment Wetlands. Environmental Engineering Science, 2019, 36, 43-59.	1.6	12
39	Unexpected transformation of dissolved phenols to toxic dicarbonyls by hydroxyl radicals and UV light. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2311-2316.	7.1	96
40	Biotransformation of AFFF Component 6:2 Fluorotelomer Thioether Amido Sulfonate Generates 6:2 Fluorotelomer Thioether Carboxylate under Sulfate-Reducing Conditions. Environmental Science and Technology Letters, 2018, 5, 283-288.	8.7	54
41	Establishment and convergence of photosynthetic microbial biomats in shallow unit process open-water wetlands. Water Research, 2018, 133, 132-141.	11.3	12
42	Treatment of perfluoroalkyl acids by heat-activated persulfate under conditions representative of in situ chemical oxidation. Chemosphere, 2018, 206, 457-464.	8.2	105
43	ES&T's Best Papers of 2017. Environmental Science & Technology, 2018, 52, 3833-3834.	10.0	0
44	Trace Element Removal in Distributed Drinking Water Treatment Systems by Cathodic H <sub>2</sub> O <sub>2</sub> Production and UV Photolysis. Environmental Science & Technology, 2018, 52, 195-204.	10.0	22
45	<i>Environmental Science &amp; Technology</i> Presents the 2018 Reviewer Awards. Environmental Science & Technology, 2018, 52, 11971-11972.	10.0	0
46	Towards a New Paradigm of Urban Water Infrastructure: Identifying Goals and Strategies to Support Multi-Benefit Municipal Wastewater Treatment. Water (Switzerland), 2018, 10, 1127.	2.7	22
47	Chemical Regeneration of Manganese Oxide-Coated Sand for Oxidation of Organic Stormwater Contaminants. Environmental Science & amp; Technology, 2018, 52, 10728-10736.	10.0	37
48	Sulfide-Induced Dissimilatory Nitrate Reduction to Ammonium Supports Anaerobic Ammonium Oxidation (Anammox) in an Open-Water Unit Process Wetland. Applied and Environmental Microbiology, 2017, 83, .	3.1	49
49	Removal of nutrients, trace organic contaminants, and bacterial indicator organisms in a demonstration-scale unit process open-water treatment wetland. Ecological Engineering, 2017, 109, 76-83.	3.6	36
50	Synthetic Graphene Oxide Leaf for Solar Desalination with Zero Liquid Discharge. Environmental Science & Technology, 2017, 51, 11701-11709.	10.0	270
51	Advanced Materials, Technologies, and Complex Systems Analyses: Emerging Opportunities to Enhance Urban Water Security. Environmental Science & Technology, 2017, 51, 10274-10281.	10.0	129
52	Treatment of Aqueous Film-Forming Foam by Heat-Activated Persulfate Under Conditions Representative of In Situ Chemical Oxidation. Environmental Science & Technology, 2017, 51, 13878-13885.	10.0	133
53	<i>Environmental Science &amp; amp; Technology</i> Presents the 2017 Reviewer Awards. Environmental Science & amp; Technology, 2017, 51, 12047-12048.	10.0	0
54	Identification of transformation products from βâ€blocking agents formed in wetland microcosms using LCâ€Qâ€ToF. Journal of Mass Spectrometry, 2016, 51, 207-218.	1.6	13

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55	Barriers to Innovation in Urban Wastewater Utilities: Attitudes of Managers in California. Environmental Management, 2016, 57, 1204-1216.	2.7	34
56	Electrochemical Transformation of Trace Organic Contaminants in the Presence of Halide and Carbonate lons. Environmental Science & amp; Technology, 2016, 50, 10143-10152.	10.0	115
57	Quantification of 11 thyroid hormones and associated metabolites in blood using isotope-dilution liquid chromatography tandem mass spectrometry. Analytical and Bioanalytical Chemistry, 2016, 408, 5429-5442.	3.7	51
58	Chemisorption of Perfluorooctanoic Acid on Powdered Activated Carbon Initiated by Persulfate in Aqueous Solution. Environmental Science & Technology, 2016, 50, 7618-7624.	10.0	60
59	Oxidation of organic contaminants by manganese oxide geomedia for passive urban stormwater treatment systems. Water Research, 2016, 88, 481-491.	11.3	60
60	Effects of Aqueous Film-Forming Foams (AFFFs) on Trichloroethene (TCE) Dechlorination by a <i>Dehalococcoides mccartyi</i> -Containing Microbial Community. Environmental Science & Technology, 2016, 50, 3352-3361.	10.0	35
61	Oxidation of Benzene by Persulfate in the Presence of Fe(III)- and Mn(IV)-Containing Oxides: Stoichiometric Efficiency and Transformation Products. Environmental Science & Technology, 2016, 50, 890-898.	10.0	257
62	Quantification of 11 thyroid hormones and associated metabolites in blood using isotope-dilution liquid chromatography tandem mass spectrometry. , 2016, 408, 5429.		1
63	Co-occurrence of Photochemical and Microbiological Transformation Processes in Open-Water Unit Process Wetlands. Environmental Science & Technology, 2015, 49, 14136-14145.	10.0	62
64	Aerobic Biotransformation of Fluorotelomer Thioether Amido Sulfonate (Lodyne) in AFFF-Amended Microcosms. Environmental Science & Technology, 2015, 49, 7666-7674.	10.0	207
65	Beyond User Acceptance: A Legitimacy Framework for Potable Water Reuse in California. Environmental Science & Technology, 2015, 49, 7552-7561.	10.0	108
66	Modular Advanced Oxidation Process Enabled by Cathodic Hydrogen Peroxide Production. Environmental Science & Technology, 2015, 49, 7391-7399.	10.0	114
67	Rapid chiral separation of atenolol, metoprolol, propranolol and the zwitterionic metoprolol acid using supercritical fluid chromatography–tandem mass spectrometry – Application to wetland microcosms. Journal of Chromatography A, 2015, 1409, 251-258.	3.7	29
68	Urban Water-Supply Reinvention. Daedalus, 2015, 144, 72-82.	1.8	22
69	Animal Manure Separation Technologies Diminish the Environmental Burden of Steroid Hormones. Environmental Science and Technology Letters, 2015, 2, 133-137.	8.7	8
70	Wastewaterâ€effluentâ€dominated streams as ecosystemâ€management tools in a drier climate. Frontiers in Ecology and the Environment, 2015, 13, 477-485.	4.0	103
71	Challenges and Opportunities for Electrochemical Processes as Next-Generation Technologies for the Treatment of Contaminated Water. Environmental Science & amp; Technology, 2015, 49, 11292-11302.	10.0	791
72	Bioavailability and characterization of dissolved organic nitrogen and dissolved organic phosphorus in wastewater effluents. Science of the Total Environment, 2015, 511, 47-53.	8.0	126

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73	Superior Removal of Disinfection Byproduct Precursors and Pharmaceuticals from Wastewater in a Staged Anaerobic Fluidized Membrane Bioreactor Compared to Activated Sludge. Environmental Science and Technology Letters, 2014, 1, 459-464.	8.7	53
74	In Situ Chemical Oxidation of Contaminated Groundwater by Persulfate: Decomposition by Fe(III)- and Mn(IV)-Containing Oxides and Aquifer Materials. Environmental Science & Technology, 2014, 48, 10330-10336.	10.0	345
75	Evidence of Remediation-Induced Alteration of Subsurface Poly- and Perfluoroalkyl Substance Distribution at a Former Firefighter Training Area. Environmental Science & Technology, 2014, 48, 6644-6652.	10.0	199
76	Biotransformation of Trace Organic Contaminants in Open-Water Unit Process Treatment Wetlands. Environmental Science & Technology, 2014, 48, 5136-5144.	10.0	74
77	Nitrate Removal in Shallow, Open-Water Treatment Wetlands. Environmental Science & Technology, 2014, 48, 11512-11520.	10.0	57
78	A Changing Framework for Urban Water Systems. Environmental Science & Technology, 2013, 47, 10721-10726.	10.0	208
79	The Innovation Deficit in Urban Water: The Need for an Integrated Perspective on Institutions, Organizations, and Technology. Environmental Engineering Science, 2013, 30, 395-408.	1.6	119
80	Engineered Infiltration Systems for Urban Stormwater Reclamation. Environmental Engineering Science, 2013, 30, 437-454.	1.6	137
81	Phototransformation of Wastewater-Derived Trace Organic Contaminants in Open-Water Unit Process Treatment Wetlands. Environmental Science & Technology, 2013, 47, 10781-10790.	10.0	143
82	Persistence of Perfluoroalkyl Acid Precursors in AFFF-Impacted Groundwater and Soil. Environmental Science & Technology, 2013, 47, 8187-8195.	10.0	582
83	Introduction: Reinventing Urban Water Infrastructure. Environmental Engineering Science, 2013, 30, 393-394.	1.6	3
84	Unit Process Wetlands for Removal of Trace Organic Contaminants and Pathogens from Municipal Wastewater Effluents. Environmental Engineering Science, 2013, 30, 421-436.	1.6	92
85	A framework for identifying characteristic odor compounds in municipal wastewater effluent. Water Research, 2012, 46, 5970-5980.	11.3	60
86	Kinetics and efficiency of H2O2 activation by iron-containing minerals and aquifer materials. Water Research, 2012, 46, 6454-6462.	11.3	142
87	Oxidative Conversion as a Means of Detecting Precursors to Perfluoroalkyl Acids in Urban Runoff. Environmental Science & Technology, 2012, 46, 9342-9349.	10.0	426
88	Dissolution of mesoporous silica supports in aqueous solutions: Implications for mesoporous silica-based water treatment processes. Applied Catalysis B: Environmental, 2012, 126, 258-264.	20.2	75
89	Inhibitory Effect of Dissolved Silica on H <sub>2</sub> O <sub>2</sub> Decomposition by Iron(III) and Manganese(IV) Oxides: Implications for H <sub>2</sub> O <sub>2</sub> -Based In Situ Chemical Oxidation. Environmental Science & Technology, 2012, 46, 1055-1062.	10.0	82
90	Iron oxide nanoparticle synthesis in aqueous and membrane systems for oxidative degradation of trichloroethylene from water. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	47

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91	The Chlorine Dilemma. Science, 2011, 331, 42-43.	12.6	338
92	Odorous Compounds in Municipal Wastewater Effluent and Potable Water Reuse Systems. Environmental Science & Technology, 2011, 45, 9347-9355.	10.0	54
93	The Role of Iron Coordination in the Production of Reactive Oxidants from Ferrous Iron Oxidation by Oxygen and Hydrogen Peroxide. ACS Symposium Series, 2011, , 177-197.	0.5	49
94	Impact of Iron Amendment on Net Methylmercury Export from Tidal Wetland Microcosms. Environmental Science & Technology, 2010, 44, 7659-7665.	10.0	28
95	Formation and fate of chlorination by-products in reverse osmosis desalination systems. Water Research, 2010, 44, 1616-1626.	11.3	79
96	A Silica-Supported Iron Oxide Catalyst Capable of Activating Hydrogen Peroxide at Neutral pH Values. Environmental Science & Technology, 2009, 43, 8930-8935.	10.0	317
97	Oxidative Stress Induced by Zero-Valent Iron Nanoparticles and Fe(II) in Human Bronchial Epithelial Cells. Environmental Science & Technology, 2009, 43, 4555-4560.	10.0	194
98	Factors Affecting the Yield of Oxidants from the Reaction of Nanoparticulate Zero-Valent Iron and Oxygen. Environmental Science & Technology, 2008, 42, 1262-1267.	10.0	625
99	Ligand-Enhanced Reactive Oxidant Generation by Nanoparticulate Zero-Valent Iron and Oxygen. Environmental Science & Technology, 2008, 42, 6936-6941.	10.0	304
100	Polyoxometalate-Enhanced Oxidation of Organic Compounds by Nanoparticulate Zero-Valent Iron and Ferrous Ion in the Presence of Oxygen. Environmental Science & Technology, 2008, 42, 4921-4926.	10.0	168
101	Use of biodegradable dissolved organic carbon (BDOC) to assess the potential for transformation of wastewater-derived contaminants in surface waters. Water Research, 2008, 42, 2943-2952.	11.3	58
102	Response to Comment on "Factors Affecting the Yield of Oxidants from the Reaction of Nanoparticulate Zero-Valent Iron and Oxygen― Environmental Science & Technology, 2008, 42, 5378-5378.	10.0	9
103	Response to Comment on "Polyoxometalate-Enhanced Oxidation of Organic Compounds by Nanoparticulate Zero-Valent Iron and Ferrous Ion in the Presence of Oxygen― Environmental Science & Technology, 2008, 42, 8169-8169.	10.0	2
104	Attenuation of Wastewater-Derived Contaminants in an Effluent-Dominated River. Environmental Science & amp; Technology, 2006, 40, 7257-7262.	10.0	175
105	Wastewater-Derived Dissolved Organic Nitrogen: Analytical Methods, Characterization, and Effects—A Review. Critical Reviews in Environmental Science and Technology, 2006, 36, 261-285.	12.8	132
106	Uptake of EDTA-complexed Pb, Cd and Fe by solution- and sand-cultured Brassica juncea. Plant and Soil, 2006, 286, 377-391.	3.7	58
107	Sources and Fate of Nitrosodimethylamine and its Precursors in Municipal Wastewater Treatment Plants. Water Environment Research, 2005, 77, 32-39.	2.7	132
108	The Fate of Estrogenic Hormones in an Engineered Treatment Wetland with Dense Macrophytes. Water Environment Research, 2005, 77, 24-31.	2.7	45

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109	Minimization of NDMA Formation during Chlorine Disinfection of Municipal Wastewater by Application of Pre-Formed Chloramines. Environmental Engineering Science, 2005, 22, 882-890.	1.6	54
110	Use of the Chiral Pharmaceutical Propranolol to Identify Sewage Discharges into Surface Waters. Environmental Science & Technology, 2005, 39, 9244-9252.	10.0	163
111	Bioavailability of wastewater-derived organic nitrogen to the alga Selenastrum Capricornutum. Water Research, 2004, 38, 3189-3196.	11.3	119
112	Pharmaceuticals, Personal Care Products, and Endocrine Disruptors in Water: Implications for the Water Industry. Environmental Engineering Science, 2003, 20, 449-469.	1.6	760
113	Precursors ofN-Nitrosodimethylamine in Natural Waters. Environmental Science & Technology, 2003, 37, 1331-1336.	10.0	174
114	A N-Nitrosodimethylamine (NDMA) precursor analysis for chlorination of water and wastewater. Water Research, 2003, 37, 3733-3741.	11.3	257
115	N-Nitrosodimethylamine (NDMA) as a Drinking Water Contaminant: A Review. Environmental Engineering Science, 2003, 20, 389-404.	1.6	571
116	Formation ofN-Nitrosodimethylamine (NDMA) from Dimethylamine during Chlorination. Environmental Science & Technology, 2002, 36, 588-595.	10.0	517
117	Analysis of estrogenic hormones in municipal wastewater effluent and surface water using enzymeâ€linked immunosorbent assay and gas chromatography/tandem mass spectrometry. Environmental Toxicology and Chemistry, 2001, 20, 133-139.	4.3	357
118	ANALYSIS OF ESTROGENIC HORMONES IN MUNICIPAL WASTEWATER EFFLUENT AND SURFACE WATER USING ENZYME-LINKED IMMUNOSORBENT ASSAY AND GAS CHROMATOGRAPHY/TANDEM MASS SPECTROMETRY. Environmental Toxicology and Chemistry, 2001, 20, 133.	4.3	16
119	Effect of metal complexation on the degradation of dithiocarbamate fungicides. Environmental Toxicology and Chemistry, 2000, 19, 820-826.	4.3	33
120	Chemistry of Superoxide Radical in Seawater:  Reactions with Organic Cu Complexes. Environmental Science & Technology, 2000, 34, 1036-1042.	10.0	128
121	EFFECT OF METAL COMPLEXATION ON THE DEGRADATION OF DITHIOCARBAMATE FUNGICIDES. Environmental Toxicology and Chemistry, 2000, 19, 820.	4.3	2
122	Sources and Environmental Fate of Strongly Complexed Nickel in Estuarine Waters:Â The Role of Ethylenediaminetetraacetate. Environmental Science & Technology, 1999, 33, 926-931.	10.0	73
123	Chemistry of the Superoxide Radical (O2-) in Seawater:  Reactions with Inorganic Copper Complexes. Journal of Physical Chemistry A, 1998, 102, 5693-5700.	2.5	107