

Perry L Mccarty

List of Publications by Year in descending order

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times ranked

6120

citing authors

#	ARTICLE	IF	CITATIONS
1	Temperate climate energy-positive anaerobic secondary treatment of domestic wastewater at pilot-scale. <i>Water Research</i> , 2021, 204, 117598.	11.3	21
2	A comparative pilot-scale evaluation of gas-sparged and granular activated carbon-fluidized anaerobic membrane bioreactors for domestic wastewater treatment. <i>Bioresource Technology</i> , 2019, 288, 120949.	9.6	50
3	What is the Best Biological Process for Nitrogen Removal: When and Why?. <i>Environmental Science & Technology</i> , 2018, 52, 3835-3841.	10.0	210
4	Low energy single-staged anaerobic fluidized bed ceramic membrane bioreactor (AFCMBR) for wastewater treatment. <i>Bioresource Technology</i> , 2017, 240, 33-41.	9.6	107
5	Pilot-Scale Comparison of Gas-Sparged and GAC-Fluidized Anaerobic Membrane Bioreactors Treating Domestic Wastewater. <i>Proceedings of the Water Environment Federation</i> , 2017, 2017, 5446-5455.	0.0	1
6	Effects of FeCl ₃ addition on the operation of a staged anaerobic fluidized membrane bioreactor (SAF-MBR). <i>Water Science and Technology</i> , 2016, 74, 130-137.	2.5	12
7	Development and application of a procedure for evaluating the long-term integrity of membranes for the anaerobic fluidized membrane bioreactor (AFMBR). <i>Water Science and Technology</i> , 2016, 74, 457-465.	2.5	17
8	Integrity of hollow-fiber membranes in a pilot-scale anaerobic fluidized membrane bioreactor (AFMBR) after two-years of operation. <i>Separation and Purification Technology</i> , 2016, 162, 101-105.	7.9	60
9	Importance of Dissolved Methane Management When Anaerobically Treating Low-Strength Wastewaters. <i>Current Organic Chemistry</i> , 2016, 20, 2810-2816.	1.6	14
10	Anaerobic fluidized membrane bioreactor polishing of baffled reactor effluent during treatment of dilute wastewater. <i>Journal of Chemical Technology and Biotechnology</i> , 2015, 90, 391-397.	3.2	21
11	Probabilistic evaluation of integrating resource recovery into wastewater treatment to improve environmental sustainability. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 1630-1635.	7.1	75
12	Anaerobic Fluidized Bed Membrane Bioreactors for the Treatment of Domestic Wastewater. , 2015, , 211-242.		5
13	Superior Removal of Disinfection Byproduct Precursors and Pharmaceuticals from Wastewater in a Staged Anaerobic Fluidized Membrane Bioreactor Compared to Activated Sludge. <i>Environmental Science and Technology Letters</i> , 2014, 1, 459-464.	8.7	53
14	Anaerobic treatment of low-strength wastewater: A comparison between single and staged anaerobic fluidized bed membrane bioreactors. <i>Bioresource Technology</i> , 2014, 165, 75-80.	9.6	87
15	Pilot-scale temperate-climate treatment of domestic wastewater with a staged anaerobic fluidized membrane bioreactor (SAF-MBR). <i>Bioresource Technology</i> , 2014, 159, 95-103.	9.6	221
16	Efficient single-stage autotrophic nitrogen removal with dilute wastewater through oxygen supply control. <i>Bioresource Technology</i> , 2012, 123, 400-405.	9.6	32
17	Lower operational limits to volatile fatty acid degradation with dilute wastewaters in an anaerobic fluidized bed reactor. <i>Bioresource Technology</i> , 2012, 109, 13-20.	9.6	24
18	Model to Couple Anaerobic Process Kinetics with Biological Growth Equilibrium Thermodynamics. <i>Environmental Science & Technology</i> , 2011, 45, 6838-6844.	10.0	24

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19	Anaerobic Fluidized Bed Membrane Bioreactor for Wastewater Treatment. <i>Environmental Science & Technology</i> , 2011, 45, 576-581.	10.0	414
20	Domestic Wastewater Treatment as a Net Energy Producer—Can This be Achieved?. <i>Environmental Science & Technology</i> , 2011, 45, 7100-7106.	10.0	1,406
21	Biological reduction of chlorinated solvents: Batch-scale geochemical modeling. <i>Advances in Water Resources</i> , 2010, 33, 969-986.	3.8	36
22	pH control for enhanced reductive bioremediation of chlorinated solvent source zones. <i>Science of the Total Environment</i> , 2009, 407, 4560-4573.	8.0	72
23	Electron donor and pH relationships for biologically enhanced dissolution of chlorinated solvent DNAPL in groundwater. <i>European Journal of Soil Biology</i> , 2007, 43, 276-282.	3.2	51
24	Thermodynamic electron equivalents model for bacterial yield prediction: Modifications and comparative evaluations. <i>Biotechnology and Bioengineering</i> , 2007, 97, 377-388.	3.3	112
25	Comparison between acetate and hydrogen as electron donors and implications for the reductive dehalogenation of PCE and TCE. <i>Journal of Contaminant Hydrology</i> , 2007, 94, 76-85.	3.3	41
26	Numerical Model for Biological Fluidized-Bed Reactor Treatment of Perchlorate-Contaminated Groundwater. <i>Environmental Science & Technology</i> , 2005, 39, 850-858.	10.0	41
27	Molecular Identification of the Catabolic Vinyl Chloride Reductase from <i>Dehalococcoides</i> sp. Strain VS and Its Environmental Distribution. <i>Applied and Environmental Microbiology</i> , 2004, 70, 4880-4888.	3.1	328
28	Simulated and experimental evaluation of factors affecting the rate and extent of reductive dehalogenation of chloroethenes with glucose. <i>Journal of Contaminant Hydrology</i> , 2004, 74, 313-331.	3.3	42
29	Vinyl Chloride and <i>cis</i> -Dichloroethene Dechlorination Kinetics and Microorganism Growth under Substrate Limiting Conditions. <i>Environmental Science & Technology</i> , 2004, 38, 1102-1107.	10.0	113
30	Comparative Evaluation of Chloroethene Dechlorination to Ethene by <i>Dehalococcoides</i> -like Microorganisms. <i>Environmental Science & Technology</i> , 2004, 38, 4768-4774.	10.0	74
31	Growth of a <i>Dehalococcoides</i> -Like Microorganism on Vinyl Chloride and <i>cis</i> -Dichloroethene as Electron Acceptors as Determined by Competitive PCR. <i>Applied and Environmental Microbiology</i> , 2003, 69, 953-959.	3.1	229
32	Comparison between Donor Substrates for Biologically Enhanced Tetrachloroethene DNAPL Dissolution. <i>Environmental Science & Technology</i> , 2002, 36, 3400-3404.	10.0	117
33	Full-scale demonstration of in situ cometabolic biodegradation of trichloroethylene in groundwater 1. Dynamics of a recirculating well system. <i>Water Resources Research</i> , 2002, 38, 10-1-10-15.	4.2	19
34	Full-scale demonstration of in situ cometabolic biodegradation of trichloroethylene in groundwater 2. Comprehensive analysis of field data using reactive transport modeling. <i>Water Resources Research</i> , 2002, 38, 11-1-11-18.	4.2	28
35	Biomass, Oleate, and Other Possible Substrates for Chloroethene Reductive Dehalogenation. <i>Bioremediation Journal</i> , 2000, 4, 125-133.	2.0	45
36	Biologically Enhanced Dissolution of Tetrachloroethene DNAPL. <i>Environmental Science & Technology</i> , 2000, 34, 2979-2984.	10.0	158

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37	Impact of Colony Morphologies and Disinfection on Biological Clogging in Porous Media. Environmental Science & Technology, 2000, 34, 1513-1520.	10.0	93
38	Mass-Transfer Limitations for Macroscale Bioremediation Modeling and Implications on Aquifer Clogging. Ground Water, 1999, 37, 523-531.	1.3	30
39	Effects of Shear Detachment on Biomass Growth and In Situ Bioremediation. Ground Water, 1999, 37, 555-563.	1.3	26
40	Chlorinated Ethene Half-Velocity Coefficients (K _S) for Reductive Dehalogenation. Environmental Science & Technology, 1999, 33, 223-226.	10.0	86
41	Full-Scale Evaluation of In Situ Cometabolic Degradation of Trichloroethylene in Groundwater through Toluene Injection. Environmental Science & Technology, 1998, 32, 88-100.	10.0	210
42	Competition for Hydrogen within a Chlorinated Solvent Dehalogenating Anaerobic Mixed Culture. Environmental Science & Technology, 1998, 32, 3591-3597.	10.0	284
43	Spreadsheet Method for Evaluation of Biochemical Reaction Rate Coefficients and Their Uncertainties by Weighted Nonlinear Least-Squares Analysis of the Integrated Monod Equation. Applied and Environmental Microbiology, 1998, 64, 2044-2050.	3.1	76
44	Effect of Chlorinated Ethenes on S _{min} for a Methanotrophic Mixed Culture. Environmental Science & Technology, 1997, 31, 2204-2210.	10.0	6
45	Numerical modeling and uncertainties in rate coefficients for methane utilization and TCE cometabolism by a methane-oxidizing mixed culture. Biotechnology and Bioengineering, 1997, 53, 320-331.	3.3	50
46	Laboratory evaluation of a two-stage treatment system for TCE cometabolism by a methane-oxidizing mixed culture. , 1997, 55, 650-659.		23
47	Effect of Three Chlorinated Ethenes on Growth Rates for a Methanotrophic Mixed Culture. Environmental Science & Technology, 1996, 30, 3517-3524.	10.0	28
48	Field Evaluation of in Situ Aerobic Cometabolism of Trichloroethylene and Three Dichloroethylene Isomers Using Phenol and Toluene as the Primary Substrates. Environmental Science & Technology, 1995, 29, 1628-1637.	10.0	168
49	Trichloroethylene concentration effects on pilot field-scale in-situ groundwater bioremediation by phenol-oxidizing microorganisms. Environmental Science & Technology, 1993, 27, 2542-2547.	10.0	97
50	Inhibition of Butyrate Oxidation by Formate during Methanogenesis. Applied and Environmental Microbiology, 1993, 59, 628-630.	3.1	8
51	In-situ transformation of carbon tetrachloride and other halogenated compounds resulting from biostimulation under anoxic conditions. Environmental Science & Technology, 1992, 26, 2454-2461.	10.0	97
52	Comparison Between Model Simulations and Field Results for In-Situ Bioremediation of Chlorinated Aliphatics: Part 2. Cometabolic Transformations. Ground Water, 1992, 30, 37-44.	1.3	113
53	A cometabolic biotransformation model for halogenated aliphatic compounds exhibiting product toxicity. Environmental Science & Technology, 1991, 25, 1381-1387.	10.0	131
54	Electrolytic model system for reductive dehalogenation in aqueous environments. Environmental Science & Technology, 1991, 25, 973-978.	10.0	121

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55	Two-stage dispersed-growth treatment of halogenated aliphatic compounds by cometabolism. Environmental Science & Technology, 1991, 25, 1387-1393.	10.0	64
56	Degradation of toluene and <i>p</i> -xylene in anaerobic microcosms: Evidence for sulfate as a terminal electron acceptor. Environmental Toxicology and Chemistry, 1991, 10, 1379-1389.	4.3	67
57	A Field Evaluation of In-Situ Biodegradation of Chlorinated Ethenes: Part 3, Studies of Competitive Inhibition. Ground Water, 1991, 29, 239-250.	1.3	90
58	Comparison Between Model Simulations and Field Results for In-Situ Bioremediation of Chlorinated Aliphatics: Part 1. Biostimulation of Methanotrophic Bacteria. Ground Water, 1991, 29, 365-374.	1.3	125
59	Column Studies on Methanotrophic Degradation of Trichloroethene and 1,2-Dichloroethane. Ground Water, 1990, 28, 910-919.	1.3	37
60	A Field Evaluation of In-Situ Biodegradation of Chlorinated Ethenes: Part 2, Results of Biostimulation and Biotransformation Experiments. Ground Water, 1990, 28, 715-727.	1.3	203
61	Methane fermentation of selected lignocellulosic materials. Bioresource Technology, 1990, 21, 239-255.	0.3	185
62	Energetic and rate effects on methanogenesis of ethanol and propionate in perturbed CSTRs. Biotechnology and Bioengineering, 1989, 34, 39-54.	3.3	62
63	Reduced product formation following perturbation of ethanol- and propionate-fed methanogenic CSTRs. Biotechnology and Bioengineering, 1989, 34, 885-895.	3.3	54
64	Biotransformation of halogenated and nonhalogenated octylphenol polyethoxylate residues under aerobic and anaerobic conditions. Environmental Science & Technology, 1989, 23, 951-961.	10.0	78
65	Thermochemical pretreatment of lignocellulose to enhance methane fermentation: I. Monosaccharide and furfurals hydrothermal decomposition and product formation rates. Biotechnology and Bioengineering, 1988, 31, 50-61.	3.3	111
66	Thermochemical pretreatment of lignocellulose to enhance methane fermentation: II. Evaluation and application of pretreatment model. Biotechnology and Bioengineering, 1988, 31, 62-70.	3.3	35
67	ES&T Critical Reviews: Transformations of halogenated aliphatic compounds. Environmental Science & Technology, 1987, 21, 722-736.	10.0	935
68	Abiotic and biotic transformations of 1,1,1-trichloroethane under methanogenic conditions. Environmental Science & Technology, 1987, 21, 1208-1213.	10.0	147
69	Anaerobic wastewater treatment. Environmental Science & Technology, 1986, 20, 1200-1206.	10.0	398
70	Utilization rates of trace halogenated organic compounds in acetate-grown biofilms. Biotechnology and Bioengineering, 1985, 27, 1564-1571.	3.3	65
71	The effect of thermal pretreatment on the anaerobic biodegradability and toxicity of waste activated sludge. Water Research, 1984, 18, 1343-1353.	11.3	162
72	Removal of trace chlorinated organic compounds by activated carbon and fixed-film bacteria. Environmental Science & Technology, 1982, 16, 836-843.	10.0	95

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73	Model of steady-state-biofilm kinetics. Biotechnology and Bioengineering, 1982, 24, 2291-2291.	3.3	89
74	Trace organics in groundwater. Environmental Science & Technology, 1981, 15, 40-51.	10.0	225
75	Anaerobic degradation of halogenated 1- and 2-carbon organic compounds. Environmental Science & Technology, 1981, 15, 596-599.	10.0	183
76	Substrate Flux into Biofilms of any Thickness. American Society of Civil Engineers, Journal of the Environmental Engineering Division, 1981, 107, 831-849.	0.3	103
77	Model of steady-state-biofilm kinetics. Biotechnology and Bioengineering, 1980, 22, 2343-2357.	3.3	433
78	Evaluation of steady-state-biofilm kinetics. Biotechnology and Bioengineering, 1980, 22, 2359-2373.	3.3	195
79	Trace-Organics Biodegradation in Aquifer Recharge. Ground Water, 1980, 18, 236-243.	1.3	50
80	Variable-Order Model of Bacterial-Film Kinetics. American Society of Civil Engineers, Journal of the Environmental Engineering Division, 1978, 104, 889-900.	0.3	61
81	Rapid measurement of monod half-velocity coefficients for bacterial kinetics. Biotechnology and Bioengineering, 1975, 17, 915-924.	3.3	45
82	Effects of carbonate and magnesium on calcium phosphate precipitation. Environmental Science & Technology, 1971, 5, 534-540.	10.0	74
83	Energetics and Kinetics of Anaerobic Treatment. Advances in Chemistry Series, 1971, , 91-107.	0.6	46
84	Aerobic decomposition of algae. Environmental Science & Technology, 1971, 5, 1023-1031.	10.0	98
85	Anaerobic decomposition of algae. Environmental Science & Technology, 1970, 4, 842-849.	10.0	125
86	Unified Basis for Biological Treatment Design and Operation. ASCE Sanitary Engineering Division Journal, 1970, 96, 757-778.	0.1	309