Linda M Abriola

List of Publications by Year in Descending Order

85 papers	4,297 citations	36 h-index	65 g-index
91 ext. papers	4,558 ext. citations	6.4 avg, IF	5.29 L-index

#	Paper	IF	Citations
85	Quantifying Impacts of Microcosm Mass Loss on Kinetic Constant Estimation. *Environmental Science & Technology*, **2021**, 55, 13822-13833	10.3	
84	Exploration of processes governing microbial reductive dechlorination in a heterogeneous aquifer flow cell. *Water Research*, **2021**, 193, 116842	12.5	1
83	Influence of aqueous film forming foams on the solubility and mobilization of non-aqueous phase liquid contaminants in quartz sands. *Water Research*, **2021**, 195, 116975	12.5	6
82	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
81	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
80	Development and experimental evaluation of a mathematical model to predict polymer-enhanced nanoparticle mobility in heterogeneous formations. *Environmental Science: Nano*, **2021**, 8, 470-484	7.1	1
79	Comment on "Uptake of Poly- and Perfluoroalkyl Substances at the Air-Water Interface". *Environmental Science & Technology*, **2020**, 54, 7019-7020	10.3	12
78	Subsurface Source Zone Characterization and Uncertainty Quantification Using Discriminative Random Fields. *Water Resources Research*, **2020**, 56, e2019WR026481	5.4	6
77	Development and Validation of a Two-Stage Kinetic Sorption Model for Polymer and Surfactant Transport in Porous Media. *Environmental Science & Technology*, **2020**, 54, 4912-4921	10.3	7
76	Bioenhanced back diffusion and population dynamics of Dehalococcoides mccartyi strains in heterogeneous porous media. *Chemosphere*, **2020**, 254, 126842	8.4	6
75	Aqueous Film-Forming Foams Exhibit Greater Interfacial Activity than PFOA, PFOS, or FOSA. *Environmental Science & Technology*, **2020**, 54, 13590-13597	10.3	9
74	Accumulation of PFOA and PFOS at the Air□Water Interface. *Environmental Science and Technology Letters*, **2019**, 6, 487-491	11	54
73	Regressed Models for Multirate Mass Transfer in Heterogeneous Media. *Water Resources Research*, **2019**, 55, 8646-8665	5.4	0
72	Modeling the influence of coupled mass transfer processes on mass flux downgradient of heterogeneous DNAPL source zones. *Journal of Contaminant Hydrology*, **2018**, 211, 1-14	3.9	11
71	Modeling reactive transport of polydisperse nanoparticles: assessment of the representative particle approach. *Environmental Science: Nano*, **2018**, 5, 2293-2303	7.1	2
70	Simulation of magnetite nanoparticle mobility in a heterogeneous flow cell. *Environmental Science: Nano*, **2017**, 4, 1512-1524	7.1	5
69	Aqueous Aggregation Behavior of Engineered Superparamagnetic Iron Oxide Nanoparticles: Effects of Oxidative Surface Aging. *Environmental Science & Technology*, **2016**, 50, 12789-12798	10.3	15

68	Influence of a polymer sunscreen additive on the transport and retention of titanium dioxide nanoparticles in water-saturated porous media. *Environmental Science: Nano*, **2016**, 3, 157-168	7.1	12
67	Improved Mobility of Magnetite Nanoparticles at High Salinity with Polymers and Surfactants. *Energy & Fuels*, **2016**, 30, 1915-1926	4.1	16
66	The effects of substrate exposure history and carbon starvation-induced stress on the EPS synthesis of TCE degrading toluene oxidizing soil bacteria. *Environmental Earth Sciences*, **2016**, 75, 1	2.9	3
65	A multi-constituent site blocking model for nanoparticle and stabilizing agent transport in porous media. *Environmental Science: Nano*, **2015**, 2, 155-166	7.1	31
64	In situ measurement and simulation of nano-magnetite mobility in porous media subject to transient salinity. *Nanoscale*, **2015**, 7, 1047-57	7.7	11
63	Modeling coupled nanoparticle aggregation and transport in porous media: a Lagrangian approach. *Journal of Contaminant Hydrology*, **2015**, 172, 48-60	3.9	18
62	Markov random field models for quantifying uncertainty in subsurface remediation **2015**,		1
61	Development and application of a screening model for evaluating bioenhanced dissolution in DNAPL source zones. *Journal of Contaminant Hydrology*, **2015**, 183, 1-15	3.9	1
60	On the upscaling of mass transfer rate expressions for interpretation of source zone partitioning tracer tests. *Water Resources Research*, **2015**, 51, 832-847	5.4	4
59	Influence of residual polymer on nanoparticle deposition in porous media. *Environmental Science & Technology*, **2014**, 48, 10664-71	10.3	28
58	Effect of surface coating composition on quantum dot mobility in porous media. *Journal of Nanoparticle Research*, **2013**, 15, 1	2.3	21
57	Influence of dissolved oxygen on silver nanoparticle mobility and dissolution in water-saturated quartz sand. *Journal of Nanoparticle Research*, **2013**, 15, 1	2.3	22
56	A geometric approach to joint inversion with applications to contaminant source zone characterization. *Inverse Problems*, **2013**, 29, 115014	2.3	17
55	Microbially enhanced dissolution and reductive dechlorination of PCE by a mixed culture: model validation and sensitivity analysis. *Journal of Contaminant Hydrology*, **2013**, 151, 117-30	3.9	13
54	Environmental Remediation and Restoration: Hydrological and Geophysical Processing Methods. *IEEE Signal Processing Magazine*, **2012**, 29, 16-26	9.4	3
53	Enhanced mobility of fullerene (C60) nanoparticles in the presence of stabilizing agents. *Environmental Science & Technology*, **2012**, 46, 11761-9	10.3	54
52	Quantification of experimental subsurface fluid saturations from high-resolution source zone images. *Water Resources Research*, **2012**, 48,	5.4	3
51	Manifold regression for subsurface contaminant characterization **2012**,		1

50	Kinetic limitations on tracer partitioning in ganglia dominated source zones. *Journal of Contaminant Hydrology*, **2011**, 126, 195-207	3.9	4
49	Influence of wettability variations on dynamic effects in capillary pressure. *Water Resources Research*, **2010**, 46,	5.4	35
48	Predicting DNAPL mass discharge from pool-dominated source zones. *Journal of Contaminant Hydrology*, **2010**, 114, 18-34	3.9	57
47	Effectiveness of nanoscale zero-valent iron for treatment of a PCE-DNAPL source zone. *Journal of Contaminant Hydrology*, **2010**, 118, 128-42	3.9	40
46	The influence of dimensionality on simulations of mass recovery from nonuniform dense non-aqueous phase liquid (DNAPL) source zones. *Advances in Water Resources*, **2009**, 32, 401-412	4.7	19
45	A multistage multicriteria spatial sampling strategy for estimating contaminant mass discharge and its uncertainty. *Water Resources Research*, **2009**, 45,	5.4	11
44	Investigation of the transport and deposition of fullerene (C60) nanoparticles in quartz sands under varying flow conditions. *Environmental Science & Technology*, **2008**, 42, 7174-80	10.3	199
43	Transport and retention of nanoscale C60 aggregates in water-saturated porous media. *Environmental Science & Technology*, **2008**, 42, 3588-94	10.3	171
42	Experimental evaluation and mathematical modeling of microbially enhanced tetrachloroethene (PCE) dissolution. *Environmental Science & Technology*, **2007**, 41, 963-70	10.3	76
41	Experimental and numerical validation of the total trapping number for prediction of DNAPL mobilization. *Environmental Science & Technology*, **2007**, 41, 8135-41	10.3	17
40	A geostatistical approach for quantification of contaminant mass discharge uncertainty using multilevel sampler measurements. *Water Resources Research*, **2007**, 43,	5.4	23
39	Modeling metabolic reductive dechlorination in dense non-aqueous phase liquid source-zones. *Advances in Water Resources*, **2007**, 30, 1547-1561	4.7	31
38	Simulation of solute transport in a heterogeneous vadose zone describing the hydraulic properties using a multistep stochastic approach. *Water Resources Research*, **2006**, 42,	5.4	16
37	Modeling dense nonaqueous phase liquid mass removal in nonuniform formations: Linking source-zone architecture and system response **2006**, 2, 74		35
36	Estimating mass discharge from dense nonaqueous phase liquid source zones using upscaled mass transfer coefficients: An evaluation using multiphase numerical simulations. *Water Resources Research*, **2006**, 42,	5.4	82
35	Pilot-scale demonstration of surfactant-enhanced PCE solubilization at the Bachman Road site. 2. System operation and evaluation. *Environmental Science & Technology*, **2005**, 39, 1791-801	10.3	63
34	Pilot-scale demonstration of surfactant-enhanced PCE solubilization at the Bachman Road site. 1. Site characterization and test design. *Environmental Science & Technology*, **2005**, 39, 1778-90	10.3	72
33	Compositional Effects on Interfacial Properties in Contaminated Systems: Implications for Organic Liquid Migration and Recovery. *ACS Symposium Series*, **2005**, 160-182	0.4	1

32	Comparison of two-dimensional and three-dimensional simulations of dense nonaqueous phase liquids (DNAPLs): Migration and entrapment in a nonuniform permeability field. *Water Resources Research*, **2005**, 41,	5.4	40
31	Exploring dynamic effects in capillary pressure in multistep outflow experiments. *Water Resources Research*, **2005**, 41,	5.4	58
30	Prediction of two-phase capillary pressure-saturation relationships in fractional wettability systems. *Journal of Contaminant Hydrology*, **2005**, 77, 247-70	3.9	43
29	Coupling aggressive mass removal with microbial reductive dechlorination for remediation of DNAPL source zones: a review and assessment. *Environmental Health Perspectives*, **2005**, 113, 465-77	8.4	86
28	Infiltration of PCE in a system containing spatial wettability variations. *Journal of Contaminant Hydrology*, **2004**, 73, 39-63	3.9	54
27	Influence of textural and wettability variations on predictions of DNAPL persistence and plume development in saturated porous media. *Advances in Water Resources*, **2004**, 27, 411-427	4.7	43
26	Stimulated microbial reductive dechlorination following surfactant treatment at the Bachman Road site. *Environmental Science & Technology*, **2004**, 38, 5902-14	10.3	56
25	Dense nonaqueous phase liquid (DNAPL) source zone characterization: Influence of hydraulic property correlation on predictions of DNAPL infiltration and entrapment. *Water Resources Research*, **2004**, 40,	5.4	44
24	Influence of hydraulic property correlation on predicted dense nonaqueous phase liquid source zone architecture, mass recovery and contaminant flux. *Water Resources Research*, **2004**, 40,	5.4	69
23	Influence of surfactant-facilitated interfacial tension reduction on chlorinated solvent migration in porous media: observations and numerical simulation. *Journal of Contaminant Hydrology*, **2003**, 64, 227-52	3.9	27
22	Entrapment and dissolution of DNAPLs in heterogeneous porous media. *Journal of Contaminant Hydrology*, **2003**, 67, 133-57	3.9	34
21	Surfactant enhanced recovery of tetrachloroethylene from a porous medium containing low permeability lenses. 1. Experimental studies. *Journal of Contaminant Hydrology*, **2001**, 48, 325-50	3.9	90
20	Surfactant enhanced recovery of tetrachloroethylene from a porous medium containing low permeability lenses. 2. Numerical simulation. *Journal of Contaminant Hydrology*, **2001**, 48, 351-74	3.9	37
19	A Nondimensional Evaluation of Tracer Sensitivity to Density Effects. *Ground Water*, **2000**, 38, 226-233	2.4	7
18	A numerical model (MISER) for the simulation of coupled physical, chemical and biological processes in soil vapor extraction and bioventing systems. *Journal of Contaminant Hydrology*, **2000**, 43, 239-270	3.9	63
17	The influence of field-scale heterogeneity on the surfactant-enhanced remediation of entrapped nonaqueous phase liquids. *Journal of Contaminant Hydrology*, **2000**, 42, 219-251	3.9	47
16	The influence of field-scale heterogeneity on the infiltration and entrapment of dense nonaqueous phase liquids in saturated formations. *Journal of Contaminant Hydrology*, **2000**, 42, 187-218	3.9	67
15	Influence of Soil Texture on Rate-Limited Micellar Solubilization. *Journal of Environmental Engineering, ASCE*, **2000**, 126, 39-46	2	10

14	The influence of capillarity in numerical modeling of organic liquid redistribution in two-phase systems. *Advances in Water Resources*, **1998**, 21, 159-170	4.7	34
13	Flow and entrapment of dense nonaqueous phase liquids in physically and chemically heterogeneous aquifer formations. *Advances in Water Resources*, **1998**, 22, 117-132	4.7	37
12	Solubilization of Dodecane, Tetrachloroethylene, and 1,2-Dichlorobenzene in Micellar Solutions of Ethoxylated Nonionic Surfactants. *Environmental Science & Technology*, **1997**, 31, 1382-1389	10.3	103
11	Influence of Viscous and Buoyancy Forces on the Mobilization of Residual Tetrachloroethylene during Surfactant Flushing. *Environmental Science & Technology*, **1996**, 30, 1328-1335	10.3	257
10	Simulation of organic liquid flow in porous media using estimated and measured transport properties. *Journal of Contaminant Hydrology*, **1996**, 22, 223-239	3.9	22
9	An Experimental Investigation of Rate-Limited Nonaqueous Phase Liquid Volatilization in Unsaturated Porous Media: Steady State Mass Transfer. *Water Resources Research*, **1995**, 31, 2159-2172	5.4	93
8	Mass conservative numerical solutions of the head-based Richards equation. *Water Resources Research*, **1994**, 30, 2579-2586	5.4	124
7	Surfactant enhanced remediation of soil columns contaminated by residual tetrachloroethylene. *Journal of Contaminant Hydrology*, **1994**, 16, 35-53	3.9	200
6	An experimental investigation of nonaqueous phase liquid dissolution in saturated subsurface systems: Transient mass transfer rates. *Water Resources Research*, **1994**, 30, 321-332	5.4	265
5	Simulation of surfactant-enhanced aquifer remediation. *Water Resources Research*, **1994**, 30, 2959-2977	5.4	92
4	Surfactant-enhanced solubilization of residual dodecane in soil columns. 1. Experimental investigation. *Environmental Science & Technology*, **1993**, 27, 2332-2340	10.3	313
3	Surfactant-enhanced solubilization of residual dodecane in soil columns. 2. Mathematical modeling. *Environmental Science & Technology*, **1993**, 27, 2341-2351	10.3	119
2	An experimental investigation of nonaqueous phase liquid dissolution in saturated subsurface systems: Steady state mass transfer rates. *Water Resources Research*, **1992**, 28, 2691-2705	5.4	335
1	Modeling Multiphase Migration of Organic Chemicals in Groundwater Systems. A Review and Assessment. *Environmental Health Perspectives*, **1989**, 83, 117	8.4	64