

Philip M Gschwend

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11935101/publications.pdf>

Version: 2024-02-01

95
papers

10,806
citations

46984

47
h-index

39638

94
g-index

97
all docs

97
docs citations

97
times ranked

6992
citing authors

#	ARTICLE	IF	CITATIONS
1	Sequestration of Hydrophobic Organic Contaminants by Geosorbents. <i>Environmental Science & Technology</i> , 1997, 31, 3341-3347.	4.6	923
2	Quantification of the Dilute Sedimentary Soot Phase: Implications for PAH Speciation and Bioavailability. <i>Environmental Science & Technology</i> , 1997, 31, 203-209.	4.6	897
3	Sorption kinetics of hydrophobic organic compounds to natural sediments and soils. <i>Environmental Science & Technology</i> , 1986, 20, 717-725.	4.6	590
4	Fluxes of polycyclic aromatic hydrocarbons to marine and lacustrine sediments in the northeastern United States. <i>Geochimica Et Cosmochimica Acta</i> , 1981, 45, 2359-2367.	1.6	536
5	On the constancy of sediment-water partition coefficients of hydrophobic organic pollutants. <i>Environmental Science & Technology</i> , 1985, 19, 90-96.	4.6	520
6	Comparison of quantification methods to measure fire-derived (black/elemental) carbon in soils and sediments using reference materials from soil, water, sediment and the atmosphere. <i>Global Biogeochemical Cycles</i> , 2007, 21, .	1.9	483
7	Assessing the Combined Roles of Natural Organic Matter and Black Carbon as Sorbents in Sediments. <i>Environmental Science & Technology</i> , 2002, 36, 21-29.	4.6	481
8	Reinterpreting Literature Sorption Data Considering both Absorption into Organic Carbon and Adsorption onto Black Carbon. <i>Environmental Science & Technology</i> , 2003, 37, 99-106.	4.6	254
9	Aquatic colloids: Concepts, definitions, and current challenges. <i>Limnology and Oceanography</i> , 1997, 42, 519-528.	1.6	247
10	Polyethylene Devices: Passive Samplers for Measuring Dissolved Hydrophobic Organic Compounds in Aquatic Environments. <i>Environmental Science & Technology</i> , 2007, 41, 1317-1323.	4.6	246
11	The Flux of Black Carbon to Surface Sediments on the New England Continental Shelf. <i>Geochimica Et Cosmochimica Acta</i> , 1998, 62, 465-472.	1.6	216
12	Comparison of their Situated Desorption Sediment-Water Partitioning of Polycyclic Aromatic Hydrocarbons and Polychlorinated Biphenyls. <i>Environmental Science & Technology</i> , 1996, 30, 172-177.	4.6	197
13	The abundance, distribution, and configuration of porewater organic colloids in recent sediments. <i>Geochimica Et Cosmochimica Acta</i> , 1991, 55, 1309-1317.	1.6	189
14	Fluorescent polycyclic aromatic hydrocarbons as probes for studying the impact of colloids on pollutant transport in groundwater. <i>Environmental Science & Technology</i> , 1990, 24, 1214-1223.	4.6	161
15	Passive sampling methods for contaminated sediments: Scientific rationale supporting use of freely dissolved concentrations. <i>Integrated Environmental Assessment and Management</i> , 2014, 10, 197-209.	1.6	153
16	Hydrophobic Meshes for Oil Spill Recovery Devices. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 774-781.	4.0	141
17	Assessing the performance and cost of oil spill remediation technologies. <i>Journal of Cleaner Production</i> , 2014, 78, 233-242.	4.6	137
18	Monodisperse ferrous phosphate colloids in an anoxic groundwater plume. <i>Journal of Contaminant Hydrology</i> , 1987, 1, 309-327.	1.6	131

#	ARTICLE	IF	CITATIONS
19	Partitioning of polycyclic aromatic hydrocarbons to marine porewater organic colloids. <i>Environmental Science & Technology</i> , 1992, 26, 1621-1626.	4.6	131
20	Effect of Solution Chemistry on Clay Colloid Release from an Iron Oxide-Coated Aquifer Sand. <i>Environmental Science & Technology</i> , 1994, 28, 1717-1726.	4.6	129
21	Colloid mobilization in two Atlantic coastal plain aquifers: Field studies. <i>Water Resources Research</i> , 1990, 26, 307-322.	1.7	120
22	Soot as a Strong Partition Medium for Polycyclic Aromatic Hydrocarbons in Aquatic Systems. <i>ACS Symposium Series</i> , 1997, , 365-381.	0.5	111
23	Numerical modeling of sorption kinetics of organic compounds to soil and sediment particles. <i>Water Resources Research</i> , 1988, 24, 1373-1383.	1.7	109
24	Measurement of Freely Dissolved PAH Concentrations in Sediment Beds Using Passive Sampling with Low-Density Polyethylene Strips. <i>Environmental Science & Technology</i> , 2009, 43, 1430-1436.	4.6	108
25	Sampling Colloids and Colloid-Associated Contaminants in Ground Water. <i>Ground Water</i> , 1993, 31, 466-479.	0.7	105
26	Sorption of Monoaromatic Hydrocarbons to Wood. <i>Environmental Science & Technology</i> , 2000, 34, 839-845.	4.6	102
27	Enhanced Concentrations of PAHs in Groundwater at a Coal Tar Site. <i>Environmental Science & Technology</i> , 2001, 35, 1320-1328.	4.6	102
28	Early Evaluation of Potential Environmental Impacts of Carbon Nanotube Synthesis by Chemical Vapor Deposition. <i>Environmental Science & Technology</i> , 2009, 43, 8367-8373.	4.6	100
29	Using Performance Reference Compounds in Polyethylene Passive Samplers to Deduce Sediment Porewater Concentrations for Numerous Target Chemicals. <i>Environmental Science & Technology</i> , 2009, 43, 8888-8894.	4.6	92
30	Using ²³⁴ Th disequilibria to estimate the vertical removal rates of polycyclic aromatic hydrocarbons from the surface ocean. <i>Marine Chemistry</i> , 1997, 57, 11-23.	0.9	89
31	Evaluating Activated Carbon's Water Sorption Coefficients of Organic Compounds Using a Linear Solvation Energy Relationship Approach and Sorbate Chemical Activities. <i>Environmental Science & Technology</i> , 2009, 43, 851-857.	4.6	83
32	Aqueous solubilities, vapor pressures, and 1-octanol-water partition coefficients for C9-C14 linear alkylbenzenes. <i>Journal of Chemical & Engineering Data</i> , 1992, 37, 394-399.	1.0	80
33	An assessment of the relative importance of horizontal and vertical transport of particle-reactive chemicals in the coastal ocean. <i>Continental Shelf Research</i> , 1998, 18, 805-829.	0.9	79
34	Multiple Alkynes React with Ethylene To Enhance Carbon Nanotube Synthesis, Suggesting a Polymerization-like Formation Mechanism. <i>ACS Nano</i> , 2010, 4, 7185-7192.	7.3	79
35	Settling Removal Rates of PCBs into the Northwestern Atlantic Derived from ²³⁸ U's ²³⁴ Th Disequilibria. <i>Environmental Science & Technology</i> , 1997, 31, 3544-3550.	4.6	76
36	On the integrity of cross-flow filtration for collecting marine organic colloids. <i>Marine Chemistry</i> , 1996, 55, 93-111.	0.9	71

#	ARTICLE	IF	CITATIONS
37	Flume Measurements of Sediment Erodibility in Boston Harbor. <i>Journal of Hydraulic Engineering</i> , 1999, 125, 998-1005.	0.7	68
38	Nucleophilic substitution reactions of dihalomethanes with hydrogen sulfide species. <i>Environmental Science & Technology</i> , 1992, 26, 2263-2274.	4.6	67
39	Volatile organic compounds at a coastal site. 1. Seasonal variations. <i>Environmental Science & Technology</i> , 1982, 16, 31-38.	4.6	66
40	On the formation of perylene in recent sediments: kinetic models. <i>Geochimica Et Cosmochimica Acta</i> , 1983, 47, 2115-2119.	1.6	66
41	Mobilization of colloids in groundwater due to infiltration of water at a coal ash disposal site. <i>Journal of Contaminant Hydrology</i> , 1990, 6, 307-320.	1.6	64
42	Precursor gas chemistry determines the crystallinity of carbon nanotubes synthesized at low temperature. <i>Carbon</i> , 2011, 49, 804-810.	5.4	62
43	Comparison of polymeric samplers for accurately assessing PCBs in pore waters. <i>Environmental Toxicology and Chemistry</i> , 2011, 30, 1288-1296.	2.2	61
44	DEPENDENCY OF POLYCHLORINATED BIPHENYL AND POLYCYCLIC AROMATIC HYDROCARBON BIOACCUMULATION IN MYA ARENARIA ON BOTH WATER COLUMN AND SEDIMENT BED CHEMICAL ACTIVITIES. <i>Environmental Toxicology and Chemistry</i> , 2004, 23, 2551.	2.2	59
45	Black carbon in marine particulate organic carbon: Inputs and cycling of highly recalcitrant organic carbon in the Gulf of Maine. <i>Marine Chemistry</i> , 2009, 113, 172-181.	0.9	58
46	Volatile organic compounds in coastal seawater. <i>Organic Geochemistry</i> , 1978, 1, 93-107.	0.9	56
47	Effect of iron diagenesis on the transport of colloidal clay in an unconfined sand aquifer. <i>Geochimica Et Cosmochimica Acta</i> , 1992, 56, 1507-1521.	1.6	54
48	Estimating Sorption Rates of Hydrophobic Organic Compounds in Iron Oxide- and Aluminosilicate Clay-Coated Aquifer Sands. <i>Environmental Science & Technology</i> , 1997, 31, 105-113.	4.6	48
49	Thermogravimetry-Mass Spectrometry for Carbon Nanotube Detection in Complex Mixtures. <i>Environmental Science & Technology</i> , 2012, 46, 12254-12261.	4.6	48
50	Mechanism of pentachloroethane dehydrochlorination to tetrachloroethylene. <i>Environmental Science & Technology</i> , 1991, 25, 76-86.	4.6	45
51	Extraction of Iron Oxides from Sediments Using Reductive Dissolution by Titanium(III). <i>Clays and Clay Minerals</i> , 1991, 39, 509-518.	0.6	43
52	Validating the Use of Performance Reference Compounds in Passive Samplers to Assess Porewater Concentrations in Sediment Beds. <i>Environmental Science & Technology</i> , 2014, 48, 10301-10307.	4.6	42
53	Volatile organic compounds at a coastal site. 2. Short-term variations. <i>Environmental Science & Technology</i> , 1982, 16, 38-45.	4.6	41
54	Fate of Linear Alkylbenzenes Released to the Coastal Environment near Boston Harbor. <i>Environmental Science & Technology</i> , 2001, 35, 2040-2048.	4.6	38

#	ARTICLE	IF	CITATIONS
55	Advancing the Use of Passive Sampling in Risk Assessment and Management of Sediments Contaminated with Hydrophobic Organic Chemicals: Results of an International Ex Situ Passive Sampling Interlaboratory Comparison. <i>Environmental Science & Technology</i> , 2018, 52, 3574-3582.	4.6	38
56	An AEM-TEM study of nanometer-scale mineral associations in an aquifer sand: Implications for colloid mobilization. <i>Geochimica Et Cosmochimica Acta</i> , 1997, 61, 707-718.	1.6	37
57	Mechanisms Controlling Release of Colloids to Groundwater in a Southeastern Coastal Plain Aquifer Sand. <i>Environmental Science & Technology</i> , 1998, 32, 1779-1785.	4.6	33
58	Modeling the transport of organic chemicals between polyethylene passive samplers and water in finite and infinite bath conditions. <i>Environmental Toxicology and Chemistry</i> , 2015, 34, 2739-2749.	2.2	32
59	In situ passive sampling of sediments in the Lower Duwamish Waterway Superfund site: Replicability, comparison with ex situ measurements, and use of data. <i>Environmental Pollution</i> , 2016, 218, 95-101.	3.7	32
60	Measuring Free, Conjugated, and Halogenated Estrogens in Secondary Treated Wastewater Effluent. <i>Environmental Science & Technology</i> , 2014, 48, 2569-2578.	4.6	31
61	Vertical distribution of microbial lipids and functional genes in chemically distinct layers of a highly polluted meromictic lake. <i>Organic Geochemistry</i> , 2008, 39, 1572-1588.	0.9	30
62	Ex situ determination of freely dissolved concentrations of hydrophobic organic chemicals in sediments and soils: basis for interpreting toxicity and assessing bioavailability, risks and remediation necessity. <i>Nature Protocols</i> , 2020, 15, 1800-1828.	5.5	27
63	Adsorption of Organic Compounds to Diesel Soot: Frontal Analysis and Polyparameter Linear Free-Energy Relationship. <i>Environmental Science & Technology</i> , 2016, 50, 285-293.	4.6	23
64	Physical chemistry of organic compounds in the marine environment. <i>Marine Chemistry</i> , 1992, 39, 187-207.	0.9	22
65	Influence of Low Oxygen Tensions and Sorption to Sediment Black Carbon on Biodegradation of Pyrene. <i>Applied and Environmental Microbiology</i> , 2010, 76, 4430-4437.	1.4	22
66	Source and Chemodynamic Behavior of Diphenyl Sulfone and ortho- and para-Hydroxybiphenyl in a Small Lake Receiving Discharges from an Adjacent Superfund Site. <i>Environmental Science & Technology</i> , 1998, 32, 1319-1328.	4.6	21
67	Fate of Benzene in a Stratified Lake Receiving Contaminated Groundwater Discharges from a Superfund Site. <i>Environmental Science & Technology</i> , 2000, 34, 4354-4362.	4.6	20
68	Predicting bioaccumulation of polycyclic aromatic hydrocarbons in soft-shelled clams (<i>Mya</i>). <i>Environmental Chemistry</i> , 2015, 34, 993-1000.	2.2	20
69	Laboratory Assessment of BTEX Soil Flushing. <i>Environmental Science & Technology</i> , 1996, 30, 3223-3231.	4.6	19
70	Sorption of radon-222 to natural sediments. <i>Geochimica Et Cosmochimica Acta</i> , 1992, 56, 3923-3932.	1.6	18
71	Polyparameter linear free energy relationship for wood charcoal-water sorption coefficients of organic sorbates. <i>Environmental Toxicology and Chemistry</i> , 2015, 34, 1464-1471.	2.2	18
72	A physical-chemical screening model for anticipating widespread contamination of community water supply wells by gasoline constituents. <i>Journal of Contaminant Hydrology</i> , 2005, 76, 109-138.	1.6	16

#	ARTICLE	IF	CITATIONS
73	Understanding the rates of nonpolar organic chemical accumulation into passive samplers deployed in the environment: Guidance for passive sampler deployments. <i>Integrated Environmental Assessment and Management</i> , 2016, 12, 486-492.	1.6	16
74	Performance of passive sampling with low-density polyethylene membranes for the estimation of freely dissolved DDX concentrations in lake environments. <i>Chemosphere</i> , 2018, 200, 227-236.	4.2	16
75	Estimating Partition Coefficients for Fuel-Water Systems: Developing Linear Solvation Energy Relationships Using Linear Solvent Strength Theory To Handle Mixtures. <i>Environmental Science & Technology</i> , 2005, 39, 2702-2710.	4.6	15
76	Hydrophobic organic compound partitioning from bulk water to the water/air interface. <i>Atmospheric Environment</i> , 1998, 33, 163-167.	1.9	14
77	Investigating Desorption of Native Pyrene from Sediment on Minute- to Month-Timescales by Time-Gated Fluorescence Spectroscopy. <i>Environmental Science & Technology</i> , 2007, 41, 7752-7758.	4.6	14
78	Investigating the Effect of Bioirrigation on In Situ Porewater Concentrations and Fluxes of Polychlorinated Biphenyls Using Passive Samplers. <i>Environmental Science & Technology</i> , 2018, 52, 4565-4573.	4.6	14
79	Interaction of abiotic and microbial processes in hexachloroethane reduction in groundwater. <i>Journal of Contaminant Hydrology</i> , 1994, 16, 157-174.	1.6	13
80	Ferrous iron oxidation rates in the pycnocline of a permanently stratified lake. <i>Chemosphere</i> , 2007, 66, 1561-1570.	4.2	13
81	Estimating Phospholipid Membrane-Water Partition Coefficients Using Comprehensive Two-Dimensional Gas Chromatography. <i>Environmental Science & Technology</i> , 2012, 46, 3449-3456.	4.6	13
82	Steroidal estrogen sources in a sewage-impacted coastal ocean. <i>Environmental Sciences: Processes and Impacts</i> , 2016, 18, 981-991.	1.7	13
83	Colloid Mobilization in the Field Using Citrate to Remediate Chromium. <i>Ground Water</i> , 2001, 39, 895-903.	0.7	12
84	Characterization of black carbon in geosorbents at the nanometer scale by STEM-EDX elemental mapping. <i>Organic Geochemistry</i> , 2013, 56, 81-93.	0.9	12
85	Inferring Black Carbon Concentrations in Particulate Organic Matter by Observing Pyrene Fluorescence Losses. <i>Environmental Science & Technology</i> , 2009, 43, 4864-4870.	4.6	11
86	Polybromomethanes. <i>ACS Symposium Series</i> , 1986, , 314-322.	0.5	10
87	Field studies of in situ colloid mobilization in a southeastern coastal plain aquifer. <i>Water Resources Research</i> , 1999, 35, 2213-2223.	1.7	10
88	Emission and Fate Assessment of Methyl Tertiary Butyl Ether in the Boston Area Airshed Using a Simple Multimedia Box Model: Comparison with Urban Air Measurements. <i>Journal of the Air and Waste Management Association</i> , 2003, 53, 1426-1435.	0.9	10
89	The atmosphere as a source/sink of polychlorinated biphenyls to/from the Lower Duwamish Waterway Superfund site. <i>Environmental Pollution</i> , 2017, 227, 263-270.	3.7	10
90	Passive sampling of DDT, DDE and DDD in sediments: accounting for degradation processes with reaction-diffusion modeling. <i>Environmental Sciences: Processes and Impacts</i> , 2018, 20, 220-231.	1.7	8

#	ARTICLE	IF	CITATIONS
91	Bromide transport before, during, and after colloid mobilization in push-pull tests and the implications for changes in aquifer properties. <i>Water Resources Research</i> , 2003, 39, .	1.7	7
92	Hydrodynamic Forcing and Sediment Character in Boston Harbor. <i>Journal of Waterway, Port, Coastal and Ocean Engineering</i> , 1998, 124, 40-42.	0.5	4
93	Phase Distributions of Hydrophobic Chemicals in the Aquatic Environment. , 1999, , 327-348.		2
94	Interlaboratory Study of Polyethylene and Polydimethylsiloxane Polymeric Samplers for <i>Ex Situ</i> Measurement of Freely Dissolved Hydrophobic Organic Compounds in Sediment Porewater. <i>Environmental Toxicology and Chemistry</i> , 2022, , .	2.2	2
95	By-Products of a Former Phenol Manufacturing Site in a Small Lake Adjacent to a Superfund Site in the Aberjona Watershed. <i>Environmental Health Perspectives</i> , 1998, 106, 1069.	2.8	1