Kathrin Fenner

List of Publications by Year
in descending order

94 papers	11,229 citations	76326 40 h-index	42399 92 g-index
96 all docs	96 docs citations	96 times ranked	11892 citing authors

#	Article	IF	Citations
1	The Challenge of Micropollutants in Aquatic Systems. Science, 2006, 313, 1072-1077.	12.6	2,873
2	Identifying Small Molecules via High Resolution Mass Spectrometry: Communicating Confidence. Environmental Science & Technology, 2014, 48, 2097-2098.	10.0	2,300
3	Evaluating Pesticide Degradation in the Environment: Blind Spots and Emerging Opportunities. Science, 2013, 341, 752-758.	12.6	835
4	Recent Advances in Environmental Risk Assessment of Transformation Products. Environmental Science & Technology, 2011, 45, 3835-3847.	10.0	355
5	Peer Reviewed: When Synthetic Chemicals Degrade in the Environment. Environmental Science & Technology, 2004, 38, 368A-375A.	10.0	285
6	Identification of Transformation Products of Organic Contaminants in Natural Waters by Computer-Aided Prediction and High-Resolution Mass Spectrometry. Environmental Science & Technology, 2009, 43, 7039-7046.	10.0	275
7	High-Throughput Identification of Microbial Transformation Products of Organic Micropollutants. Environmental Science & Technology, 2010, 44, 6621-6627.	10.0	250
8	Fate of Î²-blocker human pharmaceuticals in surface water: Comparison of measured and simulated concentrations in the Glatt Valley Watershed, Switzerland. Water Research, 2010, 44, 936-948.	11.3	176
9	Micropollutant Biotransformation Kinetics Associate with WWTP Process Parameters and Microbial Community Characteristics. Environmental Science & Technology, 2012, 46, 10579-10588.	10.0	162
10	Investigation of the Cold Condensation of Persistent Organic Pollutants with a Global Multimedia Fate Model. Environmental Science & Technology, 2000, 34, 1842-1850.	10.0	143
11	Comparing Estimates of Persistence and Long-Range Transport Potential among Multimedia Models. Environmental Science & Technology, 2005, 39, 1932-1942.	10.0	138
12	enviPath â€“ The environmental contaminant biotransformation pathway resource. Nucleic Acids Research, 2016, 44, D502-D508.	14.5	126
13	Rapid Screening for Exposure to â€œNon-Targetâ€•Pharmaceuticals from Wastewater Effluents by Combining HRMS-Based Suspect Screening and Exposure Modeling. Environmental Science & Technology, 2016, 50, 6698-6707.	10.0	125
14	Relative contribution of ammonia oxidizing bacteria and other members of nitrifying activated sludge communities to micropollutant biotransformation. Water Research, 2017, 109, 217-226.	11.3	124
15	A tiered procedure for assessing the formation of biotransformation products of pharmaceuticals and biocides during activated sludge treatment. Journal of Environmental Monitoring, 2010, 12, 2100.	2.1	119
16	Including Mixtures in the Determination of Water Quality Criteria for Herbicides in Surface Water. Environmental Science & Technology, 2006, 40, 426-435.	10.0	115
17	Systematic Exploration of Biotransformation Reactions of Amine-Containing Micropollutants in Activated Sludge. Environmental Science & Technology, 2016, 50, 2908-2920.	10.0	111
18	Application of Multimedia Models for Screening Assessment of Long-Range Transport Potential and Overall Persistence. Environmental Science & Technology, 2006, 40, 53-60.	10.0	103

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19	Environmental Persistence of Organic Pollutants: Guidance for Development and Review of POP Risk Profiles. Integrated Environmental Assessment and Management, 2009, 5, 539-556.	2.9	103
20	Biotransformation of Sulfonamide Antibiotics in Activated Sludge: The Formation of Pterin-Conjugates Leads to Sustained Risk. Environmental Science & Technology, 2018, 52, 6265-6274.	10.0	101
21	Association of Biodiversity with the Rates of Micropollutant Biotransformations among Full-Scale Wastewater Treatment Plant Communities. Applied and Environmental Microbiology, 2015, 81, 666-675.	3.1	98
22	pH-Dependent Sorption of Acidic Organic Chemicals to Soil Organic Matter. Environmental Science & Technology, 2009, 43, 9189-9195.	10.0	95
23	Structure-Based Interpretation of Biotransformation Pathways of Amide-Containing Compounds in Sludge-Seeded Bioreactors. Environmental Science & Technology, 2010, 44, 6628-6635.	10.0	93
24	Development of Prediction Models for the Reactivity of Organic Compounds with Ozone in Aqueous Solution by Quantum Chemical Calculations: The Role of Delocalized and Localized Molecular Orbitals. Environmental Science & Technology, 2015, 49, 9925-9935.	10.0	83
25	Experimental Determination of LSER Parameters for a Set of 76 Diverse Pesticides and Pharmaceuticals. Environmental Science & Technology, 2008, 42, 2034-2040.	10.0	78
26	The activity level of a microbial community function can be predicted from its metatranscriptome. ISME Journal, 2012, 6, 902-904.	9.8	70
27	Biotransformation of Two Pharmaceuticals by the Ammonia-Oxidizing Archaeon <i>Nitrososphaera gargensis</i>. Environmental Science & Technology, 2016, 50, 4682-4692.	10.0	68
28	Including Transformation Products into the Risk Assessment for Chemicals:â€‰ The Case of Nonylphenol Ethoxylate Usage in Switzerland. Environmental Science & Technology, 2002, 36, 1147-1154.	10.0	67
29	Persistence of Parent Compounds and Transformation Products in a Level IV Multimedia Model. Environmental Science & Technology, 2000, 34, 3809-3817.	10.0	65
30	Targeting aquatic microcontaminants for monitoring: exposure categorization and application to the Swiss situation. Environmental Science and Pollution Research, 2010, 17, 341-354.	5.3	62
31	pH-Dependent Biotransformation of Ionizable Organic Micropollutants in Activated Sludge. Environmental Science & Technology, 2014, 48, 13760-13768.	10.0	62
32	Physiological Modes of Action of Fluoxetine and its Human Metabolites in Algae. Environmental Science & Technology, 2009, 43, 6830-6837.	10.0	61
33	The functional and taxonomic richness of wastewater treatment plant microbial communities are associated with each other and with ambient nitrogen and carbon availability. Environmental Microbiology, 2015, 17, 4851-4860.	3.8	59
34	Identification of biotransformation products of citalopram formed in activated sludge. Water Research, 2016, 103, 205-214.	11.3	57
35	Input Dynamics and Fate in Surface Water of the Herbicide Metolachlor and of its Highly Mobile Transformation Product Metolachlor ESA. Environmental Science & Technology, 2008, 42, 5507-5513.	10.0	56
36	Data-driven extraction of relative reasoning rules to limit combinatorial explosion in biodegradation pathway prediction. Bioinformatics, 2008, 24, 2079-2085.	4.1	55

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37	Microbial community shifts in streams receiving treated wastewater effluent. Science of the Total Environment, 2020, 709, 135727.	8.0	52
38	Deriving Persistence Indicators from Regulatory Water-Sediment Studies â€“ Opportunities and Limitations in OECD 308 Data. Environmental Science & Technology, 2015, 49, 5879-5886.	10.0	50
39	Predicting biodegradation products and pathways: a hybrid knowledge- and machine learning-based approach. Bioinformatics, 2010, 26, 814-821.	4.1	46
40	QSAR-analysis and mixture toxicity as diagnostic tools: Influence of degradation on the toxicity and mode of action of diuron in algae and daphnids. Aquatic Toxicology, 2010, 97, 58-67.	4.0	45
41	Simulation Studies to Explore Biodegradation in Waterâ€“Sediment Systems: From OECD 308 to OECD 309. Environmental Science & Technology, 2016, 50, 6856-6864.	10.0	44
42	Micropollutant biotransformation and bioaccumulation in natural stream biofilms. Water Research, 2021, 193, 116846.	11.3	40
43	Eawag-Soil in enviPath: a new resource for exploring regulatory pesticide soil biodegradation pathways and half-life data. Environmental Sciences: Processes and Impacts, 2017, 19, 449-464.	3.5	37
44	Ion Trapping of Amines in Protozoa: A Novel Removal Mechanism for Micropollutants in Activated Sludge. Environmental Science & Technology, 2018, 52, 52-60.	10.0	37
45	A computer-based prediction platform for the reaction of ozone with organic compounds in aqueous solution: kinetics and mechanisms. Environmental Sciences: Processes and Impacts, 2017, 19, 465-476.	3.5	35
46	Methodological Advances to Study Contaminant Biotransformation: New Prospects for Understanding and Reducing Environmental Persistence?. ACS ES&T Water, 2021, 1, 1541-1554.	4.6	35
47	Joint Persistence of Transformation Products in Chemicals Assessment: Case Studies and Uncertainty Analysis. Risk Analysis, 2003, 23, 35-53.	2.7	33
48	Bridging across OECD 308 and 309 Data in Search of a Robust Biotransformation Indicator. Environmental Science & Technology, 2016, 50, 6865-6872.	10.0	33
49	A framework for establishing predictive relationships between specific bacterial 16S rRNA sequence abundances and biotransformation rates. Water Research, 2015, 70, 471-484.	11.3	31
50	A Framework for Evaluating the Contribution of Transformation Products to Chemical Persistence in the Environment. Environmental Science & Technology, 2011, 45, 111-117.	10.0	30
51	Simulation of Pharmaceutical and Personal Care Product Transport to Tile Drains after Biosolids Application. Journal of Environmental Quality, 2009, 38, 1274-1285.	2.0	29
52	Assessing Exposure to Transformation Products of Soil-Applied Organic Contaminants in Surface Water: Comparison of Model Predictions and Field Data. Environmental Science & Technology, 2011, 45, 2833-2841.	10.0	29
53	Evaluating the environmental parameters that determine aerobic biodegradation half-lives of pesticides in soil with a multivariable approach. Chemosphere, 2018, 209, 430-438.	8.2	29
54	Relating Metatranscriptomic Profiles to the Micropollutant Biotransformation Potential of Complex Microbial Communities. Environmental Science & Technology, 2020, 54, 235-244.	10.0	29

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55	Relating Atrazine Degradation Rate in Soil to Environmental Conditions:Â Implications for Global Fate Modeling. Environmental Science & Technology, 2007, 41, 2840-2846.	10.0	28
56	Hexadecane/air partitioning coefficients of multifunctional compounds: Experimental data and modeling. Fluid Phase Equilibria, 2010, 299, 207-215.	2.5	28
57	Prediction of overall persistence and long-range transport potential with multimedia fate models: robustness and sensitivity of results. Environmental Pollution, 2004, 128, 189-204.	7.5	27
58	The EU-project ERAPharm - Incentives for the further development of guidance documents? (4 pages). Environmental Science and Pollution Research, 2005, 12, 62-65.	5.3	27
59	Assessing Emissions from Pharmaceutical Manufacturing Based on Temporal High-Resolution Mass Spectrometry Data. Environmental Science & Technology, 2020, 54, 4110-4120.	10.0	27
60	The Need for Chemical Simplification As a Logical Consequence of Ever-Increasing Chemical Pollution. Environmental Science & Technology, 2021, 55, 14470-14472.	10.0	27
61	Pesticide Nonextractable Residue Formation in Soil: Insights from Inverse Modeling of Degradation Time Series. Environmental Science & Technology, 2012, 46, 9830-9837.	10.0	26
62	Can meta-omics help to establish causality between contaminant biotransformations and genes or gene products?. Environmental Science: Water Research and Technology, 2015, 1, 272-278.	2.4	26
63	Biotransformation of Chemicals in Waterâ€"Sediment Suspensions: Influencing Factors and Implications for Persistence Assessment. Environmental Science and Technology Letters, 2020, 7, 854-860.	8.7	26
64	Microbial residence time is a controlling parameter of the taxonomic composition and functional profile of microbial communities. ISME Journal, 2019, 13, 1589-1601.	9.8	24
65	Scientific concepts and methods for moving persistence assessments into the 21st century. Integrated Environmental Assessment and Management, 2022, 18, 1454-1487.	2.9	24
66	Indicators for the Exposure Assessment of Transformation Products of Organic Micropollutants. Environmental Science & Technology, 2007, 41, 2445-2451.	10.0	23
67	Trends in Micropollutant Biotransformation along a Solids Retention Time Gradient. Environmental Science & Technology, 2018, 52, 11601-11611.	10.0	22
68	Developing Methods to Predict Chemical Fate and Effect Endpoints for Use Within REACH. Chimia, 2006, 60, 683-690.	0.6	21
69	Selecting Scenarios to Assess Exposure of Surface Waters to Veterinary Medicines in Europe. Environmental Science & Technology, 2007, 41, 4669-4676.	10.0	21
70	Comparison of Small Molecule Biotransformation Half-Lives between Activated Sludge and Soil: Opportunities for Read-Across?. Environmental Science & Technology, 2020, 54, 3148-3158.	10.0	20
71	Relating Degradation of Pharmaceutical Active Ingredients in a Stream Network to Degradation in Waterâ€Sediment Simulation Tests. Water Resources Research, 2018, 54, 9207-9223.	4.2	19
72	Heterotrophic enzymatic biotransformations of organic micropollutants in activated sludge. Science of the Total Environment, 2021, 780, 146564.	8.0	18

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73	Understanding the Dependence of Micropollutant Biotransformation Rates on Short-Term Temperature Shifts. Environmental Science & Technology, 2020, 54, 12214-12225.	10.0	17
74	Wastewater microorganisms impact the micropollutant biotransformation potential of natural stream biofilms. Water Research, 2022, 217, 118413.	11.3	17
75	Simulating Sulfadimidine Transport in Surface Runoff and Soil at the Microplot and Field Scale. Journal of Environmental Quality, 2008, 37, 788-797.	2.0	15
76	Clustering micropollutants based on initial biotransformations for improved prediction of micropollutant removal during conventional activated sludge treatment. Environmental Science: Water Research and Technology, 2020, 6, 554-565.	2.4	15
77	Predicting Methyltert-Butyl Ether,tert-Butyl Formate, andtert-Butyl Alcohol Levels in the Environment Using the Fugacity Approach. Environmental Science & Technology, 2005, 39, 3237-3244.	10.0	12
78	Quantification of Active Ingredient Losses from Formulating Pharmaceutical Industries and Contribution to Wastewater Treatment Plant Emissions. Environmental Science & Technology, 2020, 54, 15046-15056.	10.0	10
79	Temperature, phytoplankton density and bacteria diversity drive the biotransformation of micropollutants in a lake ecosystem. Water Research, 2021, 202, 117412.	11.3	10
80	Large-scale assessment of organic contaminant emissions from chemical and pharmaceutical manufacturing into Swiss surface waters. Water Research, 2022, 215, 118221.	11.3	10
81	Biotransformation of Chemicals at the Waterâ€“Sediment Interfaceâ€”Toward a Robust Simulation Study Setup. ACS Environmental Au, 2021, 1, 46-57.	7.0	9
82	Photofragmentation of OClO Clusters in a Supersonic Jet at 360 and 275 nm. Journal of Physical Chemistry A, 1997, 101, 5736-5741.	2.5	8
83	Improving our understanding of the environmental persistence of chemicals. Integrated Environmental Assessment and Management, 2021, 17, 1123-1135.	2.9	8
84	Analyzing (Initial) Biotransformation Reactions as an Organizing Principle for Unraveling the Extent of Trace Organic Chemical Biotransformation in Biofiltration Systems. ACS ES&T Water, 2021, 1, 1921-1931.	4.6	8
85	Comment on â€œRole of Ammonia Oxidation in Organic Micropollutant Transformation during Wastewater Treatmentâ€ Overlooked Evidence to the Contrary. Environmental Science & Technology, 2021, 55, 12128-12129.	10.0	8
86	QSARs and computational chemistry methods in environmental chemical sciences. Environmental Sciences: Processes and Impacts, 2017, 19, 185-187.	3.5	6
87	To be or not to be degraded: in defense of persistence assessment of chemicals. Environmental Sciences: Processes and Impacts, 2022, 24, 1104-1109.	3.5	6
88	Towards more Sustainable Peptide- based Antibiotics: Stable in Human Blood, Enzymatically Hydrolyzed in Wastewater?. Chimia, 2021, 75, 267.	0.6	5
89	Toward Characterizing the Genetic Basis of Trace Organic Contaminant Biotransformation in Activated Sludge: The Role of Multicopper Oxidases as a Case Study. Environmental Science & Technology, 2022, 56, 313-324.	10.0	5
90	A Hybrid Machine Learning and Knowledge Based Approach to Limit Combinatorial Explosion in Biodegradation Prediction. Studies in Computational Intelligence, 2016, , 75-97.	0.9	4

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91	Comment on â€œHigh-Resolution Gas Chromatography Retention Data as Basis for the Estimation ofKowValues Using PCB Congeners as Secondary Standardsâ€ Environmental Science & Technology, 2004, 38, 2286-2287.	10.0	3
92	Response to comment of Sierra Rayne on â€œTargeting aquatic microcontaminants for monitoring: exposure categorization and application to the Swiss situation [GÃ¶tz et al., Environ Sci Pollut Res (2010) 17:341â€“354]â€ Environmental Science and Pollution Research, 2013, 20, 6678-6680.	5.3	0
93	The Swiss Chemical Society Establishes a New Section on 'Chemistry and the Environment' (SCE). Chimia, 2019, 73, 644-644.	0.6	0
94	Editorial. Chimia, 2020, 74, 105.	0.6	0