Jes Vollertsen

List of Publications by Year in descending order

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114 papers	5,157 citations	117625 34 h-index	95266 68 g-index
117 all docs	117 docs citations	117 times ranked	4566 citing authors

#	Article	IF	Citations
1	Microplastics degradation through hydrothermal liquefaction of wastewater treatment sludge. Journal of Cleaner Production, 2022, 335, 130383.	9.3	31
2	Drinking plastics? â€“ Quantification and qualification of microplastics in drinking water distribution systems by ÂµFTIR and Py-GCMS. Water Research, 2021, 188, 116519.	11.3	151
3	Semi-automated analysis of microplastics in complex wastewater samples. Environmental Pollution, 2021, 268, 115841.	7.5	72
4	Model Parameters for Aerobic Biological Sulfide Oxidation in Sewer Wastewater. Water (Switzerland), 2021, 13, 981.	2.7	6
5	Accelerated weathering affects the chemical and physical properties of marine antifouling paint microplastics and their identification by ATR-FTIR spectroscopy. Chemosphere, 2021, 274, 129749.	8.2	19
6	A complete mass balance for plastics in a wastewater treatment plant - Macroplastics contributes more than microplastics. Water Research, 2021, 201, 117307.	11.3	47
7	Accelerated Weathering Increases the Release of Toxic Leachates from Microplastic Particles as Demonstrated through Altered Toxicity to the Green Algae Raphidocelis subcapitata. Toxics, 2021, 9, 185.	3.7	18
8	Innovative aspects of environmental chemistry and technology regarding air, water, and soil pollution. Environmental Science and Pollution Research, 2021, 28, 58958-58968.	5.3	3
9	The occurrence and fate of microplastics in a mesophilic anaerobic digester receiving sewage sludge, grease, and fatty slurries. Science of the Total Environment, 2021, 798, 149287.	8.0	14
10	Microplastic pollution in drinking water. Current Opinion in Toxicology, 2021, 28, 70-75.	5.0	44
11	Quantification of plankton-sized microplastics in a productive coastal Arctic marine ecosystem. Environmental Pollution, 2020, 266, 115248.	7.5	52
12	No Clear Response in the Stormwater Phytoplankton Community to Biocide Contamination. Water (Switzerland), 2020, 12, 3120.	2.7	0
13	A nationwide assessment of plastic pollution in the Danish realm using citizen science. Scientific Reports, 2020, 10, 17773.	3.3	41
14	Identification and Quantification of Microplastics in Potable Water and Their Sources within Water Treatment Works in England and Wales. Environmental Science & Technology, 2020, 54, 12326-12334.	10.0	97
15	An exploratory study of benthic diatom communities in stormwater ponds of different land uses and varying biocide contamination. Aquatic Ecology, 2020, 54, 761-774.	1.5	7
16	Planktonic algae abundance and diversity are similar in urban stormwater ponds of different geographic locations and natural shallow lakes. Urban Ecosystems, 2020, 23, 841-850.	2.4	5
17	Toward the Systematic Identification of Microplastics in the Environment: Evaluation of a New Independent Software Tool (siMPle) for Spectroscopic Analysis. Applied Spectroscopy, 2020, 74, 1127-1138.	2.2	130
18	Exploratory analysis of hyperspectral FTIR data obtained from environmental microplastics samples. Analytical Methods, 2020, 12, 781-791.	2.7	38

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19	Microplastics Removal from Treated Wastewater by a Biofilter. Water (Switzerland), 2020, 12, 1085.	2.7	48
20	Microplastics in a Stormwater Pond. Water (Switzerland), 2019, 11, 1466.	2.7	88
21	Retention of microplastics in sediments of urban and highway stormwater retention ponds. Environmental Pollution, 2019, 255, 113335.	7.5	112
22	Assessment of input of organic micropollutants and microplastics into the Baltic Sea by urban waters. Marine Pollution Bulletin, 2019, 148, 149-155.	5.0	45
23	Simulating human exposure to indoor airborne microplastics using a Breathing Thermal Manikin. Scientific Reports, 2019, 9, 8670.	3.3	407
24	Variations in microbiome composition of sewer biofilms due to ferrous and ferric iron dosing. Cogent Environmental Science, 2019, 5, 1595293.	1.6	4
25	Sorption and Degradation Potential of Pharmaceuticals in Sediments from a Stormwater Retention Pond. Water (Switzerland), 2019, 11, 526.	2.7	20
26	Microplastics in urban and highway stormwater retention ponds. Science of the Total Environment, 2019, 671, 992-1000.	8.0	286
27	Removal of >10 Âµm Microplastic Particles from Treated Wastewater by a Disc Filter. Water (Switzerland), 2019, 11, 1935.	2.7	60
28	Release of hydrogen sulfide under intermittent flow conditions â€“ the potential of simulation models. Water Science and Technology, 2018, 77, 777-787.	2.5	8
29	Automated monitoring system for events detection in sewer network by distribution temperature sensing data measurement. Water Science and Technology, 2018, 78, 1499-1508.	2.5	6
30	Kinetics of sulfide precipitation with ferrous and ferric iron in wastewater. Water Science and Technology, 2018, 78, 1071-1081.	2.5	13
31	Apparent diffusion coefficients in sewer force main biofilms treated with iron salts. Environmental Science: Water Research and Technology, 2018, 4, 1501-1510.	2.4	0
32	Quantification of microplastic mass and removal rates at wastewater treatment plants applying Focal Plane Array (FPA)-based Fourier Transform Infrared (FT-IR) imaging. Water Research, 2018, 142, 1-9.	11.3	518
33	Variations in activities of sewer biofilms due to ferrous and ferric iron dosing. Water Science and Technology, 2018, 2017, 845-858.	2.5	5
34	Liquidâ€Gas Mass Transfer of Volatile Substances in an Energy Dissipating Structure. Water Environment Research, 2018, 90, 269-277.	2.7	4
35	Effects of Diurnal pH Variation in Sewer Process Modeling. Proceedings of the Water Environment Federation, 2018, 2018, 288-297.	0.0	0
36	WATS Sewer Process Model as a tool for Construction Projects Alternative Selection. Proceedings of the Water Environment Federation, 2018, 2018, 591-605.	0.0	0

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37	Using WATS Sewer Process Model for Project Pre-Design. Proceedings of the Water Environment Federation, 2018, 2018, 107-122.	0.0	0
38	Photodegradation of three stormwater biocides. Urban Water Journal, 2017, 14, 53-60.	2.1	12
39	Release of hydrogen sulfide in a sewer system under intermittent flow conditions: the Ericeira case study, in Portugal. Water Science and Technology, 2017, 75, 1702-1711.	2.5	10
40	Liquid-gas mass transfer at drop structures. Water Science and Technology, 2017, 75, 2257-2267.	2.5	4
41	Photodegradation of octylisothiazolinone and semi-field emissions from facade coatings. Scientific Reports, 2017, 7, 41501.	3.3	31
42	Sulfide Precipitation in Wastewater at Short Timescales. Water (Switzerland), 2017, 9, 670.	2.7	17
43	Spatial and Temporal Heterogeneity of Surface pH in Corroding Concrete Sewers. Proceedings of the Water Environment Federation, 2017, 2017, 5482-5491.	0.0	0
44	Spatial Variability of Anaerobic Processes and Wastewater pH in Force Mains. Water Environment Research, 2016, 88, 747-755.	2.7	4
45	Leaching of Terbutryn and Its Photodegradation Products from Artificial Walls under Natural Weather Conditions. Environmental Science & Technology, 2016, 50, 4289-4295.	10.0	46
46	Invertebrates in stormwater wet detention ponds â€" Sediment accumulation and bioaccumulation of heavy metals have no effect on biodiversity and community structure. Science of the Total Environment, 2016, 566-567, 1579-1587.	8.0	18
47	Airflow in Gravity Sewers â€" Determination of Wastewater Drag Coefficient. Water Environment Research, 2016, 88, 239-256.	2.7	3
48	The activated sludge ecosystem contains a core community of abundant organisms. ISME Journal, 2016, 10, 11-20.	9.8	416
49	Bioaccumulation of heavy metals in two wet retention ponds. Urban Water Journal, 2016, 13, 697-709.	2.1	13
50	A Conceptual Sewer Process Model as a Tool for Odor and Corrosion Management. Proceedings of the Water Environment Federation, 2016, 2016, 596-609.	0.0	0
51	Modeling Sulfides, pH and Hydrogen Sulfide Gas in the Sewers of San Francisco. Water Environment Research, 2015, 87, 1980-1989.	2.7	19
52	Degradation of PPCPs in activated sludge from different WWTPs in Denmark. Ecotoxicology, 2015, 24, 2073-2080.	2.4	40
53	Retainment of the antimicrobial agent triclosan in a septic tank. Water Science and Technology, 2014, 70, 586-592.	2.5	2
54	Air Flow in Gravity Sewers â€" Determination of Wastewater Drag Coefficient. Proceedings of the Water Environment Federation, 2014, 2014, 1-29.	0.0	3

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55	Dynamics of biocide emissions from buildings in a suburban stormwater catchment â€“ Concentrations, mass loads and emission processes. Water Research, 2014, 56, 66-76.	11.3	96
56	Biocides in urban wastewater treatment plant influent at dry and wet weather: Concentrations, mass flows and possible sources. Water Research, 2014, 60, 64-74.	11.3	97
57	Experimental Evaluation of the Stoichiometry of Sulfide-Related Concrete Sewer Corrosion. Journal of Environmental Engineering, ASCE, 2014, 140, 04013009.	1.4	8
58	Distribution of metals in fauna, flora and sediments of wet detention ponds and natural shallow lakes. Ecological Engineering, 2014, 66, 43-51.	3.6	24
59	Modeling Odors and Hydrogen Sulfide in the Sewers of San Francisco. Proceedings of the Water Environment Federation, 2014, 2014, 1-11.	0.0	1
60	Modeling the eutrophication of two mature planted stormwater ponds for runoff control. Ecological Engineering, 2013, 61, 601-613.	3.6	11
61	Kinetics of aerobic oxidation of volatile sulfur compounds in wastewater and biofilm from sewers. Water Science and Technology, 2013, 68, 2330-2336.	2.5	4
62	A method for on-line measurement of wastewater organic substrate oxidation level during aerobic heterotrophic respiration. Water Science and Technology, 2013, 67, 1809-1815.	2.5	1
63	Seasonal Trends in Bioaccumulation of Heavy Metals in Fauna of Stormwater Ponds. , 2013, , 485-494.		1
64	Effect of Sewer Headspace Air-Flow on Hydrogen Sulfide Removal by Corroding Concrete Surfaces. Water Environment Research, 2012, 84, 265-273.	2.7	21
65	Sorption Media for Stormwater Treatmentâ€"A Laboratory Evaluation of Five Lowâ€Cost Media for Their Ability to Remove Metals and Phosphorus from Artificial Stormwater. Water Environment Research, 2012, 84, 605-616.	2.7	23
66	Modeling anaerobic organic matter transformations in the wastewater phase of sewer networks. Water Science and Technology, 2012, 66, 1728-1734.	2.5	5
67	Improved urban stormwater treatment and pollutant removal pathways in amended wet detention ponds. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2012, 47, 1466-1477.	1.7	30
68	Modeling nutrient and pollutant removal in three wet detention ponds. Alliance for Global Sustainability Bookseries, 2012, , 237-248.	0.2	1
69	Growth kinetics of hydrogen sulfide oxidizing bacteria in corroded concrete from sewers. Journal of Hazardous Materials, 2011, 189, 685-691.	12.4	40
70	Heavy metals, PAHs and toxicity in stormwater wet detention ponds. Water Science and Technology, 2011, 64, 503-511.	2.5	18
71	A sewer process model as planning and management tool â€“ hydrogen sulfide simulation at catchment scale. Water Science and Technology, 2011, 64, 348-354.	2.5	14
72	Anaerobic Transformations of Organic Matter in Collection Systems. Water Environment Research, 2011, 83, 532-540.	2.7	17

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73	A conceptual ecosystem model of microbial communities in enhanced biological phosphorus removal plants. Water Research, 2010, 44, 5070-5088.	11.3	257
74	Sewer exfiltration and the colmation layer. Water Science and Technology, 2009, 59, 2273-2280.	2.5	15
75	Monitoring the startup of a wet detention pond equipped with sand filters and sorption filters. Water Science and Technology, 2009, 60, 1071-1079.	2.5	7
76	Biodegradability of organic matter associated with sewer sediments during first flush. Science of the Total Environment, 2009, 407, 2989-2995.	8.0	26
77	Hydrogen sulphide removal from corroding concrete: Comparison between surface removal rates and biomass activity. Environmental Technology (United Kingdom), 2009, 30, 1291-1296.	2.2	10
78	Modeling of Hydrogen Sulfide Oxidation in Concrete Corrosion Products from Sewer Pipes. Water Environment Research, 2009, 81, 365-373.	2.7	38
79	New Findings in Hydrogen Sulfide Related Corrosion of Concrete Sewers. , 2009, , .		2
80	Anaerobic Transformations of Wastewater Organic Matter in Sewer Systems. Proceedings of the Water Environment Federation, 2009, 2009, 501-513.	0.0	1
81	Performance and Modelling of a Highway Wet Detention Pond Designed for Cold Climate. Water Quality Research Journal of Canada, 2009, 44, 253-262.	2.7	10
82	Corrosion of concrete sewersâ€"The kinetics of hydrogen sulfide oxidation. Science of the Total Environment, 2008, 394, 162-170.	8.0	149
83	Towards a better understanding of sewer exfiltration. Water Research, 2008, 42, 2385-2394.	11.3	83
84	Influence of pipe material and surfaces on sulfide related odor and corrosion in sewers. Water Research, 2008, 42, 4206-4214.	11.3	79
85	Survival of hydrogen sulfide oxidizing bacteria on corroded concrete surfaces of sewer systems. Water Science and Technology, 2008, 57, 1721-1726.	2.5	14
86	Aerobic and Anaerobic Transformations of Sulfide in a Sewer Systemâ€"Field Study and Model Simulations. Water Environment Research, 2008, 80, 16-25.	2.7	36
87	Modeling the Formation and Fate of Odorous Substances in Collection Systems. Water Environment Research, 2008, 80, 118-126.	2.7	8
88	Effects of pH and Iron Concentrations on Sulfide Precipitation in Wastewater Collection Systems. Water Environment Research, 2008, 80, 380-384.	2.7	49
89	Effects of Iron on Chemical Sulfide Oxidation in Wastewater from Sewer Networks. Journal of Environmental Engineering, ASCE, 2007, 133, 655-658.	1.4	14
90	Airâ€“water mass transfer and tracer gases in stormwater systems. Water Science and Technology, 2007, 56, 267-275.	2.5	3

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91	Monitoring and modelling the performance of a wet pond for treatment of highway runoff in cold climates. Alliance for Global Sustainability Bookseries, 2007, , 499-509.	0.2	27
92	Kinetics and Stoichiometry of Aerobic Sulfide Oxidation in Wastewater from Sewers-Effects of pH and Temperature. Water Environment Research, 2006, 78, 275-283.	2.7	75
93	Gas Phase Transport in Gravity Sewers-A Methodology for Determination of Horizontal Gas Transport and Ventilation. Water Environment Research, 2006, 78, 2203-2209.	2.7	19
94	Aerobic and Anaerobic Transformations of Sulfide in a Sewer System â€“ Field Study and Model Simulations. Proceedings of the Water Environment Federation, 2006, 2006, 3654-3670.	0.0	7
95	Modeling the Formation and Fate of Odorous Substances in Collection Systems. Proceedings of the Water Environment Federation, 2006, 2006, 1097-1112.	0.0	1
96	Stochastic Modeling of Chemical Oxygen Demand Transformations in Gravity Sewers. Water Environment Research, 2005, 77, 331-339.	2.7	6
97	Discussion of â€œModeling Hydrogen Sulfide Emission Rates in Gravity Sewage Collection Systemsâ€•by Ori Lahav, Yue Lu, Uri Shavit, and Richard E. Loewenthal. Journal of Environmental Engineering, ASCE, 2005, 131, 1761-1762.	1.4	0
98	Effects of aerobicâ€“anaerobic transient conditions on sulfur and metal cycles in sewer biofilms. Biofilms, 2005, 2, 81-91.	0.6	13
99	Sulfideâ€“iron interactions in domestic wastewater from a gravity sewer. Water Research, 2005, 39, 2747-2755.	11.3	143
100	Kinetics and stoichiometry of sulfide oxidation by sewer biofilms. Water Research, 2005, 39, 4119-4125.	11.3	89
101	Influence of Wastewater Constituents on Hydrogen Sulfide Emission in Sewer Networks. Journal of Environmental Engineering, ASCE, 2005, 131, 1676-1683.	1.4	48
102	Stochastic Modeling of Chemical Oxygen Demand Transformations in Gravity Sewers. Water Environment Research, 2005, 77, 331-339.	2.7	4
103	Effect of Temperature on Air-Water Transfer of Hydrogen Sulfide. Journal of Environmental Engineering, ASCE, 2004, 130, 104-109.	1.4	61
104	Air-Water Transfer of Hydrogen Sulfide: An Approach for Application in Sewer Networks. Water Environment Research, 2004, 76, 81-88.	2.7	36
105	Determination of Kinetics and Stoichiometry of Chemical Sulfide Oxidation in Wastewater of Sewer Networks. Environmental Science & Technology, 2003, 37, 3853-3858.	10.0	79
106	Comparison of methods for determination of microbial biomass in wastewater. Water Research, 2001, 35, 1649-1658.	11.3	49
107	Resuspension and oxygen uptake of sediments in combined sewers. Urban Water, 2000, 2, 21-27.	0.5	22
108	Sewer quality modeling â€“ a dry weather approach. Urban Water, 2000, 2, 295-303.	0.5	6

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109	Effects of temperature and dissolved oxygen on hydrolysis of sewer solids. Water Research, 1999, 33, 3119-3126.	11.3	18
110	Stoichiometric and kinetic model parameters for microbial transformations of suspended solids in combined sewer systems. Water Research, 1999, 33, 3127-3141.	11.3	30
111	Aerobic microbial transformations of pipe and silt trap sediments from combined sewers. Water Science and Technology, 1999, 39, 233-249.	2.5	6
112	Aerobic microbial transformations of pipe and silt trap sediments from combined sewers. Water Science and Technology, 1998, 38, 249-256.	2.5	8
113	Aerobic microbial transformations of resuspended sediments in combined sewers - a conceptual model. Water Science and Technology, 1998, 37, 69-76.	2.5	14
114	Sewer Processes. , 0, , .		87