Frederik Hammes

List of Publications by Year
in descending order

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81	9,241	34105 52	58581 82
papers	citations	h-index	g-index

82	82	82	8765
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Assessment and Interpretation of Bacterial Viability by Using the LIVE/DEAD BacLight Kit in Combination with Flow Cytometry. Applied and Environmental Microbiology, 2007, 73, 3283-3290.	3.1	734
2	Key roles of pH and calcium metabolism in microbial carbonate precipitation. Reviews in Environmental Science and Biotechnology, 2002, 1, 3-7.	8.1	575
3	Flow-cytometric total bacterial cell counts as a descriptive microbiological parameter for drinking water treatment processes. Water Research, 2008, 42, 269-277.	11.3	485
4	Strain-Specific Ureolytic Microbial Calcium Carbonate Precipitation. Applied and Environmental Microbiology, 2003, 69, 4901-4909.	3.1	408
5	Biological Stability of Drinking Water: Controlling Factors, Methods, and Challenges. Frontiers in Microbiology, 2016, 7, 45.	3.5	287
6	Absolute quantification of microbial taxon abundances. ISME Journal, 2017, 11, 584-587.	9.8	273
7	Measurement and interpretation of microbial adenosine tri-phosphate (ATP) in aquatic environments. Water Research, 2010, 44, 3915-3923.	11.3	270
8	Rapid, cultivation-independent assessment of microbial viability in drinking water. Water Research, 2008, 42, 4010-4018.	11.3	239
9	Overnight stagnation of drinking water in household taps induces microbial growth and changes in community composition. Water Research, 2010, 44, 4868-4877.	11.3	226
10	Past, present and future applications of flow cytometry in aquatic microbiology. Trends in Biotechnology, 2010, 28, 416-424.	9.3	220
11	Mechanistic and kinetic evaluation of organic disinfection by-product and assimilable organic carbon (AOC) formation during the ozonation of drinking water. Water Research, 2006, 40, 2275-2286.	11.3	214
12	Abundance and composition of indigenous bacterial communities in a multi-step biofiltration-based drinking water treatment plant. Water Research, 2014, 62, 40-52.	11.3	179
13	Stabilization of flux during dead-end ultra-low pressure ultrafiltration. Water Research, 2010, 44, 3607-3616.	11.3	177
14	Kinetics of membrane damage to high (HNA) and low (LNA) nucleic acid bacterial clusters in drinking water by ozone, chlorine, chlorine dioxide, monochloramine, ferrate(VI), and permanganate. Water Research, 2011, 45, 1490-1500.	11.3	175
15	Inactivation of Antibiotic Resistant Bacteria and Resistance Genes by Ozone: From Laboratory Experiments to Full-Scale Wastewater Treatment. Environmental Science & Technology, 2016, 50, 11862-11871.	10.0	175
16	Rapid and direct estimation of active biomass on granular activated carbon through adenosine tri-phosphate (ATP) determination. Water Research, 2007, 41, 1973-1983.	11.3	174
17	Drinking water microbiology â€" from measurement to management. Current Opinion in Biotechnology, 2015, 33, 87-94.	6.6	170
18	Isolation and characterization of low nucleic acid (LNA)-content bacteria. ISME Journal, 2009, 3, 889-902.	9.8	169

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19	Development of biomass in a drinking water granular active carbon (GAC) filter. Water Research, 2011, 45, 6347-6354.	11.3	165
20	Cytometric methods for measuring bacteria in water: advantages, pitfalls and applications. Analytical and Bioanalytical Chemistry, 2010, 397, 1083-1095.	3.7	159
21	Big answers from small worlds: a user's guide for protist microcosms as a model system in ecology and evolution. Methods in Ecology and Evolution, 2015, 6, 218-231.	5.2	157
22	A microbiology-based multi-parametric approach towards assessing biological stability in drinking water distribution networks. Water Research, 2013, 47, 3015-3025.	11.3	153
23	A novel approach to calcium removal from calcium-rich industrial wastewater. Water Research, 2003, 37, 699-704.	11.3	136
24	Quantification of the Filterability of Freshwater Bacteria through 0.45, 0.22, and 0.1 Î¼m Pore Size Filters and Shape-Dependent Enrichment of Filterable Bacterial Communities. Environmental Science & Technology, 2007, 41, 7080-7086.	10.0	130
25	Routine bacterial analysis with automated flow cytometry. Journal of Microbiological Methods, 2013, 94, 73-76.	1.6	123
26	Escherichia coli O157 can grow in natural freshwater at low carbon concentrations. Environmental Microbiology, 2008, 10, 2387-2396.	3.8	114
27	The feasibility of automated online flow cytometry for in-situ monitoring of microbial dynamics in aquatic ecosystems. Frontiers in Microbiology, 2014, 5, 265.	3.5	113
28	Growth of Vibrio cholerae O1 Ogawa Eltor in freshwater. Microbiology (United Kingdom), 2007, 153, 1993-2001.	1.8	109
29	Dynamics of bacterial communities before and after distribution in a full-scale drinking water network. Water Research, 2015, 74, 180-190.	11.3	109
30	Influence of Size, Shape, and Flexibility on Bacterial Passage through Micropore Membrane Filters. Environmental Science & Technology, 2008, 42, 6749-6754.	10.0	108
31	Metal Decontamination of Soil, Sediment, and Sewage Sludge by Means of Transition Metal Chelant [S,S]-EDDS. Journal of Environmental Engineering, ASCE, 2001, 127, 802-811.	1.4	103
32	Formation of assimilable organic carbon (AOC) and specific natural organic matter (NOM) fractions during ozonation of phytoplankton. Water Research, 2007, 41, 1447-1454.	11.3	102
33	Biological Instability in a Chlorinated Drinking Water Distribution Network. PLoS ONE, 2014, 9, e96354.	2.5	102
34	Flow cytometry and adenosine tri-phosphate analysis: Alternative possibilities to evaluate major bacteriological changes in drinking water treatment and distribution systems. Water Research, 2012, 46, 4665-4676.	11.3	100
35	Assessing biological stability of drinking water without disinfectant residuals in a full-scale water supply system. Journal of Water Supply: Research and Technology - AQUA, 2010, 59, 31-40.	1.4	98
36	Evaluating the Growth Potential of Pathogenic Bacteria in Water. Applied and Environmental Microbiology, 2010, 76, 6477-6484.	3.1	94

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37	Development and laboratoryâ€scale testing of a fully automated online flow cytometer for drinking water analysis. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2012, 81A, 508-516.	1.5	94
38	Nutrient gradients in a granular activated carbon biofilter drives bacterial community organization and dynamics. Water Research, 2011, 45, 6355-6361.	11.3	90
39	Flow Cytometric Assessment of Bacterial Abundance in Soils, Sediments and Sludge. Frontiers in Microbiology, 2016, 7, 903.	3.5	84
40	Phylogenetic clustering of small low nucleic acid-content bacteria across diverse freshwater ecosystems. ISME Journal, 2018, 12, 1344-1359.	9.8	84
41	Critical Evaluation of the Volumetric â€œBottle Effectâ€•on Microbial Batch Growth. Applied and Environmental Microbiology, 2010, 76, 1278-1281.	3.1	82
42	Identifying the underlying causes of biological instability in a full-scale drinking water supply system. Water Research, 2018, 135, 11-21.	11.3	78
43	Permeability of low molecular weight organics through nanofiltration membranes. Water Research, 2007, 41, 3968-3976.	11.3	76
44	A pipeline for developing and testing staining protocols for flow cytometry, demonstrated with SYBR Green I and propidium iodide viability staining. Journal of Microbiological Methods, 2016, 131, 172-180.	1.6	71
45	Biofilms in shower hoses. Water Research, 2018, 131, 274-286.	11.3	69
46	Inactivation efficiency of Escherichia coli and autochthonous bacteria during ozonation of municipal wastewater effluents quantified with flow cytometry and adenosine tri-phosphate analyses. Water Research, 2016, 101, 617-627.	11.3	68
47	FMNH2-dependent monooxygenases initiate catabolism of sulfonamides in Microbacterium sp. strain BR1 subsisting on sulfonamide antibiotics. Scientific Reports, 2017, 7, 15783.	3.3	66
48	Cultivation-independent Assessment of Bacterial Viability. Advances in Biochemical Engineering/Biotechnology, 2010, 124, 123-150.	1.1	64
49	Microbiological tap water profile of a medium-sized building and effect of water stagnation. Environmental Technology (United Kingdom), 2014, 35, 620-628.	2.2	62
50	Online flow cytometry reveals microbial dynamics influenced by concurrent natural and operational events in groundwater used for drinking water treatment. Scientific Reports, 2016, 6, 38462.	3.3	62
51	Behavior and stability of adenosine triphosphate (ATP) during chlorine disinfection. Water Research, 2016, 101, 490-497.	11.3	62
52	Calcium removal from industrial wastewater by bio-catalytic CaCO3 precipitation. Journal of Chemical Technology and Biotechnology, 2003, 78, 670-677.	3.2	61
53	Biofilms in shower hoses â€“ choice of pipe material influences bacterial growth and communities. Environmental Science: Water Research and Technology, 2016, 2, 670-682.	2.4	57
54	Competition of Escherichia coli O157 with a drinking water bacterial community at low nutrient concentrations. Water Research, 2012, 46, 6279-6290.	11.3	54

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55	Short-term microbial dynamics in a drinking water plant treating groundwater with occasional high microbial loads. Water Research, 2016, 107, 11-18.	11.3	54
56	Monitoring of Dynamic Microbiological Processes Using Real-Time Flow Cytometry. PLoS ONE, 2013, 8, e80117.	2.5	41
57	Kinetics and Yields of Pesticide Biodegradation at Low Substrate Concentrations and under Conditions Restricting Assimilable Organic Carbon. Applied and Environmental Microbiology, 2014, 80, 1306-1313.	3.1	37
58	Laboratory-Scale Simulation and Real-Time Tracking of a Microbial Contamination Event and Subsequent Shock-Chlorination in Drinking Water. Frontiers in Microbiology, 2017, 8, 1900.	3.5	37
59	A uniform bacterial growth potential assay for different water types. Water Research, 2018, 142, 227-235.	11.3	37
60	360-Degree Distribution of Biofilm Quantity and Community in an Operational Unchlorinated Drinking Water Distribution Pipe. Environmental Science & Technology, 2020, 54, 5619-5628.	10.0	33
61	Spatiotemporal scales of river-groundwater interaction â€“ The role of local interaction processes and regional groundwater regimes. Science of the Total Environment, 2018, 618, 1224-1243.	8.0	32
62	Flow-cytometric quantification of microbial cells on sand from water biofilters. Water Research, 2018, 143, 66-76.	11.3	32
63	Detection of microbial disturbances in a drinking water microbial community through continuous acquisition and advanced analysis of flow cytometry data. Water Research, 2018, 145, 73-82.	11.3	29
64	Small-Scale Heterogeneity in Drinking Water Biofilms. Frontiers in Microbiology, 2019, 10, 2446.	3.5	27
65	Online analysis: Deeper insights into water quality dynamics in spring water. Science of the Total Environment, 2017, 599-600, 227-236.	8.0	26
66	Evaluating Monitoring Strategies to Detect Precipitation-Induced Microbial Contamination Events in Karstic Springs Used for Drinking Water. Frontiers in Microbiology, 2017, 8, 2229.	3.5	25
67	Growth of Legionella during COVID-19 lockdown stagnation. Environmental Science: Water Research and Technology, 2021, 7, 10-15.	2.4	23
68	The impact of industrial-scale cartridge filtration on the native microbial communities from groundwater. Water Research, 2008, 42, 4319-4326.	11.3	22
69	Continuous Monitoring of Enzymatic Reactions on Surfaces by Real-Time Flow Cytometry: Sortase A Catalyzed Protein Immobilization as a Case Study. Bioconjugate Chemistry, 2014, 25, 1492-1500.	3.6	20
70	Short-term organic carbon migration from polymeric materials in contact with chlorinated drinking water. Science of the Total Environment, 2018, 613-614, 1220-1227.	8.0	19
71	Feeding the Building Plumbing Microbiome: The Importance of Synthetic Polymeric Materials for Biofilm Formation and Management. Water (Switzerland), 2020, 12, 1774.	2.7	19
72	Variable Legionella Response to Building Occupancy Patterns and Precautionary Flushing. Microorganisms, 2022, 10, 555.	3.6	19

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73	Bacterial Colonization of Pellet Softening Reactors Used during Drinking Water Treatment. Applied and Environmental Microbiology, 2011, 77, 1041-1048.	3.1	17
74	Dynamic Hydraulics in a Drinking Water Distribution System Influence Suspended Particles and Turbidity, But Not Microbiology. Water (Switzerland), 2021, 13, 109.	2.7	15
75	Stagnation leads to short-term fluctuations in the effluent water quality of biofilters: A problem for greywater reuse?. Water Research X, 2021, 13, 100120.	6.1	12
76	Bacterial growth in batch-operated membrane filtration systems for drinking water treatment. Separation and Purification Technology, 2015, 156, 165-174.	7.9	10
77	Construction of a Low-cost Mobile Incubator for Field and Laboratory Use. Journal of Visualized Experiments, 2019, , .	0.3	10
78	Potential probiotic approaches to control Legionella in engineered aquatic ecosystems. FEMS Microbiology Ecology, 2022, 98, .	2.7	8
79	Chemical Extraction of Microorganisms from Water-Saturated, Packed Sediment. Water Environment Research, 2013, 85, 503-513.	2.7	4
80	Substrate Pre-loading Influences Initial Colonization of GAC Biofilter Biofilms. Frontiers in Microbiology, 2020, 11, 596156.	3.5	2
81	Automated flow cytometry as a flexible tool for comparing disinfection characteristics of indigenous bacterial communities and pure cultures. Ecotoxicology and Environmental Safety, 2021, 225, 112799.	6.0	2