Ilje Pikaar

List of Publications by Year
in descending order

53 papers	2,559 citations	236612 25 h-index	233125 45 g-index
53 all docs	53 docs citations	53 times ranked	2635 citing authors

#	Article	IF	Citations
1	Innovation can accelerate the transition towards a sustainable food system. Nature Food, 2020, 1, 266-272.	6.2	285
2	Microbial protein: future sustainable food supply route with low environmental footprint. Microbial Biotechnology, 2016, 9, 568-575.	2.0	227
3	Reducing sewer corrosion through integrated urban water management. Science, 2014, 345, 812-814.	6.0	194
4	Articulating the effect of food systems innovation on the Sustainable Development Goals. Lancet Planetary Health, The, 2021, 5, e50-e62.	5.1	135
5	Mainstream Ammonium Recovery to Advance Sustainable Urban Wastewater Management. Environmental Science & Technology, 2019, 53, 11066-11079.	4.6	126
6	Decoupling Livestock from Land Use through Industrial Feed Production Pathways. Environmental Science & Technology, 2018, 52, 7351-7359.	4.6	124
7	Autotrophic nitrogen assimilation and carbon capture for microbial protein production by a novel enrichment of hydrogen-oxidizing bacteria. Water Research, 2016, 101, 137-146.	5.3	116
8	Purple phototrophic bacteria for resource recovery: Challenges and opportunities. Biotechnology Advances, 2020, 43, 107567.	6.0	103
9	Electrochemical sulfide oxidation from domestic wastewater using mixed metal-coated titanium electrodes. Water Research, 2011, 45, 5381-5388.	5.3	93
10	Microbes and the Next Nitrogen Revolution. Environmental Science & Technology, 2017, 51, 7297-7303.	4.6	85
11	Feasibility of sulfide control in sewers by reuse ofÂiron rich drinking water treatment sludge. Water Research, 2015, 71, 150-159.	5.3	77
12	Electrochemical Abatement of Hydrogen Sulfide from Waste Streams. Critical Reviews in Environmental Science and Technology, 2015, 45, 1555-1578.	6.6	75
13	Electrochemical sulfide removal from synthetic and real domestic wastewater at high current densities. Water Research, 2011, 45, 2281-2289.	5.3	66
14	Sorption of organic compounds to activated carbons. Evaluation of isotherm models. Chemosphere, 2006, 65, 2343-2351.	4.2	58
15	A comprehensive laboratory assessment of the effects of sewer-dosed iron salts on wastewater treatment processes. Water Research, 2018, 146, 109-117.	5.3	56
16	Rapid removal of ammonium from domestic wastewater using polymer hydrogels. Scientific Reports, 2018, 8, 2912.	1.6	53
17	Upcycling of biowaste carbon and nutrients in line with consumer confidence: the â€œfull gasâ€•route to single cell protein. Green Chemistry, 2020, 22, 4912-4929.	4.6	53
18	Electrochemical sulfide removal and caustic recovery from spent caustic streams. Water Research, 2016, 92, 38-43.	5.3	51

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19	The hydrogen gas bio-based economy and the production of renewable building block chemicals, food and energy. New Biotechnology, 2020, 55, 12-18.	2.4	46
20	Electrochemical oxidation of iron and alkalinity generation for efficient sulfide control in sewers. Water Research, 2017, 118, 114-120.	5.3	45
21	Effects of in-sewer dosing of iron-rich drinking water sludge on wastewater collection and treatment systems. Water Research, 2020, 171, 115396.	5.3	40
22	Carbon emission avoidance and capture by producing in-reactor microbial biomass based food, feed and slow release fertilizer: Potentials and limitations. Science of the Total Environment, 2018, 644, 1525-1530.	3.9	39
23	Enhancing Toxic Metal Removal from Acidified Sludge with Nitrite Addition. Environmental Science & Technology, 2015, 49, 6257-6263.	4.6	35
24	Recovery of in-sewer dosed iron from digested sludge at downstream treatment plants and its reuse potential. Water Research, 2020, 174, 115627.	5.3	35
25	Dynamically Adaptive Control System for Bioanodes in Serially Stacked Bioelectrochemical Systems. Environmental Science & Technology, 2013, 47, 5488-5494.	4.6	31
26	Anode materials for sulfide oxidation in alkaline wastewater: An activity and stability performance comparison. Water Research, 2019, 149, 111-119.	5.3	27
27	Long-term field test of an electrochemical method for sulfide removal from sewage. Water Research, 2012, 46, 3085-3093.	5.3	24
28	Modified Poly(acrylic acid)-Based Hydrogels for Enhanced Mainstream Removal of Ammonium from Domestic Wastewater. Environmental Science & Technology, 2020, 54, 9573-9583.	4.6	24
29	Simultaneous use of caustic and oxygen for efficient sulfide control in sewers. Science of the Total Environment, 2017, 601-602, 776-783.	3.9	23
30	Electrochemical caustic generation from sewage. Electrochemistry Communications, 2011, 13, 1202-1204.	2.3	20
31	Assessing the potential for upâ€cycling recovered resources from anaerobic digestion through microbial protein production. Microbial Biotechnology, 2021, 14, 897-910.	2.0	20
32	Full-scale investigation of in-situ iron and alkalinity generation for efficient sulfide control. Water Research, 2019, 167, 115032.	5.3	19
33	In-situ caustic generation from sewage: The impact of caustic strength and sewage composition. Water Research, 2013, 47, 5828-5835.	5.3	18
34	Opportunities for reducing coagulants usage in urban water management: The Oxley Creek Sewage Collection and Treatment System as an example. Water Research, 2019, 165, 114996.	5.3	17
35	The impact of primary sedimentation on the use of iron-rich drinking water sludge on the urban wastewater system. Journal of Hazardous Materials, 2021, 402, 124051.	6.5	16
36	Direct anodic hydrochloric acid and cathodic caustic production during water electrolysis. Scientific Reports, 2016, 6, 20494.	1.6	15

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37	Effects of aging of ferric-based drinking water sludge on its reactivity for sulfide and phosphate removal. Water Research, 2020, 184, 116179.	5.3	15
38	The Urgent Need to Re-engineer Nitrogen-Efficient Food Production for the Planet. , 2018, , 35-69.		14
39	Electrochemical Production of Magnetite Nanoparticles for Sulfide Control in Sewers. Environmental Science & Technology, 2017, 51, 12229-12234.	4.6	12
40	Magnetic poly(acrylic acid)-based hydrogels for rapid ammonium sorption and efficient sorbent separation from sewage. Environmental Science and Ecotechnology, 2021, 6, 100097.	6.7	10
41	Scaling-Free Electrochemical Production of Caustic and Oxygen for Sulfide Control in Sewers. Environmental Science & Technology, 2015, 49, 11395-11402.	4.6	9
42	Resource recovery from water: From concept to standard practice. Water Research, 2020, 178, 115856.	5.3	8
43	Effect of biomass concentration on methane oxidation activity using mature compost and graphite granules as substrata. Waste Management, 2016, 56, 290-297.	3.7	6
44	Nitrite addition to acidified sludge significantly improves digestibility, toxic metal removal, dewaterability and pathogen reduction. Scientific Reports, 2016, 6, 39795.	1.6	5
45	Measuring development of environmental awareness and moral reasoning: A case-study of a civil engineering course. European Journal of Engineering Education, 2019, 44, 954-968.	1.5	5
46	Production of single-cell proteins from organic matter and residual nitrogen. , 2020, , 355-389.		3
47	Influence of inoculum selection on the utilisation of volatile fatty acid and glucose in sulfate reducing reactors. Environmental Technology (United Kingdom), 2020, , 1-12.	1.2	1
48	Nutrient recovery from water and wastewater. , 2022, , 245-293.		0
49	Upscaled and validated technologies for the production of bio-based materials from wastewater. , 2022, , 197-222.		0
50	Producing microbial-based protein from reactive nitrogen recovered from wastewater. , 2022, , 223-244.		0
51	Resource recovery from drinking water production facilities: what and how much is there?. , 2022, , 49-60.		0
52	Closing the loop within the water sector: circular resources. , 2022, , 319-337.		0
53	Resource recovery from municipal wastewater: what and how much is there?. , 2022, , 1-19.		0