Jan Peter Van der Hoek

List of Publications by Year
in descending order

98 papers	2,986 citations	159585 30 h-index	189892 50 g-index
103 all docs	103 docs citations	103 times ranked	3145 citing authors

#	Article	IF	Citations
1	Quantitative biofouling diagnosis in full scale nanofiltration and reverse osmosis installations. Water Research, 2008, 42, 4856-4868.	11.3	207
2	Wastewater as a resource: Strategies to recover resources from Amsterdamâ€™s wastewater. Resources, Conservation and Recycling, 2016, 113, 53-64.	10.8	139
3	Sorption and biodegradation of organic micropollutants during river bank filtration: A laboratory column study. Water Research, 2014, 52, 231-241.	11.3	138
4	Human health risk assessment of the mixture of pharmaceuticals in Dutch drinking water and its sources based on frequent monitoring data. Science of the Total Environment, 2014, 496, 54-62.	8.0	128
5	An experimental study on the influence of water stagnation and temperature change on water quality in a full-scale domestic drinking water system. Water Research, 2017, 123, 761-772.	11.3	125
6	Life cycle assessment of nutrient recycling from wastewater: A critical review. Water Research, 2020, 173, 115519.	11.3	93
7	Nitrate removal from ground water. Water Research, 1987, 21, 989-997.	11.3	77
8	Nitrogen Recovery from Wastewater: Possibilities, Competition with Other Resources, and Adaptation Pathways. Sustainability, 2018, 10, 4605.	3.2	77
9	Energy in the urban water cycle: Actions to reduce the total expenditure of fossil fuels with emphasis on heat reclamation from urban water. Renewable and Sustainable Energy Reviews, 2014, 30, 808-820.	16.4	75
10	Combined ion exchange/biological denitrification for nitrate removal from ground water under different process conditions. Water Research, 1988, 22, 679-684.	11.3	67
11	Use of the Threshold of Toxicological Concern (TTC) approach for deriving target values for drinking water contaminants. Water Research, 2013, 47, 1666-1678.	11.3	65
12	Identification and Quantification of Nanoplastics in Surface Water and Groundwater by Pyrolysis Gas Chromatographyâ€"Mass Spectrometry. Environmental Science & Technology, 2022, 56, 4988-4997.	10.0	65
13	Health risk assessment of organic micropollutants in greywater for potable reuse. Water Research, 2015, 72, 186-198.	11.3	63
14	The scaling potential of barium sulphate in reverse osmosis systems. Journal of Membrane Science, 2002, 197, 251-268.	8.2	61
15	The effect of redox conditions and adaptation time on organic micropollutant removal during river bank filtration: A laboratory-scale column study. Science of the Total Environment, 2016, 544, 309-318.	8.0	57
16	Use of mine waste for H2O2-assisted heterogeneous Fenton-like degradation of tetracycline by natural pyrite nanoparticles: Catalyst characterization, degradation mechanism, operational parameters and cytotoxicity assessment. Journal of Cleaner Production, 2021, 291, 125235.	9.3	53
17	RO treatment: selection of a pretreatment scheme based on fouling characteristics and operating conditions based on environmental impact. Desalination, 2000, 127, 89-101.	8.2	49
18	Fluidized ion exchange (FIX) to control NOM fouling in ultrafiltration. Desalination, 2009, 236, 334-341.	8.2	49

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19	Enhanced Performance of the Eurostat Method for Comprehensive Assessment of Urban Metabolism: A Material Flow Analysis of Amsterdam. Journal of Industrial Ecology, 2017, 21, 887-902.	5.5	47
20	Denitrification with methanol in the presence of high salt concentrations and at high pH levels. Applied Microbiology and Biotechnology, 1987, 27, 199-205.	3.6	45
21	Amsterdam as a sustainable European metropolis: integration of water, energy and material flows. Urban Water Journal, 2017, 14, 61-68.	2.1	45
22	Nitrate removal from ground water â€" use of a nitrate selective resin and a low concentrated regenerant. Water, Air, and Soil Pollution, 1988, 37, 41-53.	2.4	43
23	BaSO4 solubility prediction in reverse osmosis membrane systems. Journal of Membrane Science, 1999, 159, 47-59.	8.2	41
24	Rainwater Harvesting for Drinking Water Production: A Sustainable and Cost-Effective Solution in The Netherlands?. Water (Switzerland), 2019, 11, 511.	2.7	41
25	Retention of herbicides and pesticides in relation to aging of RO membranes. Desalination, 2000, 132, 189-193.	8.2	39
26	Effect of residual H2O2 from advanced oxidation processes on subsequent biological water treatment: A laboratory batch study. Chemosphere, 2017, 185, 637-646.	8.2	39
27	Stable barium sulphate supersaturation in reverse osmosis. Journal of Membrane Science, 2000, 179, 53-68.	8.2	38
28	Electrodialysis as an alternative for reverse osmosis in an integrated membrane system. Desalination, 1998, 117, 159-172.	8.2	37
29	Scaling control of RO membranes and direct treatment of surface water. Desalination, 2000, 132, 109-119.	8.2	37
30	Improvement of the Richardson-Zaki liquid-solid fluidisation model on the basis of hydraulics. Powder Technology, 2019, 343, 465-478.	4.2	36
31	Sulfonamides removal under different redox conditions and microbial response to sulfonamides stress during riverbank filtration: A laboratory column study. Chemosphere, 2019, 220, 668-677.	8.2	33
32	Pyrite nanoparticles derived from mine waste as efficient catalyst for the activation of persulfates for degradation of tetracycline. Journal of Water Process Engineering, 2021, 40, 101808.	5.6	33
33	The effect of feed water dissolved organic carbon concentration and composition on organic micropollutant removal and microbial diversity in soil columns simulating river bank filtration. Chemosphere, 2016, 144, 932-939.	8.2	32
34	Simultaneous removal of ammonium ions and sulfamethoxazole by ozone regenerated high silica zeolites. Water Research, 2021, 188, 116472.	11.3	32
35	Risk governance of potential emerging risks to drinking water quality: Analysing current practices. Environmental Science and Policy, 2018, 84, 97-104.	4.9	30
36	Decision support for water quality management of contaminants of emerging concern. Journal of Environmental Management, 2017, 193, 360-372.	7.8	28

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37	Quantification and modelling of organic micropollutant removal by reverse osmosis (RO) drinking water treatment. Journal of Water Process Engineering, 2021, 42, 102164.	5.6	28
38	A predictive multi-linear regression model for organic micropollutants, based on a laboratory-scale column study simulating the river bank filtration process. Journal of Hazardous Materials, 2016, 304, 502-511.	12.4	27
39	Energy recovery from the water cycle: Thermal energy from drinking water. Energy, 2018, 162, 977-987.	8.8	25
40	Low-Carbon Urban Water Systems: Opportunities beyond Water and Wastewater Utilities?. Environmental Science & Technology, 2020, 54, 14854-14861.	10.0	25
41	A laboratory-scale column study comparing organic micropollutant removal and microbial diversity for two soil types. Science of the Total Environment, 2015, 536, 632-638.	8.0	24
42	Disinfection Methods for Swimming Pool Water: Byproduct Formation and Control. Water (Switzerland), 2018, 10, 797.	2.7	24
43	Synthesis and characterization of SnO2 crystalline nanoparticles: A new approach for enhancing the catalytic ozonation of acetaminophen. Journal of Hazardous Materials, 2021, 404, 124154.	12.4	24
44	Development and application of relevance and reliability criteria for water treatment removal efficiencies of chemicals of emerging concern. Water Research, 2019, 161, 274-287.	11.3	23
45	Effective removal of bromate in nitrate-reducing anoxic zones during managed aquifer recharge for drinking water treatment: Laboratory-scale simulations. Water Research, 2018, 130, 88-97.	11.3	22
46	Biomass-derived porous aminated graphitic nanosheets for removal of the pharmaceutical metronidazole: Optimization of physicochemical features and exploration of process mechanisms. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 611, 125791.	4.7	21
47	Development and validation of a drinking water temperature model in domestic drinking water supply systems. Urban Water Journal, 2017, 14, 1031-1037.	2.1	20
48	Enhanced surface water treatment by ultrafiltration. Desalination, 1998, 119, 113-125.	8.2	19
49	Magnetic seeding coagulation: Effect of Al species and magnetic particles on coagulation efficiency, residual Al, and floc properties. Chemosphere, 2021, 268, 129363.	8.2	19
50	Improvement of voidage prediction in liquid-solid fluidized beds by inclusion of the Froude number in effective drag relations. International Journal of Multiphase Flow, 2020, 127, 103261.	3.4	18
51	An experimental study on the spray characteristics of residential sprinklers under low-flow and low-pressure conditions. Fire Safety Journal, 2014, 68, 30-40.	3.1	16
52	Development and performance of a parsimonious model to estimate temperature in sewer networks. Urban Water Journal, 2017, 14, 829-838.	2.1	15
53	A Stochastic Model to Predict Flow, Nutrient and Temperature Changes in a Sewer under Water Conservation Scenarios. Water (Switzerland), 2020, 12, 1187.	2.7	15
54	Effect of oxidation ditch and anaerobic-anoxic-oxic processes on CX3R-type disinfection by-product formation during wastewater treatment. Science of the Total Environment, 2021, 770, 145344.	8.0	15

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55	Drinking Water Temperature Modelling in Domestic Systems. Procedia Engineering, 2014, 89, 143-150.	1.2	14
56	The fate of H2O2 during managed aquifer recharge: A residual from advanced oxidation processes for drinking water production. Chemosphere, 2016, 148, 263-269.	8.2	14
57	Changes in biofilm composition and microbial water quality in drinking water distribution systems by temperature increase induced through thermal energy recovery. Environmental Research, 2021, 194, 110648.	7.5	14
58	Life Cycle Environmental Impacts of Wastewater-Derived Phosphorus Products: An Agricultural End-User Perspective. Environmental Science & Technology, 2022, 56, 10289-10298.	10.0	14
59	Effect of hydraulic residence time on microbial sulfide production in an upflow sludge blanket denitrification reactor fed with methanol. Applied Microbiology and Biotechnology, 1988, 28, 493-499.	3.6	13
60	Testing the Robustness of Two Water Distribution System Layouts under Changing Drinking Water Demand. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	2.6	13
61	The effective design of sampling campaigns for emerging chemical and microbial contaminants in drinking water and its resources based on literature mining. Science of the Total Environment, 2020, 742, 140546.	8.0	13
62	New hydraulic insights into rapid sand filter bed backwashing using the Carmanâ€"Kozeny model. Water Research, 2021, 197, 117085.	11.3	13
63	Reduction of regeneration salt requirement and waste disposal in an ion exchange process for nitrate removal from ground water. Waste Management, 1989, 9, 203-210.	7.4	12
64	Thermal energy recovery from chlorinated drinking water distribution systems: Effect on chlorine and microbial water and biofilm characteristics. Environmental Research, 2020, 187, 109655.	7.5	12
65	Robustness of the Drinking Water Distribution Network under Changing Future Demand. Procedia Engineering, 2014, 89, 339-346.	1.2	11
66	An exploration of disinfection by-products formation and governing factors in chlorinated swimming pool water. Journal of Water and Health, 2018, 16, 861-892.	2.6	11
67	Accurate voidage prediction in fluidisation systems for full-scale drinking water pellet softening reactors using data driven models. Journal of Water Process Engineering, 2020, 37, 101481.	5.6	11
68	Identifying critical elements in drinking water distribution networks using graph theory. Structure and Infrastructure Engineering, 2021, 17, 347-360.	3.7	11
69	Shower heat exchanger: reuse of energy from heated drinking water for CO₂ reduction. Drinking Water Engineering and Science, 2016, 9, 1-8.	0.8	11
70	Towards a climate neutral water cycle. Journal of Water and Climate Change, 2012, 3, 163-170.	2.9	10
71	Coping with climate change in Amsterdam â€" a watercycle perspective. Journal of Water and Climate Change, 2014, 5, 61-69.	2.9	10
72	Toward Carbon-Neutral Water Systems: Insights from Global Cities. Engineering, 2022, 14, 77-85.	6.7	10

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73	Investigation of the efficacy of the UV/Chlorine process for the removal of trimethoprim: Effects of operational parameters and artificial neural networks modelling. Science of the Total Environment, 2022, 812, 152551.	8.0	9
74	Effects of biological activated carbon filter running time on disinfection by-product precursor removal. Science of the Total Environment, 2022, 838, 155936.	8.0	9
75	Effects of cold recovery technology on the microbial drinking water quality in unchlorinated distribution systems. Environmental Research, 2020, 183, 109175.	7.5	8
76	Removal of organic micropollutants by well-tailored granular zeolites and subsequent ozone-based regeneration. Journal of Water Process Engineering, 2021, 44, 102403.	5.6	8
77	Long term capacity of biological activated carbon filtration for organics removal. Water Science and Technology: Water Supply, 2002, 2, 139-146.	2.1	7
78	Is direct nanofiltration with air fluxh an alternative for household water production for Amsterdam?. Desalination, 2003, 152, 263-269.	8.2	6
79	Selection and prioritization of mitigation measures to realize climate neutral operation of a water cycle company. Journal of Water and Climate Change, 2016, 7, 29-38.	2.9	6
80	Sustainable Societal Infrastructures: A Resilient Approach to Prevent Conflicting Claims of Drinking Water and Other Infrastructures. Sustainability, 2020, 12, 785.	3.2	6
81	Resilient Drinking Water Resources. Water Resources Management, 2021, 35, 337-351.	3.9	6
82	Microbiological Health Risk Assessment of Water Conservation Strategies: A Case Study in Amsterdam. International Journal of Environmental Research and Public Health, 2021, 18, 2595.	2.6	6
83	Removal of Hydrogen Peroxide Residuals and By-Product Bromate from Advanced Oxidation Processes by Granular Activated Carbon. Water (Switzerland), 2021, 13, 2460.	2.7	6
84	Bromate Reduction by Iron(II) during Managed Aquifer Recharge: A Laboratory-Scale Study. Water (Switzerland), 2018, 10, 370.	2.7	5
85	Towards Sustainable Heat Supply with Decentralized Multi-Energy Systems by Integration of Subsurface Seasonal Heat Storage. Energies, 2021, 14, 7958.	3.1	5
86	Remediation potential of agricultural organic micropollutants in in-situ techniques: A review. Ecological Informatics, 2022, 68, 101517.	5.2	5
87	Influence of an Extended Domestic Drinking Water System on the Drinking Water Quality. Water (Switzerland), 2018, 10, 582.	2.7	4
88	The Impact of System Integration on System Costs of a Neighborhood Energy and Water System. Energies, 2021, 14, 2616.	3.1	4
89	Experimental and numerical insights into heterogeneous liquid-solid behaviour in drinking water softening reactors. Chemical Engineering Science: X, 2021, 11, 100100.	1.5	4
90	Fluidisation characteristics of granular activated carbon in drinking water treatment applications. Advanced Powder Technology, 2021, 32, 3174-3188.	4.1	4

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91	Drivers for performance improvement originating from the Dutch drinking water benchmark. Water Policy, 2016, 18, 1247-1266.	1.5	3
92	Maximizing Thermal Energy Recovery from Drinking Water for Cooling Purpose. Energies, 2021, 14, 2413.	3.1	3
93	An integrated system approach to characterise a drinking water infrastructure system. International Journal of Critical Infrastructures, 2020, 16, 1.	0.2	3
94	Recent applications of biological technologies for decontaminating hormones in livestock waste and wastewater. Current Opinion in Environmental Science and Health, 2021, 24, 100307.	4.1	3
95	Can terminal settling velocity and drag of natural particles in water ever be predicted accurately?. Drinking Water Engineering and Science, 2021, 14, 53-71.	0.8	2
96	Adsorption of humic acid fractions by a magnetic ion exchange resin. Water Science and Technology, 2022, 85, 2129-2144.	2.5	2
97	A novel sensor measuring local voidage profile inside a fluidised bed reactor. Journal of Water Process Engineering, 2021, 42, 102091.	5.6	1
98	Thermal Energy Recovery from Drinking Water. , 0, , .		0