

# Jan Peter Van der Hoek

## List of Publications by Year in descending order

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Version: 2024-02-01

98  
papers

2,986  
citations

159358

30  
h-index

189595

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. <i>Water Research</i> , 2008, 42, 4856-4868.   | 5.3 | 207       |
| 2  | Wastewater as a resource: Strategies to recover resources from Amsterdam's wastewater. <i>Resources, Conservation and Recycling</i> , 2016, 113, 53-64.  | 5.3 | 139       |
| 3  | Sorption and biodegradation of organic micropollutants during river bank filtration: A laboratory column study. <i>Water Research</i> , 2014, 52, 231-241.   | 5.3 | 138       |
| 4  | Human health risk assessment of the mixture of pharmaceuticals in Dutch drinking water and its sources based on frequent monitoring data. <i>Science of the Total Environment</i> , 2014, 496, 54-62.  | 3.9 | 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. <i>Water Research</i> , 2017, 123, 761-772.   | 5.3 | 125       |
| 6  | Life cycle assessment of nutrient recycling from wastewater: A critical review. <i>Water Research</i> , 2020, 173, 115519.   | 5.3 | 93        |
| 7  | Nitrate removal from ground water. <i>Water Research</i> , 1987, 21, 989-997.  | 5.3 | 77        |
| 8  | Nitrogen Recovery from Wastewater: Possibilities, Competition with Other Resources, and Adaptation Pathways. <i>Sustainability</i> , 2018, 10, 4605.   | 1.6 | 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. <i>Renewable and Sustainable Energy Reviews</i> , 2014, 30, 808-820.  | 8.2 | 75        |
| 10 | Combined ion exchange/biological denitrification for nitrate removal from ground water under different process conditions. <i>Water Research</i> , 1988, 22, 679-684.  | 5.3 | 67        |
| 11 | Use of the Threshold of Toxicological Concern (TTC) approach for deriving target values for drinking water contaminants. <i>Water Research</i> , 2013, 47, 1666-1678.  | 5.3 | 65        |
| 12 | Identification and Quantification of Nanoplastics in Surface Water and Groundwater by Pyrolysis Gas Chromatography-Mass Spectrometry. <i>Environmental Science &amp; Technology</i> , 2022, 56, 4988-4997.   | 4.6 | 65        |
| 13 | Health risk assessment of organic micropollutants in greywater for potable reuse. <i>Water Research</i> , 2015, 72, 186-198.   | 5.3 | 63        |
| 14 | The scaling potential of barium sulphate in reverse osmosis systems. <i>Journal of Membrane Science</i> , 2002, 197, 251-268.  | 4.1 | 61        |
| 15 | The effect of redox conditions and adaptation time on organic micropollutant removal during river bank filtration: A laboratory-scale column study. <i>Science of the Total Environment</i> , 2016, 544, 309-318.  | 3.9 | 57        |
| 16 | Use of mine waste for H <sub>2</sub> O <sub>2</sub> -assisted heterogeneous Fenton-like degradation of tetracycline by natural pyrite nanoparticles: Catalyst characterization, degradation mechanism, operational parameters and cytotoxicity assessment. <i>Journal of Cleaner Production</i> , 2021, 291, 125235. | 4.6 | 53        |
| 17 | RO treatment: selection of a pretreatment scheme based on fouling characteristics and operating conditions based on environmental impact. <i>Desalination</i> , 2000, 127, 89-101.   | 4.0 | 49        |
| 18 | Fluidized ion exchange (FIX) to control NOM fouling in ultrafiltration. <i>Desalination</i> , 2009, 236, 334-341.  | 4.0 | 49        |

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|----|--|-----|-----------|
| 19 | Enhanced Performance of the Eurostat Method for Comprehensive Assessment of Urban Metabolism: A Material Flow Analysis of Amsterdam. <i>Journal of Industrial Ecology</i> , 2017, 21, 887-902.                                       | 2.8 | 47        |
| 20 | Denitrification with methanol in the presence of high salt concentrations and at high pH levels. <i>Applied Microbiology and Biotechnology</i> , 1987, 27, 199-205.  | 1.7 | 45        |
| 21 | Amsterdam as a sustainable European metropolis: integration of water, energy and material flows. <i>Urban Water Journal</i> , 2017, 14, 61-68.   | 1.0 | 45        |
| 22 | Nitrate removal from ground water – use of a nitrate selective resin and a low concentrated regenerant. <i>Water, Air, and Soil Pollution</i> , 1988, 37, 41-53.   | 1.1 | 43        |
| 23 | BaSO <sub>4</sub> solubility prediction in reverse osmosis membrane systems. <i>Journal of Membrane Science</i> , 1999, 159, 47-59.  | 4.1 | 41        |
| 24 | Rainwater Harvesting for Drinking Water Production: A Sustainable and Cost-Effective Solution in The Netherlands?. <i>Water (Switzerland)</i> , 2019, 11, 511.   | 1.2 | 41        |
| 25 | Retention of herbicides and pesticides in relation to aging of RO membranes. <i>Desalination</i> , 2000, 132, 189-193.   | 4.0 | 39        |
| 26 | Effect of residual H <sub>2</sub> O <sub>2</sub> from advanced oxidation processes on subsequent biological water treatment: A laboratory batch study. <i>Chemosphere</i> , 2017, 185, 637-646.                                      | 4.2 | 39        |
| 27 | Stable barium sulphate supersaturation in reverse osmosis. <i>Journal of Membrane Science</i> , 2000, 179, 53-68.  | 4.1 | 38        |
| 28 | Electrodialysis as an alternative for reverse osmosis in an integrated membrane system. <i>Desalination</i> , 1998, 117, 159-172.  | 4.0 | 37        |
| 29 | Scaling control of RO membranes and direct treatment of surface water. <i>Desalination</i> , 2000, 132, 109-119.   | 4.0 | 37        |
| 30 | Improvement of the Richardson-Zaki liquid-solid fluidisation model on the basis of hydraulics. <i>Powder Technology</i> , 2019, 343, 465-478.  | 2.1 | 36        |
| 31 | Sulfonamides removal under different redox conditions and microbial response to sulfonamides stress during riverbank filtration: A laboratory column study. <i>Chemosphere</i> , 2019, 220, 668-677.                                 | 4.2 | 33        |
| 32 | Pyrite nanoparticles derived from mine waste as efficient catalyst for the activation of persulfates for degradation of tetracycline. <i>Journal of Water Process Engineering</i> , 2021, 40, 101808.                                | 2.6 | 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. <i>Chemosphere</i> , 2016, 144, 932-939. | 4.2 | 32        |
| 34 | Simultaneous removal of ammonium ions and sulfamethoxazole by ozone regenerated high silica zeolites. <i>Water Research</i> , 2021, 188, 116472.   | 5.3 | 32        |
| 35 | Risk governance of potential emerging risks to drinking water quality: Analysing current practices. <i>Environmental Science and Policy</i> , 2018, 84, 97-104.  | 2.4 | 30        |
| 36 | Decision support for water quality management of contaminants of emerging concern. <i>Journal of Environmental Management</i> , 2017, 193, 360-372.  | 3.8 | 28        |

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|----|--|-----|-----------|
| 37 | Quantification and modelling of organic micropollutant removal by reverse osmosis (RO) drinking water treatment. <i>Journal of Water Process Engineering</i> , 2021, 42, 102164.   | 2.6 | 28        |
| 38 | A predictive multi-linear regression model for organic micropollutants, based on a laboratory-scale column study simulating the river bank filtration process. <i>Journal of Hazardous Materials</i> , 2016, 304, 502-511.   | 6.5 | 27        |
| 39 | Energy recovery from the water cycle: Thermal energy from drinking water. <i>Energy</i> , 2018, 162, 977-987.  | 4.5 | 25        |
| 40 | Low-Carbon Urban Water Systems: Opportunities beyond Water and Wastewater Utilities?. <i>Environmental Science &amp; Technology</i> , 2020, 54, 14854-14861.   | 4.6 | 25        |
| 41 | A laboratory-scale column study comparing organic micropollutant removal and microbial diversity for two soil types. <i>Science of the Total Environment</i> , 2015, 536, 632-638.   | 3.9 | 24        |
| 42 | Disinfection Methods for Swimming Pool Water: Byproduct Formation and Control. <i>Water (Switzerland)</i> , 2018, 10, 797.   | 1.2 | 24        |
| 43 | Synthesis and characterization of SnO <sub>2</sub> crystalline nanoparticles: A new approach for enhancing the catalytic ozonation of acetaminophen. <i>Journal of Hazardous Materials</i> , 2021, 404, 124154.  | 6.5 | 24        |
| 44 | Development and application of relevance and reliability criteria for water treatment removal efficiencies of chemicals of emerging concern. <i>Water Research</i> , 2019, 161, 274-287.   | 5.3 | 23        |
| 45 | Effective removal of bromate in nitrate-reducing anoxic zones during managed aquifer recharge for drinking water treatment: Laboratory-scale simulations. <i>Water Research</i> , 2018, 130, 88-97.  | 5.3 | 22        |
| 46 | Biomass-derived porous aminated graphitic nanosheets for removal of the pharmaceutical metronidazole: Optimization of physicochemical features and exploration of process mechanisms. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 611, 125791. | 2.3 | 21        |
| 47 | Development and validation of a drinking water temperature model in domestic drinking water supply systems. <i>Urban Water Journal</i> , 2017, 14, 1031-1037.  | 1.0 | 20        |
| 48 | Enhanced surface water treatment by ultrafiltration. <i>Desalination</i> , 1998, 119, 113-125.   | 4.0 | 19        |
| 49 | Magnetic seeding coagulation: Effect of Al species and magnetic particles on coagulation efficiency, residual Al, and floc properties. <i>Chemosphere</i> , 2021, 268, 129363.   | 4.2 | 19        |
| 50 | Improvement of voidage prediction in liquid-solid fluidized beds by inclusion of the Froude number in effective drag relations. <i>International Journal of Multiphase Flow</i> , 2020, 127, 103261.   | 1.6 | 18        |
| 51 | An experimental study on the spray characteristics of residential sprinklers under low-flow and low-pressure conditions. <i>Fire Safety Journal</i> , 2014, 68, 30-40.   | 1.4 | 16        |
| 52 | Development and performance of a parsimonious model to estimate temperature in sewer networks. <i>Urban Water Journal</i> , 2017, 14, 829-838.   | 1.0 | 15        |
| 53 | A Stochastic Model to Predict Flow, Nutrient and Temperature Changes in a Sewer under Water Conservation Scenarios. <i>Water (Switzerland)</i> , 2020, 12, 1187.   | 1.2 | 15        |
| 54 | Effect of oxidation ditch and anaerobic-anoxic-oxic processes on CX3R-type disinfection by-product formation during wastewater treatment. <i>Science of the Total Environment</i> , 2021, 770, 145344.   | 3.9 | 15        |

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|----|--|-----|-----------|
| 55 | Drinking Water Temperature Modelling in Domestic Systems. <i>Procedia Engineering</i> , 2014, 89, 143-150.   | 1.2 | 14        |
| 56 | The fate of H <sub>2</sub> O <sub>2</sub> during managed aquifer recharge: A residual from advanced oxidation processes for drinking water production. <i>Chemosphere</i> , 2016, 148, 263-269.                          | 4.2 | 14        |
| 57 | Changes in biofilm composition and microbial water quality in drinking water distribution systems by temperature increase induced through thermal energy recovery. <i>Environmental Research</i> , 2021, 194, 110648.    | 3.7 | 14        |
| 58 | Life Cycle Environmental Impacts of Wastewater-Derived Phosphorus Products: An Agricultural End-User Perspective. <i>Environmental Science &amp; Technology</i> , 2022, 56, 10289-10298.                                 | 4.6 | 14        |
| 59 | Effect of hydraulic residence time on microbial sulfide production in an upflow sludge blanket denitrification reactor fed with methanol. <i>Applied Microbiology and Biotechnology</i> , 1988, 28, 493-499.             | 1.7 | 13        |
| 60 | Testing the Robustness of Two Water Distribution System Layouts under Changing Drinking Water Demand. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2016, 142, .                                    | 1.3 | 13        |
| 61 | The effective design of sampling campaigns for emerging chemical and microbial contaminants in drinking water and its resources based on literature mining. <i>Science of the Total Environment</i> , 2020, 742, 140546. | 3.9 | 13        |
| 62 | New hydraulic insights into rapid sand filter bed backwashing using the Carman-Kozeny model. <i>Water Research</i> , 2021, 197, 117085.  | 5.3 | 13        |
| 63 | Reduction of regeneration salt requirement and waste disposal in an ion exchange process for nitrate removal from ground water. <i>Waste Management</i> , 1989, 9, 203-210.  | 3.7 | 12        |
| 64 | Thermal energy recovery from chlorinated drinking water distribution systems: Effect on chlorine and microbial water and biofilm characteristics. <i>Environmental Research</i> , 2020, 187, 109655.                     | 3.7 | 12        |
| 65 | Robustness of the Drinking Water Distribution Network under Changing Future Demand. <i>Procedia Engineering</i> , 2014, 89, 339-346.   | 1.2 | 11        |
| 66 | An exploration of disinfection by-products formation and governing factors in chlorinated swimming pool water. <i>Journal of Water and Health</i> , 2018, 16, 861-892.   | 1.1 | 11        |
| 67 | Accurate voidage prediction in fluidisation systems for full-scale drinking water pellet softening reactors using data driven models. <i>Journal of Water Process Engineering</i> , 2020, 37, 101481.                    | 2.6 | 11        |
| 68 | Identifying critical elements in drinking water distribution networks using graph theory. <i>Structure and Infrastructure Engineering</i> , 2021, 17, 347-360.   | 2.0 | 11        |
| 69 | Shower heat exchanger: reuse of energy from heated drinking water for CO <sub>2</sub> reduction. <i>Drinking Water Engineering and Science</i> , 2016, 9, 1-8.   | 0.8 | 11        |
| 70 | Towards a climate neutral water cycle. <i>Journal of Water and Climate Change</i> , 2012, 3, 163-170.  | 1.2 | 10        |
| 71 | Coping with climate change in Amsterdam – a watercycle perspective. <i>Journal of Water and Climate Change</i> , 2014, 5, 61-69.   | 1.2 | 10        |
| 72 | Toward Carbon-Neutral Water Systems: Insights from Global Cities. <i>Engineering</i> , 2022, 14, 77-85.  | 3.2 | 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. <i>Science of the Total Environment</i> , 2022, 812, 152551. | 3.9 | 9         |
| 74 | Effects of biological activated carbon filter running time on disinfection by-product precursor removal. <i>Science of the Total Environment</i> , 2022, 838, 155936.  | 3.9 | 9         |
| 75 | Effects of cold recovery technology on the microbial drinking water quality in unchlorinated distribution systems. <i>Environmental Research</i> , 2020, 183, 109175.  | 3.7 | 8         |
| 76 | Removal of organic micropollutants by well-tailored granular zeolites and subsequent ozone-based regeneration. <i>Journal of Water Process Engineering</i> , 2021, 44, 102403.   | 2.6 | 8         |
| 77 | Long term capacity of biological activated carbon filtration for organics removal. <i>Water Science and Technology: Water Supply</i> , 2002, 2, 139-146.   | 1.0 | 7         |
| 78 | Is direct nanofiltration with air flux an alternative for household water production for Amsterdam?. <i>Desalination</i> , 2003, 152, 263-269.   | 4.0 | 6         |
| 79 | Selection and prioritization of mitigation measures to realize climate neutral operation of a water cycle company. <i>Journal of Water and Climate Change</i> , 2016, 7, 29-38.  | 1.2 | 6         |
| 80 | Sustainable Societal Infrastructures: A Resilient Approach to Prevent Conflicting Claims of Drinking Water and Other Infrastructures. <i>Sustainability</i> , 2020, 12, 785.   | 1.6 | 6         |
| 81 | Resilient Drinking Water Resources. <i>Water Resources Management</i> , 2021, 35, 337-351.   | 1.9 | 6         |
| 82 | Microbiological Health Risk Assessment of Water Conservation Strategies: A Case Study in Amsterdam. <i>International Journal of Environmental Research and Public Health</i> , 2021, 18, 2595.                                     | 1.2 | 6         |
| 83 | Removal of Hydrogen Peroxide Residuals and By-Product Bromate from Advanced Oxidation Processes by Granular Activated Carbon. <i>Water (Switzerland)</i> , 2021, 13, 2460.   | 1.2 | 6         |
| 84 | Bromate Reduction by Iron(II) during Managed Aquifer Recharge: A Laboratory-Scale Study. <i>Water (Switzerland)</i> , 2018, 10, 370.   | 1.2 | 5         |
| 85 | Towards Sustainable Heat Supply with Decentralized Multi-Energy Systems by Integration of Subsurface Seasonal Heat Storage. <i>Energies</i> , 2021, 14, 7958.  | 1.6 | 5         |
| 86 | Remediation potential of agricultural organic micropollutants in in-situ techniques: A review. <i>Ecological Informatics</i> , 2022, 68, 101517.   | 2.3 | 5         |
| 87 | Influence of an Extended Domestic Drinking Water System on the Drinking Water Quality. <i>Water (Switzerland)</i> , 2018, 10, 582.   | 1.2 | 4         |
| 88 | The Impact of System Integration on System Costs of a Neighborhood Energy and Water System. <i>Energies</i> , 2021, 14, 2616.  | 1.6 | 4         |
| 89 | Experimental and numerical insights into heterogeneous liquid-solid behaviour in drinking water softening reactors. <i>Chemical Engineering Science: X</i> , 2021, 11, 100100.   | 1.5 | 4         |
| 90 | Fluidisation characteristics of granular activated carbon in drinking water treatment applications. <i>Advanced Powder Technology</i> , 2021, 32, 3174-3188.   | 2.0 | 4         |

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|----|---|-----|-----------|
| 91 | Drivers for performance improvement originating from the Dutch drinking water benchmark. <i>Water Policy</i> , 2016, 18, 1247-1266.   | 0.7 | 3         |
| 92 | Maximizing Thermal Energy Recovery from Drinking Water for Cooling Purpose. <i>Energies</i> , 2021, 14, 2413.   | 1.6 | 3         |
| 93 | An integrated system approach to characterise a drinking water infrastructure system. <i>International Journal of Critical Infrastructures</i> , 2020, 16, 1.                                 | 0.1 | 3         |
| 94 | Recent applications of biological technologies for decontaminating hormones in livestock waste and wastewater. <i>Current Opinion in Environmental Science and Health</i> , 2021, 24, 100307. | 2.1 | 3         |
| 95 | Can terminal settling velocity and drag of natural particles in water ever be predicted accurately?. <i>Drinking Water Engineering and Science</i> , 2021, 14, 53-71.                         | 0.8 | 2         |
| 96 | Adsorption of humic acid fractions by a magnetic ion exchange resin. <i>Water Science and Technology</i> , 2022, 85, 2129-2144.   | 1.2 | 2         |
| 97 | A novel sensor measuring local voidage profile inside a fluidised bed reactor. <i>Journal of Water Process Engineering</i> , 2021, 42, 102091.  | 2.6 | 1         |
| 98 | Thermal Energy Recovery from Drinking Water. , 0, , .   |     | 0         |