

# Kristof Demeestere

## List of Publications by Year in descending order

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97  
papers

5,442  
citations

76294

40  
h-index

85498

71  
g-index

99  
all docs

99  
docs citations

99  
times ranked

6461  
citing authors

#	ARTICLE	IF	CITATIONS
1	The ozone-activated peroxydisulfate process (O <sub>3</sub> /PMS) for removal of trace organic contaminants in natural and wastewater: Effect of the (in)organic matrix composition. <i>Chemical Engineering Journal</i> , 2022, 430, 133000.	6.6	20
2	Enhanced removal of refractory humic- and fulvic-like organics from biotreated landfill leachate by ozonation in packed bubble columns. <i>Science of the Total Environment</i> , 2022, 807, 150762.	3.9	20
3	Occurrence and point-of-use treatment of contaminants of emerging concern in groundwater of the Nzoia River basin, Kenya. <i>Environmental Pollution</i> , 2022, 297, 118725.	3.7	13
4	Surrogate-based follow-up of activated carbon adsorption preceded by ozonation for removal of bulk organics and micropollutants from landfill leachate. <i>Science of the Total Environment</i> , 2022, 820, 153349.	3.9	7
5	Advanced treatment of landfill leachate through combined Anammox-based biotreatment, O <sub>3</sub> /H <sub>2</sub> O <sub>2</sub> oxidation, and activated carbon adsorption: technical performance, surrogate-based control strategy, and operational cost analysis. <i>Journal of Hazardous Materials</i> , 2022, 430, 128481.	6.5	13
6	Dehydroascorbate induces plant resistance in rice against root-knot nematode <i>Meloidogyne graminicola</i> . <i>Molecular Plant Pathology</i> , 2022, 23, 1303-1319.	2.0	13
7	One-pot synthesized, Fe-incorporated self-standing carbons with a hierarchical porosity remove carbamazepine and sulfamethoxazole through heterogeneous electro-Fenton. <i>Chemical Engineering Journal</i> , 2022, 446, 137006.	6.6	12
8	A margin of safety approach for the assessment of environmentally realistic chemical mixtures in the marine environment based on combined passive sampling and ecotoxicity testing. <i>Science of the Total Environment</i> , 2021, 765, 142748.	3.9	5
9	Responses to Drought Stress Modulate the Susceptibility to <i>Plasmopara viticola</i> in <i>Vitis vinifera</i> Self-Rooted Cuttings. <i>Plants</i> , 2021, 10, 273.	1.6	10
10	CNT Microtubes with Entrapped Fe <sub>3</sub> O <sub>4</sub> Nanoparticles Remove Micropollutants through a Heterogeneous Electro-Fenton Process at Neutral pH. <i>Advanced Sustainable Systems</i> , 2021, 5, 2100001.	2.7	20
11	Neonicotinoid Insecticides from a Marine Perspective: Acute and Chronic Copepod Testing and Derivation of Environmental Quality Standards. <i>Environmental Toxicology and Chemistry</i> , 2021, 40, 1353-1367.	2.2	5
12	Status and needs for online control of tertiary ozone-based water treatment: use of surrogate correlation models for removal of trace organic contaminants. <i>Reviews in Environmental Science and Biotechnology</i> , 2021, 20, 297.	3.9	2
13	Ozonation in view of micropollutant removal from biologically treated landfill leachate: Removal efficiency, OH exposure, and surrogate-based monitoring. <i>Chemical Engineering Journal</i> , 2021, 410, 128413.	6.6	27
14	A Simple Teabag Equilibrium Passive Sampler using hydrophilic divinylbenzene sorbent for contaminants of emerging concern in the marine environment. <i>Science of the Total Environment</i> , 2021, 777, 146055.	3.9	2
15	Comparison and performance assessment of ozone-based AOPs in view of trace organic contaminants abatement in water and wastewater: A review. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105599.	3.3	46
16	Enhanced removal of hydrophobic volatile organic compounds in biofilters and biotrickling filters: A review on the use of surfactants and the addition of hydrophilic compounds. <i>Chemosphere</i> , 2021, 279, 130757.	4.2	33
17	Short-term effects of cadmium on leaf growth and nutrient transport in rice plants. <i>Plant Science</i> , 2021, 313, 111054.	1.7	15
18	Ozone-based advanced oxidation of biologically treated landfill leachate: Oxidation efficiency, mechanisms, and surrogate-based monitoring for bulk organics. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106459.	3.3	7

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19	Intensified ozonation in packed bubble columns for water treatment: Focus on mass transfer and humic acids removal. <i>Chemosphere</i> , 2021, 283, 131217.	4.2	16
20	Insights into a packed bubble column for removal of several ozone-persistent TrOCs by ozonation: removal kinetics, energy efficiency and elimination prediction. <i>Separation and Purification Technology</i> , 2021, 275, 119170.	3.9	9
21	Cucurbitaceae Cold Peeling Extracts (CCOPEs) Protect Plants From Root-Knot Nematode Infections Through Induced Resistance and Nematicidal Effects. <i>Frontiers in Plant Science</i> , 2021, 12, 785699.	1.7	4
22	Enhanced Production and Recovery of Orthophosphate from Wastewater Containing Phosphonate 1-Hydroxyethane-1,1-diphosphonic Acid through Combined Packed-Bed Ozonation and Adsorption. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 16946-16955.	3.2	2
23	Ozonation of trace organic compounds in different municipal and industrial wastewaters: Kinetic-based prediction of removal efficiency and ozone dose requirements. <i>Chemical Engineering Journal</i> , 2020, 387, 123405.	6.6	30
24	Occurrence and treatment of contaminants of emerging concern in the African aquatic environment: Literature review and a look ahead. <i>Journal of Environmental Management</i> , 2020, 254, 109752.	3.8	74
25	Ascorbate Oxidase Induces Systemic Resistance in Sugar Beet Against Cyst Nematode <i>Heterodera schachtii</i> . <i>Frontiers in Plant Science</i> , 2020, 11, 591715.	1.7	22
26	Characterization of landfill leachate by spectral-based surrogate measurements during a combination of different biological processes and activated carbon adsorption. <i>Water Science and Technology</i> , 2020, 81, 2606-2616.	1.2	3
27	Assessing the Impact of Drought Stress and Soil Cultivation in Chardonnay and Xynisteri Grape Cultivars. <i>Agronomy</i> , 2020, 10, 670.	1.3	14
28	Freestanding PAC/CNT microtubes remove sulfamethoxazole from water through a temperature-assisted cyclic process. <i>Journal of Hazardous Materials</i> , 2020, 392, 122133.	6.5	13
29	Morphological, Pathogenic and Toxigenic Variability in the Rice Sheath Rot Pathogen <i>Sarocladium Oryzae</i> . <i>Toxins</i> , 2020, 12, 109.	1.5	11
30	Ascorbate oxidation activates systemic defence against root-knot nematode <i>Meloidogyne graminicola</i> in rice. <i>Journal of Experimental Botany</i> , 2020, 71, 4271-4284.	2.4	26
31	Pretreatment of Secondary Effluents in View of Optimal Ozone-Based AOP Removal of Trace Organic Contaminants: Bench-Scale Comparison of Efficiency and Energy Consumption. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 8112-8120.	1.8	15
32	Enhanced Ozonation of Trace Organic Contaminants in Municipal Wastewater Plant Effluent by Adding a Preceding Filtration Step: Comparison and Prediction of Removal Efficiency. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 14661-14668.	3.2	9
33	Hydrophilic Divinylbenzene for Equilibrium Sorption of Emerging Organic Contaminants in Aquatic Matrices. <i>Environmental Science &amp; Technology</i> , 2019, 53, 10803-10812.	4.6	7
34	Systemic defense activation by COS-OGA in rice against root-knot nematodes depends on stimulation of the phenylpropanoid pathway. <i>Plant Physiology and Biochemistry</i> , 2019, 142, 202-210.	2.8	45
35	Oxidation of Trace Organic Contaminants (TrOCs) in Wastewater Effluent with Different Ozone-Based AOPs: Comparison of Ozone Exposure and $\cdot\text{OH}$ Formation. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 8896-8902.	1.8	20
36	Growth Stimulation Effects of Environmentally Realistic Contaminant Mixtures on a Marine Diatom. <i>Environmental Toxicology and Chemistry</i> , 2019, 38, 1313-1322.	2.2	4

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37	Multi-residue quantification and screening of emerging organic micropollutants in the Belgian Part of the North Sea by use of Speedisk extraction and Q-Orbitrap HRMS. <i>Marine Pollution Bulletin</i> , 2019, 142, 350-360.	2.3	25
38	Oxygenated polycyclic aromatic hydrocarbons in mussels: analytical method development and occurrence in the Belgian coastal zone. <i>Environmental Science and Pollution Research</i> , 2019, 26, 9065-9078.	2.7	12
39	Jasmonate-Induced Defense Mechanisms in the Belowground Antagonistic Interaction Between <i>Pythium arrhenomanes</i> and <i>Meloidogyne graminicola</i> in Rice. <i>Frontiers in Plant Science</i> , 2019, 10, 1515.	1.7	15
40	Targeted quantification and untargeted screening of alkylphenols, bisphenol A and phthalates in aquatic matrices using ultra-high-performance liquid chromatography coupled to hybrid Q-Orbitrap mass spectrometry. <i>Analytica Chimica Acta</i> , 2019, 1049, 141-151.	2.6	35
41	Gibberellin antagonizes jasmonate-induced defense against <i>Meloidogyne graminicola</i> in rice. <i>New Phytologist</i> , 2018, 218, 646-660.	3.5	71
42	The energy sensor OsSnRK1a confers broad-spectrum disease resistance in rice. <i>Scientific Reports</i> , 2018, 8, 3864.	1.6	63
43	Municipal wastewater effluent characterization and variability analysis in view of an ozone dose control strategy during tertiary treatment: The status in Belgium. <i>Science of the Total Environment</i> , 2018, 625, 1198-1207.	3.9	28
44	Dynamic validation of online applied and surrogate-based models for tertiary ozonation on pilot-scale. <i>Chemosphere</i> , 2018, 196, 494-501.	4.2	14
45	Mechanisms of resistance in the rice cultivar Manikpukha to the rice stem nematode <i>Ditylenchus angustus</i> . <i>Molecular Plant Pathology</i> , 2018, 19, 1391-1402.	2.0	22
46	Target of rapamycin signaling orchestrates growth-defense tradeoffs in plants. <i>New Phytologist</i> , 2018, 217, 305-319.	3.5	97
47	Trace analysis of multi-class phytohormones in <i>Oryza sativa</i> using different scan modes in high-resolution Orbitrap mass spectrometry: method validation, concentration levels, and screening in multiple accessions. <i>Analytical and Bioanalytical Chemistry</i> , 2018, 410, 4527-4539.	1.9	28
48	Techno-economic assessment of surrogate-based real-time control and monitoring of secondary effluent ozonation at pilot scale. <i>Chemical Engineering Journal</i> , 2018, 352, 431-440.	6.6	15
49	Advanced oxidation of pharmaceuticals by the ozone-activated peroxymonosulfate process: the role of different oxidative species. <i>Journal of Hazardous Materials</i> , 2018, 360, 204-213.	6.5	59
50	Occurrence, fate and removal of pharmaceuticals, personal care products and pesticides in wastewater stabilization ponds and receiving rivers in the Nzoia Basin, Kenya. <i>Science of the Total Environment</i> , 2018, 637-638, 336-348.	3.9	91
51	Statistical procedures for the determination of linearity, detection limits and measurement uncertainty: A deeper look into SPE-LC-Orbitrap mass spectrometry of pharmaceuticals in wastewater. <i>Journal of Hazardous Materials</i> , 2017, 323, 2-10.	6.5	22
52	Below-Ground Attack by the Root Knot Nematode <i>Meloidogyne graminicola</i> Predisposes Rice to Blast Disease. <i>Molecular Plant-Microbe Interactions</i> , 2017, 30, 255-266.	1.4	28
53	Enhanced treatment of secondary municipal wastewater effluent: comparing (biological) filtration and ozonation in view of micropollutant removal, unselective effluent toxicity, and the potential for real-time control. <i>Water Science and Technology</i> , 2017, 76, 236-246.	1.2	18
54	Development of a reliable experimental set-up for Dover sole larvae <i>Solea solea</i> L. and exploring the possibility of implementing this housing system in a gnotobiotic model. <i>Research in Veterinary Science</i> , 2017, 115, 418-424.	0.9	8

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55	Characterisation of landfill leachate by EEM-PARAFAC-SOM during physical-chemical treatment by coagulation-flocculation, activated carbon adsorption and ion exchange. <i>Chemosphere</i> , 2017, 186, 873-883.	4.2	72
56	Surrogate-Based Correlation Models in View of Real-Time Control of Ozonation of Secondary Treated Municipal Wastewater—Model Development and Dynamic Validation. <i>Environmental Science &amp; Technology</i> , 2017, 51, 14233-14243.	4.6	44
57	Development and validation of an ultra-high performance liquid chromatographic high resolution Q-Orbitrap mass spectrometric method for the simultaneous determination of steroidal endocrine disrupting compounds in aquatic matrices. <i>Analytica Chimica Acta</i> , 2017, 984, 140-150.	2.6	44
58	Removal of organic matter and ammonium from landfill leachate through different scenarios: Operational cost evaluation in a full-scale case study of a Flemish landfill. <i>Journal of Environmental Management</i> , 2017, 203, 774-781.	3.8	28
59	Interplay between Carotenoids, Abscisic Acid and Jasmonate Guides the Compatible Rice-Meloidogyne graminicola Interaction. <i>Frontiers in Plant Science</i> , 2017, 8, 951.	1.7	58
60	The DELLA Protein SLR1 Integrates and Amplifies Salicylic Acid- and Jasmonic Acid-Dependent Innate Immunity in Rice. <i>Plant Physiology</i> , 2016, 170, 1831-1847.	2.3	96
61	Trends in liquid chromatography coupled to high-resolution mass spectrometry for multi-residue analysis of organic micropollutants in aquatic environments. <i>TrAC - Trends in Analytical Chemistry</i> , 2015, 67, 192-208.	5.8	92
62	Balancing the False Negative and Positive Rates in Suspect Screening with High-Resolution Orbitrap Mass Spectrometry Using Multivariate Statistics. <i>Analytical Chemistry</i> , 2015, 87, 2170-2177.	3.2	35
63	A comparative study on the efficiency of ozonation and coagulation-flocculation as pretreatment to activated carbon adsorption of biologically stabilized landfill leachate. <i>Waste Management</i> , 2015, 43, 335-342.	3.7	77
64	Ozonation of biologically treated landfill leachate: efficiency and insights in organic conversions. <i>Chemical Engineering Journal</i> , 2015, 277, 104-111.	6.6	66
65	Heterogeneous photocatalysis of moxifloxacin in hospital effluent: Effect of selected matrix constituents. <i>Chemical Engineering Journal</i> , 2015, 261, 9-16.	6.6	59
66	Heterogeneous photocatalysis of moxifloxacin in water: Chemical transformation and ecotoxicity. <i>Chemosphere</i> , 2015, 119, S75-S80.	4.2	34
67	The present status of landfill leachate treatment and its development trend from a technological point of view. <i>Reviews in Environmental Science and Biotechnology</i> , 2015, 14, 93-122.	3.9	149
68	Multi-residue analysis of pharmaceuticals in wastewater by liquid chromatography-magnetic sector mass spectrometry: Method quality assessment and application in a Belgian case study. <i>Chemosphere</i> , 2015, 119, S2-S8.	4.2	85
69	Ozonation as an Advanced Treatment Technique for the Degradation of Personal Care Products in Water. <i>Handbook of Environmental Chemistry</i> , 2014, , 375-397.	0.2	3
70	Fluoroquinolone antibiotics: An emerging class of environmental micropollutants. <i>Science of the Total Environment</i> , 2014, 500-501, 250-269.	3.9	526
71	Suspect screening and target quantification of multi-class pharmaceuticals in surface water based on large-volume injection liquid chromatography and time-of-flight mass spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2014, 406, 2533-2547.	1.9	52
72	TiO <sub>2</sub> coatings synthesized by liquid flame spray and low temperature sol-gel technologies on autoclaved aerated concrete for air-purifying purposes. <i>Materials Characterization</i> , 2014, 87, 74-85.	1.9	22

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73	Accurate mass determination, quantification and determination of detection limits in liquid chromatography—high-resolution time-of-flight mass spectrometry: Challenges and practical solutions. <i>Analytica Chimica Acta</i> , 2013, 789, 74-82.	2.6	27
74	Heterogeneous photocatalysis of moxifloxacin: Identification of degradation products and determination of residual antibacterial activity. <i>Applied Catalysis B: Environmental</i> , 2013, 138-139, 333-341.	10.8	48
75	Ozonation and peroxone oxidation of benzophenone-3 in water: Effect of operational parameters and identification of intermediate products. <i>Science of the Total Environment</i> , 2013, 443, 209-217.	3.9	60
76	Titanium dioxide based strategies to prevent algal fouling on cementitious materials. <i>Cement and Concrete Composites</i> , 2013, 36, 93-100.	4.6	60
77	Volatile organic compounds in an urban environment: a comparison among Belgium, Vietnam and Ethiopia. <i>International Journal of Environmental Analytical Chemistry</i> , 2013, 93, 298-314.	1.8	31
78	From multi-residue screening to target analysis of pharmaceuticals in water: Development of a new approach based on magnetic sector mass spectrometry and application in the Nairobi River basin, Kenya. <i>Science of the Total Environment</i> , 2012, 437, 153-164.	3.9	126
79	TiO <sub>2</sub> mediated heterogeneous photocatalytic degradation of moxifloxacin: Operational variables and scavenger study. <i>Applied Catalysis B: Environmental</i> , 2012, 111-112, 150-156.	10.8	143
80	Photocatalytic activity of titanium dioxide nanoparticle coatings applied on autoclaved aerated concrete: Effect of weathering on coating physical characteristics and gaseous toluene removal. <i>Journal of Hazardous Materials</i> , 2012, 211-212, 218-225.	6.5	63
81	Advanced Oxidation of Pharmaceuticals: Chemical Analysis and Biological Assessment of Degradation Products. <i>Critical Reviews in Environmental Science and Technology</i> , 2011, 41, 215-242.	6.6	32
82	UV-A and UV-C induced photolytic and photocatalytic degradation of aqueous ciprofloxacin and moxifloxacin: Reaction kinetics and role of adsorption. <i>Applied Catalysis B: Environmental</i> , 2011, 101, 540-547.	10.8	172
83	Trace analysis of antidepressants in environmental waters by molecularly imprinted polymer-based solid-phase extraction followed by ultra-performance liquid chromatography coupled to triple quadrupole mass spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 396, 825-837.	1.9	52
84	Titanium dioxide coated cementitious materials for air purifying purposes: Preparation, characterization and toluene removal potential. <i>Building and Environment</i> , 2010, 45, 832-838.	3.0	168
85	Oxygenated polycyclic aromatic hydrocarbons in atmospheric particulate matter: Molecular characterization and occurrence. <i>Atmospheric Environment</i> , 2010, 44, 1831-1846.	1.9	273
86	Ciprofloxacin ozonation in hospital wastewater treatment plant effluent: Effect of pH and H <sub>2</sub> O <sub>2</sub> . <i>Chemosphere</i> , 2010, 78, 1142-1147.	4.2	89
87	Ozonation and advanced oxidation by the peroxone process of ciprofloxacin in water. <i>Journal of Hazardous Materials</i> , 2009, 161, 701-708.	6.5	201
88	Levofloxacin ozonation in water: Rate determining process parameters and reaction pathway elucidation. <i>Chemosphere</i> , 2009, 76, 683-689.	4.2	109
89	Identification and Occurrence of Steryl Glucosides in Palm and Soy Biodiesel. <i>JAACS, Journal of the American Oil Chemists' Society</i> , 2008, 85, 701.	0.8	67
90	Heterogeneous photocatalytic removal of toluene from air on building materials enriched with TiO <sub>2</sub> . <i>Building and Environment</i> , 2008, 43, 406-414.	3.0	151

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91	Quality control in quantification of volatile organic compounds analysed by thermal desorption-gas chromatography-mass spectrometry. <i>Journal of Chromatography A</i> , 2008, 1186, 348-357.	1.8	71
92	Ozonation of Ciprofloxacin in Water: HRMS Identification of Reaction Products and Pathways. <i>Environmental Science &amp; Technology</i> , 2008, 42, 4889-4895.	4.6	168
93	Heterogeneous Photocatalysis as an Advanced Oxidation Process for the Abatement of Chlorinated, Monocyclic Aromatic and Sulfurous Volatile Organic Compounds in Air: State of the Art. <i>Critical Reviews in Environmental Science and Technology</i> , 2007, 37, 489-538.	6.6	181
94	Critical points in the analysis of ciprofloxacin by high-performance liquid chromatography. <i>Journal of Chromatography A</i> , 2007, 1140, 126-130.	1.8	30
95	Sample preparation for the analysis of volatile organic compounds in air and water matrices. <i>Journal of Chromatography A</i> , 2007, 1153, 130-144.	1.8	299
96	Accelerated solid-phase dynamic extraction of toluene from air. <i>Journal of Chromatography A</i> , 2007, 1175, 145-153.	1.8	17
97	Regeneration of a Compost Biofilter Degrading High Loads of Ammonia by Addition of Gaseous Methanol. <i>Journal of the Air and Waste Management Association</i> , 2002, 52, 796-804.	0.9	15