Kristof Demeestere

List of Publications by Year
in descending order

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97	5,442	76294	85498
papers	citations	40 h-index	71 g-index

99	99	99	6461
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fluoroquinolone antibiotics: An emerging class of environmental micropollutants. Science of the Total Environment, 2014, 500-501, 250-269.	3.9	526
2	Sample preparation for the analysis of volatile organic compounds in air and water matrices. Journal of Chromatography A, 2007, 1153, 130-144.	1.8	299
3	Oxygenated polycyclic aromatic hydrocarbons in atmospheric particulate matter: Molecular characterization and occurrence. Atmospheric Environment, 2010, 44, 1831-1846.	1.9	273
4	Ozonation and advanced oxidation by the peroxone process of ciprofloxacin in water. Journal of Hazardous Materials, 2009, 161, 701-708.	6.5	201
5	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. Critical Reviews in Environmental Science and Technology, 2007, 37, 489-538.	6.6	181
6	UV-A and UV-C induced photolytic and photocatalytic degradation of aqueous ciprofloxacin and moxifloxacin: Reaction kinetics and role of adsorption. Applied Catalysis B: Environmental, 2011, 101, 540-547.	10.8	172
7	Ozonation of Ciprofloxacin in Water: HRMS Identification of Reaction Products and Pathways. Environmental Science & Technology, 2008, 42, 4889-4895.	4.6	168
8	Titanium dioxide coated cementitious materials for air purifying purposes: Preparation, characterization and toluene removal potential. Building and Environment, 2010, 45, 832-838.	3.0	168
9	Heterogeneous photocatalytic removal of toluene from air on building materials enriched with TiO2. Building and Environment, 2008, 43, 406-414.	3.0	151
10	The present status of landfill leachate treatment and its development trend from a technological point of view. Reviews in Environmental Science and Biotechnology, 2015, 14, 93-122.	3.9	149
11	TiO2 mediated heterogeneous photocatalytic degradation of moxifloxacin: Operational variables and scavenger study. Applied Catalysis B: Environmental, 2012, 111-112, 150-156.	10.8	143
12	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. Science of the Total Environment, 2012, 437, 153-164.	3.9	126
13	Levofloxacin ozonation in water: Rate determining process parameters and reaction pathway elucidation. Chemosphere, 2009, 76, 683-689.	4.2	109
14	Target of rapamycin signaling orchestrates growthâ€“defense tradeâ€offs in plants. New Phytologist, 2018, 217, 305-319.	3.5	97
15	The DELLA Protein SLR1 Integrates and Amplifies Salicylic Acid- and Jasmonic Acid-Dependent Innate Immunity in Rice. Plant Physiology, 2016, 170, 1831-1847.	2.3	96
16	Trends in liquid chromatography coupled to high-resolution mass spectrometry for multi-residue analysis of organic micropollutants in aquatic environments. TrAC - Trends in Analytical Chemistry, 2015, 67, 192-208.	5.8	92
17	Occurrence, fate and removal of pharmaceuticals, personal care products and pesticides in wastewater stabilization ponds and receiving rivers in the Nzoia Basin, Kenya. Science of the Total Environment, 2018, 637-638, 336-348.	3.9	91
18	Ciprofloxacin ozonation in hospital wastewater treatment plant effluent: Effect of pH and H2O2. Chemosphere, 2010, 78, 1142-1147.	4.2	89

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19	Multi-residue analysis of pharmaceuticals in wastewater by liquid chromatographyâ€“magnetic sector mass spectrometry: Method quality assessment and application in a Belgian case study. Chemosphere, 2015, 119, S2-S8.	4.2	85
20	A comparative study on the efficiency of ozonation and coagulationâ€“flocculation as pretreatment to activated carbon adsorption of biologically stabilized landfill leachate. Waste Management, 2015, 43, 335-342.	3.7	77
21	Occurrence and treatment of contaminants of emerging concern in the African aquatic environment: Literature review and a look ahead. Journal of Environmental Management, 2020, 254, 109752.	3.8	74
22	Characterisation of landfill leachate by EEM-PARAFAC-SOM during physical-chemical treatment by coagulation-flocculation, activated carbon adsorption and ion exchange. Chemosphere, 2017, 186, 873-883.	4.2	72
23	Quality control in quantification of volatile organic compounds analysed by thermal desorptionâ€“gas chromatographyâ€“mass spectrometry. Journal of Chromatography A, 2008, 1186, 348-357.	1.8	71
24	Gibberellin antagonizes jasmonateâ€induced defense against Meloidogyne graminicola in rice. New Phytologist, 2018, 218, 646-660.	3.5	71
25	Identification and Occurrence of Steryl Glucosides in Palm and Soy Biodiesel. JAOCS, Journal of the American Oil Chemists' Society, 2008, 85, 701.	0.8	67
26	Ozonation of biologically treated landfill leachate: efficiency and insights in organic conversions. Chemical Engineering Journal, 2015, 277, 104-111.	6.6	66
27	Photocatalytic activity of titanium dioxide nanoparticle coatings applied on autoclaved aerated concrete: Effect of weathering on coating physical characteristics and gaseous toluene removal. Journal of Hazardous Materials, 2012, 211-212, 218-225.	6.5	63
28	The energy sensor OsSnRK1a confers broad-spectrum disease resistance in rice. Scientific Reports, 2018, 8, 3864.	1.6	63
29	Ozonation and peroxone oxidation of benzophenone-3 in water: Effect of operational parameters and identification of intermediate products. Science of the Total Environment, 2013, 443, 209-217.	3.9	60
30	Titanium dioxide based strategies to prevent algal fouling on cementitious materials. Cement and Concrete Composites, 2013, 36, 93-100.	4.6	60
31	Heterogeneous photocatalysis of moxifloxacin in hospital effluent: Effect of selected matrix constituents. Chemical Engineering Journal, 2015, 261, 9-16.	6.6	59
32	Advanced oxidation of pharmaceuticals by the ozone-activated peroxymonosulfate process: the role of different oxidative species. Journal of Hazardous Materials, 2018, 360, 204-213.	6.5	59
33	Interplay between Carotenoids, Abscisic Acid and Jasmonate Guides the Compatible Rice-Meloidogyne graminicola Interaction. Frontiers in Plant Science, 2017, 8, 951.	1.7	58
34	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. Analytical and Bioanalytical Chemistry, 2010, 396, 825-837.	1.9	52
35	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. Analytical and Bioanalytical Chemistry, 2014, 406, 2533-2547.	1.9	52
36	Heterogeneous photocatalysis of moxifloxacin: Identification of degradation products and determination of residual antibacterial activity. Applied Catalysis B: Environmental, 2013, 138-139, 333-341.	10.8	48

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37	Comparison and performance assessment of ozone-based AOPs in view of trace organic contaminants abatement in water and wastewater: A review. Journal of Environmental Chemical Engineering, 2021, 9, 105599.	3.3	46
38	Systemic defense activation by COS-OGA in rice against root-knot nematodes depends on stimulation of the phenylpropanoid pathway. Plant Physiology and Biochemistry, 2019, 142, 202-210.	2.8	45
39	Surrogate-Based Correlation Models in View of Real-Time Control of Ozonation of Secondary Treated Municipal Wastewaterâ€"Model Development and Dynamic Validation. Environmental Science & Technology, 2017, 51, 14233-14243.	4.6	44
40	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. Analytica Chimica Acta, 2017, 984, 140-150.	2.6	44
41	Balancing the False Negative and Positive Rates in Suspect Screening with High-Resolution Orbitrap Mass Spectrometry Using Multivariate Statistics. Analytical Chemistry, 2015, 87, 2170-2177.	3.2	35
42	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. Analytica Chimica Acta, 2019, 1049, 141-151.	2.6	35
43	Heterogeneous photocatalysis of moxifloxacin in water: Chemical transformation and ecotoxicity. Chemosphere, 2015, 119, S75-S80.	4.2	34
44	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. Chemosphere, 2021, 279, 130757.	4.2	33
45	Advanced Oxidation of Pharmaceuticals: Chemical Analysis and Biological Assessment of Degradation Products. Critical Reviews in Environmental Science and Technology, 2011, 41, 215-242.	6.6	32
46	Volatile organic compounds in an urban environment: a comparison among Belgium, Vietnam and Ethiopia. International Journal of Environmental Analytical Chemistry, 2013, 93, 298-314.	1.8	31
47	Critical points in the analysis of ciprofloxacin by high-performance liquid chromatography. Journal of Chromatography A, 2007, 1140, 126-130.	1.8	30
48	Ozonation of trace organic compounds in different municipal and industrial wastewaters: Kinetic-based prediction of removal efficiency and ozone dose requirements. Chemical Engineering Journal, 2020, 387, 123405.	6.6	30
49	Below-Ground Attack by the Root Knot Nematode Meloidogyne graminicola Predisposes Rice to Blast Disease. Molecular Plant-Microbe Interactions, 2017, 30, 255-266.	1.4	28
50	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. Journal of Environmental Management, 2017, 203, 774-781.	3.8	28
51	Municipal wastewater effluent characterization and variability analysis in view of an ozone dose control strategy during tertiary treatment: The status in Belgium. Science of the Total Environment, 2018, 625, 1198-1207.	3.9	28
52	Trace analysis of multi-class phytohormones in Oryza sativa using different scan modes in high-resolution Orbitrap mass spectrometry: method validation, concentration levels, and screening in multiple accessions. Analytical and Bioanalytical Chemistry, 2018, 410, 4527-4539.	1.9	28
53	Accurate mass determination, quantification and determination of detection limits in liquid chromatographyâ€"high-resolution time-of-flight mass spectrometry: Challenges and practical solutions. Analytica Chimica Acta, 2013, 789, 74-82.	2.6	27
54	Ozonation in view of micropollutant removal from biologically treated landfill leachate: Removal efficiency, OH exposure, and surrogate-based monitoring. Chemical Engineering Journal, 2021, 410, 128413.	6.6	27

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55	Ascorbate oxidation activates systemic defence against root-knot nematode Meloidogyne graminicola in rice. Journal of Experimental Botany, 2020, 71, 4271-4284.	2.4	26
56	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. Marine Pollution Bulletin, 2019, 142, 350-360.	2.3	25
57	TiO2 coatings synthesized by liquid flame spray and low temperature solâ€“gel technologies on autoclaved aerated concrete for air-purifying purposes. Materials Characterization, 2014, 87, 74-85.	1.9	22
58	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. Journal of Hazardous Materials, 2017, 323, 2-10.	6.5	22
59	Mechanisms of resistance in the rice cultivar Manikpukha to the rice stem nematode Ditylenchus angustus. Molecular Plant Pathology, 2018, 19, 1391-1402.	2.0	22
60	Ascorbate Oxidase Induces Systemic Resistance in Sugar Beet Against Cyst Nematode Heterodera schachtii. Frontiers in Plant Science, 2020, 11, 591715.	1.7	22
61	Oxidation of Trace Organic Contaminants (TrOCs) in Wastewater Effluent with Different Ozone-Based AOPs: Comparison of Ozone Exposure and ^{â€¢}OH Formation. Industrial & Engineering Chemistry Research, 2019, 58, 8896-8902.	1.8	20
62	CNT Microtubes with Entrapped Fe₃O₄ Nanoparticles Remove Micropollutants through a Heterogeneous Electroâ€Fenton Process at Neutral pH. Advanced Sustainable Systems, 2021, 5, 2100001.	2.7	20
63	The ozone-activated peroxymonosulfate process (O3/PMS) for removal of trace organic contaminants in natural and wastewater: Effect of the (in)organic matrix composition. Chemical Engineering Journal, 2022, 430, 133000.	6.6	20
64	Enhanced removal of refractory humic- and fulvic-like organics from biotreated landfill leachate by ozonation in packed bubble columns. Science of the Total Environment, 2022, 807, 150762.	3.9	20
65	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. Water Science and Technology, 2017, 76, 236-246.	1.2	18
66	Accelerated solid-phase dynamic extraction of toluene from air. Journal of Chromatography A, 2007, 1175, 145-153.	1.8	17
67	Intensified ozonation in packed bubble columns for water treatment: Focus on mass transfer and humic acids removal. Chemosphere, 2021, 283, 131217.	4.2	16
68	Regeneration of a Compost Biofilter Degrading High Loads of Ammonia by Addition of Gaseous Methanol. Journal of the Air and Waste Management Association, 2002, 52, 796-804.	0.9	15
69	Techno-economic assessment of surrogate-based real-time control and monitoring of secondary effluent ozonation at pilot scale. Chemical Engineering Journal, 2018, 352, 431-440.	6.6	15
70	Jasmonate-Induced Defense Mechanisms in the Belowground Antagonistic Interaction Between Pythium arrhenomanes and Meloidogyne graminicola in Rice. Frontiers in Plant Science, 2019, 10, 1515.	1.7	15
71	Pretreatment of Secondary Effluents in View of Optimal Ozone-Based AOP Removal of Trace Organic Contaminants: Bench-Scale Comparison of Efficiency and Energy Consumption. Industrial & Engineering Chemistry Research, 2020, 59, 8112-8120.	1.8	15
72	Short-term effects of cadmium on leaf growth and nutrient transport in rice plants. Plant Science, 2021, 313, 111054.	1.7	15

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73	Dynamic validation of online applied and surrogate-based models for tertiary ozonation on pilot-scale. Chemosphere, 2018, 196, 494-501.	4.2	14
74	Assessing the Impact of Drought Stress and Soil Cultivation in Chardonnay and Xynisteri Grape Cultivars. Agronomy, 2020, 10, 670.	1.3	14
75	Freestanding PAC/CNT microtubes remove sulfamethoxazole from water through a temperature-assisted cyclic process. Journal of Hazardous Materials, 2020, 392, 122133.	6.5	13
76	Occurrence and point-of-use treatment of contaminants of emerging concern in groundwater of the Nzoia River basin, Kenya. Environmental Pollution, 2022, 297, 118725.	3.7	13
77	Advanced treatment of landfill leachate through combined Anammox-based biotreatment, O3/H2O2 oxidation, and activated carbon adsorption: technical performance, surrogate-based control strategy, and operational cost analysis. Journal of Hazardous Materials, 2022, 430, 128481.	6.5	13
78	Dehydroascorbate induces plant resistance in rice against rootâ€knot nematode Meloidogyne graminicola. Molecular Plant Pathology, 2022, 23, 1303-1319.	2.0	13
79	Oxygenated polycyclic aromatic hydrocarbons in mussels: analytical method development and occurrence in the Belgian coastal zone. Environmental Science and Pollution Research, 2019, 26, 9065-9078.	2.7	12
80	One-pot synthesized, Fe-incorporated self-standing carbons with a hierarchical porosity remove carbamazepine and sulfamethoxazole through heterogeneous electro-Fenton. Chemical Engineering Journal, 2022, 446, 137006.	6.6	12
81	Morphological, Pathogenic and Toxigenic Variability in the Rice Sheath Rot Pathogen Sarocladium Oryzae. Toxins, 2020, 12, 109.	1.5	11
82	Responses to Drought Stress Modulate the Susceptibility to Plasmopara viticola in Vitis vinifera Self-Rooted Cuttings. Plants, 2021, 10, 273.	1.6	10
83	Enhanced Ozonation of Trace Organic Contaminants in Municipal Wastewater Plant Effluent by Adding a Preceding Filtration Step: Comparison and Prediction of Removal Efficiency. ACS Sustainable Chemistry and Engineering, 2019, 7, 14661-14668.	3.2	9
84	Insights into a packed bubble column for removal of several ozone-persistent TrOCs by ozonation: removal kinetics, energy efficiency and elimination prediction. Separation and Purification Technology, 2021, 275, 119170.	3.9	9
85	Development of a reliable experimental set-up for Dover sole larvae Solea solea L. and exploring the possibility of implementing this housing system in a gnotobiotic model. Research in Veterinary Science, 2017, 115, 418-424.	0.9	8
86	Hydrophilic Divinylbenzene for Equilibrium Sorption of Emerging Organic Contaminants in Aquatic Matrices. Environmental Science & Technology, 2019, 53, 10803-10812.	4.6	7
87	Ozone-based advanced oxidation of biologically treated landfill leachate: Oxidation efficiency, mechanisms, and surrogate-based monitoring for bulk organics. Journal of Environmental Chemical Engineering, 2021, 9, 106459.	3.3	7
88	Surrogate-based follow-up of activated carbon adsorption preceded by ozonation for removal of bulk organics and micropollutants from landfill leachate. Science of the Total Environment, 2022, 820, 153349.	3.9	7
89	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. Science of the Total Environment, 2021, 765, 142748.	3.9	5
90	Neonicotinoid Insecticides from a Marine Perspective: Acute and Chronic Copepod Testing and Derivation of Environmental Quality Standards. Environmental Toxicology and Chemistry, 2021, 40, 1353-1367.	2.2	5

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91	Growth Stimulation Effects of Environmentally Realistic Contaminant Mixtures on a Marine Diatom. Environmental Toxicology and Chemistry, 2019, 38, 1313-1322.	2.2	4
92	Cucurbitaceae COld Peeling Extracts (CCOPEs) Protect Plants From Root-Knot Nematode Infections Through Induced Resistance and Nematicidal Effects. Frontiers in Plant Science, 2021, 12, 785699.	1.7	4
93	Ozonation as an Advanced Treatment Technique for the Degradation of Personal Care Products in Water. Handbook of Environmental Chemistry, 2014, , 375-397.	0.2	3
94	Characterization of landfill leachate by spectral-based surrogate measurements during a combination of different biological processes and activated carbon adsorption. Water Science and Technology, 2020, 81, 2606-2616.	1.2	3
95	Status and needs for online control of tertiary ozone-based water treatment: use of surrogate correlation models for removal of trace organic contaminants. Reviews in Environmental Science and Biotechnology, 2021, 20, 297.	3.9	2
96	A Simple Teabag Equilibrium Passive Sampler using hydrophilic divinylbenzene sorbent for contaminants of emerging concern in the marine environment. Science of the Total Environment, 2021, 777, 146055.	3.9	2
97	Enhanced Production and Recovery of Orthophosphate from Wastewater Containing Phosphonate 1-Hydroxyethane-1,1-diphosphonic Acid through Combined Packed-Bed Ozonation and Adsorption. ACS Sustainable Chemistry and Engineering, 2021, 9, 16946-16955.	3.2	2