Diederik P L Rousseau

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6937427/publications.pdf

Version: 2024-02-01

56 papers

2,353 citations

218677 26 h-index 206112 48 g-index

58 all docs 58 docs citations

58 times ranked

2169 citing authors

#	Article	IF	Citations
1	Contaminant Removal Processes in Subsurface-Flow Constructed Wetlands: A Review. Critical Reviews in Environmental Science and Technology, 2010, 40, 561-661.	12.8	399
2	Model-based design of horizontal subsurface flow constructed treatment wetlands: a review. Water Research, 2004, 38, 1484-1493.	11.3	287
3	Constructed wetlands in Flanders: a performance analysis. Ecological Engineering, 2004, 23, 151-163.	3.6	128
4	CWM1: a general model to describe biokinetic processes in subsurface flow constructed wetlands. Water Science and Technology, 2009, 59, 1687-1697.	2.5	111
5	Natural pigments from microalgae grown in industrial wastewater. Bioresource Technology, 2020, 303, 122894.	9.6	87
6	Characteristics and removal of microplastics in rural domestic wastewater treatment facilities of China. Science of the Total Environment, 2020, 739, 139935.	8.0	85
7	Horizontal subsurface flow constructed wetlands as tertiary treatment: Can they be an efficient barrier for microplastics pollution?. Science of the Total Environment, 2020, 721, 137785.	8.0	82
8	Removal of pharmaceuticals by a pilot aerated sub-surface flow constructed wetland treating municipal and hospital wastewater. Ecological Engineering, 2017, 100, 157-164.	3.6	71
9	The effect of primary treatment of wastewater in high rate algal pond systems: Biomass and bioenergy recovery. Bioresource Technology, 2019, 280, 27-36.	9.6	70
10	Contaminants removal and bacterial activity enhancement along the flow path of constructed wetland microbial fuel cells. Science of the Total Environment, 2019, 652, 1195-1208.	8.0	58
11	Performance Evaluation of Horizontal Subsurface Flow–Constructed Wetlands for the Treatment of Domestic Wastewater in the Tropics. Journal of Environmental Engineering, ASCE, 2013, 139, 358-367.	1.4	55
12	Natural Pigments and Biogas Recovery from Microalgae Grown in Wastewater. ACS Sustainable Chemistry and Engineering, 2020, 8, 10691-10701.	6.7	51
13	A full-scale comparison of two hybrid constructed wetlands treating domestic wastewater in Pakistan. Journal of Environmental Management, 2018, 210, 349-358.	7.8	45
14	Fate of Heavy Metals in an Urban Natural Wetland: The Nyabugogo Swamp (Rwanda). Water, Air, and Soil Pollution, 2011, 214, 321-333.	2.4	44
15	Fate and removal of microplastics in unplanted lab-scale vertical flow constructed wetlands. Science of the Total Environment, 2021, 778, 146152.	8.0	44
16	Laboratory- and full-scale studies on the removal of pharmaceuticals in an aerated constructed wetland: effects of aeration and hydraulic retention time on the removal efficiency and assessment of the aquatic risk. Water Science and Technology, 2017, 76, 1457-1465.	2.5	43
17	Simulation of carbon, nitrogen and sulphur conversion in batch-operated experimental wetland mesocosms. Ecological Engineering, 2012, 42, 304-315.	3.6	42
18	Application of the gas tracer method for measuring oxygen transfer rates in subsurface flow constructed wetlands. Water Research, 2010, 44, 4217-4225.	11.3	40

#	Article	IF	CITATIONS
19	Technical potential of microalgal bacterial floc raceway ponds treating food-industry effluents while producing microalgal bacterial biomass: An outdoor pilot-scale study. Bioresource Technology, 2016, 218, 969-979.	9.6	38
20	Numerical Modelling of Waste Stabilization Ponds: Where Do We Stand?. Water, Air, and Soil Pollution, 2012, 223, 3155-3171.	2.4	37
21	A semi-mechanistic model describing the influence of light and temperature on the respiration and photosynthetic growth of Chlorella vulgaris. Bioresource Technology, 2019, 274, 361-370.	9.6	37
22	Tertiary treatment of the liquid fraction of pig manure with Phragmites australis. Water, Air, and Soil Pollution, 2005, 160, 15-26.	2.4	31
23	A new reactor design for harvesting algae through electrocoagulation-flotation in a continuous mode. Algal Research, 2020, 47, 101828.	4.6	31
24	Use of Gisenyi Volcanic Rock for Adsorptive Removal of Cd(II), Cu(II), Pb(II), and Zn(II) from Wastewater. Water, Air, and Soil Pollution, 2012, 223, 533-547.	2.4	30
25	Effects of design and operational parameters on ammonium removal by single-stage French vertical flow filters treating raw domestic wastewater. Ecological Engineering, 2016, 97, 516-523.	3.6	30
26	Fate of metallic engineered nanomaterials in constructed wetlands: prospection and future research perspectives. Reviews in Environmental Science and Biotechnology, 2017, 16, 207-222.	8.1	30
27	Roof runoff contamination: a review on pollutant nature, material leaching and deposition. Reviews in Environmental Science and Biotechnology, 2021, 20, 549-606.	8.1	27
28	Constructed wetlands operated as bioelectrochemical systems for the removal of organic micropollutants. Chemosphere, 2021, 271, 129593.	8.2	27
29	Impact of Prior Physico-Chemical Treatment on the Clogging Process of Subsurface Flow Constructed Wetlands: Model-Based Evaluation. Water, Air, and Soil Pollution, 2007, 185, 101-109.	2.4	24
30	Economic feasibility of microalgal bacterial floc production for wastewater treatment and biomass valorization: A detailed up-to-date analysis of up-scaled pilot results. Bioresource Technology, 2017, 224, 118-129.	9.6	24
31	Decentralized grey and black water reuse by combining a vertical flow constructed wetland and membrane based potable water system: Full scale demonstration. Journal of Environmental Chemical Engineering, 2021, 9, 104688.	6.7	23
32	Fate of Silver Nanoparticles in Constructed Wetlandsâ€"a Microcosm Study. Water, Air, and Soil Pollution, 2017, 228, 1.	2.4	21
33	Food-industry-effluent-grown microalgal bacterial flocs as a bioresource for high-value phycochemicals and biogas. Algal Research, 2016, 18, 25-32.	4.6	20
34	Water treatment and re-use at temporary events using a mobile constructed wetland and drinking water production system. Science of the Total Environment, 2020, 737, 139630.	8.0	19
35	Influence of recirculation over COD and N-NH4 removals from landfill leachate by horizontal flow constructed treatment wetland. International Journal of Phytoremediation, 2019, 21, 998-1004.	3.1	16
36	Gold Mine Impact on Soil Quality, Youga, Southern Burkina Faso, West Africa. Water, Air, and Soil Pollution, 2019, 230, 1.	2.4	15

#	Article	IF	CITATIONS
37	Metal uptake by spontaneously grown Typha domingensis and introduced Chrysopogon zizanioides in a constructed wetland treating gold mine tailing storage facility seepage. Ecological Engineering, 2020, 158, 106037.	3.6	12
38	Total value wall: Full scale demonstration of a green wall for grey water treatment and recycling. Journal of Environmental Management, 2021, 298, 113489.	7.8	12
39	Iron oxide coated sand (IOS): Scale-up analysis and full-scale application for phosphorus removal from goat farm wastewater. Separation and Purification Technology, 2022, 284, 120213.	7.9	12
40	Simulation of batch-operated experimental wetland mesocosms inÂAQUASIM biofilm reactor compartment. Journal of Environmental Management, 2014, 134, 100-108.	7.8	11
41	Roof runoff contamination: Establishing material-pollutant relationships and material benchmarking based on laboratory leaching tests. Chemosphere, 2021, 283, 131112.	8.2	10
42	Trace element content in cereals from a gold mining site in Burkina Faso and intake risk assessment. Journal of Environmental Management, 2019, 248, 109292.	7.8	9
43	Investigating the effect of Eh and pH on binding forms of Co, Cu, and Pb in wetland sediments from Zambia. Journal of Environmental Management, 2022, 319, 115543.	7.8	9
44	Model Study of Short-Term Dynamics of Secondary Treatment Reed Beds at Saxby (Leicestershire, UK). Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2005, 40, 1479-1492.	1.7	7
45	Life cycle assessment of two decentralized water treatment systems combining a constructed wetland and a membrane based drinking water production system. Resources, Conservation and Recycling, 2022, 178, 106104.	10.8	7
46	Performance of a green wall (Total Value Wallâ,,¢) at high greywater loading rates and Life Cycle Impact Assessment. Science of the Total Environment, 2022, 821, 153470.	8.0	7
47	Model based analysis of carbon fluxes within microalgae-bacteria flocs using respirometric-titrimetric data. Science of the Total Environment, 2021, 784, 147048.	8.0	6
48	Hydrogen peroxide in bioelectrochemical systems negatively affects microbial current generation. Journal of Applied Electrochemistry, 2021, 51, 1463-1478.	2.9	5
49	Metals and metalloid in gold mine pit lakes and fish intake risk assessment, Burkina Faso. Environmental Geochemistry and Health, 2020, 42, 563-577.	3.4	4
50	Disinfection of constructed wetland effluent by <i>in situ</i> electrochemical chlorine production for water reuse. Environmental Science: Water Research and Technology, 2021, 8, 98-107.	2.4	4
51	Towards Water and Energy Self-Sufficiency: a Closed-Loop, Solar-Driven, Low-Tech Laundry Pilot Facility (LaundReCycle) for the Reuse of Laundry Wastewater. Circular Economy and Sustainability, 2021, 1, 1037-1051.	5.5	2
52	Validation of a simple and robust multi-residue gas chromatography-mass spectrometry method for the analysis of polycyclic aromatic hydrocarbons, phthalates and biocides in roofing material leachate and roof runoff. Journal of Chromatography Open, 2021, 1, 100007.	2.2	2
53	Synthesis, characterization, and methylene blue adsorption isotherms of hydrochars derived from forestry waste and agro-residues. Biomass Conversion and Biorefinery, 2024, 14, 1809-1824.	4.6	2
54	Towards a general kinetic microalgae model: Extending a semi-deterministic green microalgae model for the cyanobacterium Arthrospira platensis and red alga Porphyridium purpureum. Bioresource Technology, 2021, 342, 125993.	9.6	0

#	Article	IF	CITATIONS
55	Constructed Wetlands for Urban Wastewater Treatment: An Overview. , 2021, , .		O
56	Case Studies of (Semi)Constructed Wetlands Treating Point and Non-point Pollutant Loads to Protect Downstream Natural Ecosystems. , 2021, , .		0