GÃ¼nter Langergraber

List of Publications by Year
in descending order

87 papers	3,026 citations	147566 31 h-index	174990 52 g-index
99 all docs	99 docs citations	99 times ranked	2360 citing authors

#	Article	IF	Citations
1	Ecological Sanitationâ€"a way to solve global sanitation problems?. Environment International, 2005, 31, 433-444.	4.8	232
2	Constructed wetlands for the treatment of organic pollutants. Journal of Soils and Sediments, 2003, 3, 109-124.	1.5	166
3	Modeling Variably Saturated Water Flow and Multicomponent Reactive Transport in Constructed Wetlands. Vadose Zone Journal, 2005, 4, 924-938.	1.3	135
4	Using phytoremediation technologies to upgrade waste water treatment in Europe. Environmental Science and Pollution Research, 2007, 14, 490-497.	2.7	119
5	Recent developments in numerical modelling of subsurface flow constructed wetlands. Science of the Total Environment, 2009, 407, 3931-3943.	3.9	117
6	CWM1: a general model to describe biokinetic processes in subsurface flow constructed wetlands. Water Science and Technology, 2009, 59, 1687-1697.	1.2	111
7	Bio-waste valorisation: Agricultural wastes as biosorbents for removal of (in)organic pollutants in wastewater treatment. Chemical Engineering Journal Advances, 2022, 9, 100239.	2.4	109
8	Uncertainties of spectral in situ measurements in wastewater using different calibration approaches. Water Science and Technology, 2006, 53, 187-197.	1.2	103
9	Modeling of Processes in Subsurface Flow Constructed Wetlands: A Review. Vadose Zone Journal, 2008, 7, 830-842.	1.3	99
10	Characterisation of microbial biocoenosis in vertical subsurface flow constructed wetlands. Science of the Total Environment, 2007, 380, 163-172.	3.9	93
11	Modelling pollutant removal in a pilot-scale two-stage subsurface flow constructed wetlands. Ecological Engineering, 2009, 35, 281-289.	1.6	82
12	Implementing nature-based solutions for creating a resourceful circular city. Blue-Green Systems, 2020, 2, 173-185.	0.6	78
13	Simulation of the treatment performance of outdoor subsurface flow constructed wetlands in temperate climates. Science of the Total Environment, 2007, 380, 210-219.	3.9	74
14	Green walls for greywater treatment and recycling in dense urban areas: a case-study in Pune. Journal of Water Sanitation and Hygiene for Development, 2016, 6, 342-347.	0.7	73
15	Investigation of bacterial removal during the filtration process in constructed wetlands. Science of the Total Environment, 2007, 380, 173-180.	3.9	69
16	Modelling constructed wetlands: Scopes and aims â€" a comparative review. Ecological Engineering, 2015, 80, 205-213.	1.6	55
17	Nature-Based Solutions and Circularity in Cities. Circular Economy and Sustainability, 2021, 1, 319-332.	3.3	54
18	Fundamentals of Building Deconstruction as a Circular Economy Strategy for the Reuse of Construction Materials. Applied Sciences (Switzerland), 2021, 11, 939.	1.3	53

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19	Bacterial carbon utilization in vertical subsurface flow constructed wetlands. Water Research, 2008, 42, 1622-1634.	5.3	51
20	Reactive Transport Modeling of Subsurface Flow Constructed Wetlands Using the HYDRUS Wetland Module. Vadose Zone Journal, 2012, 11, vzj2011.0104.	1.3	51
21	Long term decentralized greywater treatment for water reuse purposes in a tourist facility by vertical ecosystem. Ecological Engineering, 2019, 138, 138-147.	1.6	49
22	Modelling of organic matter degradation in constructed wetlands for treatment of combined sewer overflow. Science of the Total Environment, 2007, 380, 196-209.	3.9	48
23	Generation of diurnal variation for influent data for dynamic simulation. Water Science and Technology, 2008, 57, 1483-1486.	1.2	45
24	A Framework for Addressing Circularity Challenges in Cities with Nature-Based Solutions. Water (Switzerland), 2021, 13, 2355.	1.2	39
25	Removal efficiency of a constructed wetland combined with ultrasound and UV devices for wastewater reuse in agriculture. Environmental Technology (United Kingdom), 2013, 34, 2327-2336.	1.2	38
26	High-rate nitrogen removal in a two-stage subsurface vertical flow constructed wetland. Desalination, 2009, 246, 55-68.	4.0	35
27	Diversity of abundant bacteria in subsurface vertical flow constructed wetlands. Ecological Engineering, 2009, 35, 1021-1025.	1.6	35
28	The verification of the Constructed Wetland Model No. 1 implementation in HYDRUS using column experiment data. Ecological Engineering, 2014, 68, 105-115.	1.6	33
29	Diversity of ammonia oxidising bacteria in a vertical flow constructed wetland. Water Science and Technology, 2007, 56, 241-247.	1.2	32
30	Comparison of single-stage and a two-stage vertical flow constructed wetland systems for different load scenarios. Water Science and Technology, 2010, 61, 1341-1348.	1.2	32
31	Are constructed treatment wetlands sustainable sanitation solutions?. Water Science and Technology, 2013, 67, 2133-2140.	1.2	32
32	Modelling the response of laboratory horizontal flow constructed wetlands to unsteady organic loads with HYDRUS-CWM1. Ecological Engineering, 2014, 68, 209-213.	1.6	32
33	Numerical modelling: a tool for better constructed wetland design?. Water Science and Technology, 2011, 64, 14-21.	1.2	31
34	A two-stage subsurface vertical flow constructed wetland for high-rate nitrogen removal. Water Science and Technology, 2008, 57, 1881-1887.	1.2	30
35	The new German standard on constructed wetland systems for treatment of domestic and municipal wastewater. Water Science and Technology, 2018, 78, 2414-2426.	1.2	29
36	Carbon and nitrogen gaseous fluxes from subsurface flow wetland buffer strips at mesocosm scale in East Africa. Ecological Engineering, 2015, 85, 173-184.	1.6	28

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37	Long-term behaviour of a two-stage CW system regarding nitrogen removal. Water Science and Technology, 2011, 64, 1137-1141.	1.2	26
38	Comparison of nitrogen elimination rates of different constructed wetland designs. Water Science and Technology, 2011, 64, 1122-1129.	1.2	25
39	Applying Process-Based Models for Subsurface Flow Treatment Wetlands: Recent Developments and Challenges. Water (Switzerland), 2017, 9, 5.	1.2	25
40	Aeration intensity simulation in a saturated vertical up-flow constructed wetland. Science of the Total Environment, 2020, 708, 134793.	3.9	24
41	Removal efficiency of subsurface vertical flow constructed wetlands for different organic loads. Water Science and Technology, 2007, 56, 75-84.	1.2	22
42	Optimization of subsurface vertical flow constructed wetlands for wastewater treatment. Water Science and Technology, 2007, 55, 71-78.	1.2	21
43	Long-term evaluation of a spectral sensor for nitrite and nitrate. Water Science and Technology, 2008, 57, 1563-1569.	1.2	21
44	The State of the Art of Clogging in Vertical Flow Wetlands. Water (Switzerland), 2019, 11, 2400.	1.2	19
45	Small wastewater treatment plants in Austria â€“ Technologies, management and training of operators. Ecological Engineering, 2018, 120, 164-169.	1.6	18
46	Developing sanitation planning options: A tool for systematic consideration of novel technologies and systems. Journal of Environmental Management, 2020, 271, 111004.	3.8	18
47	Nitrate dynamics in a rural headwater catchment: measurements and modelling. Hydrological Processes, 2014, 28, 1820-1834.	1.1	17
48	Treatment wetlands in decentralised approaches for linking sanitation to energy and food security. Water Science and Technology, 2018, 77, 859-860.	1.2	17
49	Towards a Cross-Sectoral View of Nature-Based Solutions for Enabling Circular Cities. Water (Switzerland), 2021, 13, 2352.	1.2	17
50	The coupled socio-ecohydrological evolution of river systems: Towards an integrative perspective of river systems in the 21st century. Science of the Total Environment, 2021, 801, 149619.	3.9	17
51	Comparison of measured and simulated distribution of microbial biomass in subsurface vertical flow constructed wetlands. Water Science and Technology, 2007, 56, 233-240.	1.2	15
52	Impact of Green Roofs and Vertical Greenery Systems on Surface Runoff Quality. Water (Switzerland), 2021, 13, 2609.	1.2	15
53	Framework Conditions and Strategies for Pop-Up Environments in Urban Planning. Sustainability, 2019, 11, 7204.	1.6	12
54	Using numerical simulation of a one stage vertical flow wetland to optimize the depth of a zeolite layer. Water Science and Technology, 2017, 75, 650-658.	1.2	11

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55	Rainwater Use for Vertical Greenery Systems: Development of a Conceptual Model for a Better Understanding of Processes and Influencing Factors. Water (Switzerland), 2021, 13, 1860.	1.2	11
56	Experiences with a top layer of gravel to enhance the performance of vertical flow constructed wetlands at cold temperatures. Water Science and Technology, 2009, 59, 1111-1116.	1.2	10
57	Survey on number and size distribution of treatment wetlands in Austria. Water Science and Technology, 2017, 75, 2309-2315.	1.2	10
58	Simulation and verification of hydraulic properties and organic matter degradation in sand filters for greywater treatment. Water Science and Technology, 2015, 71, 426-433.	1.2	9
59	Performance of subsurface flow constructed wetland mesocosms in enhancing nutrient removal from municipal wastewater in warm tropical environments. Environmental Technology (United) Tj ETQq1 1 0.784314 rgBT /Overlock	1.2	9
60	Influence of design parameters on the treatment performance of VF wetlands â€“ a simulation study. Water Science and Technology, 2019, 80, 265-273.	1.2	8
61	Experiences with pre-precipitation of phosphorus in a vertical flow constructed wetland in Austria. Water Science and Technology, 2013, 67, 2337-2341.	1.2	7
62	Sensitivity analysis of the CLARA Simplified Planning Tool using the Morris screening method. Water Science and Technology, 2015, 71, 234-244.	1.2	7
63	Design-support and performance estimation using HYDRUS/CW2D: a horizontal flow constructed wetland for polishing SBR effluent. Water Science and Technology, 2015, 71, 965-970.	1.2	7
64	Development of a Sanitation Safety Plan for improving the sanitation system in peri-urban areas of Iringa, Tanzania. Journal of Water Sanitation and Hygiene for Development, 2017, 7, 340-348.	0.7	7
65	Numerical simulation of vertical flow wetlands with special emphasis on treatment performance during winter. Water Science and Technology, 2018, 78, 2019-2026.	1.2	7
66	Possibilities of nature-based and hybrid decentralized solutions for reclaimed water reuse. Advances in Chemical Pollution, Environmental Management and Protection, 2020, , 145-187.	0.3	7
67	Constructed Wetlands for Rehabilitation and Reuse of Surface Waters in Tropical and Subtropical Areas â€“ First Results from Small-scale Plots Using Vertical Flow Beds. Water Science and Technology, 1999, 40, 155-162.	1.2	7
68	Going Beyond Global Indicatorsâ€”Policy Relevant Indicators for SDG 6 Targets in the Context of Austria. Sustainability, 2022, 14, 1647.	1.6	7
69	Non-equilibrium model for solute transport in differently designed biofilters targeting agricultural drainage water. Water Science and Technology, 2017, 76, 1324-1331.	1.2	6
70	Simulating vertical flow wetlands using filter media with different grain sizes with the HYDRUS Wetland Module. Journal of Hydrology and Hydromechanics, 2018, 66, 227-231.	0.7	6
71	Calibration of a simulation tool for subsurface flow constructed wetlands for wastewater treatment. Developments in Water Science, 2002, 47, 663-670.	0.1	5
72	Educational Resources for Geoethical Aspects of Water Management. Geosciences (Switzerland), 2022, 12, 80.	1.0	5

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73	Experiences from the full-scale implementation of a new two-stage vertical flow constructed wetland design. Water Science and Technology, 2014, 69, 335-342.	1.2	4
74	Investigations on Nitrogen Removal in a Two-Stage Subsurface Vertical Flow Constructed Wetland. , 2008, , 199-209.		4
75	Comparison of simple models for total nitrogen removal from agricultural runoff in FWS wetlands. Water Science and Technology, 2022, 85, 3301-3314.	1.2	4
76	Evaluating the Performance of Small Wastewater Treatment Plants. Frontiers in Environmental Science, 0, 10, .	1.5	4
77	Development of cost functions for water supply and sanitation technologies: case study of Bahir Dar and Arba Minch, Ethiopia. Journal of Water Sanitation and Hygiene for Development, 2015, 5, 502-511.	0.7	3
78	Editorial: Status and future of wastewater treatment modelling. Water Science and Technology, 2010, 61, 821-823.	1.2	2
79	Process Based Models for Subsurface Flow Constructed Wetlands. , 2010, , 21-35.		2
80	Sensitivity analysis for water supply input parameters of the CLARA simplified planning tool using three complementary methods. Journal of Water Supply: Research and Technology - AQUA, 2015, 64, 391-403.	0.6	2
81	Statistical validation of the CLARA Simplified Planning Tool. Water Science and Technology: Water Supply, 2016, 16, 193-201.	1.0	1
82	Editorial for the â€˜Towards Circular Cities â€“ Nature-based solutions for creating a resourceful circular cityâ€™ Special Issue. Blue-Green Systems, 2020, 2, 137-137.	0.6	1
83	Rain water harvesting as additional water supply for multi-storey buildings in Arba Minch, Ethiopia. Desalination and Water Treatment, 0, , 1-8.	1.0	0
84	Behaviour of a Two-Stage Vertical Flow Constructed Wetland with Hydraulic Peak Loads. , 2015, , 175-188.		0
85	Dezentrale Abwasserbewirtschaftung. Osterreichische Wasser- Und Abfallwirtschaft, 2018, 70, 559-559.	0.3	0
86	Water and Circular Cities. Water (Switzerland), 2021, 13, 3585.	1.2	0
87	Sanitation planning for resettlement sites in Laos. Journal of Water Sanitation and Hygiene for Development, 2022, 12, 248-257.	0.7	0