

Marcos von Sperling

List of Publications by Year in descending order

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Version: 2024-02-01

98
papers

1,412
citations

361413
20
h-index

434195
31
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99
all docs

99
docs citations

99
times ranked

1233
citing authors

#	ARTICLE	IF	CITATIONS
1	Reliability analysis of wastewater treatment plants. <i>Water Research</i> , 2008, 42, 1182-1194.	11.3	107
2	Comparison and evaluation of empirical zone settling velocity parameters based on sludge volume index using a unified settling characteristics database. <i>Water Research</i> , 2003, 37, 3821-3836.	11.3	60
3	Urban wastewater treatment technologies and the implementation of discharge standards in developing countries. <i>Urban Water</i> , 2002, 4, 105-114.	0.5	58
4	Modelling of coliform removal in 186 facultative and maturation ponds around the world. <i>Water Research</i> , 2005, 39, 5261-5273.	11.3	57
5	Anammox bacteria enrichment and characterization from municipal activated sludge. <i>Water Science and Technology</i> , 2011, 64, 1428-1434.	2.5	46
6	Performance evaluation and mathematical modelling of coliform die-off in tropical and subtropical waste stabilization ponds. <i>Water Research</i> , 1999, 33, 1435-1448.	11.3	42
7	Clogging in horizontal subsurface flow constructed wetlands: influencing factors, research methods and remediation techniques. <i>Reviews in Environmental Science and Biotechnology</i> , 2018, 17, 87-107.	8.1	41
8	Performance evaluation of different wastewater treatment technologies operating in a developing country. <i>Journal of Water Sanitation and Hygiene for Development</i> , 2011, 1, 37-56.	1.8	36
9	Evaluation of clogging in planted and unplanted horizontal subsurface flow constructed wetlands: solids accumulation and hydraulic conductivity reduction. <i>Water Science and Technology</i> , 2013, 67, 1345-1352.	2.5	36
10	A review of bacterial indicator disinfection mechanisms in waste stabilisation ponds. <i>Reviews in Environmental Science and Biotechnology</i> , 2017, 16, 517-539.	8.1	36
11	First-order COD decay coefficients associated with different hydraulic models applied to planted and unplanted horizontal subsurface-flow constructed wetlands. <i>Ecological Engineering</i> , 2013, 57, 205-209.	3.6	34
12	Performance evaluation of planted and unplanted subsurface-flow constructed wetlands for the post-treatment of UASB reactor effluents. <i>Water Science and Technology</i> , 2009, 60, 3025-3033.	2.5	30
13	Comparative performance evaluation of full-scale anaerobic and aerobic wastewater treatment processes in Brazil. <i>Water Science and Technology</i> , 2009, 59, 15-22.	2.5	29
14	Overall performance evaluation of shallow maturation ponds in series treating UASB reactor effluent: Ten years of intensive monitoring of a system in Brazil. <i>Ecological Engineering</i> , 2014, 71, 206-214.	3.6	29
15	Avaliação de 166 ETEs em operação no país, compreendendo diversas tecnologias. Parte 1: análise de desempenho. <i>Engenharia Sanitaria E Ambiental</i> , 2005, 10, 347-357.	0.5	23
16	Performance evaluation of UASB reactor systems with and without post-treatment. <i>Water Science and Technology</i> , 2009, 59, 1299-1306.	2.5	23
17	Performance of a single stage vertical flow constructed wetland system treating raw domestic sewage in Brazil. <i>Water Science and Technology</i> , 2013, 68, 1599-1606.	2.5	23
18	Clogging in constructed wetlands: Indirect estimation of medium porosity by analysis of ground-penetrating radar images. <i>Science of the Total Environment</i> , 2019, 676, 333-342.	8.0	23

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19	Determination of the required surface area for activated sludge final clarifiers based on a unified database. <i>Water Research</i> , 1999, 33, 1884-1894.	11.3	21
20	Reliability analysis of stabilisation pond systems. <i>Water Science and Technology</i> , 2007, 55, 127-134.	2.5	21
21	Hydrodynamic evaluation of a full-scale facultative pond by computational fluid dynamics (CFD) and field measurements. <i>Water Science and Technology</i> , 2014, 70, 569-575.	2.5	20
22	Role of vegetation (<i>Typha latifolia</i>) on nutrient removal in a horizontal subsurface-flow constructed wetland treating UASB reactor effluent. <i>Water Science and Technology</i> , 2015, 71, 1004-1010.	2.5	18
23	Importance of the ammonia volatilization rates in shallow maturation ponds treating UASB reactor effluent. <i>Water Science and Technology</i> , 2012, 66, 1239-1246.	2.5	17
24	Performance and behaviour of planted and unplanted units of a horizontal subsurface flow constructed wetland system treating municipal effluent from a UASB reactor. <i>Water Science and Technology</i> , 2013, 68, 1495-1502.	2.5	16
25	First stage of the French vertical flow constructed wetland system: experiments with the reduction of surface area and number of units. <i>Journal of Water Sanitation and Hygiene for Development</i> , 2015, 5, 50-55.	1.8	16
26	Uso de traçador salino para avaliação da colmatção e das condições hidrodinâmicas em sistemas alagados construídos de escoamento horizontal subsuperficial. <i>Engenharia Agrícola</i> , 2015, 35, 1137-1148.	0.7	16
27	Performance of a system with full- and pilot-scale sludge drying reed bed units treating septic tank sludge in Brazil. <i>Water Science and Technology</i> , 2015, 71, 1751-1759.	2.5	16
28	Avaliação de desempenho de reator UASB no tratamento de Águas residuais de suinocultura. <i>Revista Brasileira De Engenharia Agrícola E Ambiental</i> , 2010, 14, 94-100.	1.1	16
29	Performance evaluation of a simple wastewater treatment system comprised by UASB reactor, shallow polishing ponds and coarse rock filter. <i>Water Science and Technology</i> , 2008, 58, 1313-1319.	2.5	15
30	Sludge accumulation in shallow maturation ponds treating UASB reactor effluent: results after 11 years of operation. <i>Water Science and Technology</i> , 2014, 70, 321-328.	2.5	15
31	Comparison of simple, small, full-scale sewage treatment systems in Brazil: UASB maturation ponds coarse filter; UASB horizontal subsurface-flow wetland; vertical-flow wetland (first stage) Tj ETQq1 1 0 2 3 4 3 1 4 r g 5 T / Over	2.5	15
32	A dynamic and unified model of hydrodynamics in waste stabilization ponds. <i>Chemical Engineering Research and Design</i> , 2019, 144, 434-443.	5.6	15
33	Parameter Estimation and Sensitivity Analysis of an Activated Sludge Model Using Monte Carlo Simulation and the Analyst's Involvement. <i>Water Science and Technology</i> , 1993, 28, 219-229.	2.5	15
34	Estimation of domestic wastewater characteristics in a developing country based on socio-economic variables. <i>Water Science and Technology</i> , 1996, 34, 71.	2.5	14
35	Comparison between polishing (maturation) ponds and subsurface flow constructed wetlands (planted and unplanted) for the post-treatment of the effluent from UASB reactors. <i>Water Science and Technology</i> , 2010, 61, 1201-1209.	2.5	14
36	Lognormal behaviour of untreated and treated wastewater constituents. <i>Water Science and Technology</i> , 2012, 65, 596-603.	2.5	14

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37	Review of practical aspects for modelling of stabilization ponds using Computational Fluid Dynamics. Environmental Technology Reviews, 2016, 5, 78-102.	4.3	14
38	Solar radiation (PAR, UV-A, UV-B) penetration in a shallow maturation pond operating in a tropical climate. Water Science and Technology, 2017, 76, 182-191.	2.5	14
39	Performance evaluation of a large sewage treatment plant in Brazil, consisting of an upflow anaerobic sludge blanket reactor followed by activated sludge. Water Science and Technology, 2017, 76, 2003-2014.	2.5	14
40	A review of sanitation technologies for flood-prone areas. Journal of Water Sanitation and Hygiene for Development, 2020, 10, 397-412.	1.8	14
41	Challenges for bathing in rivers in terms of compliance with coliform standards. Case study in a large urbanized basin (das Velhas River, Brazil). Water Science and Technology, 2013, 67, 2534-2542.	2.5	12
42	TREATMENT OF SEPTIC TANK SLUDGE IN A VERTICAL FLOW CONSTRUCTED WETLAND SYSTEM. Engenharia Agricola, 2017, 37, 811-819.	0.7	12
43	Performance evaluation of a natural treatment system for small communities, composed of a UASB reactor, maturation ponds (baffled and unbaffled) and a granular rock filter in series. Environmental Technology (United Kingdom), 2018, 39, 490-502.	2.2	12
44	From start-up to heavy clogging: performance evaluation of horizontal subsurface flow constructed wetlands during 10 years of operation. Water Science and Technology, 2019, 79, 1231-1240.	2.5	12
45	Tracer studies and hydraulic behaviour of planted and un-planted vertical-flow constructed wetlands. Water Science and Technology, 2011, 64, 1056-1063.	2.5	11
46	Proposição de um sistema de indicadores de desempenho para avaliação da qualidade dos serviços de esgotamento sanitário. Engenharia Sanitaria E Ambiental, 2013, 18, 313-322.	0.5	11
47	Design of facultative ponds based on uncertainty analysis. Water Science and Technology, 1996, 33, 41-47.	2.5	11
48	Influence of temperature and pH on nitrogen removal in a series of maturation ponds treating anaerobic effluent. Water Science and Technology, 2013, 67, 2241-2248.	2.5	10
49	Influence of the geometric configuration of unplanted horizontal subsurface flow constructed wetlands in the adjustment of parameters of organic matter decay models. Journal of Water Process Engineering, 2018, 22, 123-130.	5.6	10
50	Sodium chloride as a tracer for hydrodynamic characterization of a shallow maturation pond. Water Practice and Technology, 2018, 13, 30-38.	2.0	9
51	Elements for setting up discharge standards in developing countries based on actual wastewater treatment plant performance. Water Science and Technology, 2008, 58, 2001-2008.	2.5	8
52	Difficulties and modifications in the use of available methods for hydraulic conductivity measurements in highly clogged horizontal subsurface flow constructed wetlands. Water Science and Technology, 2017, 76, 1666-1675.	2.5	8
53	Conceptual analysis of the UASB/polishing pond system regarding the removal of surfactants, micropollutants and control of gaseous emissions. Water Science and Technology, 2010, 61, 1211-1219.	2.5	7
54	Performance evaluation of a novel open trickling filter for the post-treatment of anaerobic effluents from small communities. Water Science and Technology, 2013, 67, 2746-2752.	2.5	7

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55	Performance evaluation and spatial sludge distribution at facultative and maturation ponds treating wastewater from an international airport. <i>Water Science and Technology</i> , 2014, 70, 226-233.	2.5	7
56	Estimativa do coeficiente de reaeração da água em canal raso de fundo deslizante. <i>Engenharia Sanitaria E Ambiental</i> , 2015, 20, 79-88.	0.5	7
57	Performance comparison between two equal stabilization ponds operating with and without sludge layer. <i>Water Science and Technology</i> , 2015, 71, 929-937.	2.5	7
58	Field application of a planted fixed bed reactor (PFR) for support media and rhizosphere investigation using undisturbed samples from full-scale constructed wetlands. <i>Water Science and Technology</i> , 2015, 72, 553-560.	2.5	7
59	Performance of the first stage of the French system of vertical flow constructed wetlands with only two units in parallel: influence of pulse time and instantaneous hydraulic loading rate. <i>Water Science and Technology</i> , 2018, 78, 848-859.	2.5	7
60	AVALIAÇÃO DAS CONDIÇÕES HIDRODINÂMICAS DE WETLANDS DE ESCOAMENTO HORIZONTAL SUBSUPERFICIAL (UNIDADES PLANTADA E NÃO PLANTADA). <i>Revista Eletrônica De Gestão E Tecnologias Ambientais</i> , 2013, 1, 213.	0.1	7
61	Determination of capital costs for conventional sewerage systems (collection, transportation and) <i>TJ ETQq1 1 0.784314 rgBT /Overlook</i> 365-374.	1.8	6
62	Upgrading and evaluation of a simple pond system for small communities with simple interventions to reduce land requirements and increase performance. <i>Water Practice and Technology</i> , 2017, 12, 1-11.	2.0	6
63	Performance evaluation of 388 full-scale waste stabilization pond systems with seven different configurations. <i>Water Science and Technology</i> , 2017, 75, 916-927.	2.5	6
64	Reduction of area and influence of the deposit layer in the first stage of a full-scale French system of vertical flow constructed wetlands in a tropical area. <i>Water Science and Technology</i> , 2019, 80, 347-356.	2.5	6
65	Calibration of Poorly Identifiable Systems: Application to Activated Sludge Model. <i>Journal of Environmental Engineering, ASCE</i> , 1994, 120, 625-644.	1.4	5
66	Avaliação de 166 ETES em operação no país, compreendendo diversas tecnologias. Parte 2: influência de fatores de projeto e operação. <i>Engenharia Sanitaria E Ambiental</i> , 2005, 10, 358-368.	0.5	5
67	Análise da confiabilidade de estações de tratamento de esgotos. <i>Engenharia Sanitaria E Ambiental</i> , 2007, 12, 389-398.	0.5	5
68	Investigation of aerobic and anaerobic ammonium-oxidising bacteria presence in a small full-scale wastewater treatment system comprised by UASB reactor and three polishing ponds. <i>Water Science and Technology</i> , 2010, 61, 737-743.	2.5	5
69	Eficiência de lagoas de polimento no pós-tratamento de reator UASB no tratamento de águas residuárias de suinocultura. <i>Arquivo Brasileiro De Medicina Veterinaria E Zootecnia</i> , 2014, 66, 360-366.	0.4	5
70	Nitrogen removal in a shallow maturation pond with sludge accumulated during 10 years of operation in Brazil. <i>Water Science and Technology</i> , 2017, 76, 268-278.	2.5	5
71	Vertical profiling and modelling of <i>Escherichia coli</i> decay in a shallow maturation pond operating in a tropical climate. <i>Environmental Technology (United Kingdom)</i> , 2018, 39, 759-769.	2.2	5
72	Outflow dynamics in a French system of vertical wetlands operating with an extended feeding cycle. <i>Water Science and Technology</i> , 2019, 79, 699-708.	2.5	5

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73	Simple mid-depth transverse baffles to improve bacterial disinfection in a shallow maturation pond – performance evaluation and CFD simulation. Environmental Technology (United Kingdom), 2020, , 1-9.	2.2	5
74	Desempenho tecnológico dos serviços de abastecimento de Água e esgotamento sanitário em quatro municípios de Minas Gerais: uma análise comparativa. Engenharia Sanitaria E Ambiental, 2009, 14, 109-118.	0.5	4
75	UV disinfection of stabilization pond effluent: a feasible alternative for areas with land restriction. Water Science and Technology, 2012, 65, 247-253.	2.5	4
76	Colmatação e desempenho de sistemas alagados construídos de escoamento horizontal subsuperficial ao longo de oito anos de operação. Engenharia Sanitaria E Ambiental, 2018, 23, 1227-1237.	0.5	4
77	Stratification and equalization cycles in shallow maturation ponds with different operational configurations and at different periods of the year. Water Practice and Technology, 2019, 14, 682-694.	2.0	4
78	Influence factors in the adjustment of parameters of the modified first-order kinetics equation used to model constructed wetland systems. Acta Scientiarum - Technology, 2019, 41, 36709.	0.4	4
79	A Critical Analysis of Classical Design Equations for Waste Stabilization Lagoons and Other Wastewater Treatment Systems. Water Environment Research, 1999, 71, 1240-1243.	2.7	3
80	Control Strategies for a Combined Anaerobic (UASB) – Aerobic (Activated Sludge) Wastewater Treatment System. Environmental Technology (United Kingdom), 2005, 26, 1393-1402.	2.2	3
81	Avaliação de desempenho de lagoa de polimento para pós-tratamento de reator anaeróbio de manta de lodo (UASB) no tratamento de Águas residuais de suinocultura. Arquivo Brasileiro De Medicina Veterinaria E Zootecnia, 2009, 61, 1428-1433.	0.4	3
82	A simple field essay for detecting departures from expected performance in small-scale, remote or rural wastewater treatment plants. Water Science and Technology, 2020, 82, 1380-1392.	2.5	3
83	French vertical flow treatment wetlands in a subtropical climate: Characterization of the organic deposit layer and comparison with systems in France. Science of the Total Environment, 2020, 742, 140608.	8.0	3
84	A New Method for the Design of Sequencing Batch Reactors (SBR) using the Concept of the Hindered Settling Velocity of the Sludge. Environmental Technology (United Kingdom), 1998, 19, 1223-1231.	2.2	2
85	Characterisation of pathogenic bacteria in a UASB-polishing pond system using molecular techniques. Water Science and Technology, 2010, 61, 813-819.	2.5	2
86	Avaliação do desempenho de sistemas alagados construídos de escoamento horizontal subsuperficial tratando efluente de reator UASB, com base em quatro anos de monitoramento. Engenharia Sanitaria E Ambiental, 2018, 23, 191-200.	0.5	2
87	Performance of a French system of vertical flow wetlands (first stage) operating with an extended feeding cycle. Water Science and Technology, 2019, 80, 1443-1455.	2.5	2
88	Dynamics of the behaviour of a vertical wetland (French system) operating in warm-climate conditions, evaluated by means of variables continuously measured in situ. Water Science and Technology, 2020, 82, 954-966.	2.5	2
89	Relationships between abiotic and biotic variables in a maturation pond and their influence on E. coli removal. Water Science and Technology, 2021, 84, 2903-2912.	2.5	2
90	A Study on Reaeration in River Cascades. Water Science and Technology, 1987, 19, 757-767.	2.5	1

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91	Standards for Wastewater Treatment in Brazil. Environmental Protection in the European Union, 2008, , 125-132.	0.1	1
92	Enriquecimento de bact�rias anaer�bias oxidadoras de am�nia - anammox. Engenharia Sanitaria E Ambiental, 2010, 15, 205-212.	0.5	1
93	Assessment of classical surface organic loading design equations based on the actual performance of primary and secondary facultative ponds. Water Science and Technology, 2010, 61, 971-977.	2.5	1
94	Open trickling filter: an innovative, cheap and simple form of post-treatment of sanitary effluents from anaerobic reactors in small communities. Journal of Water Sanitation and Hygiene for Development, 2012, 2, 59-67.	1.8	1
95	Kinetics of concentration decay of specific organic matter in UASB reactors operating with and without return of aerobic sludge. Environmental Technology (United Kingdom), 2014, 35, 2046-2054.	2.2	1
96	Sensitivity analysis of non-point sources in a water quality model applied to a dammed low-flow-reach river. Water Science and Technology, 2008, 57, 1295-1300.	2.5	0
97	Avalia��o das unidades de tratamento do lodo em uma ete de lodos ativados convencional submetida a distintas estrat�gias operacionais. Engenharia Sanitaria E Ambiental, 2007, 12, 127-133.	0.5	0
98	Comportamento hidrodin�mico de sistemas alagados constru�dos de escoamento horizontal subsuperficial de diferentes propor��es geom�tricas e tempos de opera��o. Engenharia Sanitaria E Ambiental, 2019, 24, 83-91.	0.5	0