Carlos A. Arias

List of Publications by Citations

83 papers	3,270 citations	29 h-index	56 g-index
85 ext. papers	3,731 ext. citations	5.5 avg, IF	5.37 L-index

#	Paper	IF	Citations
83	The use of vertical flow constructed wetlands for on-site treatment of domestic wastewater: New Danish guidelines. *Ecological Engineering*, **2005**, 25, 491-500	3.9	312
82	Bioenergy potential of Ulva lactuca: biomass yield, methane production and combustion. *Bioresource Technology*, **2011**, 102, 2595-604	11	298
81	Phosphorus removal by sands for use as media in subsurface flow constructed reed beds. *Water Research*, **2001**, 35, 1159-68	12.5	282
80	Phosphorus adsorption maximum of sands for use as media in subsurface flow constructed reed beds as measured by the Langmuir isotherm. *Water Research*, **2003**, 37, 3390-400	12.5	195
79	Removal of pharmaceuticals and personal care products (PPCPs) from urban wastewater in a pilot vertical flow constructed wetland and a sand filter. *Environmental Science & Technology*, **2007**, 41, 8171-7	10.3	194
78	Preliminary screening of small-scale domestic wastewater treatment systems for removal of pharmaceutical and personal care products. *Water Research*, **2009**, 43, 55-62	12.5	175
77	Microbial communities from different types of natural wastewater treatment systems: vertical and horizontal flow constructed wetlands and biofilters. *Water Research*, **2014**, 55, 304-12	12.5	140
76	Can root exudates from emergent wetland plants fuel denitrification in subsurface flow constructed wetland systems?. *Ecological Engineering*, **2013**, 61, 555-563	3.9	134
75	Evaluation of aquatic plants for removing polar microcontaminants: a microcosm experiment. *Chemosphere*, **2012**, 88, 1257-64	8.4	120
74	Occurrence and behavior of emerging contaminants in surface water and a restored wetland. *Chemosphere*, **2012**, 88, 1083-9	8.4	101
73	Filter bed systems treating domestic wastewater in the Nordic countries Performance and reuse of filter media. *Ecological Engineering*, **2010**, 36, 1651-1659	3.9	62
72	Microbial Electrochemical Technologies for Wastewater Treatment: Principles and Evolution from Microbial Fuel Cells to Bioelectrochemical-Based Constructed Wetlands. *Water (Switzerland)*, **2018**, 10, 1128	3	61
71	Removal of the pesticides imazalil and tebuconazole in saturated constructed wetland mesocosms. *Water Research*, **2016**, 91, 126-36	12.5	56
70	Phytoremediation of imazalil and tebuconazole by four emergent wetland plant species in hydroponic medium. *Chemosphere*, **2016**, 148, 459-66	8.4	55
69	Functionality of microbial communities in constructed wetlands used for pesticide remediation: Influence of system design and sampling strategy. *Water Research*, **2017**, 110, 241-251	12.5	53
68	Effects of constructed wetland design on ibuprofen removal - A mesocosm scale study. *Science of the Total Environment*, **2017**, 609, 38-45	10.2	48
67	Rethinking Intensification of Constructed Wetlands as a Green Eco-Technology for Wastewater Treatment. *Environmental Science & Technology*, **2018**, 52, 1693-1694	10.3	47

66	Recycling of treated effluents enhances removal of total nitrogen in vertical flow constructed wetlands. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2005**, 40, 1431-43	2.3	47
65	Enantioselective uptake, translocation and degradation of the chiral pesticides tebuconazole and imazalil by Phragmites australis. *Environmental Pollution*, **2017**, 229, 362-370	9.3	46
64	Removal of the pharmaceuticals ibuprofen and iohexol by four wetland plant species in hydroponic culture: plant uptake and microbial degradation. *Environmental Science and Pollution Research*, **2016**, 23, 2890-8	5.1	45
63	Musk fragrances, DEHP and heavy metals in a 20 years old sludge treatment reed bed system. *Water Research*, **2012**, 46, 3889-96	12.5	41
62	Twenty years experience with constructed wetland systems in Denmark--what did we learn?. *Water Science and Technology*, **2007**, 56, 63-8	2.2	39
61	Impacts of design configuration and plants on the functionality of the microbial community of mesocosm-scale constructed wetlands treating ibuprofen. *Water Research*, **2018**, 131, 228-238	12.5	38
60	Removal of the pesticide tebuconazole in constructed wetlands: Design comparison, influencing factors and modelling. *Environmental Pollution*, **2018**, 233, 71-80	9.3	38
59	Electroactive biofilm-based constructed wetland (EABB-CW): A mesocosm-scale test of an innovative setup for wastewater treatment. *Science of the Total Environment*, **2019**, 659, 796-806	10.2	38
58	Characteristics of biosolids from sludge treatment wetlands for agricultural reuse. *Ecological Engineering*, **2012**, 40, 210-216	3.9	37
57	Vertical flow-constructed wetlands for domestic wastewater treatment under tropical conditions: effect of different design and operational parameters. *Environmental Technology (United Kingdom)*, **2017**, 38, 199-208	2.6	35
56	Ibuprofen and iohexol removal in saturated constructed wetland mesocosms. *Ecological Engineering*, **2017**, 98, 394-402	3.9	32
55	Constructed wetlands and solar-driven disinfection technologies for sustainable wastewater treatment and reclamation in rural India: SWINGS project. *Water Science and Technology*, **2017**, 76, 1474-1489	2.2	26
54	Improved urban stormwater treatment and pollutant removal pathways in amended wet detention ponds. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2012**, 47, 1466-77	2.3	25
53	Microbial community metabolic function in constructed wetland mesocosms treating the pesticides imazalil and tebuconazole. *Ecological Engineering*, **2017**, 98, 378-387	3.9	24
52	Carbon footprint of sludge treatment reed beds. *Ecological Engineering*, **2012**, 44, 298-302	3.9	24
51	New insights into the effects of support matrix on the removal of organic micro-pollutants and the microbial community in constructed wetlands. *Environmental Pollution*, **2018**, 240, 699-708	9.3	23
50	Microbial nitrate removal efficiency in groundwater polluted from agricultural activities with hybrid cork treatment wetlands. *Science of the Total Environment*, **2019**, 653, 723-734	10.2	21
49	Sorption media for stormwater treatment--a laboratory evaluation of five low-cost media for their ability to remove metals and phosphorus from artificial stormwater. *Water Environment Research*, **2012**, 84, 605-16	2.8	19

48	Distribution of metals in fauna, flora and sediments of wet detention ponds and natural shallow lakes. *Ecological Engineering*, **2014**, 66, 43-51	3.9	18
47	Microbial community metabolic profiles in saturated constructed wetlands treating iohexol and ibuprofen. *Science of the Total Environment*, **2019**, 651, 1926-1934	10.2	17
46	Diversity of Aplochiton fishes (Galaxiidea) and the taxonomic resurrection of A. marinus. *PLoS ONE*, **2013**, 8, e71577	3.7	16
45	Hydraulic and hydrological aspects of an evapotranspiration-constructed wetland combined system for household greywater treatment. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2018**, 53, 493-500	2.3	15
44	WETWALL an innovative design concept for the treatment of wastewater at an urban scale109, 205-220		15
43	Pharmaceutical and personal care products in domestic wastewater and their removal in anaerobic treatment systems: Septic tank up flow anaerobic filter.. *Ingenieria E Investigacion*, **2016**, 36, 70-78	0.3	15
42	Cork as a sustainable carbon source for nature-based solutions treating hydroponic wastewaters - Preliminary batch studies. *Science of the Total Environment*, **2019**, 650, 267-276	10.2	15
41	Constructed Wetlands in Latin America and the Caribbean: A Review of Experiences during the Last Decade. *Water (Switzerland)*, **2020**, 12, 1744	3	14
40	Novel bioelectrochemical strategies for domesticating the electron flow in constructed wetlands. *Science of the Total Environment*, **2020**, 735, 139522	10.2	14
39	Comparison of removal efficiency of pathogenic microbes in four types of wastewater treatment systems in Denmark. *Ecological Engineering*, **2018**, 124, 1-6	3.9	14
38	Characterization of Hydrocarbon-Degrading Bacteria in Constructed Wetland Microcosms Used to Treat Crude Oil Polluted Water. *Bulletin of Environmental Contamination and Toxicology*, **2019**, 102, 358-364	2.7	13
37	Proposal of competencies for engineering education to develop water infrastructure based on Nature-Based Solutions in the urban context. *Journal of Cleaner Production*, **2020**, 265, 121717	10.3	12
36	Microbial density and diversity in constructed wetland systems and the relation to pollutant removal efficiency. *Water Science and Technology*, **2016**, 73, 679-86	2.2	12
35	Community level physiological profiling of microbial electrochemical-based constructed wetlands. *Science of the Total Environment*, **2020**, 721, 137761	10.2	11
34	Application of horizontal flow constructed wetland and solar driven disinfection technologies for wastewater treatment in India. *Water Practice and Technology*, **2018**, 13, 469-480	0.9	11
33	Modeling the eutrophication of two mature planted stormwater ponds for runoff control. *Ecological Engineering*, **2013**, 61, 601-613	3.9	10
32	Disinfection for decentralized wastewater reuse in rural areas through wetlands and solar driven onsite chlorination. *Science of the Total Environment*, **2020**, 721, 137595	10.2	9
31	Elimination and accumulation of polycyclic aromatic hydrocarbons in urban stormwater wet detention ponds. *Water Science and Technology*, **2011**, 64, 818-25	2.2	9

30	Hydrolytic anaerobic reactor and aerated constructed wetland systems for municipal wastewater treatment - HIGHWET project. *Environmental Technology (United Kingdom)*, **2017**, 38, 209-219	2.6	8
29	Potential Application of Chilean Natural Zeolite as a Support Medium in Treatment Wetlands for Removing Ammonium and Phosphate from Wastewater. *Water (Switzerland)*, **2020**, 12, 1156	3	4
28	Design and performance evaluation of a highly loaded aerated treatment wetland managing effluents from a food processing industry in Denmark. *Water Practice and Technology*, **2015**, 10, 644-651	0.9	4
27	Nature-based solutions coupled with advanced technologies: An opportunity for decentralized water reuse in cities. *Journal of Cleaner Production*, **2022**, 340, 130660	10.3	4
26	Constructed Wetlands for Industrial Wastewater Treatment and Removal of Nutrients. *Advances in Environmental Engineering and Green Technologies Book Series*, **2017**, 202-230	0.4	4
25	Growth dynamic of three different white willow clones used in a zero-discharge wastewater treatment system in the Sub-Mediterranean region - an early evaluation91, 260-267		4
24	Performance Comparison of Vertical Flow Treatment Wetlands Planted with the Ornamental Plant Zantedeschia aethiopica Operated under Arid and Mediterranean Climate Conditions. *Water (Switzerland)*, **2021**, 13, 1478	3	4
23	Crushed Autoclaved Aerated Concrete (CAAC), a Potential Reactive Filter Medium for Enhancing Phosphorus Removal in Nature-Based Solutions—Preliminary Batch Studies. *Water (Switzerland)*, **2019**, 11, 1442	3	3
22	Microbial Electrochemical Technologies for Wastewater Treatment: Principles and Evolution from Microbial Fuel Cells to Bioelectrochemical-Based Constructed Wetlands		3
21	Microbial Community Function in Electroactive Biofilm-based Constructed Wetlands		3
20	Evaluation of Bed Depth Reduction, Media Change, and Partial Saturation as Combined Strategies to Modify in Vertical Treatment Wetlands. *International Journal of Environmental Research and Public Health*, **2021**, 18,	4.6	3
19	Reuse of Treated Municipal Wastewater from Constructed Wetlands for Cut Flowers Irrigation in Aeroponic Cultivation. *Ingenieria Y Universidad*,24,	0.6	2
18	TIC para la determinación de los parámetros operacionales de humedales construidos diseñados para el tratamiento de aguas contaminadas por nitratos. *Revista Ingenierías Universidad De Medellín*, **2016**, 15, 53-70	0.1	2
17	Relationship between Polycyclic Aromatic Hydrocarbons in Sediments and Invertebrates of Natural and Artificial Stormwater Retention Ponds. *Water (Switzerland)*, **2020**, 12, 2020	3	2
16	Phosphorus Recovery from Wastewater: Bioavailability of P Bound to Calcareous Material for Maize (Zea Mays L.) Growth. *Recycling*, **2021**, 6, 25	3.2	2
15	Nature based solutions for winery wastewater valorisation. *Ecological Engineering*, **2021**, 169, 106311	3.9	2
14	Influence of water quality parameters on the removal of triclosan and ibuprofen in vertical subsurface flow constructed wetlands using multivariate analysis. *Environmental Technology and Innovation*, **2021**, 24, 101846	7	2
13	Methodologies for the analysis of pesticides and pharmaceuticals in sediments and plant tissue. *Analytical Methods*, **2018**, 10, 3791-3803	3.2	1

12	Constructed Wetlands for Industrial Wastewater Treatment and Removal of Nutrients **2020**, 559-587		1
11	Physicochemical and Biological Contribution of Native Macrophytes in the Constructed Wetlands to Treat Municipal Wastewater: A Pilot-Scale Experiment in a Sub-Tropical Climate Region. *Recycling*, **2022**, 7, 8	3.2	1
10	Microbial Electrochemically Assisted Treatment Wetlands: Current Flow Density as a Performance Indicator in Real-Scale Systems in Mediterranean and Northern European Locations.. *Frontiers in Microbiology*, **2022**, 13, 843135	5.7	1
9	Potential Use of Plant Biomass from Treatment Wetland Systems for Producing Biofuels through a Biocrude Green-Biorefining Platform. *Energies*, **2021**, 14, 8157	3.1	1
8	The Effect of Sol-Gel Coatings on the Phosphorus (P) Adsorption Capacity of Calcareous Materials for Use in Water Treatment. *Water (Switzerland)*, **2022**, 14, 3	3	1
7	Wastewater-Fertigated Short-Rotation Coppice, a Combined Scheme of Wastewater Treatment and Biomass Production: A State-of-the-Art Review. *Forests*, **2022**, 13, 810	2.8	1
6	Preface: Wetland ecosystems: functions and use in a changing climate. *Hydrobiologia*, **2021**, 848, 3255	2.4	0
5	Effect of intermittent induced aeration on nitrogen removal and denitrifying-bacterial community structure in Cork and gravel vertical flow pilot-scale treatment wetlands. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2021**, 56, 1121-1130	2.3	0
4	Reclamation of Treated Wastewater for Irrigation in Chile: Perspectives of the Current State and Challenges. *Water (Switzerland)*, **2022**, 14, 627	3	0
3	REAGRITECH: A Relevant Model of Sustainable Water Management. *Advances in Science, Technology and Innovation*, **2018**, 61-63	0.3	
2	Sustained Phosphorus Removal by Calcareous Materials in Long-Term (Two Years) Column Experiment. *Water (Switzerland)*, **2022**, 14, 682	3	
1	Enhanced degradation of hydrocarbons in constructed wetlands aided with nutrients, surfactant, and aeration.. *International Journal of Phytoremediation*, **2021**, 1-10	3.9	