Edson Luis Silva

List of Publications by Citations

98 papers	1,908 citations	27 h-index	38 g-index
104 ext. papers	2,357 ext. citations	6 avg, IF	5.55 L-index

#	Paper	IF	Citations
98	Hydrothermal processing of biomass for anaerobic digestion A review. *Renewable and Sustainable Energy Reviews*, **2018**, 98, 108-124	16.2	91
97	Anaerobic fluidized bed reactor with expanded clay as support for hydrogen production through dark fermentation of glucose. *International Journal of Hydrogen Energy*, **2009**, 34, 783-790	6.7	87
96	Biohydrogen production in anaerobic fluidized bed reactors: Effect of support material and hydraulic retention time. *International Journal of Hydrogen Energy*, **2010**, 35, 3379-3388	6.7	80
95	Hydrogen production from cheese whey with ethanol-type fermentation: effect of hydraulic retention time on the microbial community composition. *Bioresource Technology*, **2014**, 161, 10-19	11	67
94	Effect of substrate concentration on dark fermentation hydrogen production using an anaerobic fluidized bed reactor. *Applied Biochemistry and Biotechnology*, **2012**, 166, 1248-63	3.2	56
93	Anaerobic degradation of linear alkylbenzene sulfonate (LAS) in fluidized bed reactor by microbial consortia in different support materials. *Bioresource Technology*, **2010**, 101, 5112-22	11	54
92	Organic loading rate impact on biohydrogen production and microbial communities at anaerobic fluidized thermophilic bed reactors treating sugarcane stillage. *Bioresource Technology*, **2014**, 159, 55-63	11	52
91	Performance evaluation of packing materials in the removal of hydrogen sulphide in gas-phase biofilters: Polyurethane foam, sugarcane bagasse, and coconut fibre. *Chemical Engineering Journal*, **2010**, 158, 441-450	14.7	50
90	Hydrogen production from diluted and raw sugarcane vinasse under thermophilic anaerobic conditions. *International Journal of Hydrogen Energy*, **2014**, 39, 9599-9610	6.7	49
89	Long-term stability of hydrogen and organic acids production in an anaerobic fluidized-bed reactor using heat treated anaerobic sludge inoculum. *International Journal of Hydrogen Energy*, **2009**, 34, 3679-3688	6.7	49
88	Microbial characterization and degradation of linear alkylbenzene sulfonate in an anaerobic reactor treating wastewater containing soap powder. *Bioresource Technology*, **2014**, 167, 316-23	11	48
87	Continuous thermophilic hydrogen production and microbial community analysis from anaerobic digestion of diluted sugar cane stillage. *International Journal of Hydrogen Energy*, **2014**, 39, 9000-9011	6.7	45
86	Different ratios of carbon sources in the fermentation of cheese whey and glucose as substrates for hydrogen and ethanol production in continuous reactors. *International Journal of Hydrogen Energy*, **2014**, 39, 1288-1296	6.7	45
85	Evaluation of hydrogen and methane production from sugarcane vinasse in an anaerobic fluidized bed reactor. *International Journal of Hydrogen Energy*, **2015**, 40, 8498-8509	6.7	45
84	Hydrogen and ethanol production in anaerobic fluidized bed reactors: Performance evaluation for three support materials under different operating conditions. *Biochemical Engineering Journal*, **2012**, 61, 59-65	4.2	44
83	Effect of inoculum concentration, pH, light intensity and lighting regime on hydrogen production by phototrophic microbial consortium. *Renewable Energy*, **2015**, 75, 1-7	8.1	41
82	Performance evaluation and phylogenetic characterization of anaerobic fluidized bed reactors using ground tire and pet as support materials for biohydrogen production. *Bioresource Technology*, **2011**, 102, 3840-7	11	41

81	Continuous thermophilic hydrogen production from cheese whey powder solution in an anaerobic fluidized bed reactor: Effect of hydraulic retention time and initial substrate concentration. *International Journal of Hydrogen Energy*, **2017**, 42, 4848-4860	6.7	35
80	Hydrogen, alcohols and volatile fatty acids from the co-digestion of coffee waste (coffee pulp, husk, and processing wastewater) by applying autochthonous microorganisms. *International Journal of Hydrogen Energy*, **2019**, 44, 21434-21450	6.7	34
79	Performance and composition of bacterial communities in anaerobic fluidized bed reactors for hydrogen production: Effects of organic loading rate and alkalinity. *International Journal of Hydrogen Energy*, **2012**, 37, 16925-16934	6.7	34
78	Influence of organic loading rate on the anaerobic treatment of sugarcane vinasse and biog production in fluidized bed reactor. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2013**, 48, 1707-16	2.3	34
77	Effects of hydraulic retention time, co-substrate and nitrogen source on laundry wastewater anionic surfactant degradation in fluidized bed reactors. *Bioresource Technology*, **2017**, 224, 246-254	11	32
76	Degradation of high concentrations of nonionic surfactant (linear alcohol ethoxylate) in an anaerobic fluidized bed reactor. *Science of the Total Environment*, **2014**, 481, 121-8	10.2	31
75	Characterization and antimicrobial activity of lactic acid bacteria from fermentative bioreactors during hydrogen production using cassava processing wastewater. *Chemical Engineering Journal*, **2016**, 284, 1-9	14.7	30
74	Optimization of hydrogen and organic acids productions with autochthonous and allochthonous bacteria from sugarcane bagasse in batch reactors. *Journal of Environmental Management*, **2018**, 223, 952-963	7.9	30
73	Effect of upflow velocity and hydraulic retention time in anaerobic fluidized-bed reactors used for hydrogen production. *Chemical Engineering Journal*, **2011**, 172, 28-36	14.7	28
72	Sequential fermentative and phototrophic system for hydrogen production: An approach for Brazilian alcohol distillery wastewater. *International Journal of Hydrogen Energy*, **2015**, 40, 9642-9655	6.7	27
71	Role of homo-and heterofermentative lactic acid bacteria on hydrogen-producing reactors operated with cheese whey wastewater. *International Journal of Hydrogen Energy*, **2015**, 40, 8650-8660	6.7	25
70	Evaluation of bacterial community from anaerobic fluidized bed reactor for the removal of linear alkylbenzene sulfonate from laundry wastewater by 454-pyrosequence. *Ecological Engineering*, **2015**, 82, 231-240	3.9	24
69	Bacillus sp. isolated from banana waste and analysis of metabolic pathways in acidogenic systems in hydrogen production. *Journal of Environmental Management*, **2019**, 247, 178-186	7.9	23
68	Metabolic routes involved in the removal of linear alkylbenzene sulfonate (LAS) employing linear alcohol ethoxylated and ethanol as co-substrates in enlarged scale fluidized bed reactor. *Science of the Total Environment*, **2018**, 640-641, 1411-1423	10.2	22
67	Continuous hydrogen production from cofermentation of sugarcane vinasse and cheese whey in a thermophilic anaerobic fluidized bed reactor. *International Journal of Hydrogen Energy*, **2018**, 43, 13081-13089	6.7	22
66	Production of H(2) from cellulose by rumen microorganisms: effects of inocula pre-treatment and enzymatic hydrolysis. *Biotechnology Letters*, **2014**, 36, 537-46	3	21
65	Metagenomic analysis and optimization of hydrogen production from sugarcane bagasse. *Biomass and Bioenergy*, **2018**, 117, 78-85	5.3	19
64	Hydrogen production from sugarcane juice in expanded granular sludge bed reactors under mesophilic conditions: The role of homoacetogenesis and lactic acid production. *Industrial Crops and Products*, **2019**, 138, 111586	5.9	19

63	HRT control as a strategy to enhance continuous hydrogen production from sugarcane juice under mesophilic and thermophilic conditions in AFBRs. *International Journal of Hydrogen Energy*, **2019**, 44, 19719-19729	6.7	18
62	The effects of seed sludge and hydraulic retention time on the production of hydrogen from a cassava processing wastewater and glucose mixture in an anaerobic fluidized bed reactor. *International Journal of Hydrogen Energy*, **2014**, 39, 13118-13127	6.7	18
61	Thermophilic hydrogen and methane production from sugarcane stillage in two-stage anaerobic fluidized bed reactors. *International Journal of Hydrogen Energy*, **2020**, 45, 5239-5251	6.7	18
60	Selection of metabolic pathways for continuous hydrogen production under thermophilic and mesophilic temperature conditions in anaerobic fluidized bed reactors. *International Journal of Hydrogen Energy*, **2018**, 43, 18908-18917	6.7	18
59	Continuous Hydrogen Production from Agricultural Wastewaters at Thermophilic and Hyperthermophilic Temperatures. *Applied Biochemistry and Biotechnology*, **2017**, 182, 846-869	3.2	17
58	Statistical optimization of H2, 1,3-propanediol and propionic acid production from crude glycerol using an anaerobic fluidized bed reactor: Interaction effects of substrate concentration and hydraulic retention time. *Biomass and Bioenergy*, **2020**, 138, 105575	5.3	17
57	Optimization of key factors affecting hydrogen production from coffee waste using factorial design and metagenomic analysis of the microbial community. *International Journal of Hydrogen Energy*, **2020**, 45, 4205-4222	6.7	17
56	Influence of C/P and C/N ratios and microbial characterization in hydrogen and ethanol production in an anaerobic fluidized bed reactor. *International Journal of Hydrogen Energy*, **2017**, 42, 9600-9610	6.7	14
55	Co-Fermentation of Cheese Whey and Crude Glycerol in EGSB Reactor as a Strategy to Enhance Continuous Hydrogen and Propionic Acid Production. *Applied Biochemistry and Biotechnology*, **2017**, 183, 712-728	3.2	14
54	Design and optimization of hydrogen production from hydrothermally pretreated sugarcane bagasse using response surface methodology. *Water Science and Technology*, **2017**, 76, 95-105	2.2	14
53	Valorization of the Crude Glycerol for Propionic Acid Production Using an Anaerobic Fluidized Bed Reactor with Grounded Tires as Support Material. *Applied Biochemistry and Biotechnology*, **2018**, 186, 400-413	3.2	14
52	Experimental design and syntrophic microbial pathways for biofuel production from sugarcane bagasse under thermophilic condition. *Renewable Energy*, **2019**, 140, 852-861	8.1	13
51	Metagenomic analysis of autochthonous microbial biomass from banana waste: Screening design of factors that affect hydrogen production. *Biomass and Bioenergy*, **2020**, 138, 105573	5.3	13
50	An alternative for value aggregation to the sugarcane chain: Biohydrogen and volatile fatty acids production from sugarcane molasses in mesophilic expanded granular sludge bed reactors. *Fuel*, **2020**, 260, 116419	7.1	13
49	Simultaneous determination of anionic and nonionic surfactants in commercial laundry wastewater and anaerobic fluidized bed reactor effluent by online column-switching liquid chromatography/tandem mass spectrometry. *Science of the Total Environment*, **2017**, 580, 1120-1128	10.2	12
48	The Biological Hydrogen Production Potential of Agroindustrial Residues. *Waste and Biomass Valorization*, **2015**, 6, 273-280	3.2	11
47	Bioconversion of waste office paper to hydrogen using pretreated rumen fluid inoculum. *Bioprocess and Biosystems Engineering*, **2016**, 39, 1887-1897	3.7	11
46	Kinetics of methane production and biodegradation of linear alkylbenzene sulfonate from laundry wastewater. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2016**, 51, 1288-1302	2.3	11

45	Enhancement of Clostridium butyricum hydrogen production by iron and nickel nanoparticles: Effects on hydA expression. *International Journal of Hydrogen Energy*, **2020**, 45, 28447-28461	6.7	11
44	Controlling methane and hydrogen production from cheese whey in an EGSB reactor by changing the HRT. *Bioprocess and Biosystems Engineering*, **2020**, 43, 673-684	3.7	10
43	Methane Production from Hydrogen Peroxide Assisted Hydrothermal Pretreatment of Solid Fraction Sugarcane Bagasse. *Waste and Biomass Valorization*, **2020**, 11, 31-50	3.2	10
42	Improving the hydrogen production from coffee waste through hydrothermal pretreatment, co-digestion and microbial consortium bioaugmentation. *Biomass and Bioenergy*, **2020**, 137, 105551	5.3	9
41	Anaerobic digestion of vinasse in fluidized bed reactors: Process robustness between two-stage thermophilic-thermophilic and thermophilic-mesophilic systems. *Journal of Cleaner Production*, **2021**, 314, 128066	10.3	9
40	4-Nonylphenol degradation changes microbial community of scale-up Anaerobic Fluidized Bed Reactor. *Journal of Environmental Management*, **2020**, 267, 110575	7.9	8
39	Simultaneous hydrogen and ethanol production in a thermophilic AFBR: a comparative approach between cellulosic hydrolysate single fermentation and the fermentation of glucose and xylose as co-substrates. *Cellulose*, **2020**, 27, 2599-2612	5.5	8
38	The influence of upflow velocity and hydraulic retention time changes on taxonomic and functional characterization in Fluidized Bed Reactor treating commercial laundry wastewater in co-digestion with domestic sewage. *Biodegradation*, **2020**, 31, 73-89	4.1	8
37	Simultaneous removal of phenol and nitrate in an anoxic fluidized bed reactor. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2013**, 48, 581-91	2.3	8
36	Microbial community analyses by high-throughput sequencing of rumen microorganisms fermenting office paper in mesophilic and thermophilic lysimeters. *Chemical Engineering Research and Design*, **2020**, 136, 182-193	5.5	8
35	Influence of Sucrose on the Diversity of Bacteria Involved in Nonionic Surfactant Degradation in Fluidized Bed Reactor. *Water, Air, and Soil Pollution*, **2017**, 228, 1	2.6	7
34	Improving EGSB reactor performance for simultaneous bioenergy and organic acid production from cheese whey via continuous biological H production. *Biotechnology Letters*, **2017**, 39, 983-991	3	7
33	Simultaneous coproduction of hydrogen and ethanol in anaerobic packed-bed reactors. *BioMed Research International*, **2014**, 2014, 921291	3	7
32	Improved dark fermentation of cane molasses in mesophilic and thermophilic anaerobic fluidized bed reactors by selecting operational conditions. *International Journal of Energy Research*, **2020**, 44, 10442-10452	4.5	7
31	Enzymatic routes to hydrogen and organic acids production from banana waste fermentation by autochthonous bacteria: Optimization of pH and temperature. *International Journal of Hydrogen Energy*, **2021**, 46, 8454-8468	6.7	7
30	Identification of Anionic and Nonionic Surfactant and Recalcitrants Compounds in Commercial Laundry Wastewater by GC-MS Analysis After Anaerobic Fluidized Bed Reactor Treatment. *Water, Air, and Soil Pollution*, **2019**, 230, 1	2.6	6
29	Screening design of nutritional and physicochemical parameters on bio-hydrogen and volatile fatty acids production from Citrus Peel Waste in batch reactors. *International Journal of Hydrogen Energy*, **2021**, 46, 7794-7809	6.7	6
28	Optimized 1,3-propanediol production from crude glycerol using mixed cultures in batch and continuous reactors. *Bioprocess and Biosystems Engineering*, **2018**, 41, 1807-1816	3.7	6

27	Phenol Biodegradation by Pseudomonas putida in an Airlift Reactor: Assessment of Kinetic, Hydrodynamic, and Mass Transfer Parameters. *Water, Air, and Soil Pollution*, **2017**, 228, 1	2.6	5
26	Dynamics and response of microbial diversity to nutritional conditions in denitrifying bioreactor for linear alkylbenzene sulfonate removal. *Journal of Environmental Management*, **2020**, 263, 110387	7.9	5
25	Biodegradation of linear alkylbenzene sulfonate in commercial laundry wastewater by an anaerobic fluidized bed reactor. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2015**, 50, 946-57	2.3	5
24	Bioconversion of pretreated sugarcane vinasse into hydrogen: new perspectives to solve one of the greatest issues of the sugarcane biorefinery. *Biomass Conversion and Biorefinery*, **2020**, 1	2.3	5
23	Screening and Bioprospecting of Anaerobic Consortia for Biofuel Production Enhancement from Sugarcane Bagasse. *Applied Biochemistry and Biotechnology*, **2020**, 190, 232-251	3.2	5
22	Homoacetogenesis: New insights into controlling this unsolved challenge by selecting the optimal C/N ratio, C/P ratio and hydraulic retention time. *Chemical Engineering Research and Design*, **2021**, 145, 273-284	5.5	5
21	Bioremoval of Surfactant from Laundry Wastewater in Optimized Condition by Anoxic Reactors. *Water, Air, and Soil Pollution*, **2017**, 228, 1	2.6	4
20	Influence of linear alkylbenzene sulfonate and ethanol on the degradation kinetics of domestic sewage in co-digestion with commercial laundry wastewater. *Bioprocess and Biosystems Engineering* , **2019**, 42, 1547-1558	3.7	4
19	Effects of the Organic-Loading Rate on the Performance of an Anaerobic Fluidized-Bed Reactor Treating Synthetic Wastewater Containing Phenol. *Journal of Environmental Engineering, ASCE*, **2015**, 141, 04015022	2	4
18	Statistical optimization of methane production from brewery spent grain: Interaction effects of temperature and substrate concentration. *Journal of Environmental Management*, **2021**, 288, 112363	7.9	4
17	Review of Continuous Fermentative Hydrogen-Producing Bioreactors from Complex Wastewater **2017**,		3
16	A new side-looking at the dark fermentation of sugarcane vinasse: Improving the carboxylates production in mesophilic EGSB by selection of the hydraulic retention time and substrate concentration. *International Journal of Hydrogen Energy*, **2021**, 46, 12758-12770	6.7	3
15	Microbial and functional characterization of an allochthonous consortium applied to hydrogen production from Citrus Peel Waste in batch reactor in optimized conditions. *Journal of Environmental Management*, **2021**, 291, 112631	7.9	3
14	Bioaugmentation with Enterococcus casseliflavus: A Hydrogen-Producing Strain Isolated from Citrus Peel Waste. *Waste and Biomass Valorization*, **2021**, 12, 895-911	3.2	2
13	Influence of ethanol and nitrate on ibuprofen removal in batch reactors under denitrifying conditions. *Chemical Engineering Research and Design*, **2022**, 160, 297-309	5.5	2
12	Potential methanogenic and degradation of nonylphenol ethoxylate from domestic sewage: unraveling the essential roles of nutritional conditions and microbial community.. *Environmental Technology (United Kingdom)*, **2021**, 1-28	2.6	1
11	New Insights into Controlling Homoacetogenesis in the Co-digestion of Coffee Waste: Effect of Operational Conditions and Characterization of Microbial Communities. *Applied Biochemistry and Biotechnology*, **2021**, 1	3.2	1
10	Metataxonomic characterization of bacterial and archaeal community involved in hydrogen and methane production from citrus peel waste (Citrus sinensis L. Osbeck) in batch reactors. *Biomass and Bioenergy*, **2021**, 149, 106091	5.3	1

9	Anaerobic Biodegradation of Biodiesel Industry Wastewater in Mesophilic and Thermophilic Fluidized Bed Reactors: Enhancing Treatment and Methane Recovery. *Applied Biochemistry and Biotechnology*, **2021**, 193, 3336-3350	3.2	1
8	Dissecting the role of heterogeneity and hydrothermal pretreatment of sugarcane bagasse in metabolic pathways for biofuels production. *Industrial Crops and Products*, **2021**, 160, 113120	5.9	1
7	One waste and two products: choosing the best operational temperature and hydraulic retention time to recover hydrogen or 1,3-propanediol from glycerol fermentation. *Bioprocess and Biosystems Engineering*, **2021**, 44, 2491-2502	3.7	1
6	Methane Production Using Brewery Spent Grain: Optimal Hydrothermolysis, Fermentation of Waste and Role of Microbial Populations. *Waste and Biomass Valorization*,1	3.2	1
5	Optimization of Key Factors Affecting Hydrogen and Ethanol Production from Xylose by Thermoanaerobacterium calidifontis VCS1 Isolated from Vinasse Treatment Sludge. *Waste and Biomass Valorization*,1	3.2	0
4	Enhanced fermentative production of 1,3 propanediol by employing ethanol industry wastewater. *Bioresource Technology Reports*, **2021**, 16, 100865	4.1	0
3	Bioprospecting Sulfuric Acid Assisted Hydrothermal Pretreatment of Sugarcane Bagasse and Microbial Community Structure for Methane Production. *Bioenergy Research*,1	3.1	0
2	Microbial and functional characterization of granulated sludge from full-scale UASB thermophilic reactor applied to sugarcane vinasse treatment.. *Environmental Technology (United Kingdom)*, **2022**, 1-42	2.6	0
1	Scale-up and energy estimations of single- and two-stage vinasse anaerobic digestion systems for hydrogen and methane production. *Journal of Cleaner Production*, **2022**, 349, 131459	10.3	0