Lise Appels

List of Publications by Year in Descending Order

73 papers	5,167 citations	26 h-index	71 g-index
77 ext. papers	5,894 ext. citations	9.3 avg, IF	5.84 L-index

#	Paper	IF	Citations
73	Role of carrier characteristics affecting microbial density and population in enhanced nitrogen and phosphorus removal from wastewater. *Journal of Environmental Management*, **2022**, 302, 113976	7.9	1
72	Engineered nanomaterials in microbial fuel cells □Recent developments, sustainability aspects, and future outlook. *Fuel*, **2022**, 310, 122347	7.1	4
71	Hydrogen-enriched natural gas in a decarbonization perspective. *Fuel*, **2022**, 318, 123680	7.1	1
70	Kinetics and mechanisms of the carbamazepine degradation in aqueous media using novel iodate-assisted photochemical and photocatalytic systems.. *Science of the Total Environment*, **2022**, 153871	10.2	2
69	ZnO/□Fe2O3/Bentonite: An Efficient Solar-Light Active Magnetic Photocatalyst for the Degradation of Pharmaceutical Active Compounds. *Molecules*, **2022**, 27, 3050	4.8	1
68	Adsorption of acid fuchsine dye from wastewater by Mg-ferrite particles. *Journal of Environmental Management*, **2022**, 317, 115427	7.9	1
67	Performance assessment of ultrasonic sludge disintegration in activated sludge wastewater treatment plants under nutrient-deficient conditions. *Chemical Engineering Journal*, **2021**, 431, 133979	14.7	1
66	Indicators for resource recovery monitoring within the circular economy model implementation in the wastewater sector.. *Journal of Environmental Management*, **2021**, 304, 114261	7.9	9
65	Low temperature Moving Bed Bioreactor denitrification as mitigation measure to reduce agricultural nitrate losses. *Science of the Total Environment*, **2021**, 152110	10.2	0
64	Dairy Manure Digestate Age Increases Ultrasound Disintegration Efficiency at Low Specific Energies. *Energies*, **2021**, 14, 1640	3.1	1
63	Advances in rigid porous high temperature filters. *Renewable and Sustainable Energy Reviews*, **2021**, 139, 110713	16.2	15
62	Ultrasonication affects the bio-accessibility of primary dairy cow manure digestate for secondary post-digestion. *Fuel*, **2021**, 291, 120140	7.1	4
61	Pilot-scale evaluation of ozone as a polishing step for the removal of nonylphenol from tank truck cleaning wastewater. *Journal of Environmental Management*, **2021**, 288, 112396	7.9	0
60	Thermo-chemical water splitting: Selection of priority reversible redox reactions by multi-attribute decision making. *Renewable Energy*, **2021**, 170, 800-810	8.1	7
59	A critical review of ammonia recovery from anaerobic digestate of organic wastes via stripping. *Renewable and Sustainable Energy Reviews*, **2021**, 143, 110903	16.2	13
58	Synergistic effects of the combined use of ozone and sodium percarbonate for the oxidative degradation of dichlorvos. *Journal of Water Process Engineering*, **2021**, 39, 101721	6.7	2
57	Reviewing the thermo-chemical recycling of waste polyurethane foam. *Journal of Environmental Management*, **2021**, 278, 111527	7.9	22

56	The Need to Accurately Define and Measure the Properties of Particles. *Standards*, **2021**, 1, 19-38		2
55	Nanostructured materials via green sonochemical routes - Sustainability aspects. *Chemosphere*, **2021**, 276, 130146	8.4	11
54	Efficiency and mechanism of 2,4-dichlorophenol degradation by the UV/IO process. *Science of the Total Environment*, **2021**, 782, 146781	10.2	8
53	Biochar in water and wastewater treatment - a sustainability assessment. *Chemical Engineering Journal*, **2021**, 420, 129946	14.7	33
52	Behavior of trace elements and micronutrients in manure digestate during ozone treatment. *Chemosphere*, **2020**, 252, 126477	8.4	4
51	Influence of electrochemical advanced oxidation on the long-term operation of an Upflow Anaerobic Sludge Blanket (UASB) reactor treating 4-chlorophenol containing wastewater. *Renewable Energy*, **2020**, 159, 683-692	8.1	2
50	Ultrasound-assisted digestate treatment of manure digestate for increased biogas production in small pilot scale anaerobic digesters. *Renewable Energy*, **2020**, 152, 664-673	8.1	5
49	Simultaneous production of 5-hydroxymethylfurfural and furfural from bamboo (Phyllostachys nigra Boryana) in a biphasic reaction system. *Chemical Engineering Journal*, **2020**, 386, 123957	14.7	18
48	Prospects and perspectives foster enhanced research on bio-aviation fuels. *Journal of Environmental Management*, **2020**, 274, 111214	7.9	20
47	European bamboo fibres for composites applications, study on the seasonal influence. *Industrial Crops and Products*, **2019**, 133, 304-316	5.9	16
46	Bamboo fibres sourced from three global locations: A microstructural, mechanical and chemical composition study. *Journal of Reinforced Plastics and Composites*, **2019**, 38, 397-412	2.9	11
45	Combining microwave irradiation with sodium citrate addition improves the pre-treatment on anaerobic digestion of excess sewage sludge. *Journal of Environmental Management*, **2018**, 213, 271-278	7.9	27
44	Isolation and screening of bacterial isolates from wastewater treatment plants to decolorize azo dyes. *Journal of Bioscience and Bioengineering*, **2018**, 125, 448-456	3.3	62
43	Optimization of hydrothermal conversion of bamboo (Phyllostachys aureosulcata) to levulinic acid via response surface methodology. *Journal of Environmental Management*, **2018**, 219, 95-102	7.9	16
42	A microwave-assisted process for the in-situ production of 5-hydroxymethylfurfural and furfural from lignocellulosic polysaccharides in a biphasic reaction system. *Journal of Cleaner Production*, **2018**, 187, 1014-1024	10.3	55
41	Production of Levulinic Acid and Furfural by Microwave-Assisted Hydrolysis from Model Compounds: Effect of Temperature, Acid Concentration and Reaction Time. *Waste and Biomass Valorization*, **2018**, 9, 343-355	3.2	13
40	Effect of digestate disintegration on anaerobic digestion of organic waste. *Bioresource Technology*, **2018**, 268, 568-576	11	26
39	Microwave effects in the dilute acid hydrolysis of cellulose to 5-hydroxymethylfurfural. *Scientific Reports*, **2018**, 8, 7719	4.9	50

38	Selective electrochemical degradation of 4-chlorophenol at a Ti/RuO-IrO anode in chloride rich wastewater. *Journal of Environmental Management*, **2017**, 190, 61-71	7.9	16
37	Evaluation of the effects of low energetic microwave irradiation on anaerobic digestion. *Journal of Environmental Management*, **2017**, 202, 69-83	7.9	6
36	Decolorization of reactive azo dyes using a sequential chemical and activated sludge treatment. *Journal of Bioscience and Bioengineering*, **2017**, 124, 668-673	3.3	34
35	Assessing the composition of microbial communities in textile wastewater treatment plants in comparison with municipal wastewater treatment plants. *MicrobiologyOpen*, **2017**, 6, e00413	3.4	28
34	Microbial community dynamics linked to enhanced substrate availability and biogas production of electrokinetically pre-treated waste activated sludge. *Bioresource Technology*, **2016**, 218, 761-70	11	10
33	Microwave and ultrasound pre-treatments influence microbial community structure and digester performance in anaerobic digestion of waste activated sludge. *Applied Microbiology and Biotechnology*, **2016**, 100, 5339-52	5.7	27
32	The production of bio-energy by microbial (biogas through anaerobic digestion) or thermal (pyrolysis) processes. *Renewable Energy*, **2016**, 96, 1055	8.1	7
31	Siloxane removal and sludge disintegration using thermo-alkaline treatments with air stripping prior to anaerobic sludge digestion. *Energy Conversion and Management*, **2015**, 96, 384-391	10.6	11
30	Challenges and opportunities in improving the production of bio-ethanol. *Progress in Energy and Combustion Science*, **2015**, 47, 60-88	33.6	373
29	Energy potential for combustion and anaerobic digestion of biomass from low-input high-diversity systems in conservation areas. *GCB Bioenergy*, **2015**, 7, 888-898	5.6	26
28	Biomass of invasive plant species as a potential feedstock for bioenergy production. *Biofuels, Bioproducts and Biorefining*, **2015**, 9, 273-282	5.3	26
27	Ultrasonic Treatment of Waste Sludge: A Review on Mechanisms and Applications. *Critical Reviews in Environmental Science and Technology*, **2014**, 44, 1220-1288	11.1	125
26	Comparing the influence of low power ultrasonic and microwave pre-treatments on the solubilisation and semi-continuous anaerobic digestion of waste activated sludge. *Bioresource Technology*, **2014**, 171, 44-9	11	101
25	Bioethanol from lignocellulosic biomass: current findings determine research priorities. *Scientific World Journal, The*, **2014**, 2014, 298153	2.2	131
24	Methane and nitrous oxide emissions following anaerobic digestion of sludge in Japanese sewage treatment facilities. *Bioresource Technology*, **2014**, 171, 175-81	11	19
23	Energy-Efficient Production of Cassava-Based Bio-Ethanol. *Advances in Bioscience and Biotechnology (Print)*, **2014**, 05, 925-939	0.9	35
22	Influence of microwave pre-treatment on sludge solubilization and pilot scale semi-continuous anaerobic digestion. *Bioresource Technology*, **2013**, 128, 598-603	11	122
21	Mathematical modelling of anaerobic digestion of biomass and waste: Power and limitations. *Progress in Energy and Combustion Science*, **2013**, 39, 383-402	33.6	116

20	Effects of ultrasonic pre-treatment on sludge characteristics and anaerobic digestion. *Water Science and Technology*, **2012**, 66, 2284-90	2.2	25
19	Evaluation of peroxide based advanced oxidation processes (AOPs) for the degradation of ibuprofen in water. *Desalination and Water Treatment*, **2012**, 50, 189-197		13
18	Oxidizing Agents and Organic Solvents as Pretreatment for Anaerobic Digestion **2012**, 199-214		4
17	Simulation of the Anaerobic Digestion of Microwave Pre-Treated Waste Activated Sludge with ADM1. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2012**, 45, 677-682		2
16	Anaerobic digestion of biomass and waste: current trends in mathematical modeling. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2011**, 44, 5024-5033		4
15	Anaerobic digestion in global bio-energy production: Potential and research challenges. *Renewable and Sustainable Energy Reviews*, **2011**, 15, 4295-4301	16.2	578
14	Peracetic acid oxidation as an alternative pre-treatment for the anaerobic digestion of waste activated sludge. *Bioresource Technology*, **2011**, 102, 4124-30	11	135
13	Parameter identification and modeling of the biochemical methane potential of waste activated sludge. *Environmental Science & Technology*, **2011**, 45, 4173-8	10.3	33
12	Reply to Comment on Parameter Identification and Modeling of the Biochemical Methane Potential of Waste Activated Sludge *Environmental Science & Technology*, **2011**, 45, 7598-7599	10.3	
11	Selected Proceedings from the Sixth European Meeting on Chemical Industry and Environment (EMChIE VI)Mechelen, Belgium, May 17 19, 2010Environmental Issues in Chemical Industry. *Environmental Engineering Science*, **2011**, 28, 755-755	2	
10	Influence of low temperature thermal pre-treatment on sludge solubilisation, heavy metal release and anaerobic digestion. *Bioresource Technology*, **2010**, 101, 5743-8	11	282
9	Siloxane removal from biosolids by peroxidation. *Energy Conversion and Management*, **2008**, 49, 2859-2864	4.6	46
8	Ultrasonically enhanced anaerobic digestion of waste activated sludge. *International Journal of Sustainable Engineering*, **2008**, 1, 94-104	3.1	32
7	Principles and potential of the anaerobic digestion of waste-activated sludge. *Progress in Energy and Combustion Science*, **2008**, 34, 755-781	33.6	1880
6	Enhancing the use of waste activated sludge as bio-fuel through selectively reducing its heavy metal content. *Journal of Hazardous Materials*, **2007**, 144, 703-7	12.8	64
5	Peroxidation enhances the biogas production in the anaerobic digestion of biosolids. *Journal of Hazardous Materials*, **2007**, 146, 577-81	12.8	75
4	The analysis of volatile siloxanes in waste activated sludge. *Talanta*, **2007**, 74, 14-9	6.2	76
3	Energy use of biogas hampered by the presence of siloxanes. *Energy Conversion and Management*, **2006**, 47, 1711-1722	10.6	228

2	Reviewing Fundamental CO2 Adsorption Characteristics of Zeolite and Activated Carbon by In-situ Measurements With Radioactively Labelled CO2. *Separation and Purification Reviews*,1-12	7.3	2
1	Efficient microwave-assisted production of furanics and hydrochar from bamboo (Phyllostachys nigra Boryana) in a biphasic reaction system: effect of inorganic salts. *Biomass Conversion and Biorefinery*,1	2.3	2