

# Lise Appels

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Principles and potential of the anaerobic digestion of waste-activated sludge. <i>Progress in Energy and Combustion Science</i> , <b>2008</b> , 34, 755-781	33.6	1880
72	Anaerobic digestion in global bio-energy production: Potential and research challenges. <i>Renewable and Sustainable Energy Reviews</i> , <b>2011</b> , 15, 4295-4301	16.2	578
71	Challenges and opportunities in improving the production of bio-ethanol. <i>Progress in Energy and Combustion Science</i> , <b>2015</b> , 47, 60-88	33.6	373
70	Influence of low temperature thermal pre-treatment on sludge solubilisation, heavy metal release and anaerobic digestion. <i>Bioresource Technology</i> , <b>2010</b> , 101, 5743-8	11	282
69	Energy use of biogas hampered by the presence of siloxanes. <i>Energy Conversion and Management</i> , <b>2006</b> , 47, 1711-1722	10.6	228
68	Peracetic acid oxidation as an alternative pre-treatment for the anaerobic digestion of waste activated sludge. <i>Bioresource Technology</i> , <b>2011</b> , 102, 4124-30	11	135
67	Bioethanol from lignocellulosic biomass: current findings determine research priorities. <i>Scientific World Journal, The</i> , <b>2014</b> , 2014, 298153	2.2	131
66	Ultrasonic Treatment of Waste Sludge: A Review on Mechanisms and Applications. <i>Critical Reviews in Environmental Science and Technology</i> , <b>2014</b> , 44, 1220-1288	11.1	125
65	Influence of microwave pre-treatment on sludge solubilization and pilot scale semi-continuous anaerobic digestion. <i>Bioresource Technology</i> , <b>2013</b> , 128, 598-603	11	122
64	Mathematical modelling of anaerobic digestion of biomass and waste: Power and limitations. <i>Progress in Energy and Combustion Science</i> , <b>2013</b> , 39, 383-402	33.6	116
63	Comparing the influence of low power ultrasonic and microwave pre-treatments on the solubilisation and semi-continuous anaerobic digestion of waste activated sludge. <i>Bioresource Technology</i> , <b>2014</b> , 171, 44-9	11	101
62	The analysis of volatile siloxanes in waste activated sludge. <i>Talanta</i> , <b>2007</b> , 74, 14-9	6.2	76
61	Peroxidation enhances the biogas production in the anaerobic digestion of biosolids. <i>Journal of Hazardous Materials</i> , <b>2007</b> , 146, 577-81	12.8	75
60	Enhancing the use of waste activated sludge as bio-fuel through selectively reducing its heavy metal content. <i>Journal of Hazardous Materials</i> , <b>2007</b> , 144, 703-7	12.8	64
59	Isolation and screening of bacterial isolates from wastewater treatment plants to decolorize azo dyes. <i>Journal of Bioscience and Bioengineering</i> , <b>2018</b> , 125, 448-456	3.3	62
58	A microwave-assisted process for the in-situ production of 5-hydroxymethylfurfural and furfural from lignocellulosic polysaccharides in a biphasic reaction system. <i>Journal of Cleaner Production</i> , <b>2018</b> , 187, 1014-1024	10.3	55
57	Microwave effects in the dilute acid hydrolysis of cellulose to 5-hydroxymethylfurfural. <i>Scientific Reports</i> , <b>2018</b> , 8, 7719	4.9	50

56	Siloxane removal from biosolids by peroxidation. <i>Energy Conversion and Management</i> , <b>2008</b> , 49, 2859-2864.6	4.6	46
55	Energy-Efficient Production of Cassava-Based Bio-Ethanol. <i>Advances in Bioscience and Biotechnology (Print)</i> , <b>2014</b> , 05, 925-939	0.9	35
54	Decolorization of reactive azo dyes using a sequential chemical and activated sludge treatment. <i>Journal of Bioscience and Bioengineering</i> , <b>2017</b> , 124, 668-673	3.3	34
53	Parameter identification and modeling of the biochemical methane potential of waste activated sludge. <i>Environmental Science &amp; Technology</i> , <b>2011</b> , 45, 4173-8	10.3	33
52	Biochar in water and wastewater treatment - a sustainability assessment. <i>Chemical Engineering Journal</i> , <b>2021</b> , 420, 129946	14.7	33
51	Ultrasonically enhanced anaerobic digestion of waste activated sludge. <i>International Journal of Sustainable Engineering</i> , <b>2008</b> , 1, 94-104	3.1	32
50	Assessing the composition of microbial communities in textile wastewater treatment plants in comparison with municipal wastewater treatment plants. <i>MicrobiologyOpen</i> , <b>2017</b> , 6, e00413	3.4	28
49	Combining microwave irradiation with sodium citrate addition improves the pre-treatment on anaerobic digestion of excess sewage sludge. <i>Journal of Environmental Management</i> , <b>2018</b> , 213, 271-278.9	7.9	27
48	Microwave and ultrasound pre-treatments influence microbial community structure and digester performance in anaerobic digestion of waste activated sludge. <i>Applied Microbiology and Biotechnology</i> , <b>2016</b> , 100, 5339-52	5.7	27
47	Energy potential for combustion and anaerobic digestion of biomass from low-input high-diversity systems in conservation areas. <i>GCB Bioenergy</i> , <b>2015</b> , 7, 888-898	5.6	26
46	Effect of digestate disintegration on anaerobic digestion of organic waste. <i>Bioresource Technology</i> , <b>2018</b> , 268, 568-576	11	26
45	Biomass of invasive plant species as a potential feedstock for bioenergy production. <i>Biofuels, Bioproducts and Biorefining</i> , <b>2015</b> , 9, 273-282	5.3	26
44	Effects of ultrasonic pre-treatment on sludge characteristics and anaerobic digestion. <i>Water Science and Technology</i> , <b>2012</b> , 66, 2284-90	2.2	25
43	Reviewing the thermo-chemical recycling of waste polyurethane foam. <i>Journal of Environmental Management</i> , <b>2021</b> , 278, 111527	7.9	22
42	Prospects and perspectives foster enhanced research on bio-aviation fuels. <i>Journal of Environmental Management</i> , <b>2020</b> , 274, 111214	7.9	20
41	Methane and nitrous oxide emissions following anaerobic digestion of sludge in Japanese sewage treatment facilities. <i>Bioresource Technology</i> , <b>2014</b> , 171, 175-81	11	19
40	Simultaneous production of 5-hydroxymethylfurfural and furfural from bamboo ( <i>Phyllostachys nigra</i> Boryana) in a biphasic reaction system. <i>Chemical Engineering Journal</i> , <b>2020</b> , 386, 123957	14.7	18
39	Selective electrochemical degradation of 4-chlorophenol at a Ti/RuO-IrO anode in chloride rich wastewater. <i>Journal of Environmental Management</i> , <b>2017</b> , 190, 61-71	7.9	16

38	European bamboo fibres for composites applications, study on the seasonal influence. <i>Industrial Crops and Products</i> , <b>2019</b> , 133, 304-316	5.9	16
37	Optimization of hydrothermal conversion of bamboo ( <i>Phyllostachys aureosulcata</i> ) to levulinic acid via response surface methodology. <i>Journal of Environmental Management</i> , <b>2018</b> , 219, 95-102	7.9	16
36	Advances in rigid porous high temperature filters. <i>Renewable and Sustainable Energy Reviews</i> , <b>2021</b> , 139, 110713	16.2	15
35	Production of Levulinic Acid and Furfural by Microwave-Assisted Hydrolysis from Model Compounds: Effect of Temperature, Acid Concentration and Reaction Time. <i>Waste and Biomass Valorization</i> , <b>2018</b> , 9, 343-355	3.2	13
34	Evaluation of peroxide based advanced oxidation processes (AOPs) for the degradation of ibuprofen in water. <i>Desalination and Water Treatment</i> , <b>2012</b> , 50, 189-197		13
33	A critical review of ammonia recovery from anaerobic digestate of organic wastes via stripping. <i>Renewable and Sustainable Energy Reviews</i> , <b>2021</b> , 143, 110903	16.2	13
32	Siloxane removal and sludge disintegration using thermo-alkaline treatments with air stripping prior to anaerobic sludge digestion. <i>Energy Conversion and Management</i> , <b>2015</b> , 96, 384-391	10.6	11
31	Bamboo fibres sourced from three global locations: A microstructural, mechanical and chemical composition study. <i>Journal of Reinforced Plastics and Composites</i> , <b>2019</b> , 38, 397-412	2.9	11
30	Nanostructured materials via green sonochemical routes - Sustainability aspects. <i>Chemosphere</i> , <b>2021</b> , 276, 130146	8.4	11
29	Microbial community dynamics linked to enhanced substrate availability and biogas production of electrokinetically pre-treated waste activated sludge. <i>Bioresource Technology</i> , <b>2016</b> , 218, 761-70	11	10
28	Indicators for resource recovery monitoring within the circular economy model implementation in the wastewater sector.. <i>Journal of Environmental Management</i> , <b>2021</b> , 304, 114261	7.9	9
27	Efficiency and mechanism of 2,4-dichlorophenol degradation by the UV/IO process. <i>Science of the Total Environment</i> , <b>2021</b> , 782, 146781	10.2	8
26	The production of bio-energy by microbial (biogas through anaerobic digestion) or thermal (pyrolysis) processes. <i>Renewable Energy</i> , <b>2016</b> , 96, 1055	8.1	7
25	Thermo-chemical water splitting: Selection of priority reversible redox reactions by multi-attribute decision making. <i>Renewable Energy</i> , <b>2021</b> , 170, 800-810	8.1	7
24	Evaluation of the effects of low energetic microwave irradiation on anaerobic digestion. <i>Journal of Environmental Management</i> , <b>2017</b> , 202, 69-83	7.9	6
23	Ultrasound-assisted digestate treatment of manure digestate for increased biogas production in small pilot scale anaerobic digesters. <i>Renewable Energy</i> , <b>2020</b> , 152, 664-673	8.1	5
22	Behavior of trace elements and micronutrients in manure digestate during ozone treatment. <i>Chemosphere</i> , <b>2020</b> , 252, 126477	8.4	4
21	Oxidizing Agents and Organic Solvents as Pretreatment for Anaerobic Digestion <b>2012</b> , 199-214		4

20	Anaerobic digestion of biomass and waste: current trends in mathematical modeling. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2011</b> , 44, 5024-5033		4
19	Engineered nanomaterials in microbial fuel cells [Recent developments, sustainability aspects, and future outlook. <i>Fuel</i> , <b>2022</b> , 310, 122347	7.1	4
18	Ultrasonication affects the bio-accessibility of primary dairy cow manure digestate for secondary post-digestion. <i>Fuel</i> , <b>2021</b> , 291, 120140	7.1	4
17	Influence of electrochemical advanced oxidation on the long-term operation of an Upflow Anaerobic Sludge Blanket (UASB) reactor treating 4-chlorophenol containing wastewater. <i>Renewable Energy</i> , <b>2020</b> , 159, 683-692	8.1	2
16	Simulation of the Anaerobic Digestion of Microwave Pre-Treated Waste Activated Sludge with ADM1. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2012</b> , 45, 677-682		2
15	Reviewing Fundamental CO <sub>2</sub> Adsorption Characteristics of Zeolite and Activated Carbon by In-situ Measurements With Radioactively Labelled CO <sub>2</sub> . <i>Separation and Purification Reviews</i> , 1-12	7.3	2
14	Synergistic effects of the combined use of ozone and sodium percarbonate for the oxidative degradation of dichlorvos. <i>Journal of Water Process Engineering</i> , <b>2021</b> , 39, 101721	6.7	2
13	Efficient microwave-assisted production of furanics and hydrochar from bamboo ( <i>Phyllostachys nigra</i> Boryana) in a biphasic reaction system: effect of inorganic salts. <i>Biomass Conversion and Biorefinery</i> , 1	2.3	2
12	The Need to Accurately Define and Measure the Properties of Particles. <i>Standards</i> , <b>2021</b> , 1, 19-38		2
11	Kinetics and mechanisms of the carbamazepine degradation in aqueous media using novel iodate-assisted photochemical and photocatalytic systems.. <i>Science of the Total Environment</i> , <b>2022</b> , 153871	10.2	2
10	Performance assessment of ultrasonic sludge disintegration in activated sludge wastewater treatment plants under nutrient-deficient conditions. <i>Chemical Engineering Journal</i> , <b>2021</b> , 431, 133979	14.7	1
9	Role of carrier characteristics affecting microbial density and population in enhanced nitrogen and phosphorus removal from wastewater. <i>Journal of Environmental Management</i> , <b>2022</b> , 302, 113976	7.9	1
8	Dairy Manure Digestate Age Increases Ultrasound Disintegration Efficiency at Low Specific Energies. <i>Energies</i> , <b>2021</b> , 14, 1640	3.1	1
7	Hydrogen-enriched natural gas in a decarbonization perspective. <i>Fuel</i> , <b>2022</b> , 318, 123680	7.1	1
6	ZnO/Fe <sub>2</sub> O <sub>3</sub> /Bentonite: An Efficient Solar-Light Active Magnetic Photocatalyst for the Degradation of Pharmaceutical Active Compounds. <i>Molecules</i> , <b>2022</b> , 27, 3050	4.8	1
5	Adsorption of acid fuchsine dye from wastewater by Mg-ferrite particles. <i>Journal of Environmental Management</i> , <b>2022</b> , 317, 115427	7.9	1
4	Low temperature Moving Bed Bioreactor denitrification as mitigation measure to reduce agricultural nitrate losses. <i>Science of the Total Environment</i> , <b>2021</b> , 152110	10.2	0
3	Pilot-scale evaluation of ozone as a polishing step for the removal of nonylphenol from tank truck cleaning wastewater. <i>Journal of Environmental Management</i> , <b>2021</b> , 288, 112396	7.9	0

- 2      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
- 1      Selected Proceedings from the Sixth European Meeting on Chemical Industry and Environment  
(EMChIE VI) Mechelen, Belgium, May 17-19, 2010 Environmental Issues in Chemical Industry.  
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