

# Shao-Yuan Leu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1082556/publications.pdf>

Version: 2024-02-01

78  
papers

2,475  
citations

201658

27  
h-index

214788

47  
g-index

83  
all docs

83  
docs citations

83  
times ranked

3026  
citing authors

#	ARTICLE	IF	CITATIONS
1	Substrate-Related Factors Affecting Enzymatic Saccharification of Lignocelluloses: Our Recent Understanding. <i>Bioenergy Research</i> , 2013, 6, 405-415.	3.9	287
2	A review on morphology engineering for highly efficient and stable hybrid perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2018, 6, 12842-12875.	10.3	168
3	Optimized material composition to improve the physical and mechanical properties of extruded wood-plastic composites (WPCs). <i>Construction and Building Materials</i> , 2012, 29, 120-127.	7.2	118
4	Toward a fundamental understanding of cellulase-lignin interactions in the whole slurry enzymatic saccharification process. <i>Biofuels, Bioproducts and Biorefining</i> , 2016, 10, 648-663.	3.7	113
5	Diol pretreatment to fractionate a reactive lignin in lignocellulosic biomass biorefineries. <i>Green Chemistry</i> , 2019, 21, 2788-2800.	9.0	109
6	Recent Trends in Sustainable Textile Waste Recycling Methods: Current Situation and Future Prospects. <i>Topics in Current Chemistry</i> , 2017, 375, 76.	5.8	100
7	Sustainability metrics of pretreatment processes in a waste derived lignocellulosic biomass biorefinery. <i>Bioresource Technology</i> , 2020, 298, 122558.	9.6	98
8	Valorisation of textile waste by fungal solid state fermentation: An example of circular waste-based biorefinery. <i>Resources, Conservation and Recycling</i> , 2018, 129, 27-35.	10.8	91
9	Real-Time Aeration Efficiency Monitoring in the Activated Sludge Process and Methods to Reduce Energy Consumption and Operating Costs. <i>Water Environment Research</i> , 2009, 81, 2471-2481.	2.7	65
10	Bioconversion of Beetle-Killed Lodgepole Pine Using SPORL: Process Scale-up Design, Lignin Coproduct, and High Solids Fermentation without Detoxification. <i>Industrial &amp; Engineering Chemistry Research</i> , 2013, 52, 16057-16065.	3.7	59
11	Continuous cellulosic bioethanol co-fermentation by immobilized <i>Zymomonas mobilis</i> and suspended <i>Pichia stipitis</i> in a two-stage process. <i>Applied Energy</i> , 2020, 266, 114871.	10.1	55
12	Toward Long Solids Retention Time of Activated Sludge Processes: Benefits in Energy Saving, Effluent Quality, and Stability. <i>Water Environment Research</i> , 2012, 84, 42-53.	2.7	46
13	Characterization of the property changes of extruded wood-plastic composites during year round subtropical weathering. <i>Construction and Building Materials</i> , 2015, 88, 159-168.	7.2	42
14	An innovative wood-chip-framework soil infiltrator for treating anaerobic digested swine wastewater and analysis of the microbial community. <i>Bioresource Technology</i> , 2014, 173, 384-391.	9.6	41
15	The effect of surfactant-assisted ultrasound-ionic liquid pretreatment on the structure and fermentable sugar production of a water hyacinth. <i>Bioresource Technology</i> , 2017, 237, 27-30.	9.6	41
16	Isolation of cellulose nanocrystals from medium density fiberboards. <i>Carbohydrate Polymers</i> , 2017, 167, 70-78.	10.2	40
17	New Generation Urban Biorefinery toward Complete Utilization of Waste Derived Lignocellulosic Biomass for Biofuels and Value-Added Products. <i>Energy Procedia</i> , 2019, 158, 918-925.	1.8	39
18	Robust enzymatic saccharification of a Douglas-fir forest harvest residue by SPORL. <i>Biomass and Bioenergy</i> , 2013, 59, 393-401.	5.7	37

#	ARTICLE	IF	CITATIONS
19	Evaluation of anti-bacterial adhesion performance of polydopamine cross-linked graphene oxide RO membrane via in situ optical coherence tomography. <i>Desalination</i> , 2020, 479, 114339.	8.2	35
20	Biotechnology of Plastic Waste Degradation, Recycling, and Valorization: Current Advances and Future Perspectives. <i>ChemSusChem</i> , 2021, 14, 4103-4114.	6.8	34
21	Bioaugmentation with <i>Clostridium tyrobutyricum</i> to improve butyric acid production through direct rice straw bioconversion. <i>Bioresource Technology</i> , 2018, 263, 562-568.	9.6	33
22	Progress in the development and use of refrigerants and unintended environmental consequences. <i>Science of the Total Environment</i> , 2022, 823, 153670.	8.0	33
23	Ethanol production from non-detoxified whole slurry of sulfite-pretreated empty fruit bunches at a low cellulase loading. <i>Bioresource Technology</i> , 2014, 164, 331-337.	9.6	28
24	High titer and yield ethanol production from undetoxified whole slurry of Douglas-fir forest residue using pH profiling in SPORL. <i>Biotechnology for Biofuels</i> , 2015, 8, 22.	6.2	28
25	Sustainability analysis of pelletized bio-fuel derived from recycled wood product wastes in Hong Kong. <i>Journal of Cleaner Production</i> , 2016, 113, 400-410.	9.3	28
26	Carbon sequestration potential via energy harvesting from agricultural biomass residues in Mekong River basin, Southeast Asia. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 68, 1051-1062.	16.4	28
27	Upgrading lignocellulosic ethanol for caproate production via chain elongation fermentation. <i>International Biodeterioration and Biodegradation</i> , 2018, 135, 103-109.	3.9	28
28	Enhanced primary treatment for net energy production from sewage – The genetic clarification of substrate-acetate-methane pathway in anaerobic digestion. <i>Chemical Engineering Journal</i> , 2022, 431, 133416.	12.7	28
29	Development of a waste-derived lignin-porphyrin bio-polymer with enhanced photoluminescence at high water fraction with wide pH range and heavy metal sensitivity investigations. <i>Green Chemistry</i> , 2019, 21, 1319-1329.	9.0	27
30	Feasibility of high-concentration cellulosic bioethanol production from undetoxified whole Monterey pine slurry. <i>Bioresource Technology</i> , 2018, 250, 102-109.	9.6	25
31	Exploring spatial patterns of carbon dioxide emission abatement via energy service companies in China. <i>Resources, Conservation and Recycling</i> , 2018, 137, 145-155.	10.8	25
32	Biphasic pretreatment for energy and carbon efficient conversion of lignocellulose into bioenergy and reactive lignin. <i>Applied Energy</i> , 2021, 303, 117653.	10.1	25
33	Whole sugar 2,3-butanediol fermentation for oil palm empty fruit bunches biorefinery by a newly isolated <i>Klebsiella pneumoniae</i> PM2. <i>Bioresource Technology</i> , 2021, 333, 125206.	9.6	24
34	Bioaugmentation to Improve Nitrification in Activated Sludge Treatment. <i>Water Environment Research</i> , 2010, 82, 524-535.	2.7	23
35	Fine-pore aeration diffusers: Accelerated membrane ageing studies. <i>Water Research</i> , 2008, 42, 467-475.	11.3	22
36	Substrate-Related Factors Affecting Cellulosome-Induced Hydrolysis for Lignocellulose Valorization. <i>International Journal of Molecular Sciences</i> , 2019, 20, 3354.	4.1	22

#	ARTICLE	IF	CITATIONS
37	Recent advances of lignin valorization techniques toward sustainable aromatics and potential benchmarks to fossil refinery products. <i>Bioresource Technology</i> , 2022, 346, 126419.	9.6	22
38	Enhancing $\beta$ -etherification of lignin in Eucalyptus diol pretreatment to improve lignin monomer production. <i>Industrial Crops and Products</i> , 2022, 185, 115130.	5.2	21
39	Ultra-stable 2D layered methylammonium cadmium trihalide perovskite photoelectrodes. <i>Journal of Materials Chemistry C</i> , 2018, 6, 11552-11560.	5.5	20
40	A Nano-Ink for gel pens based on scalable CNC preparation. <i>Cellulose</i> , 2018, 25, 6465-6478.	4.9	20
41	Monitoring off-gas O <sub>2</sub> /CO <sub>2</sub> to predict nitrification performance in activated sludge processes. <i>Water Research</i> , 2010, 44, 3434-3444.	11.3	18
42	Staged organosolv pretreatment to increase net energy and reactive lignin yield in whole oil palm tree biorefinery. <i>Bioresource Technology</i> , 2021, 326, 124766.	9.6	18
43	Bioconversion of food and lignocellulosic wastes employing sugar platform: A review of enzymatic hydrolysis and kinetics. <i>Bioresource Technology</i> , 2022, 352, 127083.	9.6	18
44	Modeling the dynamic volatile fatty acids profiles with pH and hydraulic retention time in an anaerobic baffled reactor during the startup period. <i>Bioresource Technology</i> , 2016, 222, 49-58.	9.6	16
45	Modeling the performance of an anaerobic baffled reactor with the variation of hydraulic retention time. <i>Bioresource Technology</i> , 2016, 214, 477-486.	9.6	16
46	Features of a Staged Acidogenic/Solventogenic Fermentation Process To Improve Butanol Production from Rice Straw. <i>Energy &amp; Fuels</i> , 2019, 33, 1123-1132.	5.1	16
47	Anaerobic Digestion of Napier Grass ( <i>Pennisetum purpureum</i> ) in Two-Phase Dry Digestion System Versus Wet Digestion System. <i>Bioenergy Research</i> , 2020, 13, 853-865.	3.9	16
48	Dark fermentation production of volatile fatty acids from glucose with biochar amended biological consortium. <i>Bioresource Technology</i> , 2020, 303, 122921.	9.6	15
49	Efficient saccharification of wheat straw pretreated by solid particle-assisted ball milling with waste washing liquor recycling. <i>Bioresource Technology</i> , 2022, 347, 126721.	9.6	15
50	Economic and environmental analysis of using constructed riparian wetlands to support urbanized municipal wastewater treatment. <i>Ecological Engineering</i> , 2012, 44, 249-258.	3.6	14
51	Temperature profiling to maximize energy yield with reduced water input in a lignocellulosic ethanol biorefinery. <i>Applied Energy</i> , 2018, 214, 63-72.	10.1	14
52	Plant chemistry associated dynamic modelling to enhance urban vegetation carbon sequestration potential via bioenergy harvesting. <i>Journal of Cleaner Production</i> , 2018, 197, 1084-1094.	9.3	14
53	Sustainability index accounting food and carbon benefits on circular 2,3-butanediol biorefinery with oil palm empty fruit bunches. <i>Applied Energy</i> , 2021, 303, 117667.	10.1	14
54	Glucose fermentation with biochar amended consortium: Sequential fermentations. <i>Bioresource Technology</i> , 2020, 303, 122933.	9.6	12

#	ARTICLE	IF	CITATIONS
55	Genomic driven factors enhance biocatalyst-related cellulolysis potential in anaerobic digestion. <i>Bioresource Technology</i> , 2021, 333, 125148.	9.6	10
56	The Relationship Between Mixed-Liquor Particle Size and Solids Retention Time in the Activated Sludge Process. <i>Water Environment Research</i> , 2011, 83, 2178-2186.	2.7	9
57	Energy-Efficient Single-Stage Nitrite Shunt Denitrification with Saline Sewage through Concise Dissolved Oxygen (DO) Supply: Process Performance and Microbial Communities. <i>Microorganisms</i> , 2020, 8, 919.	3.6	9
58	Construction of a structural enzyme adsorption/kinetics model to elucidate additives associated lignin-cellulase interactions in complex bioconversion system. <i>Biotechnology and Bioengineering</i> , 2021, 118, 4065-4075.	3.3	9
59	Hydroxyapatite-based catalysts derived from food waste digestate for efficient glucose isomerization to fructose. <i>Green Synthesis and Catalysis</i> , 2021, 2, 356-361.	6.8	9
60	Biotechnology of Plastic Waste Degradation, Recycling, and Valorization: Current Advances and Future Perspectives. <i>ChemSusChem</i> , 2021, 14, 3981-3981.	6.8	8
61	Biorefinery potential of chemically enhanced primary treatment sewage sludge to representative value-added chemicals - A de novo angle for wastewater treatment. <i>Bioresource Technology</i> , 2021, 339, 125583.	9.6	8
62	Comparisons of high titer ethanol production and lignosulfonate properties by SPORL pretreatment of lodgepole pine at two temperatures. <i>RSC Advances</i> , 2014, 4, 27030-27038.	3.6	7
63	Biochemical Methane Potential Assay Using Single Versus Dual Sludge Inocula and Gap in Energy Recovery from Napier Grass Digestion. <i>Bioenergy Research</i> , 2020, 13, 1321-1329.	3.9	7
64	Elucidating the role of graphene oxide layers in enhancing N-Nitrosodimethylamine (NDMA) rejection and antibiofouling property of RO membrane simultaneously. <i>Journal of Membrane Science</i> , 2022, 643, 120043.	8.2	6
65	One-pot synthesis to prepare lignin/photoacid nanohybrids for multifunctional biosensors and photo-triggered singlet oxygen generation. <i>Green Chemistry</i> , 2022, 24, 2904-2918.	9.0	6
66	Pyrolysis of anaerobic digested residues in the presence of catalyst-sorbent bifunctional material: Pyrolysis characteristics, kinetics and evolved gas analysis. <i>Bioresource Technology</i> , 2022, 351, 127022.	9.6	6
67	Biomimetic reusable microfluidic reactors with physically immobilized RuBisCO for glucose precursor production. <i>Catalysis Science and Technology</i> , 2022, 12, 5009-5020.	4.1	6
68	Substrate-related features to maximize bioenergy potential of chemical enhanced primary treatment sludge. <i>Energy Procedia</i> , 2019, 158, 926-933.	1.8	5
69	Genomic insights to facilitate the construction of a high-xylose-utilization <i>Enterococcus faecalis</i> OPS2 for 2,3-BDO production. <i>Chemical Engineering Journal</i> , 2022, 448, 137617.	12.7	5
70	Modeling the Performance of Hazardous Wastes Removal in Bioaugmented Activated Sludge Processes. <i>Water Environment Research</i> , 2009, 81, 2309-2319.	2.7	4
71	Toward Long SRT of Activated Sludge Processes: Benefits in Energy Saving, Effluent Quality, and Stability. <i>Proceedings of the Water Environment Federation</i> , 2010, 2010, 7282-7295.	0.0	4
72	Dynamic simulation of continuous mixed sugar fermentation with increasing cell retention time for lactic acid production using <i>Enterococcus mundtii</i> QU 25. <i>Biotechnology for Biofuels</i> , 2020, 13, 112.	6.2	4

#	ARTICLE	IF	CITATIONS
73	Real-Time Efficiency Monitoring for Wastewater Aeration Systems. <i>Water Practice and Technology</i> , 2008, 3, .	2.0	2
74	N-Methyl-2-pyrrolidone pre-treatment of lignocellulose for high lignin yield and cellulose digestibility. <i>Biomass Conversion and Biorefinery</i> , 2024, 14, 5435-5446.	4.6	2
75	Time-Variations of Transfer Efficiency and Headloss for Fine-Pore Membrane Diffusers in Aeration Systems. <i>Proceedings of the Water Environment Federation</i> , 2007, 2007, 7944-7958.	0.0	1
76	Insights into unexpected photoisomerization from photooxidation of tribromoacetic acid in aqueous environment using ultrafast spectroscopy. <i>Journal of Hazardous Materials</i> , 2021, 418, 126214.	12.4	1
77	Enhancement of Elemental Sulfur Recovery from Wastewater Biogas Using Nickel (II)-(5,10,15,20)-tetrakis-phenylcarboxylporphyrin. <i>KSCE Journal of Civil Engineering</i> , 2020, 24, 1424-1429.	1.9	0
78	Combining Cellulosic Ethanol Fermentation Waste and Municipal Solid Waste-derived Fiber with a Kraft Black Liquor-derived Binder for Recycled Paper Making. <i>BioResources</i> , 2015, 10, .	1.0	0