Rajesh Banu

List of Publications by Citations

386 papers	12,719 citations	60 h-index	87 g-index
404 ext. papers	16,031 ext. citations	7.5 avg, IF	7.22 L-index

#	Paper	IF	Citations
386	Recent developments in pretreatment technologies on lignocellulosic biomass: Effect of key parameters, technological improvements, and challenges. *Bioresource Technology*, **2020**, 300, 122724	11	240
385	A review on lignin structure, pretreatments, fermentation reactions and biorefinery potential. *Bioresource Technology*, **2019**, 271, 462-472	11	239
384	An overview of food waste management in developing countries: Current status and future perspective. *Journal of Environmental Management*, **2015**, 157, 220-9	7.9	230
383	Fermentative hydrogen production from wastewaters: A review and prognosis. *International Journal of Hydrogen Energy*, **2012**, 37, 15632-15642	6.7	211
382	A review on the biosynthesis of metallic nanoparticles (gold and silver) using bio-components of microalgae: Formation mechanism and applications. *Enzyme and Microbial Technology*, **2016**, 95, 28-44	3.8	178
381	A comprehensive review on green nanomaterials using biological systems: Recent perception and their future applications. *Colloids and Surfaces B: Biointerfaces*, **2018**, 170, 20-35	6	175
380	A review of thermochemical conversion of microalgal biomass for biofuels: chemistry and processes. *Green Chemistry*, **2017**, 19, 44-67	10	170
379	Low temperature thermo-chemical pretreatment of dairy waste activated sludge for anaerobic digestion process. *Bioresource Technology*, **2012**, 103, 415-24	11	166
378	A critical review on issues and overcoming strategies for the enhancement of dark fermentative hydrogen production in continuous systems. *International Journal of Hydrogen Energy*, **2016**, 41, 3820-3836	6.7	147
377	A critical review on anaerobic digestion of microalgae and macroalgae and co-digestion of biomass for enhanced methane generation. *Bioresource Technology*, **2018**, 262, 319-332	11	143
376	The enhancement of anaerobic biodegradability of waste activated sludge by surfactant mediated biological pretreatment. *Bioresource Technology*, **2014**, 168, 159-66	11	140
375	Fermentative hydrogen production using lignocellulose biomass: An overview of pre-treatment methods, inhibitor effects and detoxification experiences. *Renewable and Sustainable Energy Reviews*, **2017**, 77, 28-42	16.2	135
374	Anaerobic co-digestion on improving methane production from mixed microalgae (Scenedesmus sp., Chlorella sp .) and food waste: Kinetic modeling and synergistic impact evaluation. *Chemical Engineering Journal*, **2016**, 299, 332-341	14.7	127
373	Recent insights into the cell immobilization technology applied for dark fermentative hydrogen production. *Bioresource Technology*, **2016**, 219, 725-737	11	123
372	Anaerobic membrane bioreactors for wastewater treatment: Novel configurations, fouling control and energy considerations. *Bioresource Technology*, **2019**, 283, 358-372	11	121
371	Effect of enzyme secreting bacterial pretreatment on enhancement of aerobic digestion potential of waste activated sludge interceded through EDTA. *Bioresource Technology*, **2013**, 150, 210-9	11	118
370	A critical review of pretreatment technologies to enhance anaerobic digestion and energy recovery. *Fuel*, **2020**, 270, 117494	7.1	115

369	A comprehensive overview on electro-active biofilms, role of exo-electrogens and their microbial niches in microbial fuel cells (MFCs). *Chemosphere*, **2017**, 178, 534-547	8.4	107
368	A review on biopolymer production via lignin valorization. *Bioresource Technology*, **2019**, 290, 121790	11	107
367	Intracranial infectious aneurysm: presentation, management and outcome. *Journal of the Neurological Sciences*, **2007**, 256, 3-9	3.2	103
366	Combined thermo-chemo-sonic disintegration of waste activated sludge for biogas production. *Bioresource Technology*, **2015**, 197, 383-92	11	102
365	Microbial electrolysis cell platform for simultaneous waste biorefinery and clean electrofuels generation: Current situation, challenges and future perspectives. *Progress in Energy and Combustion Science*, **2017**, 63, 119-145	33.6	101
364	Impacts of microwave pretreatments on the semi-continuous anaerobic digestion of dairy waste activated sludge. *Waste Management*, **2013**, 33, 1119-27	8.6	96
363	Promoted electromethanosynthesis in a two-chamber microbial electrolysis cells (MECs) containing a hybrid biocathode covered with graphite felt (GF). *Chemical Engineering Journal*, **2016**, 284, 1146-1155	14.7	93
362	Bio-fabrication of silver nanoparticles using the leaf extract of an ancient herbal medicine, dandelion (Taraxacum officinale), evaluation of their antioxidant, anticancer potential, and antimicrobial activity against phytopathogens. *Environmental Science and Pollution Research*, **2018**, 25, 10392-10406	5.1	92
361	Enhancement of biofuel production via microbial augmentation: The case of dark fermentative hydrogen. *Renewable and Sustainable Energy Reviews*, **2016**, 57, 879-891	16.2	92
360	Effect of citric acid induced deflocculation on the ultrasonic pretreatment efficiency of dairy waste activated sludge. *Ultrasonics Sonochemistry*, **2015**, 22, 333-40	8.9	91
359	Anti-diabetic Potential of Silver Nanoparticles Synthesized with Argyreia nervosa Leaf Extract High Synergistic Antibacterial Activity with Standard Antibiotics Against Foodborne Bacteria. *Journal of Cluster Science*, **2017**, 28, 1709-1727	3	88
358	Microalgae based biorefinery promoting circular bioeconomy-techno economic and life-cycle analysis. *Bioresource Technology*, **2020**, 302, 122822	11	88
357	A review on bio-electrochemical systems (BESs) for the syngas and value added biochemicals production. *Chemosphere*, **2017**, 177, 84-92	8.4	87
356	Exploiting antidiabetic activity of silver nanoparticles synthesized using Punica granatum leaves and anticancer potential against human liver cancer cells (HepG2). *Artificial Cells, Nanomedicine and Biotechnology*, **2018**, 46, 211-222	6.1	87
355	Seaweeds: A resource for marine bionanotechnology. *Enzyme and Microbial Technology*, **2016**, 95, 45-57	3.8	86
354	A comprehensive overview on light independent fermentative hydrogen production from wastewater feedstock and possible integrative options. *Energy Conversion and Management*, **2017**, 141, 390-402	10.6	85
353	Updates on the pretreatment of lignocellulosic feedstocks for bioenergy production□ review. *Biomass Conversion and Biorefinery*, **2018**, 8, 471-483	2.3	84
352	Treatment of seafood processing wastewater using upflow microbial fuel cell for power generation and identification of bacterial community in anodic biofilm. *Journal of Environmental Management*, **2016**, 180, 351-8	7.9	82

351	Combined treatment of alkaline and disperser for improving solubilization and anaerobic biodegradability of dairy waste activated sludge. *Bioresource Technology*, **2012**, 126, 107-16	11	82
350	Nutrient removal in an A2O-MBR reactor with sludge reduction. *Bioresource Technology*, **2009**, 100, 3820-4	11	82
349	Biomass based hydrogen production by dark fermentation-recent trends and opportunities for greener processes. *Current Opinion in Biotechnology*, **2018**, 50, 136-145	11.4	76
348	Enhancing the functional and economical efficiency of a novel combined thermo chemical disperser disintegration of waste activated sludge for biogas production. *Bioresource Technology*, **2014**, 173, 32-41	11	76
347	Improving the biogas production performance of municipal waste activated sludge via disperser induced microwave disintegration. *Bioresource Technology*, **2016**, 217, 21-7	11	74
346	Hydrogen and methane production via a two-stage processes (H 2 -SBR□+□CH 4 -UASB) using tequila vinasses. *International Journal of Hydrogen Energy*, **2014**, 39, 19249-19255	6.7	74
345	Bio-hythane production from microalgae biomass: Key challenges and potential opportunities for algal bio-refineries. *Bioresource Technology*, **2017**, 241, 525-536	11	71
344	Surpassing the current limitations of high purity H production in microbial electrolysis cell (MECs): Strategies for inhibiting growth of methanogens. *Bioelectrochemistry*, **2018**, 119, 211-219	5.6	71
343	Biogas Production from Organic Waste: Recent Progress and Perspectives. *Waste and Biomass Valorization*, **2020**, 11, 1019-1040	3.2	71
342	Treatment of dairy wastewater using anaerobic and solar photocatalytic methods. *Solar Energy*, **2008**, 82, 812-819	6.8	69
341	Application of nanotechnology (nanoparticles) in dark fermentative hydrogen production. *International Journal of Hydrogen Energy*, **2019**, 44, 1431-1440	6.7	69
340	Effect of sonically induced deflocculation on the efficiency of ozone mediated partial sludge disintegration for improved production of biogas. *Ultrasonics Sonochemistry*, **2015**, 26, 241-248	8.9	68
339	A comprehensive overview and recent advances on polyhydroxyalkanoates (PHA) production using various organic waste streams. *Bioresource Technology*, **2021**, 325, 124685	11	68
338	Profitable ultrasonic assisted microwave disintegration of sludge biomass: Modelling of biomethanation and energy parameter analysis. *Bioresource Technology*, **2018**, 254, 203-213	11	67
337	Bioelectrochemical systems using microalgae - A concise research update. *Chemosphere*, **2017**, 177, 35-48	8.4	66
336	Influence of deflocculation on microwave disintegration and anaerobic biodegradability of waste activated sludge. *Bioresource Technology*, **2015**, 185, 194-201	11	66
335	Enhancing the anaerobic digestion potential of dairy waste activated sludge by two step sono-alkalization pretreatment. *Ultrasonics Sonochemistry*, **2014**, 21, 1065-74	8.9	66
334	Anaerobic membrane bioreactors for biohydrogen production: Recent developments, challenges and perspectives. *Bioresource Technology*, **2018**, 269, 452-464	11	65

333	Microbial electrochemical systems for sustainable biohydrogen production: Surveying the experiences from a start-up viewpoint. *Renewable and Sustainable Energy Reviews*, **2017**, 70, 589-597	16.2	64
332	Techno-economic assessment of various hydrogen production methods - A review. *Bioresource Technology*, **2021**, 319, 124175	11	64
331	Enhancement of biogas production from microalgal biomass through cellulolytic bacterial pretreatment. *Bioresource Technology*, **2017**, 233, 34-43	11	62
330	Research perspectives on constraints, prospects and opportunities in biohydrogen production. *International Journal of Hydrogen Energy*, **2017**, 42, 27471-27481	6.7	61
329	Valorization of spent coffee grounds into biofuels and value-added products: Pathway towards integrated bio-refinery. *Fuel*, **2019**, 254, 115640	7.1	61
328	Evaluation of different pretreatments on organic matter solubilization and hydrogen fermentation of mixed microalgae consortia. *International Journal of Hydrogen Energy*, **2016**, 41, 21628-21640	6.7	61
327	Effect of deflocculation on the efficiency of low-energy microwave pretreatment and anaerobic biodegradation of waste activated sludge. *Applied Energy*, **2015**, 145, 104-110	10.7	60
326	Treatment of poultry slaughterhouse wastewater in upflow anaerobic filter under low upflow velocity. *International Journal of Environmental Science and Technology*, **2011**, 8, 149-158	3.3	59
325	Wheat straw extracted lignin in silver nanoparticles synthesis: Expanding its prophecy towards antineoplastic potency and hydrogen peroxide sensing ability. *International Journal of Biological Macromolecules*, **2019**, 128, 391-400	7.9	58
324	Synergetic effect of combined pretreatment for energy efficient biogas generation. *Bioresource Technology*, **2017**, 232, 235-246	11	57
323	A review on the biomass pretreatment and inhibitor removal methods as key-steps towards efficient macroalgae-based biohydrogen production. *Bioresource Technology*, **2017**, 244, 1341-1348	11	57
322	Liquefaction of food waste and its impacts on anaerobic biodegradability, energy ratio and economic feasibility. *Applied Energy*, **2017**, 208, 228-238	10.7	57
321	Anaerobic membrane bioreactor towards biowaste biorefinery and chemical energy harvest: Recent progress, membrane fouling and future perspectives. *Renewable and Sustainable Energy Reviews*, **2019**, 115, 109392	16.2	57
320	Development of artificial neural networks to predict membrane fouling in an anoxic-aerobic membrane bioreactor treating domestic wastewater. *Biochemical Engineering Journal*, **2018**, 133, 47-58	4.2	57
319	Waste-to-wealth for valorization of food waste to hydrogen and methane towards creating a sustainable ideal source of bioenergy. *Journal of Cleaner Production*, **2016**, 122, 29-41	10.3	57
318	Biohydrogen production from rice straw: Effect of combinative pretreatment, modelling assessment and energy balance consideration. *International Journal of Hydrogen Energy*, **2019**, 44, 2203-2215	6.7	57
317	An overview on advancements in biobased transesterification methods for biodiesel production: Oil resources, extraction, biocatalysts, and process intensification technologies. *Fuel*, **2021**, 285, 119117	7.1	56
316	Enhanced biohydrogen production from beverage industrial wastewater using external nitrogen sources and bioaugmentation with facultative anaerobic strains. *Journal of Bioscience and Bioengineering*, **2015**, 120, 155-60	3.3	55

315	Accelerating the sludge disintegration potential of a novel bacterial strain Planococcus jake 01 by CaCl2 induced deflocculation. *Bioresource Technology*, **2015**, 175, 396-405	11	55
314	Pretreatment technologies for industrial effluents: Critical review on bioenergy production and environmental concerns. *Journal of Environmental Management*, **2018**, 218, 165-180	7.9	55
313	Dispersion induced ozone pretreatment of waste activated biosolids: Arriving biomethanation modelling parameters, energetic and cost assessment. *Bioresource Technology*, **2017**, 244, 679-687	11	55
312	Biowaste-to-bioplastic (polyhydroxyalkanoates): Conversion technologies, strategies, challenges, and perspective. *Bioresource Technology*, **2021**, 326, 124733	11	55
311	Fenton mediated ultrasonic disintegration of sludge biomass: Biodegradability studies, energetic assessment, and its economic viability. *Bioresource Technology*, **2016**, 221, 1-8	11	54
310	Renewable biohydrogen production from lignocellulosic biomass using fermentation and integration of systems with other energy generation technologies. *Science of the Total Environment* , **2021**, 765, 144429	10.2	54
309	Impact of thermo-chemo-sonic pretreatment in solubilizing waste activated sludge for biogas production: Energetic analysis and economic assessment. *Bioresource Technology*, **2016**, 219, 479-486	11	54
308	Pretreatment of kenaf (Hibiscus cannabinus L.) biomass feedstock for polyhydroxybutyrate (PHB) production and characterization. *Bioresource Technology*, **2019**, 282, 75-80	11	54
307	Influence of thermal hydrolysis pretreatment on physicochemical properties and anaerobic biodegradability of waste activated sludge with different solids content. *Waste Management*, **2019**, 85, 214-221	8.6	54
306	HRT dependent performance and bacterial community population of granular hydrogen-producing mixed cultures fed with galactose. *Bioresource Technology*, **2016**, 206, 188-194	11	52
305	Biohydrogen production from industrial wastewater: An overview. *Bioresource Technology Reports*, **2019**, 7, 100287	4.1	52
304	Effect of deflocculation on the efficiency of disperser induced dairy waste activated sludge disintegration and treatment cost. *Bioresource Technology*, **2014**, 167, 151-8	11	51
303	Enhancement of sludge anaerobic biodegradability by combined microwave-H2O2 pretreatment in acidic conditions. *Environmental Science and Pollution Research*, **2016**, 23, 13467-79	5.1	51
302	A review on the conversion of volatile fatty acids to polyhydroxyalkanoates using dark fermentative effluents from hydrogen production. *Bioresource Technology*, **2019**, 287, 121427	11	50
301	Enhancement of aerobic biodegradability potential of municipal waste activated sludge by ultrasonic aided bacterial disintegration. *Bioresource Technology*, **2016**, 200, 161-9	11	49
300	Microbial electrohydrogenesis linked to dark fermentation as integrated application for enhanced biohydrogen production: A review on process characteristics, experiences and lessons. *Bioresource Technology*, **2018**, 251, 381-389	11	49
299	Pretreatment and hydrolysis methods for recovery of fermentable sugars from de-oiled Jatropha waste. *Bioresource Technology*, **2013**, 145, 275-9	11	49
298	Synergistic effect and biodegradation kinetics of sewage sludge and food waste mesophilic anaerobic co-digestion and the underlying stimulation mechanisms. *Fuel*, **2019**, 253, 40-49	7.1	48

297	A brief review of anaerobic membrane bioreactors emphasizing recent advancements, fouling issues and future perspectives. *Journal of Environmental Management*, **2020**, 270, 110909	7.9	48
296	Effect of hydraulic retention time (HRT) on biohydrogen production from galactose in an up-flow anaerobic sludge blanket reactor. *International Journal of Hydrogen Energy*, **2016**, 41, 21670-21677	6.7	48
295	Novel insights into scalability of biosurfactant combined microwave disintegration of sludge at alkali pH for achieving profitable bioenergy recovery and net profit. *Bioresource Technology*, **2018**, 267, 281-290	11	47
294	Solubilization of municipal sewage waste activated sludge by novel lytic bacterial strains. *Environmental Science and Pollution Research*, **2014**, 21, 2733-43	5.1	47
293	Improving the amenability of municipal waste activated sludge for biological pretreatment by phase-separated sludge disintegration method. *Bioresource Technology*, **2014**, 169, 700-706	11	47
292	HO induced cost effective microwave disintegration of dairy waste activated sludge in acidic environment for efficient biomethane generation. *Bioresource Technology*, **2017**, 244, 688-697	11	46
291	Energy-efficient methane production from macroalgal biomass through chemo disperser liquefaction. *Bioresource Technology*, **2017**, 228, 156-163	11	45
290	Exploiting fruit byproducts for eco-friendly nanosynthesis: Citrus clementina peel extract mediated fabrication of silver nanoparticles with high efficacy against microbial pathogens and rat glial tumor C6 cells. *Environmental Science and Pollution Research*, **2018**, 25, 10250-10263	5.1	45
289	Effect of chemo-mechanical disintegration on sludge anaerobic digestion for enhanced biogas production. *Environmental Science and Pollution Research*, **2016**, 23, 2402-14	5.1	45
288	Effects of side-stream, low temperature phosphorus recovery on the performance of anaerobic/anoxic/oxic systems integrated with sludge pretreatment. *Bioresource Technology*, **2013**, 140, 376-84	11	45
287	Low temperature thermochemical mediated energy and economically efficient biological disintegration of sludge: Simulation and prediction studies for anaerobic biodegradation. *Chemical Engineering Journal*, **2017**, 317, 481-492	14.7	44
286	Bioelectricity generation and effect studies from organic rich chocolaterie wastewater using continuous upflow anaerobic microbial fuel cell. *Fuel*, **2019**, 251, 224-232	7.1	44
285	Thermophilic anaerobic digestion of model organic wastes: Evaluation of biomethane production and multiple kinetic models analysis. *Bioresource Technology*, **2019**, 280, 269-276	11	44
284	Effect of NaCl induced floc disruption on biological disintegration of sludge for enhanced biogas production. *Bioresource Technology*, **2015**, 192, 807-11	11	44
283	Architectural engineering of bioelectrochemical systems from the perspective of polymeric membrane separators: A comprehensive update on recent progress and future prospects. *Journal of Membrane Science*, **2018**, 564, 508-522	9.6	44
282	Effects of 5-hydromethylfurfural, levulinic acid and formic acid, pretreatment byproducts of biomass, on fermentative H2 production from glucose and galactose. *International Journal of Hydrogen Energy*, **2014**, 39, 16885-16890	6.7	44
281	Marsilea spp.-A novel source of lignocellulosic biomass: Effect of solubilized lignin on anaerobic biodegradability and cost of energy products. *Bioresource Technology*, **2018**, 255, 220-228	11	43
280	Impact of pH control and heat pre-treatment of seed inoculum in dark H2 fermentation: A feasibility report using mixed microalgae biomass as feedstock. *International Journal of Hydrogen Energy*, **2016**, 41, 4382-4392	6.7	42

279	Biorefinery of spent coffee grounds waste: Viable pathway towards circular bioeconomy. *Bioresource Technology*, **2020**, 302, 122821	11	41
278	Biological pretreatment of non-flocculated sludge augments the biogas production in the anaerobic digestion of the pretreated waste activated sludge. *Environmental Technology (United Kingdom)*, **2013**, 34, 2113-23	2.6	41
277	Treatment of domestic wastewater using upflow anaerobic sludge blanket reactor. *International Journal of Environmental Science and Technology*, **2007**, 4, 363-370	3.3	41
276	A review on chemical mechanism of microalgae flocculation polymers. *Biotechnology Reports (Amsterdam, Netherlands)*, **2019**, 21, e00302	5.3	41
275	Lignocellulosic biomass based biorefinery: A successful platform towards circular bioeconomy. *Fuel*, **2021**, 302, 121086	7.1	41
274	Achieving profitable biological sludge disintegration through phase separation and predicting its anaerobic biodegradability by non linear regression model. *Chemical Engineering Journal*, **2015**, 279, 478-487	14.7	40
273	Impervious and influence in the liquid fuel production from municipal plastic waste through thermo-chemical biomass conversion technologies - A review. *Science of the Total Environment*, **2020**, 718, 137287	10.2	40
272	Telovelar approach: technical issues for large fourth ventricle tumors. *Childfs Nervous System*, **2007**, 23, 555-8	1.7	40
271	Biohythane production from food processing wastes - Challenges and perspectives. *Bioresource Technology*, **2020**, 298, 122449	11	40
270	Influence of ferrous sulfate on thermochemical sludge disintegration and on performances of wastewater treatment in a new process: Anoxic□xic membrane bioreactor coupled with sludge disintegration step. *Biochemical Engineering Journal*, **2012**, 66, 20-26	4.2	38
269	Effect of thermochemical sludge pretreatment on sludge reduction and on performances of anoxic-aerobic membrane bioreactor treating low strength domestic wastewater. *Journal of Chemical Technology and Biotechnology*, **2009**, 84, 1350-1355	3.5	38
268	Improved microbial conversion of de-oiled Jatropha waste into biohydrogen via inoculum pretreatment: process optimization by experimental design approach. *Biofuel Research Journal*,209-214	13.9	38
267	A comprehensive review on two-stage integrative schemes for the valorization of dark fermentative effluents. *Critical Reviews in Biotechnology*, **2018**, 38, 868-882	9.4	37
266	Cultivation of microalgal biomass using swine manure for biohydrogen production: Impact of dilution ratio and pretreatment. *Bioresource Technology*, **2018**, 260, 16-22	11	37
265	Effect of extracellular polymeric substances on sludge reduction potential of Bacillus licheniformis. *International Journal of Environmental Science and Technology*, **2013**, 10, 85-92	3.3	37
264	Food waste valorization: Biofuels and value added product recovery. *Bioresource Technology Reports*, **2020**, 11, 100524	4.1	37
263	Biological disintegration of microalgae for biomethane recovery-prediction of biodegradability and computation of energy balance. *Bioresource Technology*, **2017**, 244, 1367-1375	11	36
262	Synergetic pretreatment of algal biomass through H2O2 induced microwave in acidic condition for biohydrogen production. *Fuel*, **2019**, 253, 833-839	7.1	36

261	Trends and resource recovery in biological wastewater treatment system. *Bioresource Technology Reports*, **2019**, 7, 100235	4.1	36
260	Effects of titanium dioxide mediated dairy waste activated sludge deflocculation on the efficiency of bacterial disintegration and cost of sludge management. *Bioresource Technology*, **2015**, 197, 64-71	11	36
259	Recovery of biohydrogen in a single-chamber microbial electrohydrogenesis cell using liquid fraction of pressed municipal solid waste (LPW) as substrate. *International Journal of Hydrogen Energy*, **2016**, 41, 17896-17906	6.7	36
258	Performance evaluation of microbial electrochemical systems operated with Nafion and supported ionic liquid membranes. *Chemosphere*, **2017**, 175, 350-355	8.4	35
257	Energetically efficient microwave disintegration of waste activated sludge for biofuel production by zeolite: Quantification of energy and biodegradability modelling. *International Journal of Hydrogen Energy*, **2019**, 44, 2274-2288	6.7	35
256	Fermentative hydrogen production from mixed and pure microalgae biomass: Key challenges and possible opportunities. *International Journal of Hydrogen Energy*, **2017**, 42, 26440-26453	6.7	35
255	Mesophilic biogenic H2 production using galactose in a fixed bed reactor. *International Journal of Hydrogen Energy*, **2017**, 42, 3658-3666	6.7	35
254	Catalytic hydrothermal liquefaction of biomass into bio-oils and other value-added products A review. *Fuel*, **2021**, 285, 119053	7.1	35
253	Biohydrogen production integrated with an external dynamic membrane: A novel approach. *International Journal of Hydrogen Energy*, **2017**, 42, 27543-27549	6.7	34
252	Effects of various dilute acid pretreatments on the biochemical hydrogen production potential of marine macroalgal biomass. *International Journal of Hydrogen Energy*, **2017**, 42, 27600-27606	6.7	34
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250	Surfactant assisted disperser pretreatment on the liquefaction of Ulva reticulata and evaluation of biodegradability for energy efficient biofuel production through nonlinear regression modelling. *Bioresource Technology*, **2018**, 255, 116-122	11	34
249	Bioelectricity generation from coconut husk retting wastewater in fed batch operating microbial fuel cell by phenol degrading microorganism. *Biomass and Bioenergy*, **2014**, 69, 249-254	5.3	34
248	Enhancing aerobic digestion potential of municipal waste-activated sludge through removal of extracellular polymeric substance. *Environmental Science and Pollution Research*, **2014**, 21, 1112-23	5.1	34
247	Impact of pretreatment on food waste for biohydrogen production: A review. *International Journal of Hydrogen Energy*, **2020**, 45, 18211-18225	6.7	34
246	A hybrid constructed wetland for organic-material and nutrient removal from sewage: Process performance and multi-kinetic models. *Journal of Environmental Management*, **2018**, 222, 378-384	7.9	34
245	Effect of ferrous sulphate on nitrification during simultaneous phosphorus removal from domestic wastewater using a laboratory scale anoxic/oxic reactor. *World Journal of Microbiology and Biotechnology*, **2008**, 24, 2981-2986	4.4	33
244	Industrial wastewater to biohydrogen: Possibilities towards successful biorefinery route. *Bioresource Technology*, **2020**, 298, 122378	11	33

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242	Effect of organic loading rate on electricity generating potential of upflow anaerobic microbial fuel cell treating surgical cotton industry wastewater. *Journal of Environmental Chemical Engineering*, **2017**, 5, 1021-1026	6.8	32
241	Enhancement of anaerobic degradation of sludge biomass through surfactant-assisted bacterial hydrolysis. *Chemical Engineering Research and Design*, **2016**, 99, 207-215	5.5	32
240	Hydrogen and ethanol fermentation of various carbon sources by immobilized Escherichia coli (XL1-Blue). *International Journal of Hydrogen Energy*, **2014**, 39, 6881-6888	6.7	32
239	Combined pretreatment of electrolysis and ultra-sonication towards enhancing solubilization and methane production from mixed microalgae biomass. *Bioresource Technology*, **2017**, 245, 196-200	11	32
238	Development of a Novel Hybrid Immobilization Material (HY-IM) for Fermentative Biohydrogen Production from Beverage Wastewater. *Journal of the Chinese Chemical Society*, **2014**, 61, 827-830	1.5	32
237	Surfactant coupled sonic pretreatment of waste activated sludge for energetically positive biogas generation. *Bioresource Technology*, **2017**, 241, 710-719	11	31
236	Disperser-induced bacterial disintegration of partially digested anaerobic sludge for efficient biomethane recovery. *Chemical Engineering Journal*, **2018**, 347, 165-172	14.7	31
235	Treatment of tannery wastewater using hybrid upflow anaerobic sludge blanket reactor. *Journal of Environmental Engineering and Science*, **2007**, 6, 415-421	0.8	31
234	Effect of surfactant assisted sonic pretreatment on liquefaction of fruits and vegetable residue: Characterization, acidogenesis, biomethane yield and energy ratio. *Bioresource Technology*, **2018**, 264, 35-41	11	30
233	Electricity generation from retting wastewater consisting of recalcitrant compounds using continuous upflow microbial fuel cell. *Biotechnology and Bioprocess Engineering*, **2015**, 20, 753-759	3.1	29
232	Seed inocula for biohydrogen production from biodiesel solid residues. *International Journal of Hydrogen Energy*, **2012**, 37, 15489-15495	6.7	29
231	Phosphorus removal in low alkalinity secondary effluent using alum. *International Journal of Environmental Science and Technology*, **2008**, 5, 93-98	3.3	29
230	Optimized transesterification reaction for efficient biodiesel production using Indian oil sardine fish as feedstock. *Fuel*, **2019**, 253, 921-929	7.1	28
229	Nanoparticle induced biological disintegration: A new phase separated pretreatment strategy on microalgal biomass for profitable biomethane recovery. *Bioresource Technology*, **2019**, 289, 121624	11	28
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227	Enzymatically-boosted ionic liquid gas separation membranes using carbonic anhydrase of biomass origin. *Chemical Engineering Journal*, **2016**, 303, 621-626	14.7	28
226	Biomethane recovery from Egeria densa in a microbial electrolysis cell-assisted anaerobic system: Performance and stability assessment. *Chemosphere*, **2016**, 149, 121-9	8.4	28

225	Effect of cation binding agents on sludge solubilization potential of bacteria. *Biotechnology and Bioprocess Engineering*, **2012**, 17, 346-352	3.1	28
224	Recent advances in lignocellulosic biomass for biofuels and value-added bioproducts - A critical review. *Bioresource Technology*, **2022**, 344, 126195	11	28
223	A review on valorization of spent coffee grounds (SCG) towards biopolymers and biocatalysts production. *Bioresource Technology*, **2020**, 314, 123800	11	27
222	A perspective on galactose-based fermentative hydrogen production from macroalgal biomass: Trends and opportunities. *Bioresource Technology*, **2019**, 280, 447-458	11	27
221	Research and development perspectives of lignocellulose-based biohydrogen production. *International Biodeterioration and Biodegradation*, **2017**, 119, 225-238	4.8	26
220	Lignocellulosic biomass-based pyrolysis: A comprehensive review. *Chemosphere*, **2022**, 286, 131824	8.4	26
219	Coupled solar photo-fenton process with aerobic sequential batch reactor for treatment of pharmaceutical wastewater. *Desalination and Water Treatment*, **2012**, 48, 89-95		25
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