

Improving bioethanol production from sugarcane: evaluation of process integration and cogeneration systems

Energy

36, 3691-3703

DOI: [10.1016/j.energy.2010.09.024](https://doi.org/10.1016/j.energy.2010.09.024)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Second generation ethanol in Brazil: Can it compete with electricity production?. Bioresource Technology, 2011, 102, 8964-8971.	9.6	188
2	Modeling and optimization of a utility system containing multiple extractions steam turbines. Energy, 2011, 36, 3501-3512.	8.8	64
3	Reductive dehydration of ethanol to hydrocarbons on Ni- and Au-containing nanocomposites. Nanotechnologies in Russia, 2012, 7, 327-338.	0.7	3
4	Analysis of the Reflux Ratio on the Batch Distillation of Bioethanol Obtained from Lignocellulosic Residue. Procedia Engineering, 2012, 42, 131-139.	1.2	8
5	Improving second generation ethanol production through optimization of first generation production process from sugarcane. Energy, 2012, 43, 246-252.	8.8	87
6	Computational simulation applied to the investigation of industrial plants for bioethanol distillation. Computers and Chemical Engineering, 2012, 46, 1-16.	3.8	45
7	Double-effect integration of multicomponent alcoholic distillation columns. Energy, 2012, 45, 603-612.	8.8	45
8	Developing sugarcane lignocellulosic biorefineries: opportunities and challenges. Biofuels, 2012, 3, 307-319.	2.4	8
9	Environmental and economic assessment of sugarcane first generation biorefineries in Brazil. Clean Technologies and Environmental Policy, 2012, 14, 399-410.	4.1	136
10	Process integration study of a kraft pulp mill converted to an ethanol production plant " part B: Techno-economic analysis. Applied Thermal Engineering, 2012, 42, 179-190.	6.0	19
11	Conceptual design of cost-effective and environmentally-friendly configurations for fuel ethanol production from sugarcane by knowledge-based process synthesis. Bioresource Technology, 2012, 104, 305-314.	9.6	48
12	Integrated versus stand-alone second generation ethanol production from sugarcane bagasse and trash. Bioresource Technology, 2012, 103, 152-161.	9.6	294
13	Separation of yeast from alcoholic fermentation in small hydrocyclones. Separation and Purification Technology, 2012, 87, 62-70.	7.9	43
14	Sustainability of Biofuel Production from Oil Palm Biomass. Green Energy and Technology, 2013, , .	0.6	25
15	Increasing Efficiency of Fuel Ethanol Production from Lignocellulosic Biomass by Process Integration. Energy & Fuels, 2013, 27, 2107-2115.	5.1	20
16	Performance and cost evaluation of a new double-effect integration of multicomponent bioethanol distillation. Energy, 2013, 63, 1-9.	8.8	23
17	Integration of bioethanol as an in-process material in biorefineries using mass pinch analysis. Applied Energy, 2013, 104, 517-526.	10.1	57
18	Butanol production in a first-generation Brazilian sugarcane biorefinery: Technical aspects and economics of greenfield projects. Bioresource Technology, 2013, 135, 316-323.	9.6	111

#	ARTICLE	IF	CITATIONS
19	Evaluation of process configurations for second generation integrated with first generation bioethanol production from sugarcane. <i>Fuel Processing Technology</i> , 2013, 109, 84-89.	7.2	76
20	Biorefineries for the production of first and second generation ethanol and electricity from sugarcane. <i>Applied Energy</i> , 2013, 109, 72-78.	10.1	144
21	Energy from sugarcane bagasse in Brazil: An assessment of the productivity and cost of different technological routes. <i>Renewable and Sustainable Energy Reviews</i> , 2013, 21, 356-364.	16.4	126
22	Process Design, Integration and Optimisation: Advantages, Challenges and Drivers. , 2013, , 79-125.		3
23	Nonlinear predictive control of an evaporator for bioethanol production. , 2013, , .		7
24	Comparison among Proposals for Energy Integration of Processes for 1G/2G Ethanol and Bioelectricity Production. <i>Computer Aided Chemical Engineering</i> , 2014, , 1585-1590.	0.5	2
25	Long-Term Prospects for the Environmental Profile of Advanced Sugar Cane Ethanol. <i>Environmental Science & Technology</i> , 2014, 48, 12394-12402.	10.0	14
26	Techno-economic comparison of ethanol and electricity coproduction schemes from sugarcane residues at existing sugar mills in Southern Africa. <i>Biotechnology for Biofuels</i> , 2014, 7, .	6.2	37
27	Techno-economics of integrating bioethanol production from spent sulfite liquor for reduction of greenhouse gas emissions from sulfite pulping mills. <i>Biotechnology for Biofuels</i> , 2014, 7, 169.	6.2	14
28	Heat integration of combined 1st and 2nd generation ethanol production from wheat kernels and wheat straw. <i>Sustainable Chemical Processes</i> , 2014, 2, .	2.3	6
29	Sugarcane as a Bioenergy Source: History, Performance, and Perspectives for Second-Generation Bioethanol. <i>Bioenergy Research</i> , 2014, 7, 24-35.	3.9	101
30	Brazilian sugarcane ethanol: developments so far and challenges for the future. <i>Wiley Interdisciplinary Reviews: Energy and Environment</i> , 2014, 3, 70-92.	4.1	76
31	Potential for Bioenergy Production from Sugarcane in China. <i>Bioenergy Research</i> , 2014, 7, 1045-1059.	3.9	16
33	Review of evolution, technology and sustainability assessments of biofuel production. <i>Journal of Cleaner Production</i> , 2014, 71, 11-29.	9.3	222
34	A Yeast Isolated from Cashew Apple Juice and Its Ability to Produce First- and Second-Generation Ethanol. <i>Applied Biochemistry and Biotechnology</i> , 2014, 174, 2762-2776.	2.9	12
35	Incorporation of hydrogen production process in a sugar cane industry: Steam reforming of ethanol. <i>Applied Thermal Engineering</i> , 2014, 71, 94-103.	6.0	23
36	Economic and GHG emissions analyses for sugarcane ethanol in Brazil: Looking forward. <i>Renewable and Sustainable Energy Reviews</i> , 2014, 40, 571-582.	16.4	54
37	Thermodynamic predictions of performance of a bagasse integrated gasification combined cycle under quasi-equilibrium conditions. <i>Chemical Engineering Journal</i> , 2014, 258, 402-411.	12.7	21

#	ARTICLE	IF	CITATIONS
38	Butanol production in a sugarcane biorefinery using ethanol as feedstock. Part II: Integration to a second generation sugarcane distillery. <i>Chemical Engineering Research and Design</i> , 2014, 92, 1452-1462.	5.6	29
39	Designing optimal bioethanol networks with purification for integrated biorefineries. <i>Energy Conversion and Management</i> , 2014, 88, 1271-1282.	9.2	9
40	Study of the specific heat capacity of biomass from banana waste for application in the second-generation ethanol industry. <i>Environmental Progress and Sustainable Energy</i> , 2015, 34, 1221-1228.	2.3	7
42	Characterization of poly(lactic acid)/hydroxyapatite prepared by a solvent-blending technique. <i>Journal of Elastomers and Plastics</i> , 2015, 47, 753-768.	1.5	10
43	Synthesis of 2-methyl tetrahydrofuran from various lignocellulosic feedstocks: Sustainability assessment via LCA. <i>Resources, Conservation and Recycling</i> , 2015, 95, 174-182.	10.8	59
44	Comparison of second-generation processes for the conversion of sugarcane bagasse to liquid biofuels in terms of energy efficiency, pinch point analysis and Life Cycle Analysis. <i>Energy Conversion and Management</i> , 2015, 91, 292-301.	9.2	63
45	A MILP Transshipment Model to Integrate and Re-Engineer Distillation Columns into Overall Processes. <i>Computer Aided Chemical Engineering</i> , 2015, 37, 2015-2020.	0.5	4
46	Evaluation of the environmental performance of alternatives for polystyrene production in Brazil. <i>Science of the Total Environment</i> , 2015, 532, 655-668.	8.0	24
47	Sugarcane processing for ethanol and sugar in Brazil. <i>Environmental Development</i> , 2015, 15, 35-51.	4.1	177
48	Outlook for ethanol production costs in Brazil up to 2030, for different biomass crops and industrial technologies. <i>Applied Energy</i> , 2015, 147, 593-610.	10.1	89
49	Integration potential, resource efficiency and cost of forest-fuel-based biorefineries. <i>Computers and Chemical Engineering</i> , 2015, 82, 240-258.	3.8	19
50	Energy transfer diagram for site-wide analysis and application to a kraft pulp mill. <i>Applied Thermal Engineering</i> , 2015, 75, 547-560.	6.0	16
51	Life cycle assessment of butanol production in sugarcane biorefineries in Brazil. <i>Journal of Cleaner Production</i> , 2015, 96, 557-568.	9.3	99
52	Improving second generation bioethanol production in sugarcane biorefineries through energy integration. <i>Applied Thermal Engineering</i> , 2016, 109, 819-827.	6.0	31
54	Exergy and CO2 Analyses as Key Tools for the Evaluation of Bio-Ethanol Production. <i>Sustainability</i> , 2016, 8, 76.	3.2	13
56	Trends and Sustainability Criteria for Liquid Biofuels. , 2016, , 77-114.		0
57	Energy and water self-sufficiency assessment of the white sugar production process in Indonesia using a complex mass balance model. <i>Journal of Cleaner Production</i> , 2016, 126, 478-492.	9.3	10
58	Design-oriented thermodynamic analysis of novel heat-integrated C5 isomeride distillation scheme on pilot scale. <i>Transactions of Tianjin University</i> , 2016, 22, 77-82.	6.4	0

#	ARTICLE	IF	CITATIONS
59	Methodology for the optimal design of an integrated first and second generation ethanol production plant combined with power cogeneration. <i>Bioresource Technology</i> , 2016, 214, 441-449.	9.6	16
61	Lean hydrous and anhydrous bioethanol combustion in spark ignition engine at idle. <i>Energy Conversion and Management</i> , 2016, 128, 1-11.	9.2	11
62	Methodology for the optimal design of an integrated sugarcane distillery and cogeneration process for ethanol and power production. <i>Energy</i> , 2016, 117, 540-549.	8.8	13
63	Technical, Economic, and Greenhouse Gas Reduction Potential of Combined Ethanol Fermentation and Biofuel Gasification-Synthesis at Sulphite Pulping Mills. <i>Energy & Fuels</i> , 2016, 30, 7387-7399.	5.1	7
64	Platform Chemical Biorefinery and Agroindustrial Waste Management. , 2016, , 379-391.		6
65	Methodology for the design and comparison of optimal production configurations of first and first and second generation ethanol with power. <i>Applied Energy</i> , 2016, 184, 247-265.	10.1	11
66	Production of renewable diesel through the hydroprocessing of lignocellulosic biomass-derived bio-oil: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 58, 1293-1307.	16.4	221
67	Exergy-based performance analysis of a continuous stirred bioreactor for ethanol and acetate fermentation from syngas via Woodâ€™Ljungdahl pathway. <i>Chemical Engineering Science</i> , 2016, 143, 36-46.	3.8	30
68	Reduction of process steam demand and water-usage through heat integration in sugar and ethanol production from sugarcane â€™ Evaluation of different plant configurations. <i>Energy</i> , 2017, 138, 1263-1280.	8.8	41
69	Sweet Sorghum and Upland Rice: Alternative Preceding Crops to Ameliorate Ethanol Production and Soil Sustainability Within the Sugarcane Cropping System. <i>Sugar Tech</i> , 2017, 19, 64-71.	1.8	12
70	Multi-objective optimization of a sugarcane biorefinery for integrated ethanol and methanol production. <i>Energy</i> , 2017, 138, 1281-1290.	8.8	53
71	Hydrous bioethanol production from sugarcane bagasse via energy self-sufficient gasification-fermentation hybrid route: Simulation and financial analysis. <i>Journal of Cleaner Production</i> , 2017, 168, 1625-1635.	9.3	34
72	Optimization of simultaneous saccharification and fermentation conditions with amphipathic lignin derivatives for concentrated bioethanol production. <i>Bioresource Technology</i> , 2017, 232, 126-132.	9.6	40
73	Assessing energetic and available fuel demands from a soybean biorefinery producing refined oil, biodiesel, defatted meal and power. <i>Computers and Chemical Engineering</i> , 2017, 104, 259-270.	3.8	4
74	Hydrothermal Processing in Biorefineries. , 2017, , .		41
75	Microalgae cultivation in sugarcane vinasse: Selection, growth and biochemical characterization. <i>Bioresource Technology</i> , 2017, 228, 133-140.	9.6	114
76	Sugarcane Biotechnology: Challenges and Prospects. , 2017, , .		3
77	Carbon mass balance in sugarcane biorefineries in Brazil for evaluating carbon capture and utilization opportunities. <i>Biomass and Bioenergy</i> , 2017, 105, 351-363.	5.7	25

#	ARTICLE	IF	CITATIONS
79	Energetic optimization of Moroccan distillery using simulation and response surface methodology. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 75, 415-425.	16.4	32
80	Effect of phosphate concentration on exergetic-based sustainability parameters of glucose fermentation by <i>Ethanollic Mucor indicus</i> . <i>Sustainable Production and Consumption</i> , 2017, 9, 28-36.	11.0	13
81	Lipid productivity in the fed-batch growth of <i>Desmodesmus</i> green microalgae from sugarcane vinasse. , 2017, , .		1
82	Superstructural economic optimization of sugarcane bagasse exploitation in an ethanol distillery connected to Rankine cycle, BIGCC system and second generation ethanol process. <i>Computer Aided Chemical Engineering</i> , 2017, , 889-894.	0.5	5
83	Review of design works for the conversion of sugarcane to first and second-generation ethanol and electricity. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 91, 152-164.	16.4	29
84	Thermodynamic and economic evaluation of reheat and regeneration alternatives in cogeneration systems of the Brazilian sugarcane and alcohol sector. <i>Energy</i> , 2018, 152, 247-262.	8.8	21
85	Optimization of Fed-Batch Fermentation with in Situ Ethanol Removal by CO ₂ Stripping. <i>Energy & Fuels</i> , 2018, 32, 954-960.	5.1	20
86	Economic, environmental, and social impacts of different sugarcane production systems. <i>Biofuels, Bioproducts and Biorefining</i> , 2018, 12, 68-82.	3.7	53
87	Enzymatic Hydrolysis of Sugarcane Biomass and Heat Integration as Enhancers of Ethanol Production. <i>Journal of Renewable Materials</i> , 2018, 6, 183-194.	2.2	12
88	VAPOR-LIQUID EQUILIBRIUM CALCULATION FOR SIMULATION OF BIOETHANOL CONCENTRATION FROM SUGARCANE. <i>Brazilian Journal of Chemical Engineering</i> , 2018, 35, 341-352.	1.3	5
89	A review of integration strategies of lignocelluloses and other wastes in 1st generation bioethanol processes. <i>Process Biochemistry</i> , 2018, 75, 173-186.	3.7	63
90	Thermodynamic and Environmental Analysis of Scaling up Cogeneration Units Driven by Sugarcane Biomass to Enhance Power Exports. <i>Energies</i> , 2018, 11, 73.	3.1	21
91	Computational tools and operational research for optimal design of co-generation systems. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 93, 507-516.	16.4	5
92	Technological Advancements in 1G Ethanol Production and Recovery of By-Products Based on the Biorefinery Concept. , 2018, , 73-95.		14
93	Water and Power Consumption, Ethanol Production and CO ₂ Emissions: High-Scale Sugarcane-Based Biorefinery Toward Neutrality in Carbon. <i>Materials Science Forum</i> , 2019, 965, 87-95.	0.3	1
94	Potential reduction of greenhouse gas emission through the use of sugarcane ash in cement-based industries: A case in the Philippines. <i>Journal of Cleaner Production</i> , 2019, 239, 118072.	9.3	27
95	Thermodynamic, financial and resource assessments of a large-scale sugarcane-biorefinery: Prelude of full bioenergy carbon capture and storage scenario. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 113, 109251.	16.4	21
96	Emerging techniques in bioethanol production: from distillation to waste valorization. <i>Green Chemistry</i> , 2019, 21, 1171-1185.	9.0	71

#	ARTICLE	IF	CITATIONS
97	Systematic synthesis and integration of multiple-effect distillation into overall processes: The case of biorefineries. <i>AIChE Journal</i> , 2019, 65, e16631.	3.6	5
98	A techno-economic analysis of thermochemical pathways for corncob-to-energy: Fast pyrolysis to bio-oil, gasification to methanol and combustion to electricity. <i>Fuel Processing Technology</i> , 2019, 193, 102-113.	7.2	63
99	Energy analysis of the ethanol industry considering vinasse concentration and incineration. <i>Renewable Energy</i> , 2019, 142, 96-109.	8.9	16
100	Pretreatment for biorefineries: a review of common methods for efficient utilisation of lignocellulosic materials. <i>Biotechnology for Biofuels</i> , 2019, 12, 294.	6.2	282
101	Production Process and Optimization of Solid Bioethanol from Empty Fruit Bunches of Palm Oil Using Response Surface Methodology. <i>Processes</i> , 2019, 7, 715.	2.8	14
102	Mass and Heat Integration in Ethanol Production Mills for Enhanced Process Efficiency and Exergy-Based Renewability Performance. <i>Processes</i> , 2019, 7, 670.	2.8	8
103	Development and optimization of a novel process of double-effect distillation with vapor recompression for bioethanol recovery and vapor permeation for bioethanol dehydration. <i>Journal of Chemical Technology and Biotechnology</i> , 2019, 94, 1041-1056.	3.2	16
104	Enhanced Biogas Production from Rice Husk Through Solid-State Chemical Pretreatments. <i>Waste and Biomass Valorization</i> , 2020, 11, 2397-2407.	3.4	16
105	Determination of the optimum extraction pressure in a steam power cycle with only one bleed. <i>Energy Reports</i> , 2020, 6, 604-608.	5.1	1
106	Potential and Impacts of Cogeneration in Tropical Climate Countries: Ecuador as a Case Study. <i>Energies</i> , 2020, 13, 5254.	3.1	1
107	Insight into separation of azeotrope in wastewater to achieve cleaner production by extractive distillation and pressure-swing distillation based on phase equilibrium. <i>Journal of Cleaner Production</i> , 2020, 276, 124213.	9.3	20
108	Sustainable environmental management and related biofuel technologies. <i>Journal of Environmental Management</i> , 2020, 273, 111096.	7.8	132
109	Reduction of the energy demand of a second-generation bioethanol plant by heat integration and vapour recompression between different columns. <i>Energy</i> , 2020, 208, 118443.	8.8	13
110	Sugarcane processing by-products for bioethanol production in the Philippines: a retrospective assessment from 2007 to 2017 and future challenges. <i>Biofuels</i> , 2020, , 1-11.	2.4	0
111	Life Cycle Analysis of the Bioethanol Production from Food Waste—A Review. <i>Energies</i> , 2020, 13, 5206.	3.1	23
112	Property Modeling, Energy Balance and Process Simulation Applied to Bioethanol Purification. <i>Sugar Tech</i> , 2020, 22, 870-884.	1.8	2
113	Comparison through energy, exergy and economic analyses of two alternatives for the energy exploitation of vinasse. <i>Energy</i> , 2020, 197, 117231.	8.8	20
114	Techno-economic assessment of bioenergy and biofuel production in integrated sugarcane biorefinery: Identification of technological bottlenecks and economic feasibility of dilute acid pretreatment. <i>Energy</i> , 2020, 199, 117422.	8.8	41

#	ARTICLE	IF	CITATIONS
115	Oxidative dehydrogenation of ethanol over Cu/Mg-Al catalyst derived from hydrotalcite: effect of ethanol concentration and reduction conditions. Journal of Zhejiang University: Science A, 2020, 21, 218-228.	2.4	4
116	Second Law analysis of large-scale sugarcane-ethanol biorefineries with alternative distillation schemes: Bioenergy carbon capture scenario. Renewable and Sustainable Energy Reviews, 2021, 135, 110181.	16.4	12
117	Graphical Analysis of Plant-Wide Heat Cascade for Increasing Energy Efficiency in the Production of Ethanol and Sugar from Sugarcane. Process Integration and Optimization for Sustainability, 2021, 5, 335-359.	2.6	5
118	Biomass Waste as Sustainable Raw Material for Energy and Fuels. Sustainability, 2021, 13, 794.	3.2	108
120	A framework for the design and analysis of integrated multi-product biorefineries from agricultural and forestry wastes. Renewable and Sustainable Energy Reviews, 2021, 139, 110687.	16.4	62
121	Assessment of socioeconomic impacts, emissions and share potential of the sugar energy sector in the Brazilian electricity matrix, in the context of NDC , applying a bottom-up approach and input-output modeling. Biofuels, Bioproducts and Biorefining, 2021, 15, 1245-1263.	3.7	0
122	The E-S-T Method Based on the Grand Composite Curve Links Energy Consumption with Number of Stages and Stage Temperatures for Binary Mixture Distillation. Process Integration and Optimization for Sustainability, 0, , 1.	2.6	1
123	Calcium looping post-combustion CO2 capture in sugarcane bagasse fuelled power plants. International Journal of Greenhouse Gas Control, 2021, 110, 103401.	4.6	8
124	Production of Palm Biofuels Toward Sustainable Development. Green Energy and Technology, 2013, , 107-146.	0.6	1
125	ENERGY AND EXERGETIC EVALUATION OF THE MULTICOMPONENT SEPARATION OF PETROCHEMICAL NAPHTHA IN FALLING FILM DISTILLATION COLUMNS. Brazilian Journal of Chemical Engineering, 2019, 36, 1357-1365.	1.3	14
126	SIMULATION AND ANALYSIS OF AN INDUSTRIAL COLUMN SYSTEM OF BIOETHANOL DISTILLATION HEATED BY VAPOR DIRECT INJECTION. Engevista, 2015, 17, 254.	0.1	2
127	Microalgae based biorefinery: Issues to consider. CTyF - Ciencia, Tecnologia Y Futuro, 2011, 4, 05-21.	0.5	79
129	Energy saving alternatives for renewable ethanol production with the focus on separation/purification units: A techno-economic analysis. Energy, 2022, 239, 122363.	8.8	9
130	Advanced technologies for electricity production in the sugarcane value chain are a strategic option in a carbon reward policy context. Energy Policy, 2021, 159, 112637.	8.8	12
131	1 A COMPARATIVE STUDY BETWEEN THE USE OF REBOILERS AND DIRECT STEAM INJECTION IN DISTILLATION COLUMNS. , 0, ,		1
132	Comparative Analysis of Electricity Cogeneration Scenarios in Sugarcane Production by LCA. , 2015, , 233-260.		0
133	Techno-Economic Aspects in the Evaluation of Biorefineries for Production of Second-Generation Bioethanol. , 2017, , 401-420.		1
134	Measuring the Impact of Technology Trends and Forecasts in Sugar Industry Towards Sustainable Health-Care Services. Indian Journal of Public Health Research and Development, 2017, 8, 939.	0.0	1

#	ARTICLE	IF	CITATIONS
135	Process integration: hurdles and approaches to overcome. , 2022, , 261-281.		0
136	Arabinoxylans: A new class of food ingredients arising from synergies with biorefining, and illustrating the nature of biorefinery engineering. Food and Bioproducts Processing, 2022, 132, 83-98.	3.6	6
137	Bioethanol: Substrates, Current Status, and Challenges. Clean Energy Production Technologies, 2022, , 231-269.	0.5	1
138	Bioconversion of molesses to ethanol by reactive yeast. Chemistry Technology and Application of Substances, 2021, 4, 117-121.	0.1	0
139	Simulation and economic evaluation of different process alternatives for the fermentation and distillation steps of ethanol production. Energy Conversion and Management, 2022, 265, 115792.	9.2	5
140	Use of vegetable and approximate oil waste. Chemistry Technology and Application of Substances, 2022, 5, 36-41.	0.1	0
141	Alternative distillation configurations for bioethanol purification: Simulation, optimization and techno-economic assessment. Chemical Engineering Research and Design, 2022, 185, 130-145.	5.6	1
142	Brazilian sugar cane industry " A survey on future improvements in the process energy management. Energy, 2022, 259, 124903.	8.8	10
143	Bioenergy research in Brazil: A bibliometric evaluation of the <scp>BIOEN</scp> Research Program. Biofuels, Bioproducts and Biorefining, 0, , .	3.7	0
144	The Sustainability of Sugarcane Ethanol in Brazil: Perspective and Challenges. , 0, , .		0
145	Polymers without Petrochemicals: Sustainable Routes to Conventional Monomers. Chemical Reviews, 2023, 123, 2609-2734.	47.7	53
146	Techno-economic analysis of the production of 2G ethanol and technical lignin via a protic ionic liquid pretreatment of sugarcane bagasse. Industrial Crops and Products, 2022, 189, 115788.	5.2	4
147	Exploring Potentials for Bioresource and Bioenergy Recovery from Vinasse, the "New" Protagonist in Brazilian Sugarcane Biorefineries. Biomass, 2022, 2, 374-411.	2.8	5
148	Modeling of microalgal biodiesel production integrated to a sugarcane ethanol plant: Energy and exergy efficiencies and environmental impacts due to trade-offs in the usage of bagasse in the Brazilian context. Journal of Cleaner Production, 2023, 395, 136461.	9.3	8
149	Effect of torrefaction on steam-enhanced co-gasification of an urban forest and landfill waste blend: H2 production and CO2 emissions mitigation. International Journal of Hydrogen Energy, 2023, 48, 27151-27169.	7.1	8
150	Modeling and techno-economic analysis of a hybrid sugarcane plant fed by vinasse biogas and bagasse surplus for electricity generation. Journal of Cleaner Production, 2023, 413, 137511.	9.3	3
152	Recovery and characterization of cellulosic ethanol from fermentation of sugarcane bagasse. Chemical Engineering Research and Design, 2023, 196, 568-576.	5.6	1
154	BECCS as climate mitigation option in a Brazilian low carbon energy system: Estimating potential and effect of gigatonne scale CO2 storage. International Journal of Greenhouse Gas Control, 2023, 128, 103945.	4.6	1

#	ARTICLE	IF	CITATIONS
155	Thermal integration of a natural gas combined cycle power plant with carbon capture and utilization technologies. <i>Energy Conversion and Management</i> , 2023, 295, 117619.	9.2	2
156	Exploring the spatiotemporal evolution of bioenergy with carbon capture and storage and decarbonization of oil refineries with a national energy system model of Colombia. <i>Energy Strategy Reviews</i> , 2023, 50, 101232.	7.3	0
157	Systematic study of energy-saving bioethanol distillation process with sidestreams: Design and control. <i>Energy Conversion and Management</i> , 2023, 297, 117736.	9.2	1