Ming-Hsun Cheng

List of Publications by Year
in descending order

116 papers	2,961 citations	136740 32 h-index	214527 47 g-index
123 all docs	123 docs citations	123 times ranked	2816 citing authors

#	Article	IF	Citations
1	Butanol production from food waste: a novel process for producing sustainable energy and reducing environmental pollution. Biotechnology for Biofuels, 2015, 8, 147.	6.2	110
2	Comparison of Modified Dry-Grind Corn Processes for Fermentation Characteristics and DDGS Composition. Cereal Chemistry, 2005, 82, 187-190.	1.1	109
3	Ethanol Production from Food Waste at High Solids Content with Vacuum Recovery Technology. Journal of Agricultural and Food Chemistry, 2015, 63, 2760-2766.	2.4	100
4	Technoâ€economic analysis of biodiesel and ethanol coâ€production from lipidâ€producing sugarcane. Biofuels, Bioproducts and Biorefining, 2016, 10, 299-315.	1.9	85
5	Improvement of sugar yields from corn stover using sequential hot water pretreatment and disk milling. Bioresource Technology, 2016, 216, 706-713.	4.8	80
6	Engineering process and cost model for a conventional corn wet milling facility. Industrial Crops and Products, 2008, 27, 91-97.	2.5	79
7	Separation of Fiber from Distillers Dried Grains with Solubles (DDGS) Using Sieving and Elutriation. Cereal Chemistry, 2005, 82, 528-533.	1.1	73
8	Relationship of phenolic composition of selected purple maize (Zea mays L.) genotypes with their anti-inflammatory, anti-adipogenic and anti-diabetic potential. Food Chemistry, 2019, 289, 739-750.	4.2	71
9	Comparison of Raw Starch Hydrolyzing Enzyme with Conventional Liquefaction and Saccharification Enzymes in Dry-Grind Corn Processing. Cereal Chemistry, 2007, 84, 10-14.	1.1	70
10	Autohydrolysis of Miscanthus x giganteus for the production of xylooligosaccharides (XOS): Kinetics, characterization and recovery. Bioresource Technology, 2014, 155, 359-365.	4.8	69
11	Economic feasibility analysis of soybean oil production by hexane extraction. Industrial Crops and Products, 2017, 108, 775-785.	2.5	66
12	Bioactive compounds, nutritional benefits and food applications of colored wheat: a comprehensive review. Critical Reviews in Food Science and Nutrition, 2021, 61, 3197-3210.	5.4	65
13	Comparison of Yield and Composition of Oil Extracted from Corn Fiber and Corn Bran. Cereal Chemistry, 1999, 76, 449-451.	1.1	64
14	Fermentation of undetoxified sugarcane bagasse hydrolyzates using a two stage hydrothermal and mechanical refining pretreatment. Bioresource Technology, 2018, 261, 313-321.	4.8	62
15	Comparison of Enzymatic (E-Mill) and Conventional Dry-Grind Corn Processes Using a Granular Starch Hydrolyzing Enzyme. Cereal Chemistry, 2005, 82, 734-738.	1.1	59
16	A comparative study of anthocyanin distribution in purple and blue corn coproducts from three conventional fractionation processes. Food Chemistry, 2017, 231, 332-339.	4.2	56
17	Improving ethanol yields with deacetylated and two-stage pretreated corn stover and sugarcane bagasse by blending commercial xylose-fermenting and wild type Saccharomyces yeast. Bioresource Technology, 2019, 282, 103-109.	4.8	55
18	Towards oilcane: Engineering hyperaccumulation of triacylglycerol into sugarcane stems. GCB Bioenergy, 2020, 12, 476-490.	2.5	54

#	Article	IF	Citations
19	Promise of combined hydrothermal/chemical and mechanical refining for pretreatment of woody and herbaceous biomass. Biotechnology for Biofuels, 2016, 9, 97.	6.2	49
20	The costs of sugar production from different feedstocks and processing technologies. Biofuels, Bioproducts and Biorefining, 2019, 13, 723-739.	1.9	48
21	Dry-grind processing using amylase corn and superior yeast to reduce the exogenous enzyme requirements in bioethanol production. Biotechnology for Biofuels, 2016, 9, 228.	6.2	46
22	Evaluation and Strategies to Improve Fermentation Characteristics of Modified Dry-Grind Corn Processes. Cereal Chemistry, 2006, 83, 455-459.	1.1	45
23	Enzymatic corn wet milling: engineering process and cost model. Biotechnology for Biofuels, 2009, 2, 2.	6.2	44
24	Comparison Between Granular Starch Hydrolyzing Enzyme and Conventional Enzymes for Ethanol Production from Maize Starch with Different Amylose: Amylopectin Ratios. Starch/Staerke, 2007, 59, 549-556.	1.1	43
25	Sugar production from bioenergy sorghum by using pilot scale continuous hydrothermal pretreatment combined with disk refining. Bioresource Technology, 2019, 289, 121663.	4.8	42
26	High solids loading biorefinery for the production of cellulosic sugars from bioenergy sorghum. Bioresource Technology, 2020, 318, 124051.	4.8	41
27	Biorefinery for combined production of jet fuel and ethanol from lipidâ€producing sugarcane: a technoâ€economic evaluation. GCB Bioenergy, 2018, 10, 92-107.	2.5	40
28	Economic Feasibility of Soybean Oil Production by Enzyme-Assisted Aqueous Extraction Processing. Food and Bioprocess Technology, 2019, 12, 539-550.	2.6	40
29	Effects of Ground Corn Particle Size on Ethanol Yield and Thin Stillage Soluble Solids. Cereal Chemistry, 2007, 84, 6-9.	1.1	39
30	Changes in Lipid Composition During Dry Grind Ethanol Processing of Corn. JAOCS, Journal of the American Oil Chemists' Society, 2011, 88, 435-442.	0.8	39
31	Environmental impact assessment of soybean oil production: Extruding-expelling process, hexane extraction and aqueous extraction. Food and Bioproducts Processing, 2018, 108, 58-68.	1.8	38
32	Economic Analysis of Cellulosic Ethanol Production from Sugarcane Bagasse Using a Sequential Deacetylation, Hot Water and Disk-Refining Pretreatment. Processes, 2019, 7, 642.	1.3	37
33	Biodiesel from oil produced in vegetative tissues of biomass â€" A review. Bioresource Technology, 2021, 326, 124772.	4.8	36
34	Economics of Fiber Separation from Distillers Dried Grains with Solubles (DDGS) Using Sieving and Elutriation. Cereal Chemistry, 2006, 83, 324-330.	1.1	33
35	MiscanthusÃ—giganteus xylooligosaccharides: Purification and fermentation. Carbohydrate Polymers, 2016, 140, 96-103.	5.1	33
36	Economics of plant oil recovery: A review. Biocatalysis and Agricultural Biotechnology, 2019, 18, 101056.	1.5	32

#	Article	IF	Citations
37	Effect of Aflatoxin B1 on Dry-Grind Ethanol Process. Cereal Chemistry, 2005, 82, 302-304.	1.1	29
38	Processing Method and Corn Cultivar Affected Anthocyanin Concentration from Dried Distillers Grains with Solubles. Journal of Agricultural and Food Chemistry, 2015, 63, 3205-3218.	2.4	28
39	Economic perspective of ethanol and biodiesel coproduction from industrial hemp. Journal of Cleaner Production, 2021, 299, 126875.	4.6	28
40	Production of xylose enriched hydrolysate from bioenergy sorghum and its conversion to Î²-carotene using an engineered Saccharomyces cerevisiae. Bioresource Technology, 2020, 308, 123275.	4.8	26
41	Protease Treatment to Improve Ethanol Fermentation in Modified Dry Grind Corn Processes. Cereal Chemistry, 2009, 86, 323-328.	1.1	25
42	In Vitro Fermentation of Xylooligosaccharides Produced from <i>Miscanthus</i> Ã— <i><i>giganteus</i></i> by Human Fecal Microbiota. Journal of Agricultural and Food Chemistry, 2016, 64, 262-267.	2.4	25
43	Impact of methanol addition strategy on enzymatic transesterification of jatropha oil for biodiesel processing. Energy, 2012, 48, 375-379.	4.5	22
44	Increasing ethanol yield through fiber conversion in corn dry grind process. Bioresource Technology, 2018, 270, 742-745.	4.8	21
45	Balancing sugar recovery and inhibitor generation during energycane processing: Coupling cryogenic grinding with hydrothermal pretreatment at low temperatures. Bioresource Technology, 2021, 321, 124424.	4.8	21
46	Use of Phytases in Ethanol Production from Eâ€Mill Corn Processing. Cereal Chemistry, 2011, 88, 223-227.	1.1	20
47	Prediction of Starch Content and Ethanol Yields of Sorghum Grain Using near Infrared Spectroscopy. Journal of Near Infrared Spectroscopy, 2015, 23, 85-92.	0.8	20
48	Greenhouse gas emissions embedded in US-China fuel ethanol trade: A comparative well-to-wheel estimate. Journal of Cleaner Production, 2018, 183, 653-661.	4.6	20
49	Lifecycle energy consumption and greenhouse gas emissions from corncob ethanol in China. Biofuels, Bioproducts and Biorefining, 2018, 12, 1037-1046.	1.9	20
50	Variability in structural carbohydrates, lipid composition, and cellulosic sugar production from industrial hemp varieties. Industrial Crops and Products, 2020, 157, 112906.	2.5	20
51	Dry-Grind Processing of Corn with Endogenous Liquefaction Enzymes. Cereal Chemistry, 2006, 83, 317-320.	1.1	19
52	Effects of Protease and Urea on a Granular Starch Hydrolyzing Process for Corn Ethanol Production. Cereal Chemistry, 2009, 86, 319-322.	1.1	19
53	Ethanol Production from Modified and Conventional Dryâ€Grind Processes Using Different Corn Types. Cereal Chemistry, 2009, 86, 616-622.	1.1	18
54	Potential bioethanol production from Taiwanese chenopods (Chenopodium formosanum). Energy, 2014, 76, 59-65.	4.5	18

#	Article	IF	Citations
55	Evaluation of the quantity and composition of sugars and lipid in the juice and bagasse of lipid producing sugarcane. Biocatalysis and Agricultural Biotechnology, 2017, 10, 148-155.	1.5	18
56	Pericarp Fiber Separation from Corn Flour Using Sieving and Air Classification. Cereal Chemistry, 2008, 85, 27-30.	1.1	16
57	Effect of Harvest Moisture Content on Selected Yellow Dent Corn: Dryâ€Grind Fermentation Characteristics and DDGS Composition. Cereal Chemistry, 2012, 89, 217-221.	1.1	16
58	Technoeconomic Analysis of Biodiesel and Ethanol Production from Lipid-Producing Sugarcane and Sweet Sorghum. Industrial Biotechnology, 2016, 12, 357-365.	0.5	16
59	Germ soak water as nutrient source to improve fermentation of corn grits from modified corn dry grind process. Bioresources and Bioprocessing, 2017, 4, 38.	2.0	16
60	Hydrothermal pretreatment for valorization of genetically engineered bioenergy crop for lipid and cellulosic sugar recovery. Bioresource Technology, 2021, 341, 125817.	4.8	15
61	Bioconversion of Pelletized Big Bluestem, Switchgrass, and Low-Diversity Grass Mixtures Into Sugars and Bioethanol. Frontiers in Energy Research, 2018, 6, .	1.2	14
62	Technoâ€economic feasibility of phosphorus recovery as a coproduct from corn wet milling plants. Cereal Chemistry, 2019, 96, 380-390.	1.1	14
63	Bioprocessing and technoeconomic feasibility analysis of simultaneous production of d-psicose and ethanol using engineered yeast strain KAM-2GD. Bioresource Technology, 2019, 275, 27-34.	4.8	14
64	Identification of informative spectral ranges for predicting major chemical constituents in corn using NIR spectroscopy. Food Chemistry, 2022, 383, 132442.	4.2	14
65	Hydrolysis and Fermentation of Pericarp and Endosperm Fibers Recovered from Enzymatic Corn Dry-Grind Process. Cereal Chemistry, 2005, 82, 616-620.	1.1	13
66	Conversion of High-Solids Hydrothermally Pretreated Bioenergy Sorghum to Lipids and Ethanol Using Yeast Cultures. ACS Sustainable Chemistry and Engineering, 2021, 9, 8515-8525.	3.2	13
67	Effect of Mill Plate Setting and Number of Dynamic Steeping Stages for an Intermittent Milling and Dynamic Steeping (IMDS) Process for Corn. Cereal Chemistry, 2000, 77, 209-212.	1.1	12
68	An Enzymatic Process for Corn Wet Milling. Advances in Food and Nutrition Research, 2004, 48, 151-171.	1.5	12
69	Physical properties that govern fiber separation from distillers dried grains with solubles (DDGS) using sieving and air classification. Separation and Purification Technology, 2008, 61, 461-468.	3.9	12
70	Effect of sulfur dioxide and lactic acid in steeping water on the extraction of anthocyanins and bioactives from purple corn pericarp. Cereal Chemistry, 2019, 96, 575-589.	1.1	12
71	Activating Effects of Phenolics from Apache Red <i>Zea mays</i> L. on Free Fatty Acid Receptor 1 and Glucokinase Evaluated with a Dual Culture System with Epithelial, Pancreatic, and Liver Cells. Journal of Agricultural and Food Chemistry, 2019, 67, 9148-9159.	2.4	12
72	Field Productivities of Napier Grass for Production of Sugars and Ethanol. ACS Sustainable Chemistry and Engineering, 2020, 8, 2052-2060.	3.2	12

#	Article	IF	Citations
73	Technoâ€economic feasibility analysis of engineered energycaneâ€based biorefinery coâ€producing biodiesel and ethanol. GCB Bioenergy, 2021, 13, 1498-1514.	2.5	12
74	Impact of Fractionation Process on the Technical and Economic Viability of Corn Dry Grind Ethanol Process. Processes, 2019, 7, 578.	1.3	11
75	Optimization of two-stage pretreatment for maximizing ethanol production in 1.5G technology. Bioresource Technology, 2021, 320, 124380.	4.8	11
76	Fiber Separated from Distillers Dried Grains with Solubles as a Feedstock for Ethanol Production. Cereal Chemistry, 2007, 84, 563-566.	1.1	10
77	Techno-Economic Analysis of Extruding-Expelling of Soybeans to Produce Oil and Meal. Agriculture (Switzerland), 2019, 9, 87.	1.4	10
78	Recovering phosphorus as a coproduct from corn dry grind plants: A technoâ€economic evaluation. Cereal Chemistry, 2020, 97, 449-458.	1.1	10
79	Effects of genetic variation and growing condition of prairie cordgrass on feedstock composition and ethanol yield. Bioresource Technology, 2015, 183, 70-77.	4.8	9
80	Fouling characteristics of model carbohydrate mixtures and their interaction effects. Food and Bioproducts Processing, 2015, 93, 197-204.	1.8	9
81	Use of Pigmented Maize in Both Conventional Dry-Grind and Modified Processes Using Granular Starch Hydrolyzing Enzyme. Cereal Chemistry, 2016, 93, 344-351.	1.1	9
82	Profitability Analysis of Soybean Oil Processes. Bioengineering, 2017, 4, 83.	1.6	9
83	Phytosterol Distribution in Fractions Obtained from Processing of Distillers Dried Grains with Solubles Using Sieving and Elutriation. Cereal Chemistry, 2007, 84, 626-630.	1.1	8
84	Enhancing ethanol yields in corn dry grind process by reducing glycerol production. Cereal Chemistry, 2020, 97, 1026-1036.	1.1	8
85	Wet-Milling and Dry-Milling Properties of Dent Corn with Addition of Amylase Corn. Cereal Chemistry, 2006, 83, 321-323.	1.1	7
86	Improvement of Dryâ€Fractionation Ethanol Fermentation by Partial Germ Supplementation. Cereal Chemistry, 2015, 92, 218-223.	1.1	7
87	Impact of disk milling on corn stover pretreated at commercial scale. Bioresource Technology, 2017, 232, 297-303.	4.8	7
88	Recoveries of Oil and Hydrolyzed Sugars from Corn Germ Meal by Hydrothermal Pretreatment: A Model Feedstock for Lipid-Producing Energy Crops. Energies, 2020, 13, 6022.	1.6	7
89	Enzymatic Process for Corn Dryâ€Grind Highâ€Solids Fermentation. Cereal Chemistry, 2011, 88, 429-433.	1.1	6
90	Chemical Free Two-Step Hydrothermal Pretreatment to Improve Sugar Yields from Energy Cane. Energies, 2020, 13, 5805.	1.6	6

#	Article	IF	Citations
91	A study of moisture dependent changes in engineering properties and debranning characteristics of purple wheat. Journal of Food Processing and Preservation, 2021, 45, e15916.	0.9	6
92	Germâ€Derived FAN as Nitrogen Source for Corn Endosperm Fermentation. Cereal Chemistry, 2011, 88, 328-332.	1.1	5
93	Corn Endosperm Fermentation Using Endogenous Amino Nitrogen Generated by a Fungal Protease. Cereal Chemistry, 2011, 88, 117-123.	1.1	5
94	Influence of <i>Stenocarpella maydis</i> Infected Corn on the Composition of Corn Kernel and Its Conversion into Ethanol. Cereal Chemistry, 2012, 89, 15-23.	1.1	5
95	Maize Proximate Composition and Physical Properties Correlations to Dry-Grind Ethanol Concentrations. Cereal Chemistry, 2016, 93, 414-418.	1.1	5
96	Evaporator Fouling Tendencies of Thin Stillage and Concentrates From the Dry Grind Process. Heat Transfer Engineering, 2017, 38, 743-752.	1.2	5
97	Highâ€conversion hydrolysates and corn sweetener production in dryâ€grind corn process. Cereal Chemistry, 2018, 95, 302-311.	1.1	5
98	Changes in Corn Protein Content During Storage and Their Relationship with Dry Grind Ethanol Production. JAOCS, Journal of the American Oil Chemists' Society, 2018, 95, 923-932.	0.8	5
99	Technical and economic feasibility of an integrated ethanol and anthocyanin coproduction process using purple corn stover. Biofuels, Bioproducts and Biorefining, 2021, 15, 719-735.	1.9	5
100	Development and validation of timeâ€domain ¹Hâ€NMR relaxometry correlation for highâ€throughput phenotyping method for lipid contents of lignocellulosic feedstocks. GCB Bioenergy, 2021, 13, 1179-1190.	2.5	5
101	Mapping the National Phosphorus Recovery Potential from Centralized Wastewater and Corn Ethanol Infrastructure. Environmental Science & Technology, 2022, 56, 8691-8701.	4.6	5
102	Improving Fermentation Rate during Use of Corn Grits in Beverage Alcohol Production. Beverages, 2019, 5, 5.	1.3	4
103	Process design and techno-economic analysis of 2â€²-fucosyllactose enriched distillerâ€™s dried grains with solubles production in dry grind ethanol process using genetically engineered Saccharomyces cerevisiae. Bioresource Technology, 2021, 341, 125919.	4.8	4
104	Phosphorus fractionation and protein content control chemical phosphorus removal from corn biorefinery streams. Journal of Environmental Quality, 2020, 49, 220-227.	1.0	3
105	Wet milling characteristics of export commodity corn originating from different international geographical locations. Cereal Chemistry, 2021, 98, 794-801.	1.1	3
106	Enzymatic hydrolysis and fermentation of soy flour to produce ethanol and soy protein concentrate with increased polyphenols. JAOCS, Journal of the American Oil Chemists' Society, 2022, 99, 379-391.	0.8	3
107	Laboratory Yields and Process Stream Compositions from E-Mill and Dry-Grind Corn Processes Using a Granular Starch Hydrolyzing Enzyme. Cereal Chemistry, 2010, 87, 100-103.	1.1	2
108	Variability in composition of individual botanical fractions of<i>Miscanthus</i>Ã—<i>giganteus</i>and their blends. Biofuels, 2015, 6, 63-70.	1.4	2

#	Article	IF	Citations
109	Americanâ€™s Energy Future: An Analysis of the Proposed Energy Policy Plans in Presidential Election. Energies, 2016, 9, 1000.	1.6	2
110	Fractionation of distillers dried grains with solubles (DDGS) by combination of sieving and aspiration. Food and Bioproducts Processing, 2017, 103, 76-85.	1.8	2
111	Coprocessing Corn Germ Meal for Oil Recovery and Ethanol Production: A Process Model for Lipid-Producing Energy Crops. Processes, 2022, 10, 661.	1.3	2
112	Comparison of Protein Concentrate, Protein Isolate and Wet Sieving Processes for Enriching DDGS Protein. JAOCS, Journal of the American Oil Chemists' Society, 2014, 91, 867-874.	0.8	1
113	Improving dryâ€fractionated corn fermentation by supplementation of corn germ meal and pasta mill feed from agroâ€food industries. Cereal Chemistry, 2019, 96, 243-251.	1.1	1
114	Performance of glucoamylase selfâ€producing eBOOSTâ„¢ GT yeast on ethanol production. Cereal Chemistry, 0, , .	1.1	1
115	Characterization of Amylose Lipid Complexes and Their Effect on the Dry Grind Ethanol Process. Starch/Staerke, 2021, 73, 2100069.	1.1	0
116	Response surface methodology guided adsorption and recovery of free fatty acids from oil using resin. Biofuels, Bioproducts and Biorefining, 2021, 15, 1485-1495.	1.9	0