Vijay Singh

List of Publications by Year
in descending order

#	Article	IF	Citations
1	An economic evaluation of biological conversion of wheat straw to butanol: A biofuel. Energy Conversion and Management, 2013, 65, 456-462.	4.4	133
2	Pressurized liquid extraction of polar and nonpolar lipids in corn and oats with hexane, methylene chloride, isopropanol, and ethanol. JAOCS, Journal of the American Oil Chemists' Society, 2003, 80, 1063-1067.	0.8	130
3	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
4	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
5	Process integration for simultaneous saccharification, fermentation, and recovery (SSFR): Production of butanol from corn stover using Clostridium beijerinckii P260. Bioresource Technology, 2014, 154, 222-228.	4.8	98
6	Technoâ€economic analysis of biodiesel and ethanol coâ€production from lipidâ€producing sugarcane. Biofuels, Bioproducts and Biorefining, 2016, 10, 299-315.	1.9	85
7	Improvement of sugar yields from corn stover using sequential hot water pretreatment and disk milling. Bioresource Technology, 2016, 216, 706-713.	4.8	80
8	Engineering process and cost model for a conventional corn wet milling facility. Industrial Crops and Products, 2008, 27, 91-97.	2.5	79
9	Recovery of Fiber in the Corn Dry-Grind Ethanol Process: A Feedstock for Valuable Coproducts. Cereal Chemistry, 1999, 76, 868-872.	1.1	74
10	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
11	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
12	Fermentation of undetoxified sugarcane bagasse hydrolyzates using a two stage hydrothermal and mechanical refining pretreatment. Bioresource Technology, 2018, 261, 313-321.	4.8	62
13	Diferuloylputrescine and p-coumaroyl-feruloylputrescine, abundant polyamine conjugates in lipid extracts of maize kernels. Lipids, 2001, 36, 839-844.	0.7	59
14	Composition and economic comparison of germ fractions from modified corn processing technologies. JAOCS, Journal of the American Oil Chemists' Society, 2005, 82, 603-608.	0.8	59
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	Yield and Phytosterol Composition of Oil Extracted from Grain Sorghum and Its Wet-Milled Fractions. Cereal Chemistry, 2003, 80, 126-129.	1.1	56
17	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
18	Use of Proteases to Reduce Steep Time and SO2Requirements in a Corn Wet-Milling Process. Cereal Chemistry, 2001, 78, 405-411.	1.1	55

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19	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
20	Towards oilcane: Engineering hyperaccumulation of triacylglycerol into sugarcane stems. GCB Bioenergy, 2020, 12, 476-490.	2.5	54
21	Promise of combined hydrothermal/chemical and mechanical refining for pretreatment of woody and herbaceous biomass. Biotechnology for Biofuels, 2016, 9, 97.	6.2	49
22	Techno-economic feasibility analysis of blue and purple corn processing for anthocyanin extraction and ethanol production using modified dry grind process. Industrial Crops and Products, 2018, 115, 78-87.	2.5	49
23	Phytosterols in the aleurone layer of corn kernels. Biochemical Society Transactions, 2000, 28, 803-806.	1.6	46
24	Evaluation and Strategies to Improve Fermentation Characteristics of Modified Dry-Grind Corn Processes. Cereal Chemistry, 2006, 83, 455-459.	1.1	45
25	EFFECT OF CORN HYBRID VARIABILITY AND PLANTING LOCATION ON DRY GRIND ETHANOL PRODUCTION. Transactions of the American Society of Agricultural Engineers, 2005, 48, 709-714.	0.9	44
26	Coproduct yield comparisons of purple, blue and yellow dent corn for various milling processes. Industrial Crops and Products, 2016, 87, 266-272.	2.5	44
27	Economics of Germ Preseparation for Dry-Grind Ethanol Facilities. Cereal Chemistry, 1997, 74, 462-466.	1.1	43
28	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
29	Sugar production from bioenergy sorghum by using pilot scale continuous hydrothermal pretreatment combined with disk refining. Bioresource Technology, 2019, 289, 121663.	4.8	42
30	High solids loading biorefinery for the production of cellulosic sugars from bioenergy sorghum. Bioresource Technology, 2020, 318, 124051.	4.8	41
31	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
32	Comparison of Oil and Phytosterol Levels in Germplasm Accessions of Corn, Teosinte, and Job's Tears. Journal of Agricultural and Food Chemistry, 2001, 49, 3793-3795.	2.4	39
33	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
34	Biodiesel from oil produced in vegetative tissues of biomass â€" A review. Bioresource Technology, 2021, 326, 124772.	4.8	36
35	Quick Fiber Process: Effect of Mash Temperature, Dry Solids, and Residual Germ on Fiber Yield and Purity. Cereal Chemistry, 2000, 77, 640-644.	1.1	34
36	Enzymatic Milling of Corn: Optimization of Soaking, Grinding, and Enzyme Incubation Steps. Cereal Chemistry, 2004, 81, 626-632.	1.1	34

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37	PARTICLE SIZE DISTRIBUTIONS OF GROUND CORN AND DDGS FROM DRY GRIND PROCESSING. Transactions of the American Society of Agricultural Engineers, 2005, 48, 273-277.	0.9	33
38	Comparison of Cassava Starch with Corn as a Feedstock for Bioethanol Production. Energies, 2018, 11, 3476.	1.6	30
39	Biodiesel production from engineered sugarcane lipids under uncertain feedstock compositions: Process design and techno-economic analysis. Applied Energy, 2020, 280, 115933.	5.1	29
40	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
41	Fermentation of "Quick Fiber" Produced from a Modified Corn-Milling Process into Ethanol and Recovery of Corn Fiber. Applied Biochemistry and Biotechnology, 2004, 115, 0937-0950.	1.4	27
42	Global View of Biofuel Butanol and Economics of Its Production by Fermentation from Sweet Sorghum Bagasse, Food Waste, and Yellow Top Presscake: Application of Novel Technologies. Fermentation, 2020, 6, 58.	1.4	27
43	Effect of Resistant Starch on Hydrolysis and Fermentation of Corn Starch for Ethanol. Applied Biochemistry and Biotechnology, 2010, 160, 800-811.	1.4	26
44	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
45	Effect of Alternative Milling Techniques on the Yield and Composition of Corn Germ Oil and Corn Fiber Oil. Cereal Chemistry, 2001, 78, 46-49.	1.1	25
46	Protease Treatment to Improve Ethanol Fermentation in Modified Dry Grind Corn Processes. Cereal Chemistry, 2009, 86, 323-328.	1.1	25
47	Comparison of Coarse and Fine Corn Fiber for Corn Fiber Gum Yields and Sugar Profiles. Cereal Chemistry, 2000, 77, 560-561.	1.1	22
48	Effect of Corn Milling Practices on Aleurone Layer Cells and Their Unique Phytosterols. Cereal Chemistry, 2001, 78, 436-441.	1.1	22
49	Hybrid-Dependent Effect of Lactic Acid on Corn Starch Yields. Cereal Chemistry, 1997, 74, 249-253.	1.1	21
50	Improvement in fermentation characteristics of degermed ground corn by lipid supplementation. Journal of Industrial Microbiology and Biotechnology, 2006, 33, 655-660.	1.4	21
51	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
52	Effect of Corn Oil on Thin Stillage Evaporators. Cereal Chemistry, 1999, 76, 846-849.	1.1	20
53	Fermentation technology to improve productivity in dry grind corn process for bioethanol production. Fuel Processing Technology, 2018, 173, 66-74.	3.7	20
54	Improving technical and economic feasibility of water based anthocyanin recovery from purple corn using staged extraction approach. Industrial Crops and Products, 2020, 158, 112976.	2.5	20

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55	Pretreatment of Wet-Milled Corn Fiber to Improve Recovery of Corn Fiber Oil and Phytosterols. Cereal Chemistry, 2003, 80, 118-122.	1.1	19
56	Hybrid Variability and Effect of Growth Location on Corn Fiber Yields and Corn Fiber Oil Composition. Cereal Chemistry, 2000, 77, 692-695.	1.1	18
57	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
58	Seasonal variability in ethanol concentrations from a dry grind fermentation operation associated with incoming corn variability. Industrial Crops and Products, 2015, 67, 155-160.	2.5	16
59	Technoeconomic Analysis of Biodiesel and Ethanol Production from Lipid-Producing Sugarcane and Sweet Sorghum. Industrial Biotechnology, 2016, 12, 357-365.	0.5	16
60	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
61	Developing an integrated technology-environment-economics model to simulate food-energy-water systems in Corn Belt watersheds. Environmental Modelling and Software, 2021, 143, 105083.	1.9	16
62	Effect of Steeping with Sulfite Salts and Adjunct Acids on Corn Wet-Milling Yields and Starch Properties. Cereal Chemistry, 2005, 82, 420-424.	1.1	15
63	Effect of pH on Fouling Characteristics and Deposit Compositions in Dry-Grind Thin Stillage. Cereal Chemistry, 2006, 83, 311-314.	1.1	15
64	Hydrothermal pretreatment for valorization of genetically engineered bioenergy crop for lipid and cellulosic sugar recovery. Bioresource Technology, 2021, 341, 125817.	4.8	15
65	Technoâ€economic feasibility of phosphorus recovery as a coproduct from corn wet milling plants. Cereal Chemistry, 2019, 96, 380-390.	1.1	14
66	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
67	Effect of Kernel Size, Location, and Type of Damage on Popping Characteristics of Popcorn. Cereal Chemistry, 1997, 74, 672-675.	1.1	13
68	Pasting Properties and Surface Characteristics of Starch Obtained from an Enzymatic Corn Wet-Milling Process. Cereal Chemistry, 2002, 79, 523-527.	1.1	13
69	Technique to Measure Surface-Fouling Tendencies of Steepwater from Corn Wet Milling. Cereal Chemistry, 2003, 80, 84-86.	1.1	13
70	Ethanol Production from Corn Fiber Separated after Liquefaction in the Dry Grind Process. Energies, 2018, 11, 2921.	1.6	13
71	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
72	Effect of Various Acids and Sulfites in Steep Solution on Yields and Composition of Corn Fiber and Corn Fiber Oil. Cereal Chemistry, 2000, 77, 665-668.	1.1	12

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73	Enzymatic Milling Product Yield Comparison with Reduced Levels of Bromelain and Varying Levels of Sulfur Dioxide. Cereal Chemistry, 2005, 82, 523-527.	1.1	12
74	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
75	Technoâ€economic feasibility analysis of engineered energycaneâ€based biorefinery coâ€producing biodiesel and ethanol. GCB Bioenergy, 2021, 13, 1498-1514.	2.5	12
76	Batch Steeping of Corn: Effects of Adding Lactic Acid and Sulfur Dioxide at Different Times on Starch Yields, Protein Contents, and Starch Pasting Properties. Cereal Chemistry, 1999, 76, 600-605.	1.1	11
77	Analysis of Heat Transfer Fouling by Dry-Grind Maize Thin Stillage Using an Annular Fouling Apparatus. Cereal Chemistry, 2006, 83, 121-126.	1.1	11
78	Impact of Fractionation Process on the Technical and Economic Viability of Corn Dry Grind Ethanol Process. Processes, 2019, 7, 578.	1.3	11
79	Recovering phosphorus as a coproduct from corn dry grind plants: A technoâ€economic evaluation. Cereal Chemistry, 2020, 97, 449-458.	1.1	10
80	Wet-Milling Characteristics of Selected Yellow Dent Corn Hybrids as Influenced by Storage Conditions. Cereal Chemistry, 1998, 75, 235-240.	1.1	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	Wet Milling Characteristics of Waxy Corn Hybrids Obtained from Different Planting Locations. Starch/Staerke, 1996, 48, 335-337.	1.1	8
83	Enhancing ethanol yields in corn dry grind process by reducing glycerol production. Cereal Chemistry, 2020, 97, 1026-1036.	1.1	8
84	Optimizing Chemical-Free Pretreatment for Maximizing Oil/Lipid Recovery From Transgenic Bioenergy Crops and Its Rapid Analysis Using Time Domain-NMR. Frontiers in Energy Research, 2022, 10, .	1.2	8
85	Enrichment of Oil in Corn Fiber by Size Reduction and Floatation of Aleurone Cells. Cereal Chemistry, 2003, 80, 123-125.	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	Chemical Free Two-Step Hydrothermal Pretreatment to Improve Sugar Yields from Energy Cane. Energies, 2020, 13, 5805.	1.6	6
90	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

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91	Germâ€Derived FAN as Nitrogen Source for Corn Endosperm Fermentation. Cereal Chemistry, 2011, 88, 328-332.	1.1	5
92	Maize Proximate Composition and Physical Properties Correlations to Dry-Grind Ethanol Concentrations. Cereal Chemistry, 2016, 93, 414-418.	1.1	5
93	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
94	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
95	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
96	Integrated Biorefinery for Valorization of Engineered Bioenergy Cropsâ€”A Review. Industrial Biotechnology, 2021, 17, 271-282.	0.5	5
97	Mapping the National Phosphorus Recovery Potential from Centralized Wastewater and Corn Ethanol Infrastructure. Environmental Science & Technology, 2022, 56, 8691-8701.	4.6	5
98	Effect of Harvest Moisture Content and Ambient Air Drying on Maize Fiber Oil Yield and its Phytosterol Composition. Starch/Staerke, 2001, 53, 635-638.	1.1	4
99	Improving Fermentation Rate during Use of Corn Grits in Beverage Alcohol Production. Beverages, 2019, 5, 5.	1.3	4
100	Invited review on â€˜maize in the 21st centuryâ€™ Emerging trends of maize biorefineries in the 21st century: scientific and technological advancements in biofuel and bio-sustainable market. Journal of Cereal Science, 2021, 101, 103272.	1.8	4
101	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
102	Effect of Wet and Dry Fractionation Methods on Ethanol Production from Hard and Soft Endosperm Corn Types. Transactions of the ASABE, 2011, 54, 247-253.	1.1	3
103	Nutritional evaluation of 3 types of novel ethanol coproducts. Poultry Science, 2019, 98, 2933-2939.	1.5	3
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	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
108	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

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109	Performance of glucoamylase selfâ€producing eBOOSTâ„¢ GT yeast on ethanol production. Cereal Chemistry, 0, , .	1.1	1
110	Characterization of Amylose Lipid Complexes and Their Effect on the Dry Grind Ethanol Process. Starch/Staerke, 2021, 73, 2100069.	1.1	0
111	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