Vijay Singh

List of Publications by Citations

109 papers	2,350 citations	29 h-index	43 g-index
113 ext. papers	2,711 ext. citations	4.5 avg, IF	5.42 L-index

#	Paper	IF	Citations
109	An economic evaluation of biological conversion of wheat straw to butanol: A biofuel. *Energy Conversion and Management*, **2013**, 65, 456-462	10.6	117
108	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 Chemiststsociety*, **2003**, 80, 1063-1067	1.8	110
107	Butanol production from food waste: a novel process for producing sustainable energy and reducing environmental pollution. *Biotechnology for Biofuels*, **2015**, 8, 147	7.8	88
106	Process integration for simultaneous saccharification, fermentation, and recovery (SSFR): production of butanol from corn stover using Clostridium beijerinckii P260. *Bioresource Technology*, **2014**, 154, 222-8	11	88
105	Ethanol production from food waste at high solids content with vacuum recovery technology. *Journal of Agricultural and Food Chemistry*, **2015**, 63, 2760-6	5.7	71
104	Techno-economic analysis of biodiesel and ethanol co-production from lipid-producing sugarcane. *Biofuels, Bioproducts and Biorefining*, **2016**, 10, 299-315	5.3	68
103	Engineering process and cost model for a conventional corn wet milling facility. *Industrial Crops and Products*, **2008**, 27, 91-97	5.9	64
102	Comparison of Raw Starch Hydrolyzing Enzyme with Conventional Liquefaction and Saccharification Enzymes in Dry-Grind Corn Processing. *Cereal Chemistry*, **2007**, 84, 10-14	2.4	62
101	Recovery of Fiber in the Corn Dry-Grind Ethanol Process: A Feedstock for Valuable Coproducts. *Cereal Chemistry*, **1999**, 76, 868-872	2.4	58
100	Improvement of sugar yields from corn stover using sequential hot water pretreatment and disk milling. *Bioresource Technology*, **2016**, 216, 706-13	11	57
99	Comparison of Enzymatic (E-Mill) and Conventional Dry-Grind Corn Processes Using a Granular Starch Hydrolyzing Enzyme. *Cereal Chemistry*, **2005**, 82, 734-738	2.4	53
98	Composition and economic comparison of germ fractions from modified corn processing technologies. *JAOCS, Journal of the American Oil Chemiststsociety*, **2005**, 82, 603-608	1.8	51
97	Diferuloylputrescine and p-coumaroyl-feruloylputrescine, abundant polyamine conjugates in lipid extracts of maize kernels. *Lipids*, **2001**, 36, 839-44	1.6	49
96	Use of Proteases to Reduce Steep Time and SO2 Requirements in a Corn Wet-Milling Process. *Cereal Chemistry*, **2001**, 78, 405-411	2.4	43
95	Promise of combined hydrothermal/chemical and mechanical refining for pretreatment of woody and herbaceous biomass. *Biotechnology for Biofuels*, **2016**, 9, 97	7.8	41
94	Phytosterols in the aleurone layer of corn kernels. *Biochemical Society Transactions*, **2000**, 28, 803-806	5.1	41
93	A comparative study of anthocyanin distribution in purple and blue corn coproducts from three conventional fractionation processes. *Food Chemistry*, **2017**, 231, 332-339	8.5	40

92	Fermentation of undetoxified sugarcane bagasse hydrolyzates using a two stage hydrothermal and mechanical refining pretreatment. *Bioresource Technology*, **2018**, 261, 313-321	11	40
91	Evaluation and Strategies to Improve Fermentation Characteristics of Modified Dry-Grind Corn Processes. *Cereal Chemistry*, **2006**, 83, 455-459	2.4	40
90	Yield and Phytosterol Composition of Oil Extracted from Grain Sorghum and Its Wet-Milled Fractions. *Cereal Chemistry*, **2003**, 80, 126-129	2.4	40
89	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	2.3	39
88	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		36
87	Coproduct yield comparisons of purple, blue and yellow dent corn for various milling processes. *Industrial Crops and Products*, **2016**, 87, 266-272	5.9	36
86	Comparison of oil and phytosterol levels in germplasm accessions of corn, teosinte, and Job's tears. *Journal of Agricultural and Food Chemistry*, **2001**, 49, 3793-5	5.7	35
85	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	11	34
84	Economics of Germ Preseparation for Dry-Grind Ethanol Facilities. *Cereal Chemistry*, **1997**, 74, 462-466	2.4	34
83	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	5.9	33
82	Towards oilcane: Engineering hyperaccumulation of triacylglycerol into sugarcane stems. *GCB Bioenergy*, **2020**, 12, 476-490	5.6	30
81	Biorefinery for combined production of jet fuel and ethanol from lipid-producing sugarcane: a techno-economic evaluation. *GCB Bioenergy*, **2018**, 10, 92-107	5.6	30
80	Bioactive compounds, nutritional benefits and food applications of colored wheat: a comprehensive review. *Critical Reviews in Food Science and Nutrition*, **2021**, 61, 3197-3210	11.5	28
79	Economic Analysis of Cellulosic Ethanol Production from Sugarcane Bagasse Using a Sequential Deacetylation, Hot Water and Disk-Refining Pretreatment. *Processes*, **2019**, 7, 642	2.9	27
78	Sugar production from bioenergy sorghum by using pilot scale continuous hydrothermal pretreatment combined with disk refining. *Bioresource Technology*, **2019**, 289, 121663	11	27
77	PARTICLE SIZE DISTRIBUTIONS OF GROUND CORN AND DDGS FROM DRY GRIND PROCESSING. *Transactions of the American Society of Agricultural Engineers*, **2005**, 48, 273-277		27
76	Processing method and corn cultivar affected anthocyanin concentration from dried distillers grains with solubles. *Journal of Agricultural and Food Chemistry*, **2015**, 63, 3205-18	5.7	25
75	Effect of resistant starch on hydrolysis and fermentation of corn starch for ethanol. *Applied Biochemistry and Biotechnology*, **2010**, 160, 800-11	3.2	25

74	Enzymatic Milling of Corn: Optimization of Soaking, Grinding, and Enzyme Incubation Steps. *Cereal Chemistry*, **2004**, 81, 626-632	2.4	25
73	Fermentation of "Quick Fiber" produced from a modified corn-milling process into ethanol and recovery of corn fiber oil. *Applied Biochemistry and Biotechnology*, **2004**, 115, 0937-0950	3.2	25
72	Protease Treatment to Improve Ethanol Fermentation in Modified Dry Grind Corn Processes. *Cereal Chemistry*, **2009**, 86, 323-328	2.4	24
71	High solids loading biorefinery for the production of cellulosic sugars from bioenergy sorghum. *Bioresource Technology*, **2020**, 318, 124051	11	24
70	Quick Fiber Process: Effect of Mash Temperature, Dry Solids, and Residual Germ on Fiber Yield and Purity. *Cereal Chemistry*, **2000**, 77, 640-644	2.4	23
69	Improvement in fermentation characteristics of degermed ground corn by lipid supplementation. *Journal of Industrial Microbiology and Biotechnology*, **2006**, 33, 655-60	4.2	20
68	Comparison of Cassava Starch with Corn as a Feedstock for Bioethanol Production. *Energies*, **2018**, 11, 3476	3.1	19
67	Effect of Corn Milling Practices on Aleurone Layer Cells and Their Unique Phytosterols. *Cereal Chemistry*, **2001**, 78, 436-441	2.4	18
66	Comparison of Coarse and Fine Corn Fiber for Corn Fiber Gum Yields and Sugar Profiles. *Cereal Chemistry*, **2000**, 77, 560-561	2.4	18
65	Effect of Alternative Milling Techniques on the Yield and Composition of Corn Germ Oil and Corn Fiber Oil. *Cereal Chemistry*, **2001**, 78, 46-49	2.4	18
64	Hybrid-Dependent Effect of Lactic Acid on Corn Starch Yields. *Cereal Chemistry*, **1997**, 74, 249-253	2.4	17
63	Pretreatment of Wet-Milled Corn Fiber to Improve Recovery of Corn Fiber Oil and Phytosterols. *Cereal Chemistry*, **2003**, 80, 118-122	2.4	17
62	Biodiesel from oil produced in vegetative tissues of biomass - A review. *Bioresource Technology*, **2021**, 326, 124772	11	16
61	Fermentation technology to improve productivity in dry grind corn process for bioethanol production. *Fuel Processing Technology*, **2018**, 173, 66-74	7.2	15
60	Seasonal variability in ethanol concentrations from a dry grind fermentation operation associated with incoming corn variability. *Industrial Crops and Products*, **2015**, 67, 155-160	5.9	15
59	Effect of Corn Oil on Thin Stillage Evaporators. *Cereal Chemistry*, **1999**, 76, 846-849	2.4	15
58	Biodiesel production from engineered sugarcane lipids under uncertain feedstock compositions: Process design and techno-economic analysis. *Applied Energy*, **2020**, 280, 115933	10.7	15
57	Germ soak water as nutrient source to improve fermentation of corn grits from modified corn dry grind process. *Bioresources and Bioprocessing*, **2017**, 4, 38	5.2	14

56	Hybrid Variability and Effect of Growth Location on Corn Fiber Yields and Corn Fiber Oil Composition. *Cereal Chemistry*, **2000**, 77, 692-695	2.4	14
55	Technoeconomic Analysis of Biodiesel and Ethanol Production from Lipid-Producing Sugarcane and Sweet Sorghum. *Industrial Biotechnology*, **2016**, 12, 357-365	1.3	14
54	Production of xylose enriched hydrolysate from bioenergy sorghum and its conversion to β-carotene using an engineered Saccharomyces cerevisiae. *Bioresource Technology*, **2020**, 308, 123275	11	14
53	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	4.2	13
52	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	4.7	13
51	Effect of Steeping with Sulfite Salts and Adjunct Acids on Corn Wet-Milling Yields and Starch Properties. *Cereal Chemistry*, **2005**, 82, 420-424	2.4	12
50	Effect of pH on Fouling Characteristics and Deposit Compositions in Dry-Grind Thin Stillage. *Cereal Chemistry*, **2006**, 83, 311-314	2.4	12
49	Technique to Measure Surface-Fouling Tendencies of Steepwater from Corn Wet Milling. *Cereal Chemistry*, **2003**, 80, 84-86	2.4	12
48	Pasting Properties and Surface Characteristics of Starch Obtained from an Enzymatic Corn Wet-Milling Process. *Cereal Chemistry*, **2002**, 79, 523-527	2.4	11
47	Enzymatic Milling Product Yield Comparison with Reduced Levels of Bromelain and Varying Levels of Sulfur Dioxide. *Cereal Chemistry*, **2005**, 82, 523-527	2.4	11
46	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	11	11
45	Ethanol Production from Corn Fiber Separated after Liquefaction in the Dry Grind Process. *Energies* , **2018**, 11, 2921	3.1	11
44	Improving technical and economic feasibility of water based anthocyanin recovery from purple corn using staged extraction approach. *Industrial Crops and Products*, **2020**, 158, 112976	5.9	10
43	Effect of Kernel Size, Location, and Type of Damage on Popping Characteristics of Popcorn. *Cereal Chemistry*, **1997**, 74, 672-675	2.4	9
42	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	2.4	9
41	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	2.4	8
40	Use of Pigmented Maize in Both Conventional Dry-Grind and Modified Processes Using Granular Starch Hydrolyzing Enzyme. *Cereal Chemistry*, **2016**, 93, 344-351	2.4	8
39	Impact of Fractionation Process on the Technical and Economic Viability of Corn Dry Grind Ethanol Process. *Processes*, **2019**, 7, 578	2.9	8

38	Analysis of Heat Transfer Fouling by Dry-Grind Maize Thin Stillage Using an Annular Fouling Apparatus. *Cereal Chemistry*, **2006**, 83, 121-126	2.4	8
37	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	2.4	8
36	Wet-Milling Characteristics of Selected Yellow Dent Corn Hybrids as Influenced by Storage Conditions. *Cereal Chemistry*, **1998**, 75, 235-240	2.4	8
35	Impact of disk milling on corn stover pretreated at commercial scale. *Bioresource Technology*, **2017**, 232, 297-303	11	7
34	Techno-economic feasibility of phosphorus recovery as a coproduct from corn wet milling plants. *Cereal Chemistry*, **2019**, 96, 380-390	2.4	6
33	Improvement of Dry-Fractionation Ethanol Fermentation by Partial Germ Supplementation. *Cereal Chemistry*, **2015**, 92, 218-223	2.4	6
32	Enrichment of Oil in Corn Fiber by Size Reduction and Floatation of Aleurone Cells. *Cereal Chemistry* , **2003**, 80, 123-125	2.4	6
31	Wet Milling Characteristics of Waxy Corn Hybrids Obtained from Different Planting Locations. *Starch/Staerke*, **1996**, 48, 335-337	2.3	6
30	Bioconversion of Processing Waste from Agro-Food Industries to Bioethanol: Creating a Sustainable and Circular Economy **2020**, 161-181		6
29	Germ-Derived FAN as Nitrogen Source for Corn Endosperm Fermentation. *Cereal Chemistry*, **2011**, 88, 328-332	2.4	5
28	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	3.1	5
27	Maize Proximate Composition and Physical Properties Correlations to Dry-Grind Ethanol Concentrations. *Cereal Chemistry*, **2016**, 93, 414-418	2.4	5
26	Balancing sugar recovery and inhibitor generation during energycane processing: Coupling cryogenic grinding with hydrothermal pretreatment at low temperatures. *Bioresource Technology*, **2021**, 321, 124424	11	5
25	Developing an integrated technology-environment-economics model to simulate food-energy-water systems in Corn Belt watersheds. *Environmental Modelling and Software*, **2021**, 143, 105083	5.2	5
24	Enhancing ethanol yields in corn dry grind process by reducing glycerol production. *Cereal Chemistry*, **2020**, 97, 1026-1036	2.4	4
23	Techno-economic feasibility analysis of engineered energycane-based biorefinery co-producing biodiesel and ethanol. *GCB Bioenergy*, **2021**, 13, 1498-1514	5.6	4
22	Hydrothermal pretreatment for valorization of genetically engineered bioenergy crop for lipid and cellulosic sugar recovery. *Bioresource Technology*, **2021**, 341, 125817	11	4
21	Recovering phosphorus as a coproduct from corn dry grind plants: A techno-economic evaluation. *Cereal Chemistry*, **2020**, 97, 449-458	2.4	3

20	Changes in Corn Protein Content During Storage and Their Relationship with Dry Grind Ethanol Production. *JAOCS, Journal of the American Oil Chemiststst Society*, **2018**, 95, 923-932	1.8	3
19	Effect of Harvest Moisture Content and Ambient Air Drying on Maize Fiber Oil Yield and its Phytosterol Composition. *Starch/Staerke*, **2001**, 53, 635-638	2.3	3
18	Conversion of High-Solids Hydrothermally Pretreated Bioenergy Sorghum to Lipids and Ethanol Using Yeast Cultures. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 8515-8525	8.3	3
17	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	0.9	2
16	Improving Fermentation Rate during Use of Corn Grits in Beverage Alcohol Production. *Beverages*, **2019**, 5, 5	3.4	2
15	Nutritional evaluation of 3 types of novel ethanol coproducts. *Poultry Science*, **2019**, 98, 2933-2939	3.9	1
14	Chemical Free Two-Step Hydrothermal Pretreatment to Improve Sugar Yields from Energy Cane. *Energies*, **2020**, 13, 5805	3.1	1
13	Development and validation of time-domain 1H-NMR relaxometry correlation for high-throughput phenotyping method for lipid contents of lignocellulosic feedstocks. *GCB Bioenergy*, **2021**, 13, 1179-1190	5.6	1
12	Improving dry-fractionated corn fermentation by supplementation of corn germ meal and pasta mill feed from agro-food industries. *Cereal Chemistry*, **2019**, 96, 243-251	2.4	1
11	Performance of glucoamylase self-producing eBOOST GT yeast on ethanol production. *Cereal Chemistry*,	2.4	1
10	A study of moisture dependent changes in engineering properties and debranning characteristics of purple wheat. *Journal of Food Processing and Preservation*, **2021**, 45, e15916	2.1	1
9	Invited review on maize in the 21st century 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	3.8	1
8	Coprocessing Corn Germ Meal for Oil Recovery and Ethanol Production: A Process Model for Lipid-Producing Energy Crops. *Processes*, **2022**, 10, 661	2.9	1
7	Phosphorus fractionation and protein content control chemical phosphorus removal from corn biorefinery streams. *Journal of Environmental Quality*, **2020**, 49, 220-227	3.4	0
6	Integrated Biorefinery for Valorization of Engineered Bioenergy Crops A Review. *Industrial Biotechnology*, **2021**, 17, 271-282	1.3	0
5	Technical and economic feasibility of an integrated ethanol and anthocyanin coproduction process using purple corn stover. *Biofuels, Bioproducts and Biorefining*, **2021**, 15, 719-735	5.3	0
4	Process design and techno-economic analysis of 2'-fucosyllactose enriched distiller's dried grains with solubles production in dry grind ethanol process using genetically engineered Saccharomyces cerevisiae. *Bioresource Technology*, **2021**, 341, 125919	11	0
3	Wet milling characteristics of export commodity corn originating from different international geographical locations. *Cereal Chemistry*, **2021**, 98, 794-801	2.4	

2	Characterization of Amylose Lipid Complexes and Their Effect on the Dry Grind Ethanol Process. *Starch/Staerke*, **2021**, 73, 2100069	2.3
1	Response surface methodology guided adsorption and recovery of free fatty acids from oil using resin. *Biofuels, Bioproducts and Biorefining*, **2021**, 15, 1485-1495	5.3