David C Bressler

List of Publications by Year
in descending order

73 papers	2,681 citations	218677 26 h-index	189892 50 g-index
73 all docs	73 docs citations	73 times ranked	3461 citing authors

#	Article	IF	Citations
1	Progress in bio-based plastics and plasticizing modifications. Journal of Materials Chemistry A, 2013, 1, 13379.	10.3	594
2	Recent developments in microwave-assisted thermal conversion of biomass for fuels and chemicals. Renewable and Sustainable Energy Reviews, 2018, 92, 642-657.	16.4	129
3	Surface and thermal characterization of natural fibres treated with enzymes. Industrial Crops and Products, 2014, 53, 365-373.	5.2	127
4	Thermal deoxygenation and pyrolysis of oleic acid. Journal of Analytical and Applied Pyrolysis, 2014, 105, 1-7.	5.5	106
5	Composite materials with bast fibres: Structural, technical, and environmental properties. Progress in Materials Science, 2016, 83, 1-23.	32.8	102
6	Pyrolytic Decarboxylation and Cracking of Stearic Acid. Industrial & Engineering Chemistry Research, 2008, 47, 5328-5336.	3.7	93
7	Utilization of Slaughterhouse Waste in Value-Added Applications: Recent Advances in the Development of Wood Adhesives. Polymers, 2018, 10, 176.	4.5	78
8	Incorporation of whey permeate, a dairy effluent, in ethanol fermentation to provide a zero waste solution for the dairy industry. Journal of Dairy Science, 2016, 99, 1859-1867.	3.4	77
9	Valorization of rendering industry wastes and co-products for industrial chemicals, materials and energy: review. Critical Reviews in Biotechnology, 2016, 36, 120-131.	9.0	73
10	The susceptibility of large and small granules of waxy, normal and high-amylose genotypes of barley and corn starches toward amylolysis at sub-gelatinization temperatures. Food Research International, 2013, 51, 771-782.	6.2	69
11	Heterotrophic growth and lipid accumulation of Chlorella protothecoides in whey permeate, a dairy by-product stream, for biofuel production. Bioresource Technology, 2014, 155, 170-176.	9.6	68
12	Pyrolysis of polyunsaturated fatty acids. Fuel Processing Technology, 2014, 120, 89-95.	7.2	63
13	Fermentation of Barley by Using <i>Saccharomyces cerevisiae</i> : Examination of Barley as a Feedstock for Bioethanol Production and Value-Added Products. Applied and Environmental Microbiology, 2009, 75, 1363-1372.	3.1	53
14	Characterization of Cellulase-Treated Fibers and Resulting Cellulose Nanocrystals Generated through Acid Hydrolysis. Materials, 2018, 11, 1272.	2.9	51
15	Characterization of chemically and enzymatically treated hemp fibres using atomic force microscopy and spectroscopy. Applied Surface Science, 2014, 314, 1019-1025.	6.1	48
16	Enzymatically treated natural fibres as reinforcing agents for biocomposite material: mechanical, thermal, and moisture absorption characterization. Journal of Materials Science, 2016, 51, 2677-2686.	3.7	44
17	Adhesives from Waste Protein Biomass for Oriented Strand Board Composites: Development and Performance. Macromolecular Materials and Engineering, 2014, 299, 1003-1012.	3.6	40
18	Thermosetting Proteinaceous Plastics from Hydrolyzed Specified Risk Material. Macromolecular Materials and Engineering, 2013, 298, 1294-1303.	3.6	37

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19	Biocomposites from hydrolyzed waste proteinaceous biomass: mechanical, thermal and moisture absorption performances. Journal of Materials Chemistry A, 2013, 1, 13186.	10.3	36
20	Two-stage thermal conversion of inedible lipid feedstocks to renewable chemicals and fuels. Bioresource Technology, 2014, 158, 55-62.	9.6	36
21	Improved cold starch hydrolysis with urea addition and heat treatment at subgelatinization temperature. Carbohydrate Polymers, 2012, 87, 1649-1656.	10.2	32
22	Recovery and characterization of proteinacious material recovered from thermal and alkaline hydrolyzed specified risk materials. Process Biochemistry, 2013, 48, 885-892.	3.7	31
23	Subcritical hydrolysis and characterization of waste proteinaceous biomass for value added applications. Journal of Chemical Technology and Biotechnology, 2015, 90, 476-483.	3.2	29
24	Modification of the cellulosic component of hemp fibers using sulfonic acid derivatives: Surface and thermal characterization. Carbohydrate Polymers, 2015, 134, 230-239.	10.2	28
25	Enhancing the Adhesive Strength of a Plywood Adhesive Developed from Hydrolyzed Specified Risk Materials. Polymers, 2016, 8, 285.	4.5	27
26	Co-Production of Cellulose Nanocrystals and Fermentable Sugars Assisted by Endoglucanase Treatment of Wood Pulp. Materials, 2018, 11, 1645.	2.9	27
27	Nonisothermal DSC Study of Epoxy Resins Cured with Hydrolyzed Specified Risk Material. Industrial & Engineering Chemistry Research, 2013, 52, 8189-8199.	3.7	25
28	Simultaneous hydrolysis and co-fermentation of whey lactose with wheat for ethanol production. Bioresource Technology, 2016, 221, 616-624.	9.6	25
29	Thermal cracking of free fatty acids in inert and light hydrocarbon gas atmospheres. Fuel, 2014, 126, 250-255.	6.4	23
30	Comparative evaluation of the environmental impact of chemical methods used to enhance natural fibres for composite applications and glass fibre based composites. Journal of Cleaner Production, 2017, 149, 491-501.	9.3	23
31	Effect of incorporation of microstructured carbonized cellulose on surface and mechanical properties of epoxy composites. Journal of Applied Polymer Science, 2020, 137, 48896.	2.6	23
32	Current progress in lipid-based biofuels: Feedstocks and production technologies. Bioresource Technology, 2022, 351, 127020.	9.6	23
33	Improving ethanol productivity through self-cycling fermentation of yeast: a proof of concept. Biotechnology for Biofuels, 2017, 10, 193.	6.2	22
34	Effects of Electrolytes, Water, and Temperature on Cross-Linking of Glutaraldehyde and Hydrolyzed Specified Risk Material. Industrial & Engineering Chemistry Research, 2013, 52, 4987-4993.	3.7	20
35	Development of Proteinaceous Plywood Adhesive and Optimization of Its Lap Shear Strength. Macromolecular Materials and Engineering, 2015, 300, 198-209.	3.6	20
36	Pelletization of Torrefied Wood Using a Proteinaceous Binder Developed from Hydrolyzed Specified Risk Materials. Processes, 2019, 7, 229.	2.8	20

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37	Enzymatically-Mediated Co-Production of Cellulose Nanocrystals and Fermentable Sugars. Catalysts, 2017, 7, 322.	3.5	19
38	Production of Renewable Hydrocarbons from Thermal Conversion of Abietic Acid and Tall Oil Fatty Acids. Energy & Fuels, 2014, 28, 6988-6994.	5.1	18
39	Hydrothermal treatment of oleaginous yeast for the recovery of free fatty acids for use in advanced biofuel production. Journal of Biotechnology, 2014, 187, 10-15.	3.8	17
40	Shape tunability of carbonized cellulose nanocrystals. SN Applied Sciences, 2019, 1, 1.	2.9	17
41	Co-production of ethanol and cellulose nanocrystals through self-cycling fermentation of wood pulp hydrolysate. Bioresource Technology, 2021, 330, 124969.	9.6	16
42	Improved bioethanol productivity through gas flow rate-driven self-cycling fermentation. Biotechnology for Biofuels, 2020, 13, 14.	6.2	16
43	Resistant Starch Escaped from Ethanol Production: Evidence from Confocal Laser Scanning Microscopy of Distiller's Dried Grains with Solubles (DDGS). Cereal Chemistry, 2014, 91, 130-138.	2.2	15
44	Development of hydrolysed protein-based plywood adhesive from slaughterhouse waste: effect of chemical modification of hydrolysed protein on moisture resistance of formulated adhesives. RSC Advances, 2018, 8, 2996-3008.	3.6	15
45	Development of a torrefied wood pellet binder from the cross-linking between specified risk materials-derived peptides and epoxidized poly (vinyl alcohol). Renewable Energy, 2020, 162, 71-80.	8.9	15
46	Evaluation of value-added components of dried distillerâ€™s grain with solubles from triticale and wheat. Bioresource Technology, 2011, 102, 6920-6927.	9.6	14
47	Highly retained enzymatic activities of two different cellulases immobilized on non-porous and porous silica particles. Biotechnology and Bioprocess Engineering, 2014, 19, 621-628.	2.6	14
48	A Canadian Ethanol Feedstock Study to Benchmark the Relative Performance of Triticale: II. Grain Quality and Ethanol Production. Agronomy Journal, 2013, 105, 1707-1720.	1.8	13
49	Two-step thermal conversion of oleaginous microalgae into renewable hydrocarbons. Bioresource Technology, 2014, 158, 91-97.	9.6	13
50	Improving the accessibility of hemp fibres using caustic to swell the macrostructure for enzymatic enhancement. Industrial Crops and Products, 2015, 67, 74-80.	5.2	13
51	Production of Renewable Hydrocarbons by Thermal Cracking of Oleic Acid in the Presence of Water. Energy & Fuels, 2017, 31, 9446-9454.	5.1	13
52	Pyrolysis of fatty acids derived from hydrolysis of brown grease with biosolids. Environmental Science and Pollution Research, 2020, 27, 26395-26405.	5.3	13
53	Cultivation of oleaginous yeast using aqueous fractions derived from hydrothermal pretreatments of biomass. Bioresource Technology, 2014, 170, 413-420.	9.6	11
54	Value-Added Products from Urea Glycerolysis Using a Heterogeneous Biosolids-Based Catalyst. Catalysts, 2018, 8, 373.	3.5	9

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55	A Biorefinery Strategy That Introduces Hydrothermal Treatment Prior to Acid Hydrolysis for Co-generation of Furfural and Cellulose Nanocrystals. Frontiers in Chemistry, 2020, 8, 323.	3.6	9
56	Glycerol Acetylation Mediated by Thermally Hydrolysed Biosolids-Based Material. Catalysts, 2020, 10, 5.	3.5	9
57	Surface and thermal enhancement of the cellulosic component of thermo mechanical pulp using a rapid method: Iodomethane modification. Carbohydrate Polymers, 2016, 142, 300-308.	10.2	8
58	Accelerating settling rates of biosolids lagoons through thermal hydrolysis. Journal of Environmental Management, 2018, 220, 227-232.	7.8	8
59	Utilization of tall oil to enhance natural fibers for composite applications and production of a bioplastic. Journal of Applied Polymer Science, 2016, 133, .	2.6	7
60	Thermal processing of algal biomass for biofuel production. Current Opinion in Green and Sustainable Chemistry, 2016, 2, 1-5.	5.9	7
61	Evaluation of thermally hydrolyzed specified risk materials cross-linked with glutaraldehyde for tackifier applications. Progress in Organic Coatings, 2020, 140, 105535.	3.9	7
62	Cross-Linking of Thermally Hydrolyzed Specified Risk Materials with Epoxidized Poly (Vinyl Alcohol) for Tackifier Applications. Coatings, 2020, 10, 630.	2.6	7
63	The potential of fiber-depleted starch concentrate produced through air currents assisted particle separation of barley flour in bio-ethanol production. Bioresource Technology, 2020, 303, 122942.	9.6	7
64	Valorizing Biowaste for Wastewater Treatment: Dewatering Sludges Using Specified Risk Material-Based Flocculants for Industrial Sustainability. ACS Sustainable Chemistry and Engineering, 2021, 9, 2037-2046.	6.7	7
65	Biowaste-based biodegradable flocculants for clean and sustainable tailings management in industrial mining and mineral processing. Journal of Cleaner Production, 2021, 323, 129195.	9.3	5
66	Monitoring sugar release during pipeline hydro-transport of wheat straw. Biomass and Bioenergy, 2016, 93, 144-149.	5.7	4
67	Incorporation of Biosolids as Water Replacement in a Two-Step Renewable Hydrocarbon Process: Hydrolysis of Brown Grease with Biosolids. Waste and Biomass Valorization, 2020, 11, 6769-6780.	3.4	3
68	Desulphurization of drop-in fuel produced through lipid pyrolysis using brown grease and biosolids feedstocks. Biomass and Bioenergy, 2021, 154, 106233.	5.7	3
69	Microbially-mediated de-watering and consolidation (â€œBiodensificationâ€) of oil sands mature fine tailings, amended with agri-business by-products. Nova Scientia, 2020, 12, .	0.1	3
70	Surface and Bulk Transformation of Thermomechanical Pulp Using Fatty Acyl Chlorides: Influence of Reaction Parameters on Surface, Morphological, and Thermal Properties. Journal of Wood Chemistry and Technology, 2016, 36, 114-128.	1.7	1
71	Using Specified Risk Materials-Based Peptides for Oil Sands Fluid Fine Tailings Management. Materials, 2021, 14, 1582.	2.9	1
72	Ruminant-Waste Protein Hydrolysates and Their Derivatives as a Bio-Flocculant for Oil Sands Tailing Management. Polymers, 2021, 13, 3533.	4.5	1

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73	Biosolids-based catalyst for oxidative desulphurization of drop-in fuels derived from waste fats. Fuel, 2022, 324, 124546.	6.4	1