Wouter Huijgen

List of Publications by Year in descending order

36 papers	5,178 citations	172457 29 h-index	330143 37 g-index
37 all docs	37 docs citations	37 times ranked	5153 citing authors

#	Article	IF	Citations
1	Reductive lignocellulose fractionation into soluble lignin-derived phenolic monomers and dimers and processable carbohydrate pulps. Energy and Environmental Science, 2015, 8, 1748-1763.	30.8	688
2	New insights into the structure and composition of technical lignins: a comparative characterisation study. Green Chemistry, 2016, 18, 2651-2665.	9.0	648
3	Mineral CO2Sequestration by Steel Slag Carbonation. Environmental Science & Technology, 2005, 39, 9676-9682.	10.0	598
4	Mechanisms of aqueous wollastonite carbonation as a possible CO2 sequestration process. Chemical Engineering Science, 2006, 61, 4242-4251.	3.8	281
5	Ethanol-based organosolv fractionation of wheat straw for the production of lignin and enzymatically digestible cellulose. Bioresource Technology, 2013, 135, 58-66.	9.6	251
6	Carbonation of Steel Slag for CO2Sequestration:Â Leaching of Products and Reaction Mechanisms. Environmental Science & Technology, 2006, 40, 2790-2796.	10.0	237
7	Cost evaluation of CO2 sequestration by aqueous mineral carbonation. Energy Conversion and Management, 2007, 48, 1923-1935.	9.2	172
8	Biorefinery of the green seaweed Ulva lactuca to produce animal feed, chemicals and biofuels. Journal of Applied Phycology, 2016, 28, 3511-3525.	2.8	169
9	Pyrolysis of wheat straw-derived organosolv lignin. Journal of Analytical and Applied Pyrolysis, 2012, 93, 95-103.	5.5	166
10	Hydrogenâ€free catalytic fractionation of woody biomass. ChemSusChem, 2016, 9, 3280-3287.	6.8	149
11	Opportunities and challenges for seaweed in the biobased economy. Trends in Biotechnology, 2014, 32, 231-233.	9.3	138
12	Biorefining of wheat straw using an acetic and formic acid based organosolv fractionation process. Bioresource Technology, 2014, 156, 275-282.	9.6	131
13	Changes in mineralogical and leaching properties of converter steel slag resulting from accelerated carbonation at low CO2 pressure. Waste Management, 2011, 31, 2236-2244.	7.4	124
14	Pretreatment and Fractionation of Wheat Straw by an Acetone-Based Organosolv Process. Industrial & Engineering Chemistry Research, 2010, 49, 10132-10140.	3.7	120
15	Characteristics of wheat straw lignins from ethanol-based organosolv treatment. Industrial Crops and Products, 2014, 59, 85-95.	5.2	119
16	Energy Consumption and Net CO2Sequestration of Aqueous Mineral Carbonation. Industrial & Engineering Chemistry Research, 2006, 45, 9184-9194.	3.7	117
17	Lignin pyrolysis for profitable lignocellulosic biorefineries. Biofuels, Bioproducts and Biorefining, 2014, 8, 645-657.	3.7	113
18	Fractionation of wheat straw by prehydrolysis, organosolv delignification and enzymatic hydrolysis for production of sugars and lignin. Bioresource Technology, 2012, 114, 389-398.	9.6	110

#	Article	IF	Citations
19	Conversion of (Ligno)Cellulose Feeds to Isosorbide with Heteropoly Acids and Ru on Carbon. ChemSusChem, 2013, 6, 199-208.	6.8	108
20	Catalytic organosolv fractionation of willow wood and wheat straw as pretreatment for enzymatic cellulose hydrolysis. Journal of Chemical Technology and Biotechnology, 2011, 86, 1428-1438.	3.2	105
21	Effective fractionation of lignocellulose in herbaceous biomass and hardwood using a mild acetone organosolv process. Green Chemistry, 2017, 19, 5505-5514.	9.0	102
22	Butanol fermentation of the brown seaweed Laminaria digitata by Clostridium beijerinckii DSM-6422. Bioresource Technology, 2017, 238, 16-21.	9.6	68
23	Fuels and plastics from lignocellulosic biomass via the furan pathway; a technical analysis. RSC Advances, 2014, 4, 3536-3549.	3.6	61
24	Biobased alkylphenols from lignins via a two-step pyrolysis â€“ Hydrodeoxygenation approach. Bioresource Technology, 2017, 229, 160-168.	9.6	51
25	Technoâ€economic comparative assessment of novel lignin depolymerization routes to bioâ€based aromatics. Biofuels, Bioproducts and Biorefining, 2019, 13, 1068-1084.	3.7	48
26	Organosolv pretreatment of olive tree biomass for fermentable sugars. Holzforschung, 2011, 65, .	1.9	41
27	Acid catalysed alcoholysis of wheat straw: Towards second generation furan-derivatives. Catalysis Today, 2014, 223, 3-10.	4.4	38
28	The importance of pretreatment and feedstock purity in the reductive splitting of (ligno)cellulose by metal supported USY zeolite. Green Chemistry, 2016, 18, 2095-2105.	9.0	35
29	Use of Food and Packaging Model Matrices to Investigate the Antioxidant Properties of Biorefinery Grass Lignins. Journal of Agricultural and Food Chemistry, 2015, 63, 10022-10031.	5.2	32
30	Techno-economic and ex-ante environmental assessment of C6 sugars production from spruce and corn. Comparison of organosolv and wet milling technologies. Journal of Cleaner Production, 2018, 170, 610-624.	9.3	31
31	The role of lignin in the densification of torrefied wood in relation to the final product properties. Biomass and Bioenergy, 2018, 111, 248-262.	5.7	27
32	The influence of thermochemical treatments on the lignocellulosic structure of wheat straw as studied by natural abundance 13C NMR. Bioresource Technology, 2013, 146, 585-590.	9.6	23
33	Lignin-to-Liquid-Solvolysis (LtL) of Organosolv Extracted Lignin. ACS Sustainable Chemistry and Engineering, 2018, 6, 3102-3112.	6.7	21
34	Aquatic weeds as novel protein sources: Alkaline extraction of tannin-rich Azolla. Biotechnology Reports (Amsterdam, Netherlands), 2019, 24, e00368.	4.4	20
35	The promotional effect of water-soluble extractives on the enzymatic cellulose hydrolysis of pretreated wheat straw. Bioresource Technology, 2017, 243, 994-999.	9.6	19
36	Biomass Pre-Extraction as a Versatile Strategy to Improve Biorefinery Feedstock Flexibility, Sugar Yields, and Lignin Purity. ACS Sustainable Chemistry and Engineering, 2022, 10, 6012-6022.	6.7	15