M Toufiq Reza

List of Publications by Year
in descending order

71	3,712	159358 30	128067 60
papers	citations	h-index	g-index

71	71	71	2685
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Hydrothermal carbonization: Fate of inorganics. Biomass and Bioenergy, 2013, 49, 86-94.	2.9	381
2	Hydrothermal Carbonization of Biomass for Energy and Crop Production. Applied Bioenergy, 2014, 1, .	4.3	259
3	Hydrothermal carbonization (HTC) of wheat straw: Influence of feedwater pH prepared by acetic acid and potassium hydroxide. Bioresource Technology, 2015, 182, 336-344.	4.8	256
4	Characterization of products from hydrothermal carbonization of orange pomace including anaerobic digestibility of process liquor. Bioresource Technology, 2015, 196, 35-42.	4.8	191
5	Hydrothermal carbonization of loblolly pine: reaction chemistry and water balance. Biomass Conversion and Biorefinery, 2014, 4, 311-321.	2.9	183
6	Reaction kinetics of hydrothermal carbonization of loblolly pine. Bioresource Technology, 2013, 139, 161-169.	4.8	171
7	Pelletization of biochar from hydrothermally carbonized wood. Environmental Progress and Sustainable Energy, 2012, 31, 225-234.	1.3	143
8	Behavior of selected hydrolyzed and dehydrated products during hydrothermal carbonization of biomass. Bioresource Technology, 2014, 169, 352-361.	4.8	131
9	Pyrolysis of hydrochar from digestate: Effect of hydrothermal carbonization and pyrolysis temperatures on pyrochar formation. Bioresource Technology, 2016, 220, 168-174.	4.8	128
10	Engineered pellets from dry torrefied and HTC biochar blends. Biomass and Bioenergy, 2014, 63, 229-238.	2.9	121
11	Effect of hydrothermal carbonization temperature on pH, dissociation constants, and acidic functional groups on hydrochar from cellulose and wood. Journal of Analytical and Applied Pyrolysis, 2019, 137, 138-145.	2.6	121
12	Hydrothermal carbonization of various lignocellulosic biomass. Biomass Conversion and Biorefinery, 2015, 5, 173-181.	2.9	104
13	Hydrothermal carbonization (HTC) of cow manure: Carbon and nitrogen distributions in HTC products. Environmental Progress and Sustainable Energy, 2016, 35, 1002-1011.	1.3	100
14	Effect of salt addition on hydrothermal carbonization of lignocellulosic biomass. Fuel, 2012, 99, 271-273.	3.4	85
15	Hydrothermal carbonization (HTC): Near infrared spectroscopy and partial least-squares regression for determination of selective components in HTC solid and liquid products derived from maize silage. Bioresource Technology, 2014, 161, 91-101.	4.8	74
16	Pretreatment of rice hulls by ionic liquid dissolution. Bioresource Technology, 2012, 114, 629-636.	4.8	72
17	Co-Hydrothermal Carbonization of coal-biomass blend: Influence of temperature on solid fuel properties. Fuel Processing Technology, 2017, 167, 711-720.	3.7	65
18	Characterization of hydrochar obtained from hydrothermal carbonization of wheat straw digestate. Biomass Conversion and Biorefinery, 2015, 5, 425-435.	2.9	56

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19	Cationic Dye Adsorption on Hydrochars of Winery and Citrus Juice Industries Residues: Performance, Mechanism, and Thermodynamics. Energies, 2020, 13, 4686.	1.6	55
20	Hydrothermal Carbonization of Digestate in the Presence of Zeolite: Process Efficiency and Composite Properties. ACS Sustainable Chemistry and Engineering, 2015, 3, 2967-2974.	3.2	53
21	Hydrothermal Carbonization of Autoclaved Municipal Solid Waste Pulp and Anaerobically Treated Pulp Digestate. ACS Sustainable Chemistry and Engineering, 2016, 4, 3649-3658.	3.2	49
22	Effect of Pyrolysis Temperature on Acidic Oxygen-Containing Functional Groups and Electron Storage Capacities of Pyrolyzed Hydrochars. ACS Sustainable Chemistry and Engineering, 2019, 7, 8387-8396.	3.2	47
23	Wet Air Oxidation of Hydrothermal Carbonization (HTC) Process Liquid. ACS Sustainable Chemistry and Engineering, 2016, 4, 3250-3254.	3.2	45
24	Hydrothermal Carbonization (HTC) and Pelletization of Two Arid Land Plants Bagasse for Energy Densification. ACS Sustainable Chemistry and Engineering, 2016, 4, 1106-1114.	3.2	45
25	Effects of water recycling in hydrothermal carbonization of loblolly pine. Environmental Progress and Sustainable Energy, 2014, 33, 1309-1315.	1.3	44
26	Techno-Economic Assessment of Co-Hydrothermal Carbonization of a Coal-Miscanthus Blend. Energies, 2019, 12, 630.	1.6	44
27	Production, characterization, and biogas application of magnetic hydrochar from cellulose. Bioresource Technology, 2015, 186, 34-43.	4.8	40
28	Hydrothermal Carbonization of Various Paper Mill Sludges: An Observation of Solid Fuel Properties. Energies, 2019, 12, 858.	1.6	38
29	Hydrothermal carbonization of food waste: simplified process simulation model based on experimental results. Biomass Conversion and Biorefinery, 2018, 8, 283-292.	2.9	35
30	Recovery of Macro and Micro-Nutrients by Hydrothermal Carbonization of Septage. Journal of Agricultural and Food Chemistry, 2018, 66, 1854-1862.	2.4	32
31	Assessment of mutagenic potential of pyrolysis biochars by Ames Salmonella/mammalian-microsomal mutagenicity test. Ecotoxicology and Environmental Safety, 2014, 107, 306-312.	2.9	30
32	Liquidâ€“Liquid Extraction of Furfural from Water by Hydrophobic Deep Eutectic Solvents: Improvement of Density Function Theory Modeling with Experimental Validations. ACS Omega, 2020, 5, 22305-22313.	1.6	28
33	Continuous Anaerobic Degradation of Liquid Condensate from Steam-Derived Hydrothermal Carbonization of Sewage Sludge. ACS Sustainable Chemistry and Engineering, 2016, 4, 1673-1678.	3.2	27
34	Formation of Carbon Quantum Dots via Hydrothermal Carbonization: Investigate the Effect of Precursors. Energies, 2021, 14, 986.	1.6	27
35	Co-hydrothermal carbonization of coal waste and food waste: fuel characteristics. Biomass Conversion and Biorefinery, 2022, 12, 3-13.	2.9	25
36	Hydrothermal Liquefaction of Loblolly Pine: Effects of Various Wastes on Produced Biocrude. ACS Omega, 2018, 3, 3051-3059.	1.6	24

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37	A steady-state equilibrium-based carbon dioxide gasification simulation model for hydrothermally carbonized cow manure. Energy Conversion and Management, 2019, 191, 12-22.	4.4	24
38	Technoeconomic analysis of co-hydrothermal carbonization of coal waste and food waste. Biomass Conversion and Biorefinery, 2022, 12, 39-49.	2.9	23
39	Elucidating hydrochar morphology and oxygen functionality change with hydrothermal treatment temperature ranging from subcritical to supercritical conditions. Journal of Analytical and Applied Pyrolysis, 2020, 152, 104965.	2.6	22
40	Effects of process liquid recirculation on material properties of hydrochar and corresponding adsorption of cationic dye. Journal of Analytical and Applied Pyrolysis, 2022, 161, 105418.	2.6	20
41	Pyrolysis Creates Electron Storage Capacity of Black Carbon (Biochar) from Lignocellulosic Biomass. ACS Sustainable Chemistry and Engineering, 2021, 9, 6821-6831.	3.2	19
42	Hydrothermal Carbonization of Lignocellulosic Biomass. Green Chemistry and Sustainable Technology, 2014, , 275-311.	0.4	18
43	Synopsis of Factors Affecting Hydrogen Storage in Biomass-Derived Activated Carbons. Sustainability, 2021, 13, 1947.	1.6	18
44	Upcycling simulated food wastes into superactivated hydrochar for remarkable hydrogen storage. Journal of Analytical and Applied Pyrolysis, 2021, 159, 105322.	2.6	18
45	Algal Remediation of Wastewater Produced from Hydrothermally Treated Septage. Sustainability, 2019, 11, 3454.	1.6	17
46	Investigation of hydrothermal carbonization and chemical activation process conditions on hydrogen storage in loblolly pine-derived superactivated hydrochars. International Journal of Hydrogen Energy, 2022, 47, 26422-26434.	3.8	17
47	Enhancement of energy and combustion properties of hydrochar via citric acid catalysed secondary char production. Biomass Conversion and Biorefinery, 2023, 13, 10527-10538.	2.9	16
48	Optical texture of hydrochar from maize silage and maize silage digestate. International Journal of Coal Geology, 2014, 134-135, 74-79.	1.9	13
49	Evaluation of Integrated Anaerobic Digestion and Hydrothermal Carbonization for Bioenergy Production. Journal of Visualized Experiments, 2014, , .	0.2	13
50	Hydrothermal carbonization of glucose in saline solution: sequestration of nutrients on carbonaceous materials. AIMS Energy, 2016, 4, 173-189.	1.1	13
51	Pretreatment of Biomass by Selected Type-III Deep Eutectic Solvents and Evaluation of the Pretreatment Effects on Hydrothermal Carbonization. Industrial & Engineering Chemistry Research, 2021, 60, 15479-15491.	1.8	12
52	Ash reduction of corn stover by mild hydrothermal preprocessing. Biomass Conversion and Biorefinery, 2014, 5, 21.	2.9	11
53	Behavior of Stable Carbon and Stable Nitrogen Isotopes during Hydrothermal Carbonization of biomass. Journal of Analytical and Applied Pyrolysis, 2018, 131, 85-92.	2.6	11
54	Pyrolysis and carbon dioxide gasification kinetics of hydrochar produced from cow manure. Environmental Progress and Sustainable Energy, 2019, 38, 154-162.	1.3	11

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55	Integration of Air Classification and Hydrothermal Carbonization to Enhance Energy Recovery of Corn Stover. Energies, 2021, 14, 1397.	1.6	10
56	Techno-economic assessment of superactivated hydrochar production by KOH impregnation compared to direct chemical activation. Biomass Conversion and Biorefinery, 0, , 1.	2.9	10
57	Systems Analysis of SO2-CO2 Co-Capture from a Post-Combustion Coal-Fired Power Plant in Deep Eutectic Solvents. Energies, 2020, 13, 438.	1.6	8
58	Assessing hydrothermal carbonization as sustainable home sewage management for rural counties: A case study from Appalachian Ohio. Science of the Total Environment, 2021, 781, 146648.	3.9	8
59	Application of biosorbents for ion removal from sodium lactate fermentation broth. Journal of Environmental Chemical Engineering, 2016, 4, 10-19.	3.3	7
60	Effect of pyrolysis on basic functional groups of hydrochars. Biomass Conversion and Biorefinery, 2021, 11, 1117-1124.	2.9	6
61	Transformation of Sulfur during Co-Hydrothermal Carbonization of Coal Waste and Food Waste. Energies, 2021, 14, 2271.	1.6	6
62	Carbon Capture from Biogas by Deep Eutectic Solvents: A COSMO Study to Evaluate the Effect of Impurities on Solubility and Selectivity. Clean Technologies, 2021, 3, 490-502.	1.9	6
63	Binder-free torrefied biomass pellets: significance of torrefaction temperature and pelletization parameters by multivariate analysis. Biomass Conversion and Biorefinery, 2020, , 1.	2.9	4
64	Preliminary safety evaluation of solvothermal liquefaction of plastic wastes using toluene as solvent. Clean Technologies and Environmental Policy, 2022, 24, 801-813.	2.1	4
65	Towards solvothermal upcycling of mixed plastic wastes: Depolymerization pathways of waste plastics in sub- and supercritical toluene. Energy Conversion and Management: X, 2022, 13, 100158.	0.9	4
66	Blending hydrochar improves hydrophobic properties of corn stover pellets. Biomass Conversion and Biorefinery, 0, , 1.	2.9	4
67	Challenges and process economics for algal carbon capture with novel integration: Hydrothermal carbonization. Bioresource Technology Reports, 2020, 12, 100556.	1.5	3
68	Hydrothermal degradation of Î²-estradiol and oxytetracycline at selective reaction severities. SN Applied Sciences, 2020, 2, 1.	1.5	3
69	Effect of supercritical water temperature and Pd/C catalyst on upgrading fuel characteristics of gumweed-derived solvent-extracted biocrude. Biomass Conversion and Biorefinery, 2020, , 1.	2.9	2
70	Liquid-Liquid Equilibrium of Deep Eutectic Solvent-Aromatic-Aliphatic Ternary Systems: Experimental Study with COSMO Model Predictions. Processes, 2021, 9, 1169.	1.3	2
71	Correction: Hydrothermal carbonization of glucose in saline solution: sequestration of nutrients on carbonaceous materials. AIMS Energy, 2018, 6, 269-271.	1.1	0