Mikael Thyrel

List of Publications by Year
in descending order

29 papers	984 citations	516215 16 h-index	476904 29 g-index
29 all docs	29 docs citations	29 times ranked	951 citing authors

#	Article	IF	Citations
1	High quality biofuel pellet production from pre-compacted low density raw materials. Bioresource Technology, 2008, 99, 7176-7182.	4.8	121
2	Slagging Characteristics during Combustion of Corn Stovers with and without Kaolin and Calcite. Energy & Fuels, 2008, 22, 3465-3470.	2.5	115
3	Moisture content and storage time influence the binding mechanisms in biofuel wood pellets. Applied Energy, 2012, 99, 109-115.	5.1	100
4	Effect of biomaterial characteristics on pelletizing properties and biofuel pellet quality. Fuel Processing Technology, 2009, 90, 1129-1134.	3.7	90
5	Sustainable Biomass Activated Carbons as Electrodes for Battery and Supercapacitorsâ€”A Mini-Review. Nanomaterials, 2020, 10, 1398.	1.9	76
6	Process Parameters Optimization, Characterization, and Application of KOH-Activated Norway Spruce Bark Graphitic Biochars for Efficient Azo Dye Adsorption. Molecules, 2022, 27, 456.	1.7	59
7	A comparative study of chemical treatment by $MgCl_2$, $ZnSO_4$, $ZnCl_2$, and KOH on physicochemical properties and acetaminophen adsorption performance of biobased porous materials from tree bark residues. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 642, 128626.	2.3	59
8	A Short Review on the Electrochemical Performance of Hierarchical and Nitrogen-Doped Activated Biocarbon-Based Electrodes for Supercapacitors. Nanomaterials, 2021, 11, 424.	1.9	47
9	Industrial scale biofuel pellet production from blends of unbarked softwood and hardwood stemsâ€”the effects of raw material composition and moisture content on pellet quality. Fuel Processing Technology, 2012, 95, 73-77.	3.7	31
10	Biomass pellet combustion: Cavities and ash formation characterized by synchrotron X-ray micro-tomography. Fuel Processing Technology, 2018, 176, 211-220.	3.7	31
11	Flexible supercapacitors of biomass-based activated carbon-polypyrrole on eggshell membranes. Journal of Environmental Chemical Engineering, 2021, 9, 106155.	3.3	27
12	Near Infrared Image Analysis for Online Identification and Separation of Wood Chips with Elevated Levels of Extractives. Journal of Near Infrared Spectroscopy, 2012, 20, 591-599.	0.8	24
13	Combustion characteristics of straw stored with $CaCO_3$ in bubbling fluidized bed using quartz and olivine as bed materials. Applied Energy, 2018, 212, 1400-1408.	5.1	23
14	Application of design of experiments (DoE) for optimised production of micro- and mesoporous Norway spruce bark activated carbons. Biomass Conversion and Biorefinery, 2023, 13, 10113-10131.	2.9	20
15	Time-Resolved Study of Silicate Slag Formation During Combustion of Wheat Straw Pellets. Energy & Fuels, 2019, 33, 2308-2318.	2.5	19
16	Combustion and Slagging Behavior of Biomass Pellets Using a Burner Cup Developed for Ash-Rich Fuels. Energy & Fuels, 2014, 28, 1103-1110.	2.5	18
17	Temperature controlled feed layer formation in biofuel pellet production. Fuel, 2012, 94, 81-85.	3.4	15
18	VOC off-gassing from pelletized steam exploded softwood bark: Emissions at different industrial process steps. Fuel Processing Technology, 2018, 171, 70-77.	3.7	15

#	Article	IF	Citations
19	Energy smart hot-air pasteurisation as effective as energy intense autoclaving for fungal preprocessing of lignocellulose feedstock for bioethanol fuel production. Renewable Energy, 2020, 155, 237-247.	4.3	14
20	Facile Synthesis of Sustainable Biomass-Derived Porous Biochars as Promising Electrode Materials for High-Performance Supercapacitor Applications. Nanomaterials, 2022, 12, 866.	1.9	14
21	Nanomapping and speciation of C and Ca in thermally treated lignocellulosic cell walls using scanning transmission X-ray microscopy and K-edge XANES. Fuel, 2016, 167, 149-157.	3.4	12
22	Characterization of fast pyrolysis bio-oil properties by near-infrared spectroscopic data. Journal of Analytical and Applied Pyrolysis, 2018, 133, 9-15.	2.6	12
23	Fate of phosphorus and potassium in single-pellet thermal conversion of forest residues with a focus on the char composition. Biomass and Bioenergy, 2021, 150, 106124.	2.9	10
24	Phase transitions involving Ca â€" The most abundant ash forming element â€" In thermal treatment of lignocellulosic biomass. Fuel, 2021, 285, 119054.	3.4	8
25	A method for differentiating between exogenous and naturally embedded ash in bio-based feedstock by combining ED-XRF and NIR spectroscopy. Biomass and Bioenergy, 2019, 122, 84-89.	2.9	8
26	Morphological characterisation of ash particles from co-combustion of sewage sludge and wheat straw with X-ray microtomography. Waste Management, 2021, 135, 30-39.	3.7	7
27	Using the macromolecular composition to predict process settings that give high pellet durability in ring-die biomass pellet production. Fuel, 2021, 283, 119267.	3.4	4
28	Reducing Volatile Organic Compound Off-Gassing during the Production of Pelletized Steam-Exploded Bark: Impact of Storage Time and Controlled Ventilation. Energy & Fuels, 2018, 32, 5181-5186.	2.5	3
29	Does Mechanical Screening of Contaminated Forest Fuels Improve Ash Chemistry for Thermal Conversion?. Energy & Fuels, 2020, 34, 16294-16301.	2.5	2