

# Wei-Hsin Chen

## List of Publications by Citations

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431  
papers

16,169  
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71  
h-index

110  
g-index

460  
ext. papers

20,878  
ext. citations

7.8  
avg. IF

7.75  
L-index

#	Paper	IF	Citations
431	A state-of-the-art review of biomass torrefaction, densification and applications. <i>Renewable and Sustainable Energy Reviews</i> , <b>2015</b> , 44, 847-866	16.2	689
430	A study on torrefaction of various biomass materials and its impact on lignocellulosic structure simulated by a thermogravimetry. <i>Energy</i> , <b>2010</b> , 35, 2580-2586	7.9	388
429	Torrefaction and co-torrefaction characterization of hemicellulose, cellulose and lignin as well as torrefaction of some basic constituents in biomass. <i>Energy</i> , <b>2011</b> , 36, 803-811	7.9	368
428	Thermochemical conversion of microalgal biomass into biofuels: a review. <i>Bioresource Technology</i> , <b>2015</b> , 184, 314-327	11	365
427	Biorefineries in circular bioeconomy: A comprehensive review. <i>Bioresource Technology</i> , <b>2020</b> , 299, 122585	11	272
426	Thermogravimetric analysis and kinetics of co-pyrolysis of raw/torrefied wood and coal blends. <i>Applied Energy</i> , <b>2013</b> , 105, 57-65	10.7	226
425	Disruption of sugarcane bagasse lignocellulosic structure by means of dilute sulfuric acid pretreatment with microwave-assisted heating. <i>Applied Energy</i> , <b>2011</b> , 88, 2726-2734	10.7	222
424	Isothermal torrefaction kinetics of hemicellulose, cellulose, lignin and xylan using thermogravimetric analysis. <i>Energy</i> , <b>2011</b> , 36, 6451-6460	7.9	207
423	Recent developments on algal biochar production and characterization. <i>Bioresource Technology</i> , <b>2017</b> , 246, 2-11	11	201
422	An evaluation on improvement of pulverized biomass property for solid fuel through torrefaction. <i>Applied Energy</i> , <b>2011</b> , 88, 3636-3644	10.7	197
421	Sustainability of direct biodiesel synthesis from microalgae biomass: A critical review. <i>Renewable and Sustainable Energy Reviews</i> , <b>2019</b> , 107, 59-74	16.2	190
420	State of the art and prospective of lipase-catalyzed transesterification reaction for biodiesel production. <i>Energy Conversion and Management</i> , <b>2017</b> , 141, 339-353	10.6	189
419	Thermal pretreatment of wood (Lauan) block by torrefaction and its influence on the properties of the biomass. <i>Energy</i> , <b>2011</b> , 36, 3012-3021	7.9	186
418	Pyrolysis characteristics and kinetics of microalgae via thermogravimetric analysis (TGA): A state-of-the-art review. <i>Bioresource Technology</i> , <b>2017</b> , 246, 88-100	11	182
417	An experimental analysis on property and structure variations of agricultural wastes undergoing torrefaction. <i>Applied Energy</i> , <b>2012</b> , 100, 318-325	10.7	173
416	A review of thermochemical conversion of microalgal biomass for biofuels: chemistry and processes. <i>Green Chemistry</i> , <b>2017</b> , 19, 44-67	10	170
415	Catalytic thermochemical conversion of biomass for biofuel production: A comprehensive review. <i>Renewable and Sustainable Energy Reviews</i> , <b>2019</b> , 113, 109266	16.2	168

4 <sup>14</sup>	Hydrothermal carbonization of sugarcane bagasse via wet torrefaction in association with microwave heating. <i>Bioresource Technology</i> , <b>2012</b> , 118, 195-203	11	165
4 <sup>13</sup>	Evaluation of the engine performance and exhaust emissions of biodiesel-bioethanol-diesel blends using kernel-based extreme learning machine. <i>Energy</i> , <b>2018</b> , 159, 1075-1087	7.9	161
4 <sup>12</sup>	Hydrolysis characteristics of sugarcane bagasse pretreated by dilute acid solution in a microwave irradiation environment. <i>Applied Energy</i> , <b>2012</b> , 93, 237-244	10.7	159
4 <sup>11</sup>	Optimization of biodiesel production by microwave irradiation-assisted transesterification for waste cooking oil-Calophyllum inophyllum oil via response surface methodology. <i>Energy Conversion and Management</i> , <b>2018</b> , 158, 400-415	10.6	157
4 <sup>10</sup>	Torrefaction and low temperature carbonization of oil palm fiber and Eucalyptus in nitrogen and air atmospheres. <i>Bioresource Technology</i> , <b>2012</b> , 123, 98-105	11	149
4 <sup>09</sup>	Investigation on the ignition and burnout temperatures of bamboo and sugarcane bagasse by thermogravimetric analysis. <i>Applied Energy</i> , <b>2015</b> , 160, 49-57	10.7	148
4 <sup>08</sup>	Progress in biomass torrefaction: Principles, applications and challenges. <i>Progress in Energy and Combustion Science</i> , <b>2021</b> , 82, 100887	33.6	147
4 <sup>07</sup>	Pyrolysis of high ash sewage sludge: Kinetics and thermodynamic analysis using Coats-Redfern method. <i>Renewable Energy</i> , <b>2019</b> , 131, 854-860	8.1	146
4 <sup>06</sup>	A comparison of gasification phenomena among raw biomass, torrefied biomass and coal in an entrained-flow reactor. <i>Applied Energy</i> , <b>2013</b> , 112, 421-430	10.7	141
4 <sup>05</sup>	Modeling and simulation for the design of thermal-concentrated solar thermoelectric generator. <i>Energy</i> , <b>2014</b> , 64, 287-297	7.9	137
4 <sup>04</sup>	Design of heat sink for improving the performance of thermoelectric generator using two-stage optimization. <i>Energy</i> , <b>2012</b> , 39, 236-245	7.9	136
4 <sup>03</sup>	State of art review on conventional and advanced pyrolysis of macroalgae and microalgae for biochar, bio-oil and bio-syngas production. <i>Energy Conversion and Management</i> , <b>2020</b> , 210, 112707	10.6	131
4 <sup>02</sup>	Recent advances in downstream processing of microalgae lipid recovery for biofuel production. <i>Bioresource Technology</i> , <b>2020</b> , 304, 122996	11	126
4 <sup>01</sup>	Gasification performances of raw and torrefied biomass in a downdraft fixed bed gasifier using thermodynamic analysis. <i>Fuel</i> , <b>2014</b> , 117, 1231-1241	7.1	125
4 <sup>00</sup>	A numerical study on the performance of miniature thermoelectric cooler affected by Thomson effect. <i>Applied Energy</i> , <b>2012</b> , 89, 464-473	10.7	121
399	Pretreatment of biomass by torrefaction and carbonization for coal blend used in pulverized coal injection. <i>Bioresource Technology</i> , <b>2014</b> , 161, 333-9	11	120
398	A state-of-the-art review on thermochemical conversion of biomass for biofuel production: A TG-FTIR approach. <i>Energy Conversion and Management</i> , <b>2020</b> , 209, 112634	10.6	115
397	Experimental study on thermoelectric modules for power generation at various operating conditions. <i>Energy</i> , <b>2012</b> , 45, 874-881	7.9	113

396	Torrefaction, pyrolysis and two-stage thermodegradation of hemicellulose, cellulose and lignin. <i>Fuel</i> , <b>2019</b> , 258, 116168	7.1	112
395	Torrefaction performance and energy usage of biomass wastes and their correlations with torrefaction severity index. <i>Applied Energy</i> , <b>2018</b> , 220, 598-604	10.7	112
394	Non-oxidative and oxidative torrefaction characterization and SEM observations of fibrous and ligneous biomass. <i>Applied Energy</i> , <b>2014</b> , 114, 104-113	10.7	111
393	Modeling and simulation of hydrogen generation from high-temperature and low-temperature water gas shift reactions. <i>International Journal of Hydrogen Energy</i> , <b>2008</b> , 33, 6644-6656	6.7	111
392	Torrefied biomasses in a drop tube furnace to evaluate their utility in blast furnaces. <i>Bioresource Technology</i> , <b>2012</b> , 111, 433-8	11	106
391	Microalgae from wastewater treatment to biochar [Feedstock preparation and conversion technologies. <i>Energy Conversion and Management</i> , <b>2017</b> , 150, 1-13	10.6	106
390	Water gas shift reaction for hydrogen production and carbon dioxide capture: A review. <i>Applied Energy</i> , <b>2020</b> , 258, 114078	10.7	105
389	Impact of torrefaction on the composition, structure and reactivity of a microalga residue. <i>Applied Energy</i> , <b>2016</b> , 181, 110-119	10.7	104
388	Overview: Comparison of pretreatment technologies and fermentation processes of bioethanol from microalgae. <i>Energy Conversion and Management</i> , <b>2018</b> , 173, 81-94	10.6	102
387	Thermal decomposition dynamics and severity of microalgae residues in torrefaction. <i>Bioresource Technology</i> , <b>2014</b> , 169, 258-264	11	102
386	Recent advances in the pretreatment of microalgal and lignocellulosic biomass: A comprehensive review. <i>Bioresource Technology</i> , <b>2020</b> , 298, 122476	11	102
385	Catalytic effects of potassium on biomass pyrolysis, combustion and torrefaction. <i>Applied Energy</i> , <b>2019</b> , 235, 346-355	10.7	101
384	Performance investigation and design optimization of a thermoelectric generator applied in automobile exhaust waste heat recovery. <i>Energy Conversion and Management</i> , <b>2016</b> , 120, 71-80	10.6	99
383	One-step synthesis of dimethyl ether from the gas mixture containing CO <sub>2</sub> with high space velocity. <i>Applied Energy</i> , <b>2012</b> , 98, 92-101	10.7	95
382	A comprehensive study on pyrolysis kinetics of microalgal biomass. <i>Energy Conversion and Management</i> , <b>2017</b> , 131, 109-116	10.6	94
381	Assessment of energy performance and air pollutant emissions in a diesel engine generator fueled with water-containing ethanol[Biodiesel]diesel blend of fuels. <i>Energy</i> , <b>2011</b> , 36, 5591-5599	7.9	94
380	Pulverized coal burnout in blast furnace simulated by a drop tube furnace. <i>Energy</i> , <b>2010</b> , 35, 576-581	7.9	94
379	Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities. <i>Bioresource Technology</i> , <b>2013</b> , 146, 152-160	11	91

378	Isothermal and non-isothermal torrefaction characteristics and kinetics of microalga <i>Scenedesmus obliquus</i> CNW-N. <i>Bioresource Technology</i> , <b>2014</b> , 155, 245-51	11	90
377	Thermodynamic analysis of hydrogen production from methane via autothermal reforming and partial oxidation followed by water gas shift reaction. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 11787-11797	6.7	90
376	Impact of dilute acid pretreatment on the structure of bagasse for bioethanol production. <i>International Journal of Energy Research</i> , <b>2010</b> , 34, 265-274	4.5	89
375	Torrefaction operation and optimization of microalga residue for energy densification and utilization. <i>Applied Energy</i> , <b>2015</b> , 154, 622-630	10.7	87
374	Sustainability of the four generations of biofuels A review. <i>International Journal of Energy Research</i> , <b>2020</b> , 44, 9266-9282	4.5	87
373	Product characteristics from the torrefaction of oil palm fiber pellets in inert and oxidative atmospheres. <i>Bioresource Technology</i> , <b>2016</b> , 199, 367-374	11	86
372	Impacts of COVID-19 pandemic on the global energy system and the shift progress to renewable energy: Opportunities, challenges, and policy implications. <i>Energy Policy</i> , <b>2021</b> , 154, 112322	7.2	85
371	Power output analysis and optimization of two straight-bladed vertical-axis wind turbines. <i>Applied Energy</i> , <b>2017</b> , 185, 223-232	10.7	83
370	An evaluation of hydrogen production from the perspective of using blast furnace gas and coke oven gas as feedstocks. <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 11727-11737	6.7	81
369	Pyrolysis of microalgae residues--A kinetic study. <i>Bioresource Technology</i> , <b>2016</b> , 199, 362-366	11	80
368	Hygroscopic transformation of woody biomass torrefaction for carbon storage. <i>Applied Energy</i> , <b>2018</b> , 231, 768-776	10.7	80
367	Characterization of solid and liquid products from bamboo torrefaction. <i>Applied Energy</i> , <b>2015</b> , 160, 829-835	10.7	79
366	Microalgal biosorption of heavy metals: A comprehensive bibliometric review. <i>Journal of Hazardous Materials</i> , <b>2021</b> , 402, 123431	12.8	78
365	An evaluation on rice husks and pulverized coal blends using a drop tube furnace and a thermogravimetric analyzer for application to a blast furnace. <i>Energy</i> , <b>2009</b> , 34, 1458-1466	7.9	77
364	Sustainable biofuel and bioenergy production from biomass waste residues using microwave-assisted heating: A comprehensive review. <i>Chemical Engineering Journal</i> , <b>2021</b> , 403, 126233	14.7	77
363	Wet torrefaction of microalga <i>Chlorella vulgaris</i> ESP-31 with microwave-assisted heating. <i>Energy Conversion and Management</i> , <b>2017</b> , 141, 163-170	10.6	75
362	Predictions of biochar yield and elemental composition during torrefaction of forest residues. <i>Bioresource Technology</i> , <b>2016</b> , 215, 239-246	11	75
361	Torrefaction of microalgal biochar as potential coal fuel and application as bio-adsorbent. <i>Energy Conversion and Management</i> , <b>2018</b> , 165, 152-162	10.6	73

360	Performance analysis and optimum operation of a thermoelectric generator by Taguchi method. <i>Applied Energy</i> , <b>2015</b> , 158, 44-54	10.7	68
359	Effect of torrefaction pretreatment on the pyrolysis of rubber wood sawdust analyzed by Py-GC/MS. <i>Bioresource Technology</i> , <b>2018</b> , 259, 469-473	11	67
358	Numerical prediction and practical improvement of pulverized coal combustion in blast furnace. <i>International Communications in Heat and Mass Transfer</i> , <b>2006</b> , 33, 327-334	5.8	67
357	Thermal degradation of carbohydrates, proteins and lipids in microalgae analyzed by evolutionary computation. <i>Energy Conversion and Management</i> , <b>2018</b> , 160, 209-219	10.6	66
356	Emulsification analysis of bio-oil and diesel under various combinations of emulsifiers. <i>Applied Energy</i> , <b>2016</b> , 178, 746-757	10.7	65
355	Adsorptive removal of cationic methylene blue and anionic Congo red dyes using wet-torrefied microalgal biochar: Equilibrium, kinetic and mechanism modeling. <i>Environmental Pollution</i> , <b>2021</b> , 272, 115986	9.3	65
354	A comprehensive analysis of food waste derived liquefaction bio-oil properties for industrial application. <i>Applied Energy</i> , <b>2019</b> , 237, 283-291	10.7	64
353	Numerical investigation on performance of coal gasification under various injection patterns in an entrained flow gasifier. <i>Applied Energy</i> , <b>2012</b> , 100, 218-228	10.7	64
352	Performances of pulverized coal injection in blowpipe and tuyere at various operational conditions. <i>Energy Conversion and Management</i> , <b>2007</b> , 48, 2069-2076	10.6	62
351	An experimental study on carbon monoxide conversion and hydrogen generation from water gas shift reaction. <i>Energy Conversion and Management</i> , <b>2008</b> , 49, 2801-2808	10.6	61
350	A comprehensive review of life cycle assessment (LCA) of microalgal and lignocellulosic bioenergy products from thermochemical processes. <i>Bioresource Technology</i> , <b>2019</b> , 291, 121837	11	59
349	Determination of rated wind speed for maximum annual energy production of variable speed wind turbines. <i>Applied Energy</i> , <b>2017</b> , 205, 781-789	10.7	59
348	Oxidative torrefaction of biomass nutshells: Evaluations of energy efficiency as well as biochar transportation and storage. <i>Applied Energy</i> , <b>2019</b> , 235, 428-441	10.7	58
347	An energy analysis of torrefaction for upgrading microalga residue as a solid fuel. <i>Bioresource Technology</i> , <b>2015</b> , 185, 285-93	11	57
346	Hydrogen production from steam reforming of coke oven gas and its utility for indirect reduction of iron oxides in blast furnace. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 11748-11758	6.7	57
345	Performance optimization of thermoelectric generators designed by multi-objective genetic algorithm. <i>Applied Energy</i> , <b>2018</b> , 209, 211-223	10.7	57
344	Hydrogen generation from a catalytic water gas shift reaction under microwave irradiation. <i>International Journal of Hydrogen Energy</i> , <b>2008</b> , 33, 4789-4797	6.7	56
343	Analysis on energy consumption and performance of reheating furnaces in a hot strip mill. <i>International Communications in Heat and Mass Transfer</i> , <b>2005</b> , 32, 695-706	5.8	56

342	Characteristics of products from the pyrolysis of oil palm fiber and its pellets in nitrogen and carbon dioxide atmospheres. <i>Energy</i> , <b>2016</b> , 94, 569-578	7.9	51
341	Renewable aviation fuel by advanced hydroprocessing of biomass: Challenges and perspective. <i>Energy Conversion and Management</i> , <b>2019</b> , 199, 112015	10.6	50
340	Volatile release and particle formation characteristics of injected pulverized coal in blast furnaces. <i>Energy Conversion and Management</i> , <b>2007</b> , 48, 2025-2033	10.6	50
339	Effect of microwave double absorption on hydrogen generation from methanol steam reforming. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 1987-1997	6.7	49
338	Burning characteristics of pulverized coal within blast furnace raceway at various injection operations and ways of oxygen enrichment. <i>Fuel</i> , <b>2015</b> , 143, 98-106	7.1	48
337	Carbon dioxide capture by single droplet using Selexol, Rectisol and water as absorbents: A theoretical approach. <i>Applied Energy</i> , <b>2013</b> , 111, 731-741	10.7	48
336	Characterization of biomass waste torrefaction under conventional and microwave heating. <i>Bioresource Technology</i> , <b>2018</b> , 264, 7-16	11	48
335	Power output and efficiency of a thermoelectric generator under temperature control. <i>Energy Conversion and Management</i> , <b>2016</b> , 127, 404-415	10.6	45
334	Nanomaterials Utilization in Biomass for Biofuel and Bioenergy Production. <i>Energies</i> , <b>2020</b> , 13, 892	3.1	44
333	Geometric effect on cooling power and performance of an integrated thermoelectric generation-cooling system. <i>Energy Conversion and Management</i> , <b>2014</b> , 87, 566-575	10.6	44
332	A new design of solar thermoelectric generator with combination of segmented materials and asymmetrical legs. <i>Energy Conversion and Management</i> , <b>2018</b> , 175, 11-20	10.6	44
331	A review of synthesis and morphology of SrTiO <sub>3</sub> for energy and other applications. <i>International Journal of Energy Research</i> , <b>2019</b> , 43, 5151-5174	4.5	43
330	Dilute sulfuric acid hydrolysis of red macroalgae <i>Eucheuma denticulatum</i> with microwave-assisted heating for biochar production and sugar recovery. <i>Bioresource Technology</i> , <b>2017</b> , 246, 20-27	11	43
329	Characterization of water gas shift reaction in association with carbon dioxide sequestration. <i>Journal of Power Sources</i> , <b>2007</b> , 172, 368-375	8.9	43
328	Pyrolysis: An effective technique for degradation of COVID-19 medical wastes. <i>Chemosphere</i> , <b>2021</b> , 275, 130092	8.4	43
327	Overview on catalytic deoxygenation for biofuel synthesis using metal oxide supported catalysts. <i>Renewable and Sustainable Energy Reviews</i> , <b>2019</b> , 112, 834-852	16.2	42
326	Thermal behavior and hydrogen production of methanol steam reforming and autothermal reforming with spiral preheating. <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 3397-3408	6.7	42
325	Thermodynamic approach and comparison of two-step and single step DME (dimethyl ether) syntheses with carbon dioxide utilization. <i>Energy</i> , <b>2016</b> , 109, 326-340	7.9	42

324	Hydrogen production from methanol partial oxidation over Pt/Al <sub>2</sub> O <sub>3</sub> catalyst with low Pt content. <i>Energy</i> , <b>2015</b> , 88, 399-407	7.9	40
323	Taguchi approach for co-gasification optimization of torrefied biomass and coal. <i>Bioresource Technology</i> , <b>2013</b> , 144, 615-22	11	39
322	Co-gasification performance of coal and petroleum coke blends in a pilot-scale pressurized entrained-flow gasifier. <i>International Journal of Energy Research</i> , <b>2012</b> , 36, 499-508	4.5	39
321	Hydrogen production from water gas shift reaction in a high gravity (Hige) environment using a rotating packed bed. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 10179-10189	6.7	39
320	Thermodynamic analysis of the partial oxidation of coke oven gas for indirect reduction of iron oxides in a blast furnace. <i>Energy</i> , <b>2015</b> , 86, 758-771	7.9	38
319	Product Yields and Characteristics of Corncob Waste under Various Torrefaction Atmospheres. <i>Energies</i> , <b>2014</b> , 7, 13-27	3.1	38
318	Thermal characterization of oil palm fiber and eucalyptus in torrefaction. <i>Energy</i> , <b>2014</b> , 71, 40-48	7.9	38
317	A comprehensive review of hydrogen production from methanol thermochemical conversion for sustainability. <i>Energy</i> , <b>2021</b> , 217, 119384	7.9	38
316	Comparison and characterization of property variation of microalgal biomass with non-oxidative and oxidative torrefaction. <i>Fuel</i> , <b>2019</b> , 246, 375-385	7.1	37
315	Assessment of agro-industrial residues for bioenergy potential by investigating thermo-kinetic behavior in a slow pyrolysis process. <i>Fuel</i> , <b>2020</b> , 278, 118259	7.1	37
314	Surface grafting techniques on the improvement of membrane bioreactor: State-of-the-art advances. <i>Bioresource Technology</i> , <b>2018</b> , 269, 489-502	11	37
313	Sugarcane Bagasse Pyrolysis in a Carbon Dioxide Atmosphere with Conventional and Microwave-Assisted Heating. <i>Frontiers in Energy Research</i> , <b>2015</b> , 3,	3.8	37
312	Extinction of counterflow diffusion flames with radiative heat loss and nonunity Lewis numbers. <i>Combustion and Flame</i> , <b>2007</b> , 148, 100-116	5.3	37
311	Microalgal Torrefaction for Solid Biofuel Production. <i>Trends in Biotechnology</i> , <b>2020</b> , 38, 1023-1033	15.1	36
310	Polarization phenomena of hydrogen-rich gas in high-permeance Pd and PdCu membrane tubes. <i>Applied Energy</i> , <b>2014</b> , 113, 41-50	10.7	36
309	Hydrogen and synthesis gas production from activated carbon and steam via reusing carbon dioxide. <i>Applied Energy</i> , <b>2013</b> , 101, 551-559	10.7	36
308	An experimental study on single-step dimethyl ether (DME) synthesis from hydrogen and carbon monoxide under various catalysts. <i>International Journal of Hydrogen Energy</i> , <b>2015</b> , 40, 13583-13593	6.7	35
307	Bioethanol production from acid pretreated microalgal hydrolysate using microwave-assisted heating wet torrefaction. <i>Fuel</i> , <b>2020</b> , 279, 118435	7.1	35



306	Transient dynamic of hydrogen permeation through a palladium membrane. <i>International Journal of Hydrogen Energy</i> , <b>2009</b> , 34, 2440-2448	6.7	35
305	Hydrogen permeation dynamics across a palladium membrane in a varying pressure environment. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 5410-5418	6.7	35
304	Tailored hydrotalcite-based Mg-Ni-Al catalyst for hydrogen production via methane decomposition: Effect of nickel concentration and spinel-like structures. <i>International Journal of Hydrogen Energy</i> , <b>2019</b> , 44, 14424-14433	6.7	35
303	Synthesis of renewable heterogeneous acid catalyst from oil palm empty fruit bunch for glycerol-free biodiesel production. <i>Science of the Total Environment</i> , <b>2020</b> , 727, 138534	10.2	34
302	Partial oxidation of methanol over a Pt/Al <sub>2</sub> O <sub>3</sub> catalyst enhanced by sprays. <i>Energy</i> , <b>2016</b> , 106, 1-12	7.9	34
301	Performance of a thermoelectric generator intensified by temperature oscillation. <i>Energy</i> , <b>2017</b> , 133, 257-269	7.9	33
300	Unsteady absorption of sulfur dioxide by an atmospheric water droplet with internal circulation. <i>Atmospheric Environment</i> , <b>2001</b> , 35, 2375-2393	5.3	33
299	Thermal degradation and compositional changes of wood treated in a semi-industrial scale reactor in vacuum. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2018</b> , 130, 8-18	6	32
298	Biochar production from microalgae cultivation through pyrolysis as a sustainable carbon sequestration and biorefinery approach. <i>Clean Technologies and Environmental Policy</i> , <b>2018</b> , 20, 2047-2055	4.3	32
297	Microalgae Oil: Algae Cultivation and Harvest, Algae Residue Torrefaction and Diesel Engine Emissions Tests. <i>Aerosol and Air Quality Research</i> , <b>2015</b> , 15, 81-98	4.6	32
296	Applying microwave vacuum pyrolysis to design moisture retention and pH neutralizing palm kernel shell biochar for mushroom production. <i>Bioresource Technology</i> , <b>2020</b> , 312, 123572	11	32
295	Microwave-assisted wet torrefaction of microalgae under various acids for coproduction of biochar and sugar. <i>Journal of Cleaner Production</i> , <b>2020</b> , 253, 119944	10.3	32
294	Independent parallel pyrolysis kinetics of cellulose, hemicelluloses and lignin at various heating rates analyzed by evolutionary computation. <i>Energy Conversion and Management</i> , <b>2020</b> , 221, 113165	10.6	31
293	Ultrasonic assisted oil extraction and biodiesel synthesis of Spent Coffee Ground. <i>Fuel</i> , <b>2020</b> , 261, 116124	7.1	31
292	Iron oxide reduction by graphite and torrefied biomass analyzed by TG-FTIR for mitigating CO <sub>2</sub> emissions. <i>Energy</i> , <b>2019</b> , 180, 968-977	7.9	30
291	A review on valorization of oyster mushroom and waste generated in the mushroom cultivation industry. <i>Journal of Hazardous Materials</i> , <b>2020</b> , 400, 123156	12.8	30
290	Hydrogen production and carbon dioxide enrichment from ethanol steam reforming followed by water gas shift reaction. <i>Journal of Cleaner Production</i> , <b>2017</b> , 162, 1430-1441	10.3	30
289	Numerical characterization on concentration polarization of hydrogen permeation in a Pd-based membrane tube. <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 14734-14744	6.7	30

288	Hysteresis and reaction characterization of methane catalytic partial oxidation on rhodium catalyst. <i>Journal of Power Sources</i> , <b>2009</b> , 194, 467-477	8.9	30
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