Quang-Vu Bach

List of Publications by Year
in descending order

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107 papers	5,061 citations	109321 35 h-index	106344 65 g-index
108 all docs	108 docs citations	108 times ranked	4389 citing authors

#	Article	IF	Citations
1	Upgrading biomass fuels via wet torrefaction: A review and comparison with dry torrefaction. Renewable and Sustainable Energy Reviews, 2016, 54, 665-677.	16.4	311
2	Pyrolysis characteristics and kinetics of microalgae via thermogravimetric analysis (TGA): A state-of-the-art review. Bioresource Technology, 2017, 246, 88-100.	9.6	258
3	A review of thermochemical conversion of microalgal biomass for biofuels: chemistry and processes. Green Chemistry, 2017, 19, 44-67.	9.0	216
4	A review on municipal solid waste as a renewable source for waste-to-energy project in India: Current practices, challenges, and future opportunities. Journal of Cleaner Production, 2020, 277, 123227.	9.3	176
5	Wet torrefaction of biomass for high quality solid fuel production: A review. Renewable and Sustainable Energy Reviews, 2018, 91, 259-271.	16.4	163
6	Investigation of nano powders influence on melting process within a storage unit. Journal of Molecular Liquids, 2020, 318, 114321.	4.9	163
7	Comparative Assessment of Wet Torrefaction. Energy & Fuels, 2013, 27, 6743-6753.	5.1	136
8	A novel sensitivity analysis model of EANN for F-MWCNTsâ€“Fe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" id="d1e301" altimg="si3.gif"><mml:msub><mml:mrow /><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub></mml:math>O<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" id="d1e309" altimg="si4.gif"><mml:msub><mml:mrow /><mml:mrow><mml:mn>4</mml:mn></mml:mrow></mml:msu	2.6	132
9	A comprehensive study on pyrolysis kinetics of microalgal biomass. Energy Conversion and Management, 2017, 131, 109-116.	9.2	116
10	Develop optimal network topology of artificial neural network (AONN) to predict the hybrid nanofluids thermal conductivity according to the empirical data of Al2O3 â€“ Cu nanoparticles dispersed in ethylene glycol. Physica A: Statistical Mechanics and Its Applications, 2020, 549, 124015.	2.6	107
11	Application of nanotechnology (nanoparticles) in dark fermentative hydrogen production. International Journal of Hydrogen Energy, 2019, 44, 1431-1440.	7.1	105
12	Quantitative risk assessment of an urban hydrogen refueling station. International Journal of Hydrogen Energy, 2019, 44, 1288-1298.	7.1	105
13	Wet torrefaction of microalga Chlorella vulgaris ESP-31 with microwave-assisted heating. Energy Conversion and Management, 2017, 141, 163-170.	9.2	103
14	Fast hydrothermal liquefaction of a Norwegian macro-alga: Screening tests. Algal Research, 2014, 6, 271-276.	4.6	98
15	Predictions of biochar yield and elemental composition during torrefaction of forest residues. Bioresource Technology, 2016, 215, 239-246.	9.6	98
16	Effects of magnetic field on micro cross jet injection of dispersed nanoparticles in a microchannel. International Journal of Numerical Methods for Heat and Fluid Flow, 2020, 30, 2683-2704.	2.8	94
17	Effects of wet torrefaction on pyrolysis of woody biomass fuels. Energy, 2015, 88, 443-456.	8.8	93
18	Pyrolysis characteristics and kinetics of biomass torrefied in various atmospheres. Energy Conversion and Management, 2017, 141, 72-78.	9.2	91

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19	Simulation based on FVM for influence of nanoparticles on flow inside a pipe enhanced with helical tapes. Applied Nanoscience (Switzerland), 2023, 13, 2641-2651.	3.1	82
20	Annulus shape tank with convective flow in a porous zone with impose of MHD. International Journal of Modern Physics C, 2020, 31, 2050168.	1.7	80
21	Turbulent flows in a spiral double-pipe heat exchanger. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 30, 39-53.	2.8	79
22	Seasonal, spatial variation, and pollution sources of heavy metals in the sediment of the Saigon River, Vietnam. Environmental Pollution, 2020, 256, 113412.	7.5	79
23	Effects of wet torrefaction on reactivity and kinetics of wood under air combustion conditions. Fuel, 2014, 137, 375-383.	6.4	77
24	Independent parallel pyrolysis kinetics of cellulose, hemicelluloses and lignin at various heating rates analyzed by evolutionary computation. Energy Conversion and Management, 2020, 221, 113165.	9.2	77
25	Implementation of data intelligence models coupled with ensemble machine learning for prediction of water quality index. Environmental Science and Pollution Research, 2020, 27, 41524-41539.	5.3	68
26	Non-isothermal pyrolysis of torrefied stump â€“ A comparative kinetic evaluation. Applied Energy, 2014, 136, 759-766.	10.1	65
27	Combustion kinetics of wet-torrefied forest residues using the distributed activation energy model (DAEM). Applied Energy, 2017, 185, 1059-1066.	10.1	54
28	Water-based nanofluid flow with various shapes of Al2O3 nanoparticles owing to MHD inside a permeable tank with heat transfer. Applied Nanoscience (Switzerland), 2023, 13, 2653-2664.	3.1	51
29	Comparative study on the thermal degradation of dry- and wet-torrefied woods. Applied Energy, 2017, 185, 1051-1058.	10.1	50
30	Application of TiO2 nanoparticle for solar photocatalytic oxidation system. Applied Nanoscience (Switzerland), 2023, 13, 1729-1736.	3.1	49
31	Development of a biomass torrefaction process integrated with oxy-fuel combustion. Bioresource Technology, 2016, 199, 408-413.	9.6	47
32	Two-step thermodegradation kinetics of cellulose, hemicelluloses, and lignin under isothermal torrefaction analyzed by particle swarm optimization. Energy Conversion and Management, 2021, 238, 114116.	9.2	46
33	Torrefaction Influence on Pelletability and Pellet Quality of Norwegian Forest Residues. Energy & Fuels, 2014, 28, 2554-2561.	5.1	44
34	Application of nanomaterial for thermal unit including tube fitted with turbulator. Applied Nanoscience (Switzerland), 2023, 13, 1717-1728.	3.1	44
35	Develop Molecular Dynamics Method to Simulate the Flow and Thermal Domains of H2O/Cu Nanofluid in a Nanochannel Affected by an External Electric Field. International Journal of Thermophysics, 2020, 41, 1.	2.1	44
36	Nanofluid flow through microchannel with a triangular corrugated wall: Heat transfer enhancement against entropy generation intensification. Mathematical Methods in the Applied Sciences, 0, , .	2.3	43

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37	Enhanced microbial biodiesel production from lignocellulosic hydrolysates using yeast isolates. Fuel, 2019, 256, 115932.	6.4	40
38	Epoxidized soybean oil grafted with CTBN as a novel toughener for improving the fracture toughness and mechanical properties of epoxy resin. Polymer Journal, 2020, 52, 345-357.	2.7	40
39	Slip velocity and temperature jump of a non-Newtonian nanofluid, aqueous solution of carboxy-methyl cellulose/aluminum oxide nanoparticles, through a microtube. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 29, 1606-1628.	2.8	39
40	Methane emissions and associated microbial activities from paddy salt-affected soil as influenced by biochar and cow manure addition. Applied Soil Ecology, 2020, 152, 103531.	4.3	38
41	The effect of alcoholâ€“gasoline fuel blends on the enginesâ€™ performances and emissions. Fuel, 2020, 276, 117977.	6.4	37
42	Accelerating wet torrefaction rate and ash removal by carbon dioxide addition. Fuel Processing Technology, 2015, 140, 297-303.	7.2	36
43	Thermal two-phase analysis of nanomaterial in a pipe with turbulent flow. Applied Nanoscience (Switzerland), 2020, , 1.	3.1	36
44	Propose a new approach of fuzzy lookup table method to predict Al2O3/deionized water nanofluid thermal conductivity based on achieved empirical data. Physica A: Statistical Mechanics and Its Applications, 2019, 527, 121177.	2.6	35
45	Silver based hybrid nanocomposite: A novel antibacterial material for water cleansing. Journal of Cleaner Production, 2021, 284, 124746.	9.3	34
46	Effect of nonuniform magnetic field on thermal performance of nanofluid flow in angled junction. International Journal of Modern Physics C, 2021, 32, 2150001.	1.7	33
47	Process modeling and optimization for torrefaction of forest residues. Energy, 2017, 138, 348-354.	8.8	32
48	Phosphorous-jointed epoxidized soybean oil and rice husk-based silica as the novel additives for improvement mechanical and flame retardant of epoxy resin. Journal of Fire Sciences, 2020, 38, 3-27.	2.0	32
49	High quality product gas from biomass steam gasification combined with torrefaction and carbonÂdioxide capture processes. International Journal of Hydrogen Energy, 2019, 44, 14387-14394.	7.1	31
50	Combined biochar vertical flow and free-water surface constructed wetland system for dormitory sewage treatment and reuse. Science of the Total Environment, 2020, 713, 136404.	8.0	31
51	Effects of DOPO-Grafted Epoxidized Soybean Oil on Fracture Toughness and Flame Retardant of Epoxy Resin/Rice Husk Silica Hybrid. Macromolecular Research, 2020, 28, 826-834.	2.4	31
52	Synthesis of Cr-doped Al2O3 by Pechini sol-gel method and its application for reversible thermochromic sensors. Materials Chemistry and Physics, 2019, 223, 708-714.	4.0	30
53	A Novel Correlation to Calculate Thermal Conductivity of Aqueous Hybrid Graphene Oxide/Silicon Dioxide Nanofluid: Synthesis, Characterizations, Preparation, and Artificial Neural Network Modeling. Arabian Journal for Science and Engineering, 2020, 45, 9747-9758.	3.0	30
54	Assessment of groundwater quality based on principal component analysis and pollution source-based examination: a case study in Ho Chi Minh City, Vietnam. Environmental Monitoring and Assessment, 2020, 192, 395.	2.7	30

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55	Dry and Wet Torrefaction of Woody Biomass â€“ A Comparative Studyon Combustion Kinetics. Energy Procedia, 2015, 75, 150-155.	1.8	29
56	Gasification kinetics of raw and wet-torrefied microalgae Chlorella vulgaris ESP-31 in carbon dioxide. Bioresource Technology, 2017, 244, 1393-1399.	9.6	29
57	Present a new multi objective optimization statistical Pareto frontier method composed of artificial neural network and multi objective genetic algorithm to improve the pipe flow hydrodynamic and thermal properties such as pressure drop and heat transfer coefficient for non-Newtonian binary fluids. Physica A: Statistical Mechanics and Its Applications, 2019, 535, 122409.	2.6	29
58	Hydrothermal pretreatment of fresh forest residues: Effects of feedstock pre-drying. Biomass and Bioenergy, 2016, 85, 76-83.	5.7	28
59	Pyrolysis characteristics and non-isothermal torrefaction kinetics of industrial solid wastes. Fuel, 2019, 251, 118-125.	6.4	28
60	Enhancing mode I and II interlaminar fracture toughness of carbon fiber-filled epoxy-based composites using both rice husk silica and silk fibroin electrospun nanofibers. High Performance Polymers, 2019, 31, 1195-1203.	1.8	28
61	Synthesis and characterization of additive graphene oxide nanoparticles dispersed in water: Experimental and theoretical viscosity prediction of nonâ€Newtonian nanofluid. Mathematical Methods in the Applied Sciences, 0, , .	2.3	28
62	Carbon-Fiber-Reinforced Epoxy Resin with Sustainable Additives from Silk and Rice Husks for Improved Mode-I and Mode-II Interlaminar Fracture Toughness. Macromolecular Research, 2020, 28, 33-41.	2.4	26
63	Thermal conductivity enhancement of nanofluid by adding multiwalled carbon nanotubes: Characterization and numerical modeling patterns. Mathematical Methods in the Applied Sciences, 0, , .	2.3	26
64	3D interconnected structure of poly(methyl methacrylate) microbeads coated with copper nanoparticles for highly thermal conductive epoxy composites. Composites Part B: Engineering, 2019, 175, 107105.	12.0	25
65	Contrastive nutrient leaching from two differently textured paddy soils as influenced by biochar addition. Journal of Soils and Sediments, 2020, 20, 297-307.	3.0	25
66	Finned unit solidification with use of nanoparticles improved PCM. Journal of Molecular Liquids, 2020, 314, 113659.	4.9	25
67	Seasonal, Spatial Variation, and Potential Sources of Organochlorine Pesticides in Water and Sediment in the Lower Reaches of the Dong Nai River System in Vietnam. Archives of Environmental Contamination and Toxicology, 2019, 77, 514-526.	4.1	24
68	Controlled elitist multi-objective genetic algorithm joined with neural network to study the effects of nano-clay percentage on cell size and polymer foams density of PVC/clay nanocomposites. Journal of Thermal Analysis and Calorimetry, 2020, 139, 2801-2810.	3.6	24
69	Energy and exergy analysis and optimization of a gas turbine cycle coupled by a bottoming organic Rankine cycle. Journal of Thermal Analysis and Calorimetry, 2020, 141, 495-510.	3.6	24
70	Investigation of additives nanoparticles and sphere barriers effects on the fluid flow inside a nanochannel impressed by an extrinsic electric field: A molecular dynamics simulation. Journal of Molecular Liquids, 2020, 318, 114023.	4.9	22
71	Effects of Co-Silanized Silica on the Mechanical Properties and Thermal Characteristics of Natural Rubber/Styrene-Butadiene Rubber Blend. Silicon, 2020, 12, 1799-1809.	3.3	20
72	Performance of a Residential Pellet Combustor Operating on Raw and Torrefied Spruce and Spruce-Derived Residues. Energy & Fuels, 2013, 27, 4760-4769.	5.1	19

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73	Significant enhancement of fracture toughness and mechanical properties of epoxy resin using CTBNâ€grafted epoxidized linseed oil. Journal of Applied Polymer Science, 2020, 137, 48276.	2.6	19
74	Effect of Torrefaction on Steam Gasification of Biomass in Dual Fluidized Bed Reactorâ€”a Process Simulation Study. Bioenergy Research, 2019, 12, 1042-1051.	3.9	18
75	Isothermal torrefaction kinetics for sewage sludge pretreatment. Fuel, 2020, 277, 118103.	6.4	18
76	Synthesis and Irreversible Thermochromic Sensor Applications of Manganese Violet. Materials, 2018, 11, 1693.	2.9	17
77	Performance of ventilation system involving thermal storage unit considering porous media. Journal of Energy Storage, 2020, 31, 101709.	8.1	17
78	A new method of black-box fuzzy system identification optimized by genetic algorithm and its application to predict mixture thermal properties. International Journal of Numerical Methods for Heat and Fluid Flow, 2020, 30, 2485-2499.	2.8	14
79	Non-uniform Slab Heating Pattern in a Preheating Furnace to Reduce Fuel Consumption: Burnersâ€™ Load Distribution Effects Through Semitransparent Medium via Discreet Ordinatesâ€™ Thermal Radiation and kâ€“Îµ Turbulent Model. International Journal of Thermophysics, 2020, 41, 1.	2.1	14
80	Oxidized multiwall carbon nanotubes filled epoxy-based coating: fabrication, anticorrosive, and mechanical characteristics. Polymer Bulletin, 2021, 78, 2329-2339.	3.3	14
81	Pretreatment of Korean pine (Pinus koraiensis) via wet torrefaction in inert and oxidative atmospheres. Fuel, 2021, 291, 119616.	6.4	14
82	Characteristics of airborne bacteria and fungi in the atmosphere in Ho Chi Minh city, Vietnam - A case study over three years. International Biodeterioration and Biodegradation, 2019, 145, 104819.	3.9	13
83	Impacts of phosphorous-linked epoxidized vegetable oil on mechanical behaviors and flammability properties of silica reinforced epoxy composite. Thermochimica Acta, 2020, 691, 178722.	2.7	13
84	Liquid Paraffin Thermal Conductivity with Additives Tungsten Trioxide Nanoparticles: Synthesis and Propose a New Composed Approach of Fuzzy Logic/Artificial Neural Network. Arabian Journal for Science and Engineering, 2021, 46, 2543-2552.	3.0	13
85	A Molecular Dynamics Simulation Study on Separation Selectivity of CO2/CH4 Mixture in Mesoporous Carbons. Energy Procedia, 2016, 86, 144-149.	1.8	12
86	Heat transfer assessment of turbulent nanofluid flow in a circular pipe fitted with elliptical-cut twisted tape inserts. Journal of Thermal Analysis and Calorimetry, 2022, 147, 727-740.	3.6	12
87	Silane coupling agent with amine group grafted nano/micro-glass fiber as novel toughener for epoxy resin: fabrication and mechanical properties. Composite Interfaces, 2020, 27, 1085-1100.	2.3	12
88	Molecular dynamics performance for coronavirus simulation by C, N, O, and S atoms implementation dreiding force field: drug delivery atomic interaction in contact with metallic Fe, Al, and steel. Computational Particle Mechanics, 2021, 8, 737-749.	3.0	11
89	Crack prevention of biodegradable polymer coating on metal facilitated by a nano-coupled interlayer. Journal of Bioactive and Compatible Polymers, 2014, 29, 515-526.	2.1	10
90	Effect of Wet Torrefaction on Thermal Decomposition Behavior of Microalga Chlorella vulgaris ESP-31. Energy Procedia, 2017, 105, 206-211.	1.8	10

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91	Assessment and source quantification of heavy metal(loid)s in surface water using multivariate analyses from the Saigon River, Vietnam. Environmental Science and Pollution Research, 2020, 27, 19383-19397.	5.3	10
92	Catalytic effect of oil shale ash on CO2 gasification of leached wheat straw and reed chars. Energy, 2018, 152, 906-913.	8.8	8
93	Influences of electric field strength on rheological properties of electrorheological fluid based on hollow poly (O-phenylenediamine co O-toluidine) dispersed on silicone oil. Journal of Molecular Liquids, 2020, 314, 113762.	4.9	8
94	Wet Torrefaction of Forest Residues. Energy Procedia, 2014, 61, 1196-1199.	1.8	7
95	Suspension of poly(o-toluidine)-coated silica-based coreâ€“shell-structured composite in silicone oil: fabrication and rheological properties at different external electric field strengths. Polymer Bulletin, 2020, 77, 3563-3576.	3.3	7
96	Bacterial cellulose filled epoxy resin-based green composites: fabrication and characterization. Composite Interfaces, 2020, 27, 645-662.	2.3	7
97	Develop Boltzmann equation to simulate nonâ€Newtonian magnetoâ€hydrodynamic nanofluid flow using power law magnetic Reynolds number. Mathematical Methods in the Applied Sciences, 0, , .	2.3	7
98	A new hybrid sewage treatment system combining a rolled pipe system and membrane bioreactor to improve the biological nitrogen removal efficiency: A pilot study. Journal of Cleaner Production, 2018, 178, 937-946.	9.3	6
99	Wet Torrefaction of forest Residues â€“ Combustion Kinetics. Energy Procedia, 2015, 75, 168-173.	1.8	5
100	Using hybrid fillers of nano/micro glass fiber and fly ash as novel toughener for enhancing the interlaminar fracture toughness of vinyl ester resin filled with carbon fiber based composite. Composite Interfaces, 2020, 27, 289-305.	2.3	5
101	Effects of CO2 on Wet Torrefaction of Biomass. Energy Procedia, 2014, 61, 1200-1203.	1.8	4
102	Process modeling for steam biomass gasification in a dual fluidized bed gasifier. Computer Aided Chemical Engineering, 2018, , 343-348.	0.5	4
103	The impact energy analysis by genetic algorithm and response surface methods to study the plastic composite, compatibilizer, and recycled poly effects. Journal of Thermal Analysis and Calorimetry, 2020, 141, 421-433.	3.6	4
104	Process modeling for torrefaction of birch branches. Energy Procedia, 2017, 142, 395-400.	1.8	3
105	A new monitor model to detect damages in surface and subsurface during cup grinding process of BK7 optical glass: a new optimization model for energy damage. Journal of Thermal Analysis and Calorimetry, 2021, 144, 1949-1957.	3.6	3
106	Construction and Demolition Waste-Derived Feedstock: Fuel Characterization of a Potential Resource for Sustainable Aviation Fuels Production. Frontiers in Energy Research, 2021, 9, .	2.3	2
107	Thermal behavior of hybrid nanomaterial within a permeable chamber considering Lorentz impact. Applied Nanoscience (Switzerland), 2020, , 1.	3.1	0