Igor Donskoy

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8286880/publications.pdf

Version: 2024-02-01

61	564	759190 12	677123 22
papers	citations	h-index	g-index

63	63	63	218
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Dissociation of natural and artificial gas hydrate. Chemical Engineering Science, 2016, 148, 65-77.	3.8	78
2	Ways to improve the efficiency of carbon dioxide utilization and gas hydrate storage at low temperatures. Journal of CO2 Utilization, 2019, 34, 313-324.	6.8	66
3	Dissociation kinetics of methane hydrate and CO2 hydrate for different granular composition. Fuel, 2020, 262, 116614.	6.4	60
4	A semi-empirical approach to the thermodynamic analysis of downdraft gasification. Fuel, 2016, 168, 91-106.	6.4	39
5	Studying the influence of key parameters on the methane hydrate dissociation in order to improve the storage efficiency. Journal of Energy Storage, 2021, 44, 103288.	8.1	22
6	A technique proximate and ultimate analysis of solid fuels and coal tar. Journal of Thermal Analysis and Calorimetry, 2015, 122, 1213-1220.	3.6	19
7	Dissociation of gas hydrate for a single particle and for a thick layer of particles: The effect of self-preservation on the dissociation kinetics of the gas hydrate layer. Fuel, 2022, 314, 122759.	6.4	17
8	Coal gasification process simulations using combined kinetic-thermodynamic models in one-dimensional approximation. Combustion Theory and Modelling, 2017, 21, 529-559.	1.9	16
9	Co-modeling of methane hydrate dissociation and combustion in a boundary layer. Combustion and Flame, 2022, 238, 111912.	5.2	16
10	Dissociation and combustion of mixed methane-ethane hydrate. Fuel, 2022, 325, 124771.	6.4	16
11	Thermal analysis in numerical thermodynamic modeling of solid fuel conversion. Journal of Thermal Analysis and Calorimetry, 2012, 109, 1311-1317.	3.6	15
12	Methane hydrate combustion by using different granules composition. Fuel Processing Technology, 2017, 158, 154-162.	7.2	15
13	Numerical investigation of the staged gasification of wet wood. Thermal Engineering (English) Tj ETQq1 1 0.784314 rgBT /Overlock 1	0.9	12
14	Dissociation and Combustion of a Layer of Methane Hydrate Powder: Ways to Increase the Efficiency of Combustion and Degassing. Energies, 2021, 14, 4855.	3.1	12
15	Dissociation of a powder layer of methane gas hydrate in a wide range of temperatures and heat fluxes. Powder Technology, 2022, 397, 117017.	4.2	12
16	Modernization of Air-Blown Entrained-Flow Gasifier of Integrated Gasification Combined Cycle Plant. Combustion, Explosion and Shock Waves, 2018, 54, 337-344.	0.8	10
17	Process Simulation of the Co-Gasification of Wood and Polymeric Materials in a Fixed Bed. Solid Fuel Chemistry, 2018, 52, 121-127.	0.7	10
18	Economic Efficiency Assessment of Using Wood Waste in Cogeneration Plants with Multi-Stage Gasification. Applied Sciences (Switzerland), 2020, 10, 7600.	2.5	10

#	Article	IF	Citations
19	Improving the efficiency of storage of natural and artificial methane hydrates. Journal of Natural Gas Science and Engineering, 2021, , 104324.	4.4	10
20	Combustion of a Powder Layer of Methane Hydrate: The Influence of Layer Height and Air Velocity Above the Layer. Flow, Turbulence and Combustion, 2022, 109, 175-191.	2.6	10
21	Impact of gas-phase chemistry on the composition of biomass pyrolysis products. Journal of Thermal Analysis and Calorimetry, 2015, 122, 1089-1098.	3.6	9
22	Calculation of the fixed bed coal gasification regimes by the use of thermodynamic model with macrokinetic constraints. Thermal Engineering (English Translation of Teploenergetika), 2013, 60, 904-909.	0.9	8
23	Mathematical simulation of the reaction zone of a Shell-Prenflo gasifier with the use of the models of sequential equilibrium. Solid Fuel Chemistry, 2016, 50, 191-196.	0.7	8
24	Studying the controllability of processes for thermochemical conversion of solid fuel in a bed. Thermal Engineering (English Translation of Teploenergetika), 2012, 59, 302-309.	0.9	5
25	Optimizing modes of a small-scale combined-cycle power plant with atmospheric-pressure gasifier. Thermophysics and Aeromechanics, 2015, 22, 639-646.	0.5	5
26	Influence of Coal-Biomass Fuel Composition on the Efficiency of its Conversion in Entrained-Flow Gasifiers. Solid Fuel Chemistry, 2019, 53, 113-119.	0.7	5
27	A DSC signal for studying kinetics of moisture evaporation from lignocellulosic fuels. Thermochimica Acta, 2021, 698, 178887.	2.7	5
28	Evaluation of the Effectiveness of Joint Use of Wood and Other Renewable Energy Sources in the Baikal Region. Applied Sciences (Switzerland), 2022, 12, 1254.	2.5	5
29	Numerical Study on the Efficiency of Biomass and Municipal Waste Fixed-Bed Co-Gasification. E3S Web of Conferences, 2019, 114, 06006.	0.5	4
30	Thermochemical interaction of wood and polyethylene during co-oxidation in the conditions of thermogravimetric analysis. Reaction Kinetics, Mechanisms and Catalysis, 2020, 131, 845-857.	1.7	4
31	Simulation and Optimization of Wood Biomass Gasification Regimes in a Flow of Steam-Oxygen Blast. Russian Journal of Applied Chemistry, 2020, 93, 519-526.	0.5	4
32	Mathematical Modelling of the Fixed-Bed Biomass-Coal Co-Gasification Process. MATEC Web of Conferences, 2016, 72, 01026.	0.2	3
33	Mathematical modeling of the fixed-bed staged biomass gasification process. Renewable Bioresources, 2016, 4, 1.	0.7	3
34	Experimental study on fixed-bed combustion and agglomeration of sawdustâ€“polyethylene mixtures. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 0, , 1-13.	2.3	3
35	Mathematical modelling and optimization of biomass-plastic fixed-bed downdraft co-gasification process. EPJ Web of Conferences, 2017, 159, 00010.	0.3	2
36	Dissociation of methane hydrate granules. Journal of Physics: Conference Series, 2017, 899, 032014.	0.4	2

#	Article	IF	Citations
37	Investigation of the features of polyolefins and wood biomass thermochemical conversion for their energy utilization. Journal of Physics: Conference Series, 2019, 1369, 012016.	0.4	2
38	Thermal decomposition of polyethylene agglomerates in a porous medium. Journal of Physics: Conference Series, 2020, 1677, 012037.	0.4	2
39	Mathematical modelling of the agglomeration in a reactive porous medium with variable permeability. Journal of Physics: Conference Series, 2020, 1565, 012101.	0.4	2
40	MATHEMATICAL MODELLING OF WOOD GASIFICATION WITH TARRY PRODUCTS DECOMPOSITION ON ACTIVE MATERIAL PARTICLES. Power Engineering Research Equipment Technology, 2019, 20, 107-117.	0.4	2
41	Study of the formation and decomposition processes of agglomerates during fixed bed combustion of polymeric materials. E3S Web of Conferences, 2020, 209, 03010.	0.5	2
42	Mathematical modelling of the oxyfuel gasification of pulverized coal fuel. E3S Web of Conferences, 2020, 209, 03011.	0.5	2
43	Model of carbon particle burnout in a flow reactor for thermochemical conversion of solid fuel. Theoretical Foundations of Chemical Engineering, 2017, 51, 199-205.	0.7	1
44	Thermoanalytical study of drying kinetics of lignocellulosic fuels. Journal of Physics: Conference Series, 2019, 1261, 012009.	0.4	1
45	Thermogravimetric Study of the Kinetics of the Reaction C + CO2 under Pore-Diffusion Control. Energies, 2021, 14, 1886.	3.1	1
46	ÐœÐĐ¢Ð•ÐœÐĐ¢Ð˜Ð§Ð•Ð¡ÐšÐžÐ• ÐœÐžÐ”Ð•Ð›Ð˜ÐĐžÐ’ÐĐĐ˜Ð• Ð¡ÐžÐ’ÐœÐ•Ð¡Ð¢ÐĐžÐ™ ÐšÐžÐĐ’Ð•ÐĐ¡Ð˜ Ð¢Ð’Ð›Ð˜ÐĐ		
47	Mathematical modelling of the staged pulverized coal gasification process. Science Bulletin of the Novosibirsk State Technical University, 2015, , 231-245.	0.0	1
48	Numerical Investigation of Coal and Biomass Co-Gasification Regimes in Entrained-Flow Oxygen-Steam Blown Reactor. Vestnik Ã›Å¾no-UralÊ¹skogo Gosudarstvennogo Universiteta: SeriÃ¢ Ãˆnergetika, 2018, 18, 14-21.	1.4	1
49	Changes in thermal conductivity of wood during its thermochemical conversion. Journal of Physics: Conference Series, 2020, 1677, 012038.	0.4	1
50	Determining critical conditions in the thermal explosion problem using approximate variational formulations. , 2022, , 7-20.	0.1	1
51	CFD-Modeling of the Multistage Gasifier Capacity of 30 KW. Journal of Physics: Conference Series, 2017, 891, 012229.	0.4	0
52	Influence of volatiles oxidation processes on kinetics of sawdust combustion. MATEC Web of Conferences, 2017, 115, 03015.	0.2	0
53	Development of method for determination of the kinetics constants of coal char gasification in pore diffusion regimes. E3S Web of Conferences, 2019, 114, 07007.	0.5	0
54	Numerical study of coal and woody biomass co-gasification in oxygen-fed gasifier. Journal of Physics: Conference Series, 2019, 1261, 012008.	0.4	0

#	Article	IF	Citations
55	Numerical modelling and optimization of pulverized biomass gasification process. Journal of Physics: Conference Series, 2019, 1369, 012015.	0.4	0
56	Estimation of methane hydrates dissociation kinetic coefficients at T < 273 K. Journal of Physics: Conference Series, 2020, 1565, 012102.	0.4	0
57	Numerical estimation of the thermal stability boundaries for the process of thermochemical conversion processes of biomass in quasi-equilibrium approximation. E3S Web of Conferences, 2021, 289, 06001.	0.5	0
58	Numerical study of operating modes of single-stage air-steam blown entrained flow gasifier. Vestnik Ã›Å¾no-UralÊ¹skogo Gosudarstvennogo Universiteta: SeriÃ¢ Ãˆnergetika, 2017, 17, 13-23.	1.4	0
59	Mathematical modeling of thermal decomposition of resins in the process of reversed gasification of plant biomass. Power Engineering Research Equipment Technology, 2020, 22, 83-93.	0.4	0
60	Influence of the Composition of Solid Fuel on the Equilibrium Characteristics of a Gasification Process in the Mixtures of Oxygen and Carbon Dioxide. Solid Fuel Chemistry, 2021, 55, 399-406.	0.7	0
61	Oxidation of partially decomposed wood: Experimental investigation and kinetic analysis. Thermochimica Acta, 2022, 712, 179215.	2.7	0