

Panagiotis Grammelis

List of Publications by Year in descending order

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117
papers

3,962
citations

109137

35
h-index

138251

58
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120
all docs

120
docs citations

120
times ranked

3697
citing authors

#	ARTICLE	IF	CITATIONS
1	Process integration and scale up considerations of <i>Typha domingensis</i> macrophyte bioconversion into ethanol. <i>Biochemical Engineering Journal</i> , 2022, 181, 108404.	1.8	0
2	Process Analysis and Design Considerations of a Low Carbon Methanol Synthesis Plant from Lignite/Waste Gasification. <i>Fuels</i> , 2022, 3, 245-274.	1.3	4
3	Technoeconomic Assessment of LNG-Fueled Solid Oxide Fuel Cells in Small Island Systems: The Patmos Island Case Study. <i>Energies</i> , 2022, 15, 3892.	1.6	3
4	Technical assessment of LNG based polygeneration systems for non-interconnected island cases using SOFC. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 4827-4843.	3.8	21
5	Introducing an artificial neural network energy minimization multi-scale drag scheme for fluidized particles. <i>Chemical Engineering Science</i> , 2021, 229, 116013.	1.9	23
6	Applicability of Torrefied Sunflower Husk Pellets in Small and Medium Scale Furnaces. <i>Waste and Biomass Valorization</i> , 2021, 12, 2579-2596.	1.8	8
7	Energy management and techno-economic assessment of a predictive battery storage system applying a load levelling operational strategy in island systems. <i>International Journal of Energy Research</i> , 2021, 45, 2709-2727.	2.2	19
8	Microgrid energy management strategies assessment through coupled thermal-electric considerations. <i>Energy Conversion and Management</i> , 2021, 228, 113711.	4.4	18
9	Combustion of olive tree pruning pellets versus sunflower husk pellets at industrial boiler. Monitoring of emissions and combustion efficiency. <i>Renewable Energy</i> , 2021, 171, 516-525.	4.3	17
10	Comparison Analysis of the Effect of High and Low Port Activity Seasons on Air Quality in the Port of Heraklion. <i>Environmental Sciences Proceedings</i> , 2021, 8, 3.	0.3	2
11	Monitoring feedstock losses over five months storage of olive tree pruning hog fuel in piles. Comparison of covered vs. uncovered storage. <i>Biomass and Bioenergy</i> , 2021, 153, 106228.	2.9	3
12	A Review on Management of End of Life Tires (ELTs) and Alternative Uses of Textile Fibers. <i>Energies</i> , 2021, 14, 571.	1.6	50
13	A Comparative Case Analysis of Meteorological and Air Pollution Parameters between a High and Low Port Activity Period in Igoumenitsa Port. , 2021, 11, .		1
14	Numerical comparative investigation of a flexible lignite-fired boiler using pre-dried lignite or biomass as supporting fuel. <i>Renewable Energy</i> , 2020, 145, 1831-1848.	4.3	16
15	Review on dynamic process modeling of gasification based biorefineries and bio-based heat & power plants. <i>Fuel Processing Technology</i> , 2020, 197, 106188.	3.7	38
16	Dynamic Modeling and Simulation of Non-Interconnected Systems under High-RES Penetration: The Madeira Island Case. <i>Energies</i> , 2020, 13, 5786.	1.6	8
17	Biomass Availability in Europe as an Alternative Fuel for Full Conversion of Lignite Power Plants: A Critical Review. <i>Energies</i> , 2020, 13, 3390.	1.6	41
18	Nanoparticle Emission and Characterization from Pre-Dried Lignite and Bituminous Coal Co-Combustion. <i>Energies</i> , 2020, 13, 2373.	1.6	3

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19	Acid-Catalyzed Wet Torrefaction for Enhancing the Heating Value of Barley Straw. <i>Energies</i> , 2020, 13, 1693.	1.6	6
20	Machine Performance and Hog Fuel Quality Evaluation in Olive Tree Pruning Harvesting Conducted Using a Towed Shredder on Flat and Hilly Fields. <i>Energies</i> , 2020, 13, 1713.	1.6	16
21	Impact of Torrefaction on Vine Pruning's Fuel Characteristics. <i>Journal of Energy Engineering - ASCE</i> , 2020, 146, .	1.0	8
22	Advanced energy management system based on PV and load forecasting for load smoothing and optimized peak shaving of islanded power systems. <i>E3S Web of Conferences</i> , 2019, 113, 03001.	0.2	4
23	Smart energy management algorithm for load smoothing and peak shaving based on load forecasting of an island's power system. <i>Applied Energy</i> , 2019, 238, 627-642.	5.1	104
24	Numerical simulation of a silicon-based latent heat thermal energy storage system operating at ultra-high temperatures. <i>Applied Energy</i> , 2019, 242, 837-853.	5.1	40
25	A Methodology for Determination and Definition of Key Performance Indicators for Smart Grids Development in Island Energy Systems. <i>Energies</i> , 2019, 12, 242.	1.6	45
26	Drying of Lignite of Various Origins in a Pilot Scale Toroidal Fluidized Bed Dryer using Low Quality Heat. <i>Energies</i> , 2019, 12, 1191.	1.6	6
27	Thermal Simulation and Economic Study of Predried Lignite Production Retrofit of a Greek Power Plant for Enhanced Flexibility. <i>Journal of Energy Engineering - ASCE</i> , 2019, 145, 04019001.	1.0	12
28	A review of key environmental and energy performance indicators for the case of renewable energy systems when integrated with storage solutions. <i>Applied Energy</i> , 2018, 231, 380-398.	5.1	70
29	Comparative investigation of a co-firing scheme in a lignite-fired boiler at very low thermal-load operation using either pre-dried lignite or biomass as supporting fuel. <i>Fuel Processing Technology</i> , 2018, 180, 140-154.	3.7	18
30	Fly Ash Formation and Characteristics from (co-)Combustion of an Herbaceous Biomass and a Greek Lignite (Low-Rank Coal) in a Pulverized Fuel Pilot-Scale Test Facility. <i>Energies</i> , 2018, 11, 1581.	1.6	35
31	4.27 Pyrolysis Energy Conversion Systems. , 2018, , 1065-1106.		7
32	Numerical investigation and comparison of coarse grain CFD " DEM and TFM in the case of a 1 MW th fluidized bed carbonator simulation. <i>Chemical Engineering Science</i> , 2017, 163, 189-205.	1.9	61
33	Simulation of the reacting flow within a pilot scale calciner by means of a three phase TFM model. <i>Fuel Processing Technology</i> , 2017, 162, 105-125.	3.7	27
34	Dynamic Modeling of a Utility Once-Through Pulverized-Fuel Steam Generator. <i>Journal of Energy Engineering - ASCE</i> , 2017, 143, 04016070.	1.0	8
35	Torrefaction and combustion of pellets made of a mixture of coal sludge and straw. <i>Fuel</i> , 2017, 210, 859-865.	3.4	25
36	Recent Innovations in Advanced Thermal Energy Systems towards Better Utilization of Energy Resources and Cleaner Environment: Issues and Challenges. <i>Journal of Energy Engineering - ASCE</i> , 2017, 143, 02017001.	1.0	1

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37	Predictive method for low load off-design operation of a lignite fired power plant. <i>Fuel</i> , 2017, 209, 685-693.	3.4	14
38	Numerical examination of an operationally flexible lignite-fired boiler including its convective section using as supporting fuel pre-dried lignite. <i>Fuel Processing Technology</i> , 2017, 166, 237-257.	3.7	23
39	Process Integration of a Polygeneration Plant with Biomass/Coal Co-pyrolysis. <i>Energy & Fuels</i> , 2017, 31, 14408-14422.	2.5	19
40	Efficient CHP-Plant Configuration for District Heating Systems Utilizing Low-Rank Coals. <i>Journal of Energy Engineering - ASCE</i> , 2017, 143, .	1.0	7
41	CFD Simulation of Domestic Gasification Boiler. <i>Journal of Energy Engineering - ASCE</i> , 2017, 143, 04016052.	1.0	4
42	An environmental and economic evaluation of the lignite power generation system by using the life cycle analysis principles. <i>International Journal of Global Warming</i> , 2017, 13, 296.	0.2	3
43	An environmental and economic evaluation of the lignite power generation system by using the life cycle analysis principles. <i>International Journal of Global Warming</i> , 2017, 13, 296.	0.2	0
44	Solid fuel types for energy generation. , 2016, , 29-58.		23
45	Classification of Refuse Derived Fuel (RDF) and Model Development of a Novel Thermal Utilization Concept Through Air-Gasification. <i>Waste and Biomass Valorization</i> , 2016, 7, 1297-1308.	1.8	24
46	Pilot applications proposal for sustainable woody biomass supply chains. <i>International Journal of Energy Research</i> , 2016, 40, 81-90.	2.2	3
47	Implementation of the Power to Methanol concept by using CO ₂ from lignite power plants: Techno-economic investigation. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 16674-16687.	3.8	65
48	Implementation of a sustainable energy action plan for municipality of Ptolemaida. <i>International Journal of Global Warming</i> , 2016, 10, 55.	0.2	2
49	Smart Recovery of Materials and Upgrade of Organic Compost and RDF in Existing Mechanical Biological Treatment Plants by Using NIR Technology. <i>Green Energy and Technology</i> , 2016, , 771-778.	0.4	1
50	Pre-dried lignite technology implementation in partial load/low demand cases for flexibility enhancement. <i>Energy</i> , 2016, 96, 427-436.	4.5	20
51	Energetic comparison of CO ₂ capture techniques from solid fossil fuel power plants. <i>International Journal of Greenhouse Gas Control</i> , 2016, 45, 106-117.	2.3	27
52	Modeling of biofuel pellets torrefaction in a realistic geometry. <i>Thermal Science</i> , 2016, 20, 1223-1231.	0.5	4
53	New power production options for biomass and cogeneration. <i>Wiley Interdisciplinary Reviews: Energy and Environment</i> , 2015, 4, 471-485.	1.9	6
54	Comparison of Waste-to-Energy Processes by Means of Life Cycle Analysis Principles regarding the Global Warming Potential Impact: Applied Case Studies in Greece, France and Germany. <i>Waste and Biomass Valorization</i> , 2015, 6, 605-621.	1.8	37

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55	Report on comparison among current industrial scale lignite drying technologies (A critical review) Tj ETQq1 1 0.784314 rgBT/Overlo	3.4	100
56	Calcium looping process simulation based on an advanced thermodynamic model combined with CFD analysis. Fuel, 2015, 153, 370-381.	3.4	24
57	Integration of calcium looping technology in existing cement plant for CO ₂ capture: Process modeling and technical considerations. Fuel, 2015, 153, 210-223.	3.4	83
58	Application of an advanced coupled EMMS-TFM model to a pilot scale CFB carbonator. Chemical Engineering Science, 2015, 138, 482-498.	1.9	51
59	Thermodynamic analysis and comparison of retrofitting pre-drying concepts at existing lignite power plants. Applied Thermal Engineering, 2015, 74, 165-173.	3.0	43
60	Refuse-derived fuel classification in a mechanical biological treatment plant and its valorization with techno-economic criteria. International Journal of Environmental Science and Technology, 2015, 12, 1137-1146.	1.8	12
61	Characterization of Solid Residues from High Temperature Gasification of Olive Kernel. Waste and Biomass Valorization, 2014, 5, 893-901.	1.8	4
62	Co-firing of biomass with coal in thermal power plants: technology schemes, impacts, and future perspectives. Wiley Interdisciplinary Reviews: Energy and Environment, 2014, 3, 384-399.	1.9	34
63	Decoupled CFD simulation of furnace and heat exchangers in a lignite utility boiler. Fuel, 2014, 117, 633-648.	3.4	19
64	Experimental and economic study of a gasification plant fuelled with olive industry wastes. Energy for Sustainable Development, 2014, 23, 247-257.	2.0	61
65	A decoupled approach for NO _x -N ₂ O 3-D CFD modeling in CFB plants. Fuel, 2014, 115, 401-415.	3.4	33
66	Effect of pressure and gas concentration on CO ₂ and SO ₂ capture performance of limestones. Fuel, 2014, 122, 236-246.	3.4	18
67	Modeling of Wheat Straw Torrefaction as a Preliminary Tool for Process Design. Waste and Biomass Valorization, 2013, 4, 409-420.	1.8	14
68	Performance of Natural Sorbents during Calcium Looping Cycles: A Comparison between Fluidized Bed and Thermo-Gravimetric Tests. Energy & Fuels, 2013, 27, 6048-6054.	2.5	31
69	Parametric investigation of a renewable alternative for utilities adopting the co-firing lignite/biomass concept. Fuel, 2013, 113, 873-897.	3.4	30
70	High-resolution 3-D full-loop simulation of a CFB carbonator cold model. Chemical Engineering Science, 2013, 90, 137-150.	1.9	104
71	A comparative characterization study of Ca-looping natural sorbents. Applied Energy, 2013, 108, 373-382.	5.1	38
72	Calcium looping for CO ₂ capture from a lignite fired power plant. Fuel, 2013, 113, 826-836.	3.4	77

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73	Investigation of pre-drying lignite in an existing Greek power plant. <i>Thermal Science</i> , 2012, 16, 283-296.	0.5	16
74	Numerical investigation Greek lignite/cardoon co-firing in a tangentially fired furnace. <i>Applied Energy</i> , 2012, 97, 514-524.	5.1	91
75	Investigation of proper modeling of very dense granular flows in the recirculation system of CFBs. <i>Particology</i> , 2012, 10, 699-709.	2.0	32
76	Comparative Study of Combustion Properties of Five Energy Crops and Greek Lignite. <i>Energy & Fuels</i> , 2012, 26, 869-878.	2.5	53
77	Modelling of biomass gasifier and microturbine for the olive oil industry. <i>International Journal of Energy Research</i> , 2012, 36, 355-367.	2.2	49
78	Fluidized Bed Combustion of Solid Biomass for Electricity and/or Heat Generation. <i>Green Energy and Technology</i> , 2011, , 123-149.	0.4	3
79	Numerical investigation of the grid spatial resolution and the anisotropic character of EMMS in CFB multiphase flow. <i>Chemical Engineering Science</i> , 2011, 66, 3979-3990.	1.9	29
80	Numerical investigation of the oxy-fuel combustion in large scale boilers adopting the ECO-Scrub technology. <i>Fuel</i> , 2011, 90, 198-214.	3.4	106
81	An advanced EMMS scheme for the prediction of drag coefficient under a 1.2MWth CFBC isothermal flow—Part II: Numerical implementation. <i>Chemical Engineering Science</i> , 2010, 65, 4089-4099.	1.9	69
82	Numerical investigation of Solid Recovered Fuels™ co-firing with brown coal in large scale boilers — Evaluation of different co-combustion modes. <i>Fuel</i> , 2010, 89, 3693-3709.	3.4	52
83	An advanced EMMS scheme for the prediction of drag coefficient under a 1.2MWth CFBC isothermal flow—Part I: Numerical formulation. <i>Chemical Engineering Science</i> , 2010, 65, 4080-4088.	1.9	90
84	Dry Lignite Cofiring in a Greek Utility Boiler: Experimental Activities and Numerical Simulations. <i>Energy & Fuels</i> , 2010, 24, 5464-5473.	2.5	11
85	CO2 and SO2 Capture Capability of Two Greek Limestones. <i>Green Energy and Technology</i> , 2010, , 329-346.	0.4	0
86	Chemical, leaching and toxicity characteristics of CFB combustion residues. <i>Fuel</i> , 2009, 88, 1201-1209.	3.4	32
87	Pyrolysis kinetics and combustion characteristics of waste recovered fuels. <i>Fuel</i> , 2009, 88, 195-205.	3.4	204
88	Numerical investigation on the combustion behaviour of pre-dried Greek lignite. <i>Fuel</i> , 2009, 88, 2385-2391.	3.4	23
89	Partial O2-fired coal power plant with post-combustion CO2 capture: A retrofitting option for CO2 capture ready plants. <i>Fuel</i> , 2009, 88, 2428-2436.	3.4	39
90	A global optimization study on the devolatilisation kinetics of coal, biomass and waste fuels. <i>Fuel Processing Technology</i> , 2009, 90, 762-769.	3.7	30

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91	Experimental investigation on the combustion behaviour of pre-dried Greek lignite. Fuel Processing Technology, 2009, 90, 1071-1079.	3.7	33
92	The CO ₂ and SO ₂ capture capability of two Greek limestones during repeated thermal cycles. International Journal of Global Warming, 2009, 1, 270.	0.2	1
93	Co-firing Solid Recovered Fuels (SRFs) with brown coal in large-scale pulverised fuel power plants – a simulation approach. International Journal of Global Warming, 2009, 1, 106.	0.2	1
94	Cultivation and Characterization of Cynara Cardunculus for Solid Biofuels Production in the Mediterranean Region. International Journal of Molecular Sciences, 2008, 9, 1241-1258.	1.8	92
95	APPLICATION OF POLYMER MEMBRANE TECHNOLOGY IN COAL COMBUSTION PROCESSES. Chemical Engineering Communications, 2007, 194, 322-333.	1.5	8
96	Advantages and Possibilities of Solid Recovered Fuel Cocombustion in the European Energy Sector. Journal of the Air and Waste Management Association, 2007, 57, 1178-1189.	0.9	48
97	Combustion and environmental performance of clean coal end products. International Journal of Energy Research, 2007, 31, 1237-1250.	2.2	9
98	CFB air-blown flash pyrolysis. Part I: Engineering design and cold model performance. Fuel, 2007, 86, 1372-1386.	3.4	37
99	CFB air-blown flash pyrolysis. Part II: Operation and experimental results. Fuel, 2007, 86, 1387-1395.	3.4	16
100	Quality characteristics of Greek fly ashes and potential uses. Fuel Processing Technology, 2007, 88, 77-85.	3.7	32
101	A kinetic study on the devolatilisation of animal derived byproducts. Fuel Processing Technology, 2007, 88, 787-794.	3.7	22
102	Pyrolysis and Combustion Characteristics of Biomass and Waste-Derived Feedstock. Industrial & Engineering Chemistry Research, 2006, 45, 3791-3799.	1.8	86
103	Refurbishment priorities at the Russian coal-fired power sector for cleaner energy production" Case studies. Energy Policy, 2006, 34, 3124-3136.	4.2	12
104	Effects of biomass co-firing with coal on ash properties. Part II: Leaching, toxicity and radiological behaviour. Fuel, 2006, 85, 2316-2322.	3.4	30
105	Effects of biomass co-firing with coal on ash properties. Part I: Characterisation and PSD. Fuel, 2006, 85, 2310-2315.	3.4	61
106	Particulate removal via electrostatic precipitators " CFD simulation. Fuel Processing Technology, 2006, 87, 623-631.	3.7	81
107	An economic and environmental assessment of biomass utilization in lignite-fired power plants of Greece. International Journal of Energy Research, 2006, 30, 763-775.	2.2	8
108	Biomass Combustion Modeling in Fluidized Beds. Energy & Fuels, 2005, 19, 292-297.	2.5	23

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109	The lignite electricity-generating sector in Greece: Current status and future prospects. International Journal of Energy Research, 2004, 28, 785-798.	2.2	8
110	The perspectives of energy production from coal-fired power plants in an enlarged EU. International Journal of Energy Research, 2004, 28, 799-815.	2.2	11
111	Evaluation of the environmental impact of waste wood co-utilisation for energy production. Energy, 2004, 29, 2181-2193.	4.5	23
112	Pyrolysis characteristics and kinetics of biomass residuals mixtures with lignite. Fuel, 2003, 82, 1949-1960.	3.4	426
113	Kinetic Modeling of Coal/Agricultural By-Product Blends. Energy & Fuels, 2003, 17, 549-558.	2.5	71
114	Thermal Exploitation of Wastes with Lignite for Energy Production. Journal of the Air and Waste Management Association, 2003, 53, 1301-1311.	0.9	9
115	Experience on Combustion and Co-Combustion of Greek Brown Coal in Fluidized Bed Facilities. , 2003, , 499.		1
116	Fluidized bed combustion with the use of Greek solid fuels. Thermal Science, 2003, 7, 33-42.	0.5	5
117	Emissions monitoring during coal waste wood co-combustion in an industrial steam boiler. Fuel, 2002, 81, 547-554.	3.4	47