

Sultan M Al-Salem

List of Publications by Year in descending order

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94
papers

4,598
citations

236612

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102304

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docs citations

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4187
citing authors

#	ARTICLE	IF	CITATIONS
1	A review on co-pyrolysis of biomass with plastics and tires: recent progress, catalyst development, and scaling up potential. <i>Biomass Conversion and Biorefinery</i> , 2023, 13, 8747-8771.	2.9	9
2	Slow pyrolysis of end of life tyres (ELTs) grades: Effect of temperature on pyro-oil yield and quality. <i>Journal of Environmental Management</i> , 2022, 301, 113863.	3.8	11
3	Study of the Degradation Behaviour of Virgin and Biodegradable Plastic Films in Marine Environment Using ASTM D 6691. <i>Journal of Polymers and the Environment</i> , 2022, 30, 2329-2340.	2.4	5
4	Effect of COVID-19 lockdown measures on the plastic waste generation trends and distribution of microplastics in the Northwestern Arabian/Persian Gulf. <i>Ocean and Coastal Management</i> , 2022, 216, 105979.	2.0	3
5	Computational Investigation of Microreactor Configurations for Hydrogen Production from Formic Acid Decomposition Using a Pd/C Catalyst. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 1655-1665.	1.8	11
6	Hydrogenation of carbon dioxide (CO ₂) to fuels in microreactors: a review of set-ups and value-added chemicals production. <i>Reaction Chemistry and Engineering</i> , 2022, 7, 795-812.	1.9	7
7	Economic Feasibility Study of a Carbon Capture and Storage (CCS) Integration Project in an Oil-Driven Economy: The Case of the State of Kuwait. <i>International Journal of Environmental Research and Public Health</i> , 2022, 19, 6490.	1.2	2
8	Thermal degradation kinetics of real-life reclaimed plastic solid waste (PSW) from an active landfill site: The mining of an unsanitary arid landfill. <i>Ain Shams Engineering Journal</i> , 2021, 12, 983-993.	3.5	10
9	Microbial Electrolysis Cells for Decentralised Wastewater Treatment: The Next Steps. <i>Water (Switzerland)</i> , 2021, 13, 445.	1.2	23
10	Energy Potential of Plastic Waste Valorization: A Short Comparative Assessment of Pyrolysis versus Gasification. <i>Energy & Fuels</i> , 2021, 35, 3558-3571.	2.5	43
11	Inducing polymer waste biodegradation using oxo-prodegradant and thermoplastic starch based additives. <i>Journal of Polymer Research</i> , 2021, 28, 1.	1.2	7
12	Decomposition of Additive-Free Formic Acid Using a Pd/C Catalyst in Flow: Experimental and CFD Modelling Studies. <i>Catalysts</i> , 2021, 11, 341.	1.6	15
13	Wax Recovery from the Pyrolysis of Virgin and Waste Plastics. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 8301-8309.	1.8	25
14	Theoretical Investigation of the Deactivation of Ni Supported Catalysts for the Catalytic Deoxygenation of Palm Oil for Green Diesel Production. <i>Catalysts</i> , 2021, 11, 747.	1.6	8
15	Soil quality of simulated landfill exposure to plastics in context of heavy metal analysis. <i>Environmental Science and Pollution Research</i> , 2021, 28, 36904-36910.	2.7	2
16	Process Simulation Modelling of the Catalytic Hydrodeoxygenation of 4-Propylguaiacol in Microreactors. <i>Fuels</i> , 2021, 2, 272-285.	1.3	4
17	Experimental and Process Modelling Investigation of the Hydrogen Generation from Formic Acid Decomposition Using a Pd/Zn Catalyst. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 8462.	1.3	7
18	Study of the fuel properties of extracted oils obtained from low and linear low density polyethylene pyrolysis. <i>Fuel</i> , 2021, 304, 121396.	3.4	21

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19	Plastic Wastes to Fuels and Chemicals. <i>Composites Science and Technology</i> , 2021, , 283-309.	0.4	0
20	Investigation of landfill leachate pollution impact on shallow aquifers using numerical simulation. <i>Arabian Journal of Geosciences</i> , 2021, 14, 1.	0.6	3
21	Pyrolysis of High-Density Polyethylene in a Fluidized Bed Reactor: Pyro-Wax and Gas Analysis. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 18283-18292.	1.8	11
22	Three-dimensional numerical modelling of transport, fate and distribution of microplastics in the northwestern Arabian/Persian Gulf. <i>Marine Pollution Bulletin</i> , 2020, 161, 111723.	2.3	18
23	Ozone (O_3) ambient levels as a secondary airborne precursor in Fahaheel urban area, the State of Kuwait. <i>Atmospheric Science Letters</i> , 2020, 21, e983.	0.8	6
24	Modelling of packed bed and coated wall microreactors for methanol steam reforming for hydrogen production. <i>RSC Advances</i> , 2020, 10, 41680-41692.	1.7	25
25	From gangue to the fuel-cells application. <i>Scientific Reports</i> , 2020, 10, 20022.	1.6	9
26	Biohydrogen Production by Catalytic Supercritical Water Gasification: A Comparative Study. <i>ACS Omega</i> , 2020, 5, 15390-15401.	1.6	13
27	Top-Down Reactive Approach for the Synthesis of Disordered ZrN Nanocrystalline Bulk Material from Solid Waste. <i>Nanomaterials</i> , 2020, 10, 1826.	1.9	4
28	Can plastic waste management be a novel solution in combating the novel Coronavirus (COVID-19)? A short research note. <i>Waste Management and Research</i> , 2020, 39, 0734242X2097844.	2.2	5
29	Pyro-Oil and Wax Recovery from Reclaimed Plastic Waste in a Continuous Auger Pyrolysis Reactor. <i>Energies</i> , 2020, 13, 2040.	1.6	42
30	Solid-State Conversion of Magnesium Waste to Advanced Hydrogen-Storage Nanopowder Particles. <i>Nanomaterials</i> , 2020, 10, 1037.	1.9	4
31	Valorisation of End of Life Tyres (ELTs) in a Newly Developed Pyrolysis Fixed-Bed Batch Process. <i>Chemical Engineering Research and Design</i> , 2020, 138, 167-175.	2.7	17
32	Molten Solar Salt Pyrolysis of Mixed Plastic Waste: Process Simulation and Technoeconomic Evaluation. <i>Energy & Fuels</i> , 2020, 34, 7397-7409.	2.5	24
33	Baseline soil characterisation of active landfill sites for future restoration and development in the state of Kuwait. <i>International Journal of Environmental Science and Technology</i> , 2020, 17, 4407-4418.	1.8	11
34	Identification of Commercial Oxo-Biodegradable Plastics: Study of UV Induced Degradation in an Effort to Combat Plastic Waste Accumulation. <i>Journal of Polymers and the Environment</i> , 2020, 28, 2364-2376.	2.4	11
35	Fuel production using membrane reactors: a review. <i>Environmental Chemistry Letters</i> , 2020, 18, 1477-1490.	8.3	47
36	Hydrogen-Rich Gas Stream from Steam Gasification of Biomass: Eggshell as a CO_2 Sorbent. <i>Energy & Fuels</i> , 2020, 34, 4828-4836.	2.5	32

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37	Computational fluid dynamics (CFD) and reaction modelling study of bio-oil catalytic hydrodeoxygenation in microreactors. <i>Reaction Chemistry and Engineering</i> , 2020, 5, 1083-1092.	1.9	16
38	An assessment of microplastics threat to the marine environment: A short review in context of the Arabian/Persian Gulf. <i>Marine Environmental Research</i> , 2020, 159, 104961.	1.1	37
39	Evidence of microplastics (MP) in gut content of major consumed marine fish species in the State of Kuwait (of the Arabian/Persian Gulf). <i>Marine Pollution Bulletin</i> , 2020, 154, 111052.	2.3	58
40	Membrane Reactors for Renewable Fuel Production and Their Environmental Benefits. <i>Environmental Chemistry for A Sustainable World</i> , 2020, , 383-411.	0.3	4
41	STUDY OF COMMERCIAL THERMOPLASTIC BIODEGRADABLE POLYESTER RESIN AS A SOLID WASTE MITIGATION ROUTE USING ASTM D 5988-18. , 2020, , .		2
42	In Situ Aerobic Biodegradation In Soil Contact Using The Standard Test Method of ASTM D 5988-12. IOP Conference Series: Earth and Environmental Science, 2019, 291, 012011.	0.2	3
43	Insights into the evaluation of the abiotic and biotic degradation rate of commercial pro-oxidant filled polyethylene (PE) thin films. <i>Journal of Environmental Management</i> , 2019, 250, 109475.	3.8	33
44	A review of the valorization and management of industrial spent catalyst waste in the context of sustainable practice: The case of the State of Kuwait in parallel to European industry. <i>Waste Management and Research</i> , 2019, 37, 1127-1141.	2.2	12
45	Plastic Solid Waste (PSW) in the Context of Life Cycle Assessment (LCA) and Sustainable Management. <i>Environmental Management</i> , 2019, 64, 230-244.	1.2	131
46	Thermal Response and Degressive Reaction Study of <i>Oxo-Biodegradable</i> Plastic Products Exposed to Various Degradation Media. <i>International Journal of Polymer Science</i> , 2019, 2019, 1-15.	1.2	9
47	Determination of biodegradation rate of commercial oxo-biodegradable polyethylene film products using ASTM D 5988. <i>Journal of Polymer Research</i> , 2019, 26, 1.	1.2	16
48	Thermal pyrolysis of high density polyethylene (HDPE) in a novel fixed bed reactor system for the production of high value gasoline range hydrocarbons (HC). <i>Chemical Engineering Research and Design</i> , 2019, 127, 171-179.	2.7	90
49	Study of the degradation profile for virgin linear low-density polyethylene (LLDPE) and polyolefin (PO) plastic waste blends. <i>Journal of Material Cycles and Waste Management</i> , 2019, 21, 1106-1122.	1.6	27
50	On the Kinetics of Degradation Reaction Determined Post Accelerated Weathering of Polyolefin Plastic Waste Blends. <i>International Journal of Environmental Research and Public Health</i> , 2019, 16, 395.	1.2	5
51	Eggshell as a Carbon Dioxide Sorbent: Kinetics of the Calcination and Carbonation Reactions. <i>Energy & Fuels</i> , 2019, 33, 4474-4486.	2.5	14
52	The Sustainability Challenge in the Context of Polymer Degradation. , 2019, , 65-113.		0
53	Research and Development (R&D) Strategies. , 2019, , 507.		0
54	Kinetic Studies Related to Polymer Degradation and Stability. , 2019, , 233-268.		3

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55	Energy Production From Plastic Solid Waste (PSW). , 2019, , 45-64.		10
56	Feedstock and Optimal Operation for Plastics to Fuel Conversion in Pyrolysis. , 2019, , 117-146.		10
57	Major Technologies Implemented for Chemicals and Fuel Recovery. , 2019, , 21-44.		0
58	Influential parameters on natural weathering under harsh climatic conditions of mechanically recycled plastic film specimens. Journal of Environmental Management, 2019, 230, 355-365.	3.8	38
59	MECHANICAL PROFILING OF COMMERCIAL GRADE BIODEGRADABLE PLASTIC FILMS POST EXPOSURE TO NATURAL AND ACCELERATED WEATHERING. , 2019, , .		0
60	INVESTIGATING OZONE AMBIENT LEVELS: CASE STUDY OF THE FAHAHEEL URBAN AREA, STATE OF KUWAIT. , 2019, , .		0
61	Liquid fuel synthesis in microreactors. Reaction Chemistry and Engineering, 2018, 3, 414-432.	1.9	27
62	Multi-variable regression analysis for the solid waste generation in the State of Kuwait. Chemical Engineering Research and Design, 2018, 119, 172-180.	2.7	51
63	Non-isothermal degradation kinetics of virgin linear low density polyethylene (LLDPE) and biodegradable polymer blends. Journal of Polymer Research, 2018, 25, 1.	1.2	35
64	THE FIRST CHEMICAL IDENTIFICATION OF POLYOLEFIN (PO) WASTE BLENDS USING INFRARED SPECTROSCOPY. , 2018, , .		4
65	Thermal Degradation Kinetics of Virgin Polypropylene (PP) and PP with Starch Blends Exposed to Natural Weathering. Industrial & Engineering Chemistry Research, 2017, 56, 5210-5220.	1.8	51
66	The first carbon atlas of the state of Kuwait. Energy, 2017, 133, 317-326.	4.5	13
67	A review on thermal and catalytic pyrolysis of plastic solid waste (PSW). Journal of Environmental Management, 2017, 197, 177-198.	3.8	717
68	Carbon Dioxide Mitigation. Springer Handbooks, 2017, , 931-953.	0.3	1
69	Ambient Air Quality Assessment of Al-Mansoriah Residential Area in the State of Kuwait. Journal of Engineering Research, 2017, 6, 52.	0.2	5
70	Variation in Gas Chromatography (GC) analysis in setting up laboratory protocols for waste to energy novel fixed bed reactor setups. International Journal of Energy Production and Management, 2017, 2, 294-305.	1.9	3
71	DEVELOPMENT OF AN ANALYTICAL SOLUTION MATHEMATICAL MODEL FOR A THERMOPLASTIC STARCH AND LINEAR LOW-DENSITY POLYETHYLENE BLENDS FOR PYROLYTIC DEGRADATION. , 2017, , .		1
72	CHARACTERISATION OF WASTE POLYOLEFIN BLENDS USING THERMAL AND IMAGING TECHNIQUES AIMED AT PRODUCT DEVELOPMENT. WIT Transactions on Engineering Sciences, 2017, , .	0.0	0

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73	Effect of Die Head Temperature at Compounding Stage on the Degradation of Linear Low Density Polyethylene/Plastic Film Waste Blends after Accelerated Weathering. <i>International Journal of Polymer Science</i> , 2016, 2016, 1-18.	1.2	16
74	Investigating the effect of accelerated weathering on the mechanical and physical properties of high content plastic solid waste (PSW) blends with virgin linear low density polyethylene (LLDPE). <i>Polymer Testing</i> , 2015, 46, 116-121.	2.3	59
75	Carbon dioxide (CO ₂) estimation from Kuwait's petroleum refineries. <i>Chemical Engineering Research and Design</i> , 2015, 95, 38-50.	2.7	3
76	Carbon dioxide (CO ₂) emission sources in Kuwait from the downstream industry: Critical analysis with a current and futuristic view. <i>Energy</i> , 2015, 81, 575-587.	4.5	23
77	Degradation Kinetic Parameter Determination of Blends Containing Polyethylene Terephthalate (PET) and Other Polymers with Nanomaterials. , 2015, , 167-194.		1
78	Techno-economic assessment of thermo-chemical treatment (TCT) units in the Greater London area. <i>Chemical Engineering Journal</i> , 2014, 248, 253-263.	6.6	33
79	On the degradation kinetics of poly(ethylene terephthalate) (PET)/poly(methyl methacrylate) (PMMA) blends in dynamic thermogravimetry. <i>Polymer Degradation and Stability</i> , 2014, 104, 28-32.	2.7	25
80	Life cycle assessment of alternative technologies for municipal solid waste and plastic solid waste management in the Greater London area. <i>Chemical Engineering Journal</i> , 2014, 244, 391-402.	6.6	119
81	Life cycle assessment and optimization on the production of petrochemicals and energy from polymers for the Greater London Area. <i>Computer Aided Chemical Engineering</i> , 2012, , 101-106.	0.3	4
82	Thermochemical Treatment of Plastic Solid Waste. , 2011, , 233-242.		18
83	The valorization of plastic solid waste (PSW) by primary to quaternary routes: From re-use to energy and chemicals. <i>Progress in Energy and Combustion Science</i> , 2010, 36, 103-129.	15.8	372
84	Kinetic study of high density polyethylene (HDPE) pyrolysis. <i>Chemical Engineering Research and Design</i> , 2010, 88, 1599-1606.	2.7	121
85	Monitoring and Modelling the Trends of Primary and Secondary Air Pollution Precursors: The Case of the State of Kuwait. <i>International Journal of Chemical Engineering</i> , 2010, 2010, 1-12.	1.4	57
86	Kinetics and product distribution of end of life tyres (ELTs) pyrolysis: A novel approach in polyisoprene and SBR thermal cracking. <i>Journal of Hazardous Materials</i> , 2009, 172, 1690-1694.	6.5	42
87	Influence of natural and accelerated weathering on various formulations of linear low density polyethylene (LLDPE) films. <i>Materials & Design</i> , 2009, 30, 1729-1736.	5.1	51
88	Establishing an integrated databank for plastic manufacturers and converters in Kuwait. <i>Waste Management</i> , 2009, 29, 479-484.	3.7	51
89	Recycling and recovery routes of plastic solid waste (PSW): A review. <i>Waste Management</i> , 2009, 29, 2625-2643.	3.7	1,648
90	Comparative assessment of ambient air quality in two urban areas adjacent to petroleum downstream/upstream facilities in Kuwait. <i>Brazilian Journal of Chemical Engineering</i> , 2008, 25, 683-696.	0.7	14

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91	Primary Pollutants Monitoring and Modeling Using Chemical Mass Balance (CMB) Around Fahaheel Residential Area. American Journal of Environmental Sciences, 2008, 4, 13-21.	0.3	7
92	Outdoor air quality data analysis of Al-Mansoriah residential area (Kuwait): air quality indices results. WIT Transactions on Ecology and the Environment, 2008, , .	0.0	4
93	Plastic Solid Waste Assessment in the State of Kuwait and Proposed Methods of Recycling. American Journal of Applied Sciences, 2007, 4, 354-356.	0.1	6
94	Chemical processes effect on ambient air quality: modelling and primary/secondary pollutants monitoring study. WIT Transactions on Ecology and the Environment, 2007, , .	0.0	0