

# Javier Dufour

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8376967/publications.pdf>

Version: 2024-02-01

129  
papers

4,852  
citations

70961

41  
h-index

110170

64  
g-index

132  
all docs

132  
docs citations

132  
times ranked

4863  
citing authors

#	ARTICLE	IF	CITATIONS
1	Potential pathways for syngas transformation towards kerosene range hydrocarbons in a dual Fischer-Tropsch zeolite bed. International Journal of Energy Research, 2022, 46, 5280-5287.	2.2	3
2	Social Life Cycle Assessment of a Proton Exchange Membrane Fuel Cell stack. E3S Web of Conferences, 2022, 334, 09001.	0.2	3
3	Environmental and economic multi-objective optimisation of synthetic fuels production via an integrated methodology based on process simulation. Computers and Chemical Engineering, 2022, 157, 107624.	2.0	4
4	Using Focused Beam Laser Reflectance Measurements To Determine Asphaltene Aggregation Stability. Energy & Fuels, 2022, 36, 6058-6068.	2.5	1
5	SAF production from cameline oil hydrotreatment: A technoeconomic assessment of alternative process configurations. Fuel, 2022, 324, 124602.	3.4	2
6	Harmonised carbon and energy footprints of fossil hydrogen. International Journal of Hydrogen Energy, 2021, 46, 17587-17594.	3.8	11
7	Conversion of synthesis gas to aromatics at medium temperature with a fischer tropsch and ZSM-5 dual catalyst bed. Catalysis Today, 2021, 369, 175-183.	2.2	17
8	The impact of incineration phase-out on municipal solid waste landfilling and life cycle environmental performance: Case study of Madrid, Spain. Science of the Total Environment, 2021, 755, 142537.	3.9	38
9	Comparative life cycle sustainability assessment of renewable and conventional hydrogen. Science of the Total Environment, 2021, 756, 144132.	3.9	43
10	Comparative life cycle assessment of hydrogen-fuelled passenger cars. International Journal of Hydrogen Energy, 2021, 46, 35961-35973.	3.8	64
11	Revisiting the role of steam methane reforming with CO2 capture and storage for long-term hydrogen production. Science of the Total Environment, 2021, 771, 145432.	3.9	64
12	Assessment of the energy recovery potential of municipal solid waste under future scenarios. Applied Energy, 2021, 293, 116915.	5.1	28
13	A novel method to obtain solid-liquid equilibrium and eutectic points for hydrocarbon mixtures by using differential scanning calorimetry and numerical integration. Fuel, 2021, 297, 120788.	3.4	5
14	Environmental life cycle assessment of the incorporation of recycled high-density polyethylene to polyethylene pipe grade resins. Journal of Cleaner Production, 2021, 319, 128580.	4.6	19
15	Life cycle sustainability assessment of synthetic fuels from date palm waste. Science of the Total Environment, 2021, 796, 148961.	3.9	13
16	Modeling, simulation and life-cycle assessment of the use of bio-oil and char in conventional refineries. Biofuels, Bioproducts and Biorefining, 2020, 14, 30-42.	1.9	9
17	Using harmonised life-cycle indicators to explore the role of hydrogen in the environmental performance of fuel cell electric vehicles. International Journal of Hydrogen Energy, 2020, 45, 25758-25765.	3.8	39
18	Eco-efficiency assessment of calcium sulfoaluminate clinker production. Journal of Industrial Ecology, 2020, 24, 695-706.	2.8	9

#	ARTICLE	IF	CITATIONS
19	Prospective techno-economic and environmental assessment of a national hydrogen production mix for road transport. <i>Applied Energy</i> , 2020, 259, 114121.	5.1	57
20	Technoeconomic and environmental review of value-added products from wastewater: Bioplastic production and algal cultivation for biofuels. , 2020, , 435-454.		1
21	Techno-economic Assessment of a Hydrothermal Liquefaction Process for Energy Recovery from Food Waste. <i>Computer Aided Chemical Engineering</i> , 2020, 48, 1729-1734.	0.3	2
22	Techno-economic and life cycle assessment of an integrated hydrothermal carbonization system for sewage sludge. <i>Journal of Cleaner Production</i> , 2020, 277, 122930.	4.6	99
23	Harmonised life-cycle indicators of nuclear-based hydrogen. <i>International Journal of Hydrogen Energy</i> , 2020, 46, 29724-29724.	3.8	5
24	Life cycle assessment of trigeneration plants. , 2020, , 125-139.		1
25	An integrated techno-economic, environmental and social assessment of the solar thermochemical fuel pathway. <i>Sustainable Energy and Fuels</i> , 2020, 4, 3992-4002.	2.5	31
26	Thermodynamic, economic and environmental assessment of energy systems including the use of gas from manure fermentation in the context of the Spanish potential. <i>Energy</i> , 2020, 200, 117452.	4.5	10
27	Influence of climate change externalities on the sustainability-oriented prioritisation of prospective energy scenarios. <i>Energy</i> , 2020, 196, 117179.	4.5	15
28	Review of life-cycle environmental consequences of waste-to-energy solutions on the municipal solid waste management system. <i>Resources, Conservation and Recycling</i> , 2020, 157, 104778.	5.3	112
29	Prospective carbon footprint comparison of hydrogen options. <i>Science of the Total Environment</i> , 2020, 728, 138212.	3.9	34
30	Validation of GreenH2armony <sup>®</sup> as a Tool for the Computation of Harmonised Life-Cycle Indicators of Hydrogen. <i>Energies</i> , 2020, 13, 1603.	1.6	5
31	Thermodynamic, economic and environmental assessment of renewable natural gas production systems. <i>Energy Conversion and Management: X</i> , 2020, 7, 100046.	0.9	6
32	Lessons for regional energy modelling: enhancing demand-side transport and residential policies in Madrid. <i>Regional Studies</i> , 2019, 53, 826-837.	2.5	3
33	Long-term opportunities for electricity production through municipal solid waste incineration when internalising external costs. <i>Journal of Cleaner Production</i> , 2019, 215, 870-877.	4.6	28
34	End of life of fuel cells and hydrogen products: From technologies to strategies. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 20965-20977.	3.8	57
35	Life cycle sustainability assessment of hydrogen from biomass gasification: A comparison with conventional hydrogen. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 21193-21203.	3.8	73
36	Effect of K, Co and Mo addition in Fe-based catalysts for aviation biofuels production by Fischer-Tropsch synthesis. <i>Fuel Processing Technology</i> , 2019, 194, 106102.	3.7	32

#	ARTICLE	IF	CITATIONS
37	Life Cycle Costing and Eco-Efficiency Assessment of Fuel Production by Coprocessing Biomass in Crude Oil Refineries. <i>Energies</i> , 2019, 12, 4664.	1.6	12
38	Robust eco-efficiency assessment of hydrogen from biomass gasification as an alternative to conventional hydrogen: A life-cycle study with and without external costs. <i>Science of the Total Environment</i> , 2019, 650, 1465-1475.	3.9	61
39	Cumulative Energy Demand of Hydrogen Energy Systems. <i>Environmental Footprints and Eco-design of Products and Processes</i> , 2019, , 47-75.	0.7	2
40	Enhanced prioritisation of prospective scenarios for power generation in Spain: How and which one?. <i>Energy</i> , 2019, 169, 369-379.	4.5	11
41	Simulation and life cycle assessment of synthetic fuels produced via biogas dry reforming and Fischer-Tropsch synthesis. <i>Fuel</i> , 2019, 235, 1492-1500.	3.4	56
42	How do methodological choices affect the carbon footprint of microalgal biodiesel? A harmonised life cycle assessment. <i>Journal of Cleaner Production</i> , 2019, 207, 560-568.	4.6	24
43	Harmonising methodological choices in life cycle assessment of hydrogen: A focus on acidification and renewable hydrogen. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 19426-19433.	3.8	35
44	Exergy analysis of hydrogen production via biogas dry reforming. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 11688-11695.	3.8	50
45	Towards Energy Self-sufficiency in Large Metropolitan Areas: Business Opportunities on Renewable Electricity in Madrid. , 2018, , 17-31.		1
46	Harmonising the cumulative energy demand of renewable hydrogen for robust comparative life-cycle studies. <i>Journal of Cleaner Production</i> , 2018, 175, 384-393.	4.6	45
47	Is coal extension a sensible option for energy planning? A combined energy systems modelling and life cycle assessment approach. <i>Energy Policy</i> , 2018, 114, 413-421.	4.2	29
48	Long-term modelling and assessment of the energy-economy decoupling in Spain. <i>Energy</i> , 2018, 151, 455-466.	4.5	14
49	Environmental analysis of Spirulina cultivation and biogas production using experimental and simulation approach. <i>Renewable Energy</i> , 2018, 129, 724-732.	4.3	32
50	Environmental impact efficiency of natural gas combined cycle power plants: A combined life cycle assessment and dynamic data envelopment analysis approach. <i>Science of the Total Environment</i> , 2018, 615, 29-37.	3.9	53
51	Revisiting ISEW Valuation Approaches: The Case of Spain Including the Costs of Energy Depletion and of Climate Change. <i>Ecological Economics</i> , 2018, 144, 292-303.	2.9	31
52	Exergy analysis of alternative configurations of a system coproducing synthetic fuels and electricity via biomass gasification, Fischer-Tropsch synthesis and a combined-cycle scheme. <i>Fuel</i> , 2017, 194, 375-394.	3.4	40
53	A review of life-cycle approaches coupled with data envelopment analysis within multi-criteria decision analysis for sustainability assessment of energy systems. <i>Journal of Cleaner Production</i> , 2017, 150, 164-174.	4.6	159
54	Modelling of co-processing of HDO-oil with VGO in a FCC unit. <i>Fuel</i> , 2017, 196, 362-370.	3.4	22

#	ARTICLE	IF	CITATIONS
55	Harmonised life-cycle global warming impact of renewable hydrogen. <i>Journal of Cleaner Production</i> , 2017, 149, 762-772.	4.6	85
56	A kinetic reaction model for biomass pyrolysis processes in Aspen Plus. <i>Applied Energy</i> , 2017, 188, 595-603.	5.1	87
57	Recycling of used lubricating oil: Evaluation of environmental and energy performance by LCA. <i>Resources, Conservation and Recycling</i> , 2017, 125, 315-323.	5.3	46
58	Prospective life cycle assessment of the Spanish electricity production. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 75, 21-34.	8.2	49
59	Prospective Analysis of Life-Cycle Indicators through Endogenous Integration into a National Power Generation Model. <i>Resources</i> , 2016, 5, 39.	1.6	36
60	Life-cycle performance of hydrogen production via indirect biomass gasification with CO <sub>2</sub> capture. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 19484-19491.	3.8	88
61	Delving into sensible measures to enhance the environmental performance of biohydrogen: A quantitative approach based on process simulation, life cycle assessment and data envelopment analysis. <i>Bioresource Technology</i> , 2016, 214, 376-385.	4.8	45
62	Assessing the social acceptance of hydrogen for transportation in Spain: An unintentional focus on target population for a potential hydrogen economy. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 5203-5208.	3.8	48
63	Integration of life-cycle indicators into energy optimisation models: the case study of power generation in Norway. <i>Journal of Cleaner Production</i> , 2016, 112, 2693-2696.	4.6	55
64	Screening of socio-economic indicators for sustainability assessment: a combined life cycle assessment and data envelopment analysis approach. <i>International Journal of Life Cycle Assessment</i> , 2016, 21, 202-214.	2.2	38
65	Exergetic analysis of hybrid power plants with biomass and photovoltaics coupled with a solid-oxide electrolysis system. <i>Energy</i> , 2016, 94, 304-315.	4.5	10
66	Life cycle assessment of pyrolysis oil applications. <i>Biomass Conversion and Biorefinery</i> , 2015, 5, 1.	2.9	7
67	Life-cycle performance of natural gas power plants with pre-combustion CO <sub>2</sub> capture. , 2015, 5, 268-276.		14
68	Assessing the Life-Cycle Performance of Hydrogen Production via Biofuel Reforming in Europe. <i>Resources</i> , 2015, 4, 398-411.	1.6	45
69	Tracking development paths: Monitoring driving forces and the impact of carbon-free energy sources in Spain. <i>Environmental Science and Policy</i> , 2015, 50, 62-73.	2.4	17
70	Exergy analysis of synthetic biofuel production via fast pyrolysis and hydrougrading. <i>Energy</i> , 2015, 79, 325-336.	4.5	39
71	Steam-Iron process as an alternative to Water Gas Shift reaction in biomass gasification. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 5074-5080.	3.8	8
72	Biomass Pyrolysis for Biochar or Energy Applications? A Life Cycle Assessment. <i>Environmental Science &amp; Technology</i> , 2015, 49, 5195-5202.	4.6	177

#	ARTICLE	IF	CITATIONS
73	Life-cycle performance of hydrogen as an energy management solution in hydropower plants: A case study in Central Italy. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 16660-16672.	3.8	26
74	On the environmental suitability of high- and low-enthalpy geothermal systems. <i>Geothermics</i> , 2015, 53, 27-37.	1.5	65
75	Simulation and life cycle assessment of biofuel production via fast pyrolysis and hydrougrading. <i>Fuel</i> , 2015, 139, 441-456.	3.4	114
76	Environmental and exergetic evaluation of hydrogen production via lignocellulosic biomass gasification. <i>Journal of Cleaner Production</i> , 2014, 69, 165-175.	4.6	137
77	Synthesis of copper promoted high temperature water-gas shift catalysts by oxidation-precipitation. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 17600-17607.	3.8	4
78	Exergetic analysis of a fast pyrolysis process for bio-oil production. <i>Fuel Processing Technology</i> , 2014, 119, 245-255.	3.7	74
79	Carbon Footprint as a Single Indicator in Energy Systems: The Case of Biofuels and CO2 Capture Technologies. <i>Ecoproduction</i> , 2014, , 81-104.	0.8	0
80	Environmental benchmarking of wind farms according to their operational performance. <i>Energy</i> , 2013, 61, 589-597.	4.5	57
81	Life-cycle assessment of Fischer-Tropsch products from biosyngas. <i>Renewable Energy</i> , 2013, 59, 229-236.	4.3	36
82	Life cycle assessment of hydrogen production from biomass gasification. Evaluation of different Spanish feedstocks. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 7616-7622.	3.8	61
83	Comparative Life Cycle Assessment of Biodiesel Production from Cardoon ( <i>Cynara cardunculus</i> ) and Rapeseed Oil Obtained under Spanish Conditions. <i>Energy &amp; Fuels</i> , 2013, 27, 5280-5286.	2.5	18
84	Effect of the precursor on the activity of high temperature water gas shift catalysts. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 7647-7653.	3.8	32
85	Life-cycle performance of indirect biomass gasification as a green alternative to steam methane reforming for hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 9961-9972.	3.8	117
86	Environmental and thermodynamic evaluation of CO2 capture, transport and storage with and without enhanced resource recovery. <i>Energy</i> , 2013, 50, 477-485.	4.5	54
87	On the feasibility of producing hydrogen with net carbon fixation by the decomposition of vegetable and microalgal oils. <i>Energy and Environmental Science</i> , 2012, 5, 6126.	15.6	26
88	Preliminary assessment of plastic waste valorization via sequential pyrolysis and catalytic reforming. <i>Journal of Material Cycles and Waste Management</i> , 2012, 14, 301-307.	1.6	22
89	Auto shredder residue recycling: Mechanical separation and pyrolysis. <i>Waste Management</i> , 2012, 32, 852-858.	3.7	69
90	Life cycle assessment of transportation fuels from biomass pyrolysis. <i>Fuel</i> , 2012, 97, 812-821.	3.4	172

#	ARTICLE	IF	CITATIONS
91	Life cycle assessment of alternatives for hydrogen production from renewable and fossil sources. International Journal of Hydrogen Energy, 2012, 37, 1173-1183.	3.8	131
92	Life cycle assessment of two alternative bioenergy systems involving Salix spp. biomass: Bioethanol production and power generation. Applied Energy, 2012, 95, 111-122.	5.1	101
93	Life cycle assessment of biodiesel production from free fatty acid-rich wastes. Renewable Energy, 2012, 38, 155-162.	4.3	106
94	Hydrogen Production from Fossil Fuels: Life Cycle Assessment of Technologies with Low Greenhouse Gas Emissions. Energy & Fuels, 2011, 25, 2194-2202.	2.5	74
95	Effect of iron on the hydriding properties of the Mg <sub>6</sub> Pd hydrogen storage system. International Journal of Hydrogen Energy, 2011, 36, 2165-2169.	3.8	12
96	Life cycle assessment of hydrogen production by methane decomposition using carbonaceous catalysts. International Journal of Hydrogen Energy, 2010, 35, 1205-1212.	3.8	42
97	Influence of Hydrocarbon Distribution in Crude Oil and Residues on Asphaltene Stability. Energy & Fuels, 2010, 24, 2281-2286.	2.5	23
98	Routine to estimate composition of concentrated metal-nitric-hydrofluoric acid pickle liquors. Hydrometallurgy, 2009, 96, 88-94.	1.8	8
99	Synthesis of Fe <sub>3</sub> O <sub>4</sub> -based catalysts for the high-temperature water gas shift reaction. International Journal of Hydrogen Energy, 2009, 34, 4475-4481.	3.8	82
100	Life cycle assessment of processes for hydrogen production. Environmental feasibility and reduction of greenhouse gases emissions. International Journal of Hydrogen Energy, 2009, 34, 1370-1376.	3.8	194
101	Performance of Fe-Cr based WGS catalysts prepared by co-precipitation and oxi-precipitation methods. International Journal of Hydrogen Energy, 2009, 34, 8921-8928.	3.8	32
102	Characterization of the Asphaltene Onset Region by Focused-Beam Laser Reflectance: A Tool for Additives Screening. Energy & Fuels, 2009, 23, 1155-1161.	2.5	15
103	Determination of iron and chromium fluorides solubility for the treatment of wastes from stainless steel mills. Chemical Engineering Journal, 2008, 136, 116-125.	6.6	16
104	Hydrolysis of iron and chromium fluorides: Mechanism and kinetics. Journal of Hazardous Materials, 2008, 154, 135-145.	6.5	5
105	Properties of Asphaltenes Precipitated with Different n-Alkanes. A Study To Assess the Most Representative Species for Modeling. Energy & Fuels, 2008, 22, 763-769.	2.5	43
106	Kinetics of K <sub>2</sub> FeF <sub>5</sub> ·H <sub>2</sub> O (s) and CrF <sub>3</sub> ·2H <sub>2</sub> O (s) Crystallization from Stainless Steel Spent Pickling Baths. Industrial & Engineering Chemistry Research, 2007, 46, 5221-5227.	1.8	7
107	Fluoride Speciation in Stainless Steel Pickling Liquor. ISIJ International, 2006, 46, 281-286.	0.6	21
108	Influence of the precipitation pH of magnetite in the oxidation process to maghemite. Materials Research Bulletin, 2006, 41, 703-713.	2.7	37

#	ARTICLE	IF	CITATIONS
109	Nickel Hydroxide Recovery from Stainless Steel Pickling Liquors by Selective Precipitation. Industrial & Engineering Chemistry Research, 2005, 44, 5750-5756.	1.8	31
110	Separación selectiva de hierro y cromo de las lejías agotadas del decapado de acero inoxidable. Revista De Metalurgia, 2005, 41, 475-478.	0.1	0
111	Feasibility Study of Metals Recycling from Nitric-Hydrofluoric Waste Pickle Baths. Environmental Engineering Science, 2004, 21, 583-590.	0.8	15
112	Mathematical model of magnetite synthesis by oxidation of sulfuric pickling liquors from steelmaking. Chemical Engineering Communications, 2002, 189, 285-297.	1.5	7
113	Zeolite synthesis employing alkaline waste effluents from the aluminum industry. Environmental Progress, 2002, 21, 105-110.	0.8	14
114	Obtención de hexaferrita de bario anisotrópica a partir de un residuo siderúrgico. Revista De Metalurgia, 2002, 38, 94-99.	0.1	3
115	Synthesis of 13X Zeolite from Alkaline Waste Streams in the Aluminum Anodizing Industry. Industrial & Engineering Chemistry Research, 2001, 40, 1140-1145.	1.8	13
116	Recovery of the Metals from Pickling Liquors of Stainless Steel by Precipitation Methods.. ISIJ International, 2001, 41, 801-806.	0.6	9
117	Study of the Photo-Oxidation of Mass-Deacidified Papers. Restaurator, 2001, 22, .	0.2	10
118	OPTIMIZATION OF 4A ZEOLITE SYNTHESIS AS RECOVERY OF WASTES FROM ALUMINUM FINISHING. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2001, 36, 1257-1269.	0.9	8
119	IMPROVEMENT OF CERAMIC METHOD FOR SYNTHESIZING M-TYPE HEXAFERRITES. Chemical Engineering Communications, 1998, 167, 227-244.	1.5	5
120	Photo Oxidation of Paper Documents. A Literature Review. Restaurator, 1997, 18, .	0.2	21
121	Viability of the use of pickling baths from aluminium surface treatment for synthesizing low Si/Al zeolites. Journal of Environmental Science and Health Part A: Environmental Science and Engineering, 1997, 32, 1807-1825.	0.1	5
122	Protocol for the synthesis of Ba-hexaferrites with prefixed coercivities. Journal of Magnetism and Magnetic Materials, 1997, 172, 308-316.	1.0	9
123	Mechanism and kinetic control of the oxyprecipitation of sulphuric liquors from steel pickling. Chemical Engineering Journal, 1997, 68, 173-187.	6.6	15
124	Synthesis of M-type hexaferrites from steel pickling liquors (ID 109). Journal of Magnetism and Magnetic Materials, 1996, 157-158, 125-126.	1.0	5
125	KINETICS AND MECHANISM OF THE OXYPRECIPITATION OF WASTE HYDROCHLORIC PICKLING LIQUORS. Chemical Engineering Communications, 1996, 145, 53-71.	1.5	2
126	Mathematical model of goethite synthesis by oxyprecipitation of steel pickling liquors. The Chemical Engineering Journal and the Biochemical Engineering Journal, 1995, 59, 287-291.	0.1	2



#	ARTICLE	IF	CITATIONS
127	Procesos de obtención de ferritas hexagonales tipo M. Revista De Metalurgia, 1995, 31, 111-119.	0.1	2
128	Treatment and recovery of pickling liquors. Journal of Environmental Science and Health Part A: Environmental Science and Engineering, 1994, 29, 1899-1926.	0.1	4
129	The treatment of hydrochloric acid waste pickle liquors. Journal of Environmental Science and Health Part A: Environmental Science and Engineering, 1993, 28, 1651-1667.	0.1	7