

# Luigi Gurreri

## List of Publications by Year in descending order

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42  
papers

1,764  
citations

331538

21  
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360920

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g-index

42  
all docs

42  
docs citations

42  
times ranked

1058  
citing authors

#	ARTICLE	IF	CITATIONS
1	Application of computational fluid dynamics technique in membrane distillation processes. , 2022, , 161-208.		0
2	Coupling of electromembrane processes with reverse osmosis for seawater desalination: Pilot plant demonstration and testing. Desalination, 2022, 526, 115541.	4.0	15
3	A porous media CFD model for the simulation of hemodialysis in hollow fiber membrane modules. Journal of Membrane Science, 2022, 646, 120219.	4.1	10
4	Application of computational fluid dynamics technique in electro dialysis/reverse electro dialysis processes. , 2022, , 81-160.		0
5	Performance Comparison of Alternative Hollow-Fiber Modules for Hemodialysis by Means of a CFD-Based Model. Membranes, 2022, 12, 118.	1.4	6
6	Exergy analysis of electro dialysis for water desalination: Influence of irreversibility sources. Energy Conversion and Management, 2022, 258, 115314.	4.4	11
7	A comprehensive multi-scale model for bipolar membrane electro dialysis (BMED). Chemical Engineering Journal, 2022, 437, 135317.	6.6	30
8	Electromembrane Processes: Experiments and Modelling. Membranes, 2021, 11, 149.	1.4	2
9	A 2-D model of electro dialysis stacks including the effects of membrane deformation. Desalination, 2021, 500, 114835.	4.0	10
10	CFD prediction of shell-side flow and mass transfer in regular fiber arrays. International Journal of Heat and Mass Transfer, 2021, 168, 120855.	2.5	6
11	Bipolar membrane reverse electro dialysis for the sustainable recovery of energy from pH gradients of industrial wastewater: Performance prediction by a validated process model. Journal of Environmental Management, 2021, 287, 112319.	3.8	18
12	Electro dialysis with asymmetrically profiled membranes: Influence of profiles geometry on desalination performance and limiting current phenomena. Desalination, 2021, 506, 115001.	4.0	25
13	CFD prediction of flow, heat and mass transfer in woven spacer-filled channels for membrane processes. International Journal of Heat and Mass Transfer, 2021, 173, 121246.	2.5	14
14	Water desalination by capacitive electro dialysis: Experiments and modelling. Desalination, 2020, 473, 114150.	4.0	23
15	On the modelling of an Acid/Base Flow Battery: An innovative electrical energy storage device based on pH and salinity gradients. Applied Energy, 2020, 277, 115576.	5.1	34
16	Electro dialysis Applications in Wastewater Treatment for Environmental Protection and Resources Recovery: A Systematic Review on Progress and Perspectives. Membranes, 2020, 10, 146.	1.4	212
17	Energy Harvesting by Waste Acid/Base Neutralization via Bipolar Membrane Reverse Electro dialysis. Energies, 2020, 13, 5510.	1.6	25
18	The Acid-Base Flow Battery: Sustainable Energy Storage via Reversible Water Dissociation with Bipolar Membranes. Membranes, 2020, 10, 409.	1.4	30

#	ARTICLE	IF	CITATIONS
19	Ionic shortcut currents via manifolds in reverse electro dialysis stacks. Desalination, 2020, 485, 114450.	4.0	38
20	Electrodialysis for wastewater treatmentâ€”Part I: Fundamentals and municipal effluents. , 2020, , 141-192.		4
21	Pressure-Induced Deformation of Pillar-Type Profiled Membranes and Its Effects on Flow and Mass Transfer. Computation, 2019, 7, 32.	1.0	7
22	Modelling and cost analysis of hybrid systems for seawater desalination: Electromembrane pre-treatments for Reverse Osmosis. Desalination, 2019, 467, 175-195.	4.0	46
23	Fluidâ€™Structure Interaction and Flow Redistribution in Membrane-Bounded Channels. Energies, 2019, 12, 4259.	1.6	5
24	Optimization of net power density in Reverse Electro dialysis. Energy, 2019, 181, 576-588.	4.5	26
25	A hierarchical model for novel schemes of electro dialysis desalination. Desalination, 2019, 465, 79-93.	4.0	43
26	Membrane Deformation and Its Effects on Flow and Mass Transfer in the Electromembrane Processes. International Journal of Molecular Sciences, 2019, 20, 1840.	1.8	20
27	The REAPower Project. , 2019, , 407-448.		2
28	Mass transfer in ducts with transpiring walls. International Journal of Heat and Mass Transfer, 2019, 132, 1074-1086.	2.5	9
29	Electrodialysis for water desalination: A critical assessment of recent developments on process fundamentals, models and applications. Desalination, 2018, 434, 121-160.	4.0	369
30	Determination of limiting current density and current efficiency in electro dialysis units. Desalination, 2018, 445, 138-148.	4.0	98
31	On some issues in the computational modelling of spacer-filled channels for membrane distillation. Desalination, 2017, 411, 101-111.	4.0	30
32	Multi-physical modelling of reverse electro dialysis. Desalination, 2017, 423, 52-64.	4.0	49
33	Coupling CFD with a one-dimensional model to predict the performance of reverse electro dialysis stacks. Journal of Membrane Science, 2017, 541, 595-610.	4.1	74
34	Reverse electro dialysis. , 2016, , 135-180.		15
35	Flow and mass transfer in spacer-filled channels for reverse electro dialysis: a CFD parametrical study. Journal of Membrane Science, 2016, 497, 300-317.	4.1	94
36	Assessment of temperature polarization in membrane distillation channels by liquid crystal thermography. Desalination and Water Treatment, 2015, 55, 2747-2765.	1.0	13

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37	CFD modelling of profiled-membrane channels for reverse electrodialysis. Desalination and Water Treatment, 2015, 55, 3404-3423.	1.0	53
38	CFD prediction of concentration polarization phenomena in spacer-filled channels for reverse electrodialysis. Journal of Membrane Science, 2014, 468, 133-148.	4.1	130
39	CFD analysis of the fluid flow behavior in a reverse electrodialysis stack. Desalination and Water Treatment, 2012, 48, 390-403.	1.0	62
40	Electrochemical abatement of chloroethanes in water: Reduction, oxidation and combined processes. Electrochimica Acta, 2010, 55, 701-708.	2.6	65
41	Pressure drop at low Reynolds numbers in woven-spacer-filled channels for membrane processes: CFD prediction and experimental validation. , 0, 61, 170-182.		32
42	Performance comparison between overlapped and woven spacers for membrane distillation. , 0, 69, 178-189.		9