

Gustavo A Fimbres Weihs

List of Publications by Year in descending order

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Version: 2024-02-01

41
papers

1,173
citations

393982

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docs citations

43
times ranked

730
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Review of 3D CFD modeling of flow and mass transfer in narrow spacer-filled channels in membrane modules. <i>Chemical Engineering and Processing: Process Intensification</i> , 2010, 49, 759-781. | 1.8 | 252 |
| 2 | Numerical study of mass transfer in three-dimensional spacer-filled narrow channels with steady flow. <i>Journal of Membrane Science</i> , 2007, 306, 228-243. | 4.1 | 142 |
| 3 | Unsteady Flows with Mass Transfer in Narrow Zigzag Spacer-Filled Channels: A Numerical Study. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 6594-6603. | 1.8 | 81 |
| 4 | 3D CFD study of the effect of multi-layer spacers on membrane performance under steady flow. <i>Journal of Membrane Science</i> , 2019, 580, 256-267. | 4.1 | 52 |
| 5 | Numerical study of two-dimensional multi-layer spacer designs for minimum drag and maximum mass transfer. <i>Journal of Membrane Science</i> , 2008, 325, 809-822. | 4.1 | 51 |
| 6 | CFD modelling of electro-osmotic permeate flux enhancement on the feed side of a membrane module. <i>Journal of Membrane Science</i> , 2014, 470, 378-388. | 4.1 | 39 |
| 7 | Biofouling performance of RO membranes coated with Iron NPs on graphene oxide. <i>Desalination</i> , 2019, 451, 45-58. | 4.0 | 39 |
| 8 | Approximation for modelling electro-osmotic mixing in the boundary layer of membrane systems. <i>Journal of Membrane Science</i> , 2014, 450, 18-27. | 4.1 | 38 |
| 9 | Steady-state design of CO ₂ pipeline networks for minimal cost per tonne of CO ₂ avoided. <i>International Journal of Greenhouse Gas Control</i> , 2012, 8, 150-168. | 2.3 | 36 |
| 10 | CFD modelling of electro-osmotic permeate flux enhancement in spacer-filled membrane channels. <i>Journal of Membrane Science</i> , 2016, 507, 107-118. | 4.1 | 28 |
| 11 | Steady-state optimisation of CCS pipeline networks for cases with multiple emission sources and injection sites: South-east Queensland case study. <i>Energy Procedia</i> , 2011, 4, 2748-2755. | 1.8 | 26 |
| 12 | A Review of CFD Modelling and Performance Metrics for Osmotic Membrane Processes. <i>Membranes</i> , 2020, 10, 285. | 1.4 | 26 |
| 13 | A CFD study on the effect of membrane permeance on permeate flux enhancement generated by unsteady slip velocity. <i>Journal of Membrane Science</i> , 2018, 556, 138-145. | 4.1 | 25 |
| 14 | 3D CFD study on hydrodynamics and mass transfer phenomena for SWM feed spacer with different floating characteristics. <i>Chemical Engineering Research and Design</i> , 2020, 159, 36-46. | 2.7 | 25 |
| 15 | CFD study of the effect of unsteady slip velocity waveform on shear stress in membrane systems. <i>Chemical Engineering Science</i> , 2018, 192, 16-24. | 1.9 | 24 |
| 16 | CFD study of the effect of SWM feed spacer geometry on mass transfer enhancement driven by forced transient slip velocity. <i>Journal of Membrane Science</i> , 2020, 597, 117643. | 4.1 | 24 |
| 17 | The techno-economic case for coupling advanced spacers to high-permeance RO membranes for desalination. <i>Desalination</i> , 2020, 491, 114534. | 4.0 | 22 |
| 18 | CFD modelling of unsteady electro-osmotic permeate flux enhancement in membrane systems. <i>Chemical Engineering Science</i> , 2016, 146, 189-198. | 1.9 | 21 |

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|----|--|-----|-----------|
| 19 | Comparison of oscillating flow and slip velocity mass transfer enhancement in spacer-filled membrane channels: CFD analysis and validation. <i>Journal of Membrane Science</i> , 2020, 593, 117433. | 4.1 | 21 |
| 20 | CFD analysis of tracer response technique under cake-enhanced osmotic pressure. <i>Journal of Membrane Science</i> , 2014, 449, 38-49. | 4.1 | 19 |
| 21 | Coupled effects of circular and elliptical feed spacers under forced-slip on viscous dissipation and mass transfer enhancement based on CFD. <i>Journal of Membrane Science</i> , 2021, 637, 119599. | 4.1 | 19 |
| 22 | Optimal pipeline design for CCS projects with anticipated increasing CO ₂ flow rates. <i>International Journal of Greenhouse Gas Control</i> , 2014, 31, 165-174. | 2.3 | 18 |
| 23 | Understanding the Economic Feasibility of Ship Transport of CO ₂ within the CCS Chain. <i>Energy Procedia</i> , 2014, 63, 2630-2637. | 1.8 | 15 |
| 24 | Effect of seawater variability on endemic bacterial biofouling of a reverse osmosis membrane coated with iron nanoparticles (FeNPs). <i>Chemical Engineering Science</i> , 2020, 223, 115753. | 1.9 | 15 |
| 25 | 3D CFD study of hydrodynamics and mass transfer phenomena for spiral wound membrane submerged-type feed spacer with different node geometries and sizes. <i>International Journal of Heat and Mass Transfer</i> , 2022, 191, 122819. | 2.5 | 15 |
| 26 | Reduced-order model for the analysis of mass transfer enhancement in membrane channel using electro-osmosis. <i>Chemical Engineering Science</i> , 2015, 122, 86-96. | 1.9 | 14 |
| 27 | Spatio-temporal frequency response analysis of forced slip velocity effect on solute concentration oscillations in a reverse osmosis membrane channel. <i>Computers and Chemical Engineering</i> , 2016, 84, 151-161. | 2.0 | 13 |
| 28 | Control study on mixing enhancement in boundary layers of membrane systems. <i>Journal of Process Control</i> , 2013, 23, 1197-1204. | 1.7 | 12 |
| 29 | Preparation of Thin-Film Composite Nanofiltration Membranes Doped with N- and Cl-Functionalized Graphene Oxide for Water Desalination. <i>Polymers</i> , 2021, 13, 1637. | 2.0 | 11 |
| 30 | Effects of pipeline distance, injectivity and capacity on CO ₂ pipeline and storage site selection. <i>International Journal of Greenhouse Gas Control</i> , 2016, 51, 95-105. | 2.3 | 10 |
| 31 | Optimal Pipeline Design with Increasing CO ₂ Flow Rates. <i>Energy Procedia</i> , 2013, 37, 3089-3096. | 1.8 | 9 |
| 32 | Biofouling of FeNP-Coated SWRO Membranes with Bacteria Isolated after Pre-Treatment in the Sea of Cortez. <i>Coatings</i> , 2019, 9, 462. | 1.2 | 8 |
| 33 | Improving Thermal Distribution in Water-Cooled PV Modules and Its Effect on RO Permeate Recovery. <i>Water (Switzerland)</i> , 2021, 13, 229. | 1.2 | 5 |
| 34 | COMPARACIÃO DE MÓDULOS DE DESCARGA PARA VERTIDOS DE SALMUERAS, PROVENIENTES DE UNA PLANTA DESALINIZADORA EN SONORA, MÉXICO. <i>Revista Internacional De Contaminacion Ambiental</i> , 2017, 33, 45-54. | 0.1 | 4 |
| 35 | Biofouling Studies on Thin Film Composite Membranes for Reverse Osmosis Desalination Processes. , 2017, , 99-104. | | 3 |
| 36 | DESIGN AND MANUFACTURING OF A PULSATILE VALVE FOR GENERATING VARIABLE FLOWS IN REVERSE OSMOSIS DESALINATION MODULES. <i>Dyna (Spain)</i> , 2020, 95, 509-513. | 0.1 | 3 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Scoping study of the economics of CO2 transport and storage options for steel manufacturing emissions in eastern Australia. International Journal of Greenhouse Gas Control, 2022, 114, 103592. | 2.3 | 3 |
| 38 | Effect of storage capacity on CO2 pipeline optimisation. Energy Procedia, 2014, 63, 2757-2763. | 1.8 | 2 |
| 39 | From Building Blocks to Case Studies: Estimating the Costs of Transport and Storage for East Coast Australia. Energy Procedia, 2017, 114, 6411-6417. | 1.8 | 1 |
| 40 | Structural modification of polysulfone/NMP membranes: effect of chloroform as co-solvent. Polymer Bulletin, 0, , 1. | 1.7 | 1 |
| 41 | Mixing Index. , 2015, , 1-3. | | 0 |