

2017

Valorization of desalination brines by electrodialysis with bipolar membranes using nanocomposite anion exchange membranes.

C. Fernandez-Gonzalez, A. Dominguez-Ramos, R. Ibañez, Y. Chen, A. Irabien.
Desalination 406, 16-24, 2017.

Environmental challenges of the Chlor-Alkali production: seeking answers from a life cycle approach.

Garcia-Herrero, M. Margallo, R. Onandía, R. Aldaco, A. Irabien.
Science of the Total Environment 580, 147-157, 2017.

Hybrid solvent ([emim][Ac]+water) to improve the CO₂ capture efficiency in a PVDF hollow fiber contactor.

L. Gómez-Coma, A. Garea, A. Irabien.
ACS Sustain. Chem. Eng. 5, 1, 734-743, 2017

Productivity and Selectivity of Gas-Phase CO₂ Electroreduction to Methane at Copper Nanoparticle-Based Electrodes

Merino-Garcia, J. Albo, A. Irabien.
Energy Technology, 5(6), 922-928, 2017.

When product diversification influences life cycle impact assessment: A case study of canned anchovy

J. Laso, M. Margallo, P. Fullana, A. Bala, C. Gazulla, A. Irabien, R. Aldaco.
Science of the Total Environment 581, 629-639, 2017.

Sn nanoparticles on gas diffusion electrodes: Synthesis, characterization and use for continuous CO₂ electroreduction to formate

A. Del Castillo, M. Alvarez-Guerra, J. Solla-Gullón, A. Sáez, V. Montiel, A. Irabien.
Journal of CO₂ Utilization 18, 222-228, 2017.

Mass transfer analysis for CO₂ capture by PVDF membrane contactor and ionic liquid

L. Gómez-Coma, A. Garea, A. Irabien
Chem. Eng. Technol. 10.1002/ceat 40 (4), pp. 678-690, 2017.

Copper-Based Metal–Organic Porous Materials for CO₂ Electrocatalytic Reduction to Alcohols

J. Albo, D. Vallejo, G. Beobide, O. Castillo, P. Castaño, A. Irabien
Chem Sus Chem 10 (6), 1100-1109, 2017.

Introducing life cycle thinking to define best available techniques for products: Application to the anchovy canning industry

J. Laso, M. Margallo, P. Fullana, A. Bala, C. Gazulla, A. Irabien, R. Aldaco
Journal of Cleaner Production 155, 139-150, 2017.

Enhancing fouling resistance of polyethylene anion exchange membranes using carbon nanotubes and iron oxide nanoparticles

C. Fernandez-Gonzalez, B. Zhang, A. Dominguez-Ramos, R. Ibañez, A. Irabien, Y. Chen
Desalination 411, 19-27, 2017.

Aiding eco-labelling process and its implementation: Environmental Impact Assessment Methodology to define Product Category Rules for canned anchovies

J. Laso, M. Margallo, P. Fullana, A. Bala, C. Gazulla, A. Irabien, R. Aldaco
MethodsX 4, 143-152, 2017.

Methanol electrosynthesis from CO₂ at Cu₂/ZnO prompted by pyridine-based aqueous solutions

J. Albo, G. Beobide, P. Castaño, A. Irabien
Journal of CO₂ Utilization 18, 164-172, 2017.

Comparison of flat and hollow-fiber mixed matrix composite membranes for CO₂ separation with temperature.

Fernández-Barquín, C. Casado-Coterillo, M. Etxeberria-Benavides, J. Zuñiga, A. Irabien.
Chemical Engineering and Technology, 40, 5, 997-1007, 2017.

Transport of lignin and other lignocellulosic components through supported ionic liquids membranes.

R. Abejón, A. Abejón, A. Garea, A. Irabien
Chemical Engineering Transactions 57, 1153-1158, 2017.

Separation of CO₂-N₂ gas mixtures: Membrane combination and temperature influence.

Fernández-Barquín, C. Casado-Coterillo, A. Irabien
Separation and purification technology, 188, 197-205
doi: 10.1016/j.seppur.2017.07.029, 2017.

Incorporating linear programming and life cycle thinking into environmental sustainability decision-making: a case study on anchovy canning industry.

I.García Herrero, J. Laso, M. Margallo, A. Bala, C. Gazulla, P. Fulla-i-Palmer, I. Vázquez Rowe, A. Irabien, R. Aldaco
Clean Technologies and Environmental Policy, 19, 1897-1912, doi: 10.1007/s10098-017-1373-6, 2017.

Life Cycle Assessment model for the chlor-alkali process: A comprehensive review of resources and available technologies.

García Herrero, M. Margallo, R. Onandía, R. Aldaco, A. Irabien.
Sustainable Production and Consumption, 12, 44-58, 2017.

Measuring the Vulnerability of an Energy Intensive Sector to the EU ETS under a Life Cycle Approach: The Case of the Chlor-Alkali Industry.

García Herrero, M. Margallo, J. Laso, R. Onandía, R. Aldaco, A. Irabien.
Sustainability 9, 837-860, 2017.

Electrochemical impedance spectroscopy of enhanced layered nanocomposite ion exchange membranes.

C. Fernandez-Gonzalez, J. Kavanagh, A. Dominguez-Ramos, A. Ibañez, A. Irabien, Y.B. Chen, H. Coster.
Journal of Membrane Science 541, 611-620, 2017.

CAPÍTULO DE LIBRO Incorporating Linear Programming and Life Cycle Thinking into environmental sustainability decision-making: A case study on anchovy canning industry

García-Herrero, J. Laso, M. Margallo, K. Hjalil, A. Bala, C. Gazulla, R. Aldaco.
Computer Aided Chemical Engineering 40, 2023-2028. Elsevier, 2017.

Preliminary techno-economic analysis of non-commercial ceramic and organosilica membranes for hydrogen peroxide ultrapurification.

R. Abejón, A. Abejón, W. Puthai, S.B. Ibrahim, H. Nagasawa, T. Tsuru, A. Garea.
Chemical Engineering Research and Design 125, 385-397, 2017.

Characterization of manganese-bearing particles in the vicinities of a manganese alloy plant.
Hernández- Pellón, I. Fernández-Olmo, F. Ledoux, L. Courcot, D. Courcot.
Chemosphere 175, 411-424, 2017.

Modeling of a Microfluidic Electrochemical Cell for the Electro-Reduction of CO₂ to CH₃OH.
Y. Kotb, S-E.K. Fateen, J. Albo, I. Ismail
Electrochem. Soc., 164, 13, E391-E400, 2017.

A bibliometric analysis of research on supported ionic liquid membranes during the 1995-2015 period: Study of the main applications and trending topics.
R. Abejón, H. Pérez-Acebo, A. Garea.
Membranes 7(4), 63, 2017.