

CARBON DIOXIDE CAPTURE AND UTILISATION. MATERIALS CIRCULAR ECONOMY. SUSTAINABILITY.

Electrocatalytic reduction of CO₂ to formate using particulate Sn electrodes: Effect of metal loading and particle size

A Del Castillo, M Alvarez-Guerra, J Solla-Gullón, A Sáez, V Montiel, ...
Applied Energy 157, 165-173. 2015.

Production of methanol from CO₂ electroreduction at Cu₂O and Cu₂O/ZnO-based electrodes in aqueous solution

J Albo, A Sáez, J Solla-Gullón, V Montiel, A Irabien
Applied Catalysis B: Environmental 176, 709-717. 2015.

Sustainability assessment of electrodialysis powered by photovoltaic solar energy for freshwater production

A Fernandez-Gonzalez, C Dominguez-Ramos, A Ibañez, R Irabien
Renewable and Sustainable Energy Reviews 47, 604-615. 2015.

Optimization of ionic liquid recycling in Ionic Liquid-based Three Phase Partitioning processes

E Alvarez-Guerra, A Irabien
ESCAPE25, 138. 2015.

Ionic liquids in the electrochemical valorisation of CO₂

M Alvarez-Guerra, J Albo, E Alvarez-Guerra, A Irabien
Energy & Environmental Science 8, 2574-2599. 2015.

Towards the electrochemical conversion of carbon dioxide into methanol

J Albo, M Alvarez-Guerra, P Castaño, A Irabien
Green Chem 17 (4), 2304 - 2324. 2015.

CO₂ electro-valorization to dimethyl carbonate from methanol using potassium methoxide and the ionic liquid [bmim][Br] in a filter-press electrochemical cell

I Garcia-Herrero, M Alvarez-Guerra, A Irabien
Journal of Chemical Technology and Biotechnology 90 (8), 1433–1438. 2015.

Ionic liquid-based three phase partitioning (ILTPP) systems for whey protein recovery: ionic liquid selection

E Alvarez-Guerra, A Irabien
Journal of Chemical Technology and Biotechnology 90 (5), 939-946. 2015.

Global warming footprint of the electrochemical reduction of carbon dioxide to formate

A Dominguez-Ramos, B Singh, X Zhang, EG Hertwich, A Irabien
Journal of Cleaner Production 148, 148–155. 2015.

RESEARCH AND DEVELOPMENT OF MEMBRANE SEPARATION PROCESSES.

Preparation and characterization of novel chitosan-based mixed matrix membranes resistant in alkaline media

L García-Cruz, C Casado-Coterillo, J Iniesta, V Montiel, Á Irabien
Journal of Applied Polymer Science 132 (29). 2015.

Arsenic removal from drinking water by reverse osmosis: minimization of costs and energy consumption

A Abejón, A Garea, A Irabien
Separation and Purification Technology 144, 46–53. 2015.

Synergistic Effect of Combining Titanosilicate and 1-Ethyl-3-Methylimidazolium Acetate in Mixed Matrix Membranes for Efficient CO₂ Separation

MML Guerrero, C Casado-Coterillo, A Irabien
European Journal of Sustainable Development 4 (2), 103. 2015.

Synthesis and characterisation of MOF/ionic liquid/chitosan mixed matrix membranes for CO₂/N₂ separation

C Casado-Coterillo, A Fernández-Barquín, B Zornoza, C Tellez, ...
RSC Advances 5, 102350 - 102361. 2015.

Hybrid Ionic Liquid-Chitosan Membranes for CO₂ Separation: Mechanical and Thermal Behavior

E Santos, E Rodríguez-Fernández, C Casado-Coterillo, Á Irabien
International Journal of Chemical Reactor Engineering. 2015.

LTA/Poly(1-trimethylsilyl-1-propyne) MixedMatrix Membranes for High-Temperature CO₂/N₂ Separatio

A Fernandez-Barquin, C Casado-Coterillo, M Palomino, S Valencia, ...
Chem. Eng. Technol. 38 (4), 658-666. 2015.

Multiobjective Optimization Applied to the Integration of Polyamide and Cellulose Acetate Reverse Osmosis Membranes in Hybrid Cascades for Ultrapurification of Wet Chemicals

R Abejon, A Garea, A Irabien
Industrial and Engineering Chemistry Research 54 (3), 1006-1014. 2015.

Integration of quality-dependent prices in the optimization strategy for chemicals ultrapurification by reverse osmosis membrane cascades

R Abejón, A Garea, A Irabien
Desalination and Water Treatment 56 (1), 3486-3493. 2015.

SOURCES AND CHARACTERIZATION OF PARTICULATE MATTER AND ITS COMPONENTS

Estimation of PM10-Bound As, Cd, Ni and Pb Levels by Means of Statistical Modelling: PLSR and ANN Approaches

G Santos, I Fernández-Olmo, A Irabien
Water, Air, & Soil Pollution 226 (8), 1-14. 2015.

A comparative study between the fluxes of trace elements in bulk atmospheric deposition at industrial, urban, traffic, and rural sites

I Fernández-Olmo, M Puente, A Irabien
Environmental Science and Pollution Research 22 (17), 13427-13444. 2015.

LIFE CYCLE ASSESSMENT TOOLS FOR DECISION SUPPORT IN PROCESSES AND PRODUCTS.

Environmental sustainability assessment of the management of municipal solid waste incineration residues: a review of the current situation

Á Margallo, M., Taddei, M.B.M., Hernández-Pellón, A., Aldaco, R., Irabien
Clean Technologies and Environmental Policy Journal 17 (5), 1333-1. 2015.

Life cycle assessment of technologies for partial dealcoholisation of wines

Al María Margallo Rubén Aldaco, Albert Barceló, Nazely Diban, Inmaculada Ortiz
Sustainable Production and Consumption 2, 29–39. 2015.