

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

Multi-objective optimization of coal-fired electricity production with CO₂ capture

J Cristóbal, G Guillén-Gosálbez, L Jiménez, A Irabien

Applied Energy 98, 266-272. 2012.

Non-dispersive absorption of CO₂ in parallel and cross-flow membrane modules using EMISE

J Albo, A Irabien

Journal of Chemical Technology and Biotechnology 87 (10), 1502-1507. 2012.

MINLP model for optimizing electricity production from coal-fired power plants considering carbon management

J Cristóbal, G Guillén-Gosálbez, L Jiménez, A Irabien

Energy Policy 51, 493-501. 2012.

Separation performance of CO₂ through supported magnetic ionic liquid membranes (SMILMs)

J Albo, E Santos, LA Neves, SP Simeonov, CAM Afonso, JG Crespo, ...

Separation and purification technology 97, 26-33. 2012.

Conversion of carbon dioxide into formate using a continuous electrochemical reduction process in a lead cathode

M Alvarez-Guerra, S Quintanilla, A Irabien

Chemical Engineering Journal, 278-284. 2012.

Optimization of global and local pollution control in electricity production from coal burning

J Cristóbal, G Guillén-Gosálbez, L Jiménez, A Irabien

Applied Energy 92, 369-378. 2012.

Risk assessment of total petroleum hydrocarbons (TPHs) fractions

J Pinedo, R Ibañez, A Irabien

Chem. Engineer. Transact 28 (6) 2012.

Hydrocarbons Analysis for Risk Assessment in Polluted Soils

J Pinedo, R Ibáñez, Ó Primo, Á Irabien

Chemical Engineering Transactions 28, 79-82. 2012.

RESEARCH AND DEVELOPMENT OF MEMBRANE SEPARATION PROCESSES.

Analysis of Hybrid Reverse Osmosis Cascades for Ultrapurification of Chemicals

R Abejón, A Garea, A Irabien

Procedia Engineering 44, 1653-1654. 2012.

Optimum design of reverse osmosis systems for hydrogen peroxide ultrapurification

R Abejón, A Garea, A Irabien

AIChE Journal 58 (12), 3718-3730. 2012.

Integrated countercurrent reverse osmosis cascades for hydrogen peroxide ultrapurification

R Abejón, A Garea, A Irabien

Computers & Chemical Engineering 41, 67-76. 2012.

Analysis, modelling and simulation of hydrogen peroxide ultrapurification by multistage reverse osmosis

R Abejón, A Garea, A Irabien

Chemical Engineering Research and Design 90 (3), 442-452. 2012.

Environmental and economic evaluation of SO₂ recovery in a ceramic hollow fibre membrane contactor

P Luis, A Garea, A Irabien

Chemical Engineering and Processing: Process Intensification 52, 151-154. 2012.

Mixed matrix membranes from polymerizable ionic liquids

C Casado-Coterillo, E Santamaría, J Albo, A Irabien

20th International Congress of Chemical and Process Engineering (CHISA 2012). 2012.

Non-dispersive absorption of CO₂ using membrane contactors and ionic liquids

J Albo, L Gómez, A Irabien

International Symposium on Chemical Reaction Engineering (ISCRE22). 2012.

Minimization of Energy Consumption for Chemicals Ultrapurification Processes

R Abejón, A Garea, A Irabien

Chemical Engineering Transactions 29, 1549-1554. 2012.

PARTICLES IDENTIFICATION AND CONTROL IN ATMOSPHERIC POLLUTION

Evaluation of the urban/rural particle-bound PAH and PCB levels in the northern Spain (Cantabria region)

A Arruti, I Fernández-Olmo, Á Irabien

Environmental Monitoring and Assessment 184 (11), 6513-6526. 2012.