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GRUPO LABORATORIO CATÁLISIS Y MATERIALES



Autores: J. Cencerrero, P. Sánchez, A. de Lucas-Consuegra, A.R. de la Osa, A. Romero

Título: Metal-free borocarbonitrides as electrocatalysts for the hydrogen evolution reaction under alkaline media.

Revista: Journal of Electroanalytical Chemistry 977, 118856 (2025)



Autores: K. Sravan Kumar, S. Mateo, A.R. de la Osa, P. Sánchez, A. de Lucas-Consuegra

Título: Advancements in membrane-less electrolysis configurations: Innovations and challenges.

Revista: Current Opinion in Electrochemistry 49, 101602 (2025)



Autores: R. Crisafulli, A. de la Hoz, A.R. de la Osa, P. Sánchez, A. de Lucas-Consuegra

Título: Studying the Competition between Glucose Oxidation and Oxygen Evolution Reaction: Toward a Membrane-Free Electrolyzer for the Production of H₂ and Added Value Products.

Revista: ACS Sustainable Chemistry and Engineering 13, 4963–4974 (2025)



Autores: C. Gómez-Sacedón, A. R. González-Elípe, V. Rodríguez-Pintor, J.M. Luque-Centeno, F. Yubero, J. Gil-Rostra, A. de Lucas Consuegra

Título: Recent advances in electrocatalysts fabrication by magnetron sputtering for alkaline water electrolysis

Revista: Current Opinion in Electrochemistry 49, 101622 (2025)



Autores: J. Serrano-Jiménez, M.P. Caballero, A. Rodríguez-Gómez, A. de Lucas-Consuegra, P. Sánchez, A.R. de la Osa

Título: Optimization of anodic catalysts with preferentially oriented Pt crystallites for ammonia electro-oxidation

Revista: Catalyst Today 460, 115482 (2025)



Autores: C. Martín, A.R. de la Osa, A. de Lucas-Consuegra, M. Pinzón, P. Sánchez,

Título: Highly active Ni-Co catalysts supported on TiCSiC for ammonia decomposition

Revista: International Journal of Hydrogen Energy 174, 151371 (2025)



Autores: M.Pinzón, C.Martín, A.Romero, A.R. de la Osa, P.Sánchez

Título: Efficient hydrogen production from ammonia over Ru-Co/SiC catalysts

Revista: Catalysis Today 458, 115378 (2025)



Autores: I.Vidal-Barreiro, P.Sánchez, A. de Lucas-Consuegra, A. Romero

Título: A New Doped Graphene-Based Catalyst for Hydrogen Evolution Reaction Under Low-Electrolyte Concentration and Biomass-Rich Environments

Revista: Energy and Fuels, 39(9), 4514-4524 (2025)



Autores: D.Y. Nurseta, J.M. Garcia-Vargas, L. Sanchez-Silva

Título: Sustainable phenol production: Evaluating high phenolic bio-oil from olive pomace via fast pyrolysis combined with chemical and thermochemical pretreatment

Revista: Sustainable Production and Consumption 54, 75-87 (2025)



Autores: J.R. Trapero, A. Alcazar-Ruiz, F. Dorado, L. Sanchez-Silva

Título: Biochar price forecasting: A novel methodology for enhancing market stability and economic viability

Revista: Journal of Environmental Management 377, 124681 (2025)



Autores: E. Pinilla-Peñalver, O. del Fresno, S. Quintana, J.A. Ballesteros, M.D. Fernandez, A. Romero, L. Sanchez-Silva

Título: Achieving High Sound Absorption and Transmission Loss with Silica-Doped Polyurethane Aerogels

Revista: Construction and Building Materials 471, 140730 (2025)



Autores: A. Villardon, A. Alcazar-Ruiz, J. Cencerrero, A. Romero, L. Sanchez-Silva, F. Dorado

Título: Olive Stone-Derived Biochar as a Sustainable Catalyst Support for CO₂ Methanation

Revista: Journal of CO₂ Utilization 96, 103102 (2025)



Autores: C. Ortega-Portas, E. Pinilla-Peñalver, L. Sánchez-Silva, E. Torrecilla-Sádaba, J. Esteban, J.J. Aguilera-Correa

Título: Polyurethane Aerogels Doped with Modified SiO₂ Particles: Advanced Materials with Antibacterial Properties for Healthcare Applications

Revista: Colloids and Surfaces A: Physicochemical and Engineering Aspects 721, 137204 (2025)



Autores: L. Gallego-Mena, R. Campana, A. Villardon, F. Dorado, L. Sanchez-Silva

Título: Hydrothermal Carbonization of Olive Stone for CO₂ Capture: Effect of Zinc Chloride Activation

Revista: Journal of Environmental Chemical Engineering 13, 117321 (2025)