

CURRÍCULUM VITAE

Nombre: José Ortiz Landeros
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Formación

Doctorado: Doctorado en Ciencias en Metalurgia y Materiales
ESIQIE - Instituto Politécnico Nacional, México (2008-2011).

Maestría: Maestría en Metalurgia y Ciencia de Materiales
IIM-Universidad Michoacana de San Nicolás de Hidalgo, México (2005-2007).

Licenciatura: Ingeniero en Metalurgia y Materiales
ESIQIE-Instituto Politécnico Nacional, México (2000-2005).

Estancia(s) Pos-Doctoral(es):

- Junio de 2010 - Dic. de 2012 Investigador Invitado (Visiting Researcher) en "Membranes and Energy Laboratory", Department of Chemical Engineering, Arizona State University, Tempe, AZ USA.
- Enero de 2013 – Julio de 2013 Investigador Posdoctoral Departamento de Ciencias Básicas e Ingeniería, Área de Química Aplicada Universidad Autónoma Metropolitana Azc.

Experiencia Laboral

- 2013-2019 Profesor Investigador Titular A. Departamento de Ingeniería en Metalurgia y Materiales, ESIQIE-IPN.

Experiencia Docente

Cursos Asignados:

- Seminario del Posgrado en Ciencias en Metalurgia y Materiales
- Procesamiento de Materiales I : Cerámicos
- Introducción a los Cerámicos

Áreas de interés de investigación

- Síntesis química, procesamiento y caracterización de materiales.
- Procesamiento de materiales cerámicos avanzados.
- Fabricación de absorbentes cerámicos para captura de gases.
- Fabricación de membranas inorgánicas densas y porosas para separación de gases, en aplicaciones medioambientales y de generación de energía.

Publicaciones Seleccionadas (*Artículos en revistas; 6 años a la fecha*)

1. Issis C. Romero-Ibarra, J. Ortiz-Landeros and Heriberto Pfeiffer, Microstructural and CO₂ chemisorption analyses of Li₄SiO₄: Effect of surface modification by the ball milling process, *Thermochim. Acta*, 567 (2013), 118-124.
2. J. Ortiz-Landeros, Issis C. Romero-Ibarra, Carlos Gómez-Yáñez, Enrique Lima and Heriberto Pfeiffer, Mechanochemical synthesis and kinetic analysis of the CO₂ chemisorption in Li_{4+x}(Si_{1-x}Al_x)O₄ solid solutions at different temperatures, *Journal Phys. Chem. C* 117 [12] (2013) 6303-6311.
3. X. Dong, J. Ortiz-Landeros and J. Y.S. Lin, Asymmetric tubular ceramic-carbonate dual phase membrane for high temperature CO₂ separation, *Chemical Communications*. 49 (2013) 9654-9656.
4. J. Ortiz-Landeros, Tyler Norton and Y.S. Lin, Effects of Support Pore Structure on Carbon Dioxide Permeation of Ceramic-Carbonate Dual-Phase Membranes, *Chem Eng. Sci.* 104 (2013) 891-898.
5. Tyler T. Norton, J. Ortiz-Landeros and Y.S. Lin, Stability of La-Sr-Co-Fe Oxide-Carbonate Dual-Phase Membranes for Carbon Dioxide Separation at High Temperatures, *Ind. Eng. Chem Res.* 53 (2014) 2432-2440.
6. M. B. Durán-Guevara, H. P. Perea, M. I. Espitia-Cabrera, J. Ortiz-Landeros, M.E. Contreras, Potassium-based sorbents using mesostructured γ -alumina supports for low temperature CO₂ capture, *Ceramics International*, 41 (2015), 3036- 3044.
7. J. Ortiz-Landeros, R. López-Juárez, I.C. Romero-Ibarra, H. Pfeiffer, H. Balmori-Ramírez, C. Gómez-Yáñez, Fast microwave-assisted hydrothermal synthesis of Li₂SiO₃ and its water vapor and CO₂ capture properties, *Particuology* 24 (2016).
8. Briz-López, E.M., Ramírez-Moreno, M.J., Romero-Ibarra, I.C., C. Gómez-Yañez, H.Pfeiffer, J. Ortiz-Landeros, First assessment of Li₂O–Bi₂O₃ ceramic oxides for high temperature carbon dioxide. *Journal of Energy Chemistry*, 25 [5] (2016) 754-760.
9. Lara-García, H.A., Ramírez-Moreno, M.J., J. Ortiz-Landeros, Pfeiffer, H. CO₂ chemisorption in Li₂CuO₂ microstructurally modified by ball milling: Study performed with different physicochemical CO₂ capture conditions, *RSC Advances* 6 [63] (2016) 57880-57888.
10. Lara-García, H.A., Sánchez-Camacho, P. Duan, Y. J. Ortiz-Landeros, Pfeiffer, H. Analysis of the CO₂ Chemisorption in Li₅FeO₄, a New High Temperature CO₂ Captor Material. Effect of the CO₂ and O₂ Partial Pressures *Journal of Physical Chemistry C*, 121 [6] (2017) 3455-3462.
11. Ovalle-Encinia, O. Mendoza-Nieto, J.A., J. Ortiz-Landeros, Pfeiffer, H., Ce_{0.8}Sm_{0.15}Sr_{0.05}O₂ as Possible Oxidation Catalyst and Assessment of the CaO Addition in the Coupled CO Oxidation-CO₂ Capture Process, *Industrial and Engineering Chemistry Research*, 56, [21] (2017) 6124-6130.
12. F. Ambriz-Vargas, R. Zamorano-Ulloa, A. Romero-Serrano, J. Ortiz-Landeros, J. Crespo-Villegas, D. Ramírez-Rosales, C. Gómez-Yáñez, Point-Defect Chemistry on the Polarization Behavior of Niobium Doped Bismuth Titanate, *J. Mex. Chem. Soc.* 61 [4] (2017) 317-325.

13. O. Ovalle-Encinia, H. Pfeiffer, J. Ortiz-Landeros, $\text{Ce}_{0.85}\text{Sm}_{0.15}\text{O}_{2-x}\text{Sm}_{0.6}\text{Sr}_{0.4}\text{Al}_{0.3}\text{Fe}_{0.7}\text{O}_3$ composite for the preparation of dense ceramic-carbonate membranes for CO_2 separation, *Journal of Membrane Science*, 547, (2018) 11-18.
14. Oscar Ovalle-Encinia, Heriberto Pfeiffer, José Ortiz-Landeros, CO_2 separation improvement produced on a ceramic-carbonate dense membrane superficially modified with Au-Pd, *Ind. Eng. Chem. Res.*, 57 (2018) 9261-9268.
15. C.G. Mendoza-Serrato, M.J. Ramírez-Moreno, A. Ezeta, J. Ortiz-Landeros, Procesamiento de membranas cerámico-carbonato densas para la separación de CO_2 , *Rev. LatinAm. Metal. Mat.*, 38 [2] (2018) XX-XX.
16. H. Lara-García, O. Ovalle-Encinia, J. Ortiz-Landeros, E. Lima, H. Pfeiffer, Synthesis of $\text{Li}_{4+x}\text{Si}_{1-x}\text{Fe}_x\text{O}_4$ solid solution by dry ball milling and its high efficient CO_2 chemisorption in a wide temperature range and low CO_2 concentrations, *Journal of Materials Chemistry A*, 7 (2019) 4153-4164.
17. R. Ortega-Lugo, J.A. Fabián-Anguiano, O. Ovalle-Encinia, Carlos Gómez-Yáñez, B. H. Zeifert, José Ortiz-Landeros, Mixed-conducting ceramic-carbonate membranes exhibiting high CO_2/O_2 permeation flux and stability at high temperatures, *Journal of Advanced Ceramics* (2019).
18. Oscar Ovalle-Encinia, Heriberto Pfeiffer, José Ortiz-Landeros, Synthesis of pure lithium aluminate ($\gamma\text{-LiAlO}_2$) nanoparticles by EDTA-citrate complexing method, *Journal of the Mexican Chemical Society* (2019).