

PUBLICACIONES

1 Publicaciones en revistas indexadas y arbitradas (2010-2019)

1. J.J. Figueroa-Lara, J.M. Murcia-González, R. García-Martínez, M. Romero-Romo, M. Torres Rodríguez, **V. Mugica-Álvarez***. Effect of platform subway depth on the presence of Airborne PM_{2.5}, metals, and toxic organic species. *Journal of Hazardous Materials*. 377: 427-436.
2. **V. Mugica-Alvarez***, C.A. Martínez-Reyes, N.M. Santiago-Tello, I. Martínez-Rodríguez, M. Gutiérrez-Arzaluz, J.J. Figueroa-Lara. Evaporative volatile organic compounds from gasoline in Mexico City: Characterization and atmospheric reactivity. *Energy reports*. 2019. <https://doi.org/10.1016/j.egypr.2019.11.010>
3. **Violeta Mugica-Álvarez***, Francisco Hernández-Rosas, Miguel Magaña-Reyes, Jorge Herrera-Murillo, Naxieli Santiago-De La Rosa, Mirella Gutiérrez-Arzaluz, José de Jesús Figueroa-Lara, Griselda González-Cardoso. 2018. Sugarcane burning emissions: Characterization and emission factors. *Atmospheric Environment*. 193: 262–272
4. Naxieli Santiago-De La Rosa, Griselda González-Cardoso, José de Jesús Figueroa-Lara, Mirella Gutiérrez-Arzaluz, Claudia Octaviano-Villasana, Irma Fabiola Ramírez-Hernández & **Violeta Mugica-Álvarez***. 2018. Emission factors of atmospheric and climatic pollutants from crop residues burning, *Journal of the Air & Waste Management Association*, 68:8, 849-865, DOI: 10.1080/10962247.2018.1459326
5. Romero-Torres E., Gutiérrez-Arzaluz M., **Mugica-Alvarez V.**, González-Reyes L., Torres-Rodríguez M., Tzompantzi-Morales F.J., Tzompantzi-Flores C. Synthesis and characterization of gold nanoparticles on titanium dioxide for the catalytic photodegradation of 2,4-dichlorophenoxyacetic acid. *Journal of Applied Research and Technology*. 16 (2018) 346-356
6. OG Aztatzi-Aguilar, A Valdés-Arzate, Y Debray-García, ES Calderón-Aranda, M Uribe-Ramirez, L Acosta-Saavedra, ME Gonsebatt, JA Maciel-Ruiz, P Petrosyan, **V Mugica-Alvarez**, MC Gutiérrez-Ruiz, LE Gómez-Quiroz, A Osornio-Vargas, J Froines, MT Kleinman, and A De Vizcaya-Ruiz. 2018. Exposure to ambient particulate matter induces oxidative stress in lung and aorta in a size- and time-dependent manner in rats. *Toxicology research and application*. 2:1-15, doi.org/10.1177/2397847318794859. ISSN 23978473
7. Ibarra-García, A.R., Barceló-Quintal, I.D., García-Albortante, J., López-Lafuente, A.L., González-Huecas, C., Quintana-Nieto, J.R. and **Mugica-Alvarez, V.*** (2018). Phytoextraction of metals by native plants from mining wastes in Zacatecas, Mexico. *Acta Horti*. 1227, 409-416 DOI:10.17660/ActaHortic.2018.1227.51. ISSN 0567-7572 (print) 2406-6168 (electronic).
8. Griselda González-Cardoso, Janai M. Hernández, Naxieli Santiago de la Rosa, Mirella Gutiérrez, **Violeta Mugica-Alvarez***. 2018. PM_{2.5} emissions from urban crematoriums. *Energy Procedia*. 153:359-363. doi 10.1016/j.egypro.2018.10.047
9. Santiago-De la Rosa Naxieli, **Mugica-Álvarez Violeta**, Cereceda-Balic Francisco, Guerrero Fabián, Yáñez Karen, Lapuerta Magin. 2017. Emission factors from different burning stages of agriculture wastes in Mexico. *Environ Sci Pollut Res*. 24: 24297-24310. DOI 10.1007/s11356-017-0049-4
10. **Mugica-Alvarez V***, Hernández-Moreno A., Valle-Hernández B. L., Millán-Vázquez F., Espejo-Montes F., Torres-Rodríguez M. 2017. Characterization and modelling of atmospheric particles from sugarcane burning in Morelos, Mexico. *Human and Ecological Risk Assessment: An International Journal*. 23:1056-1071. DOI:10.1080/10807039.2017.1300767. 1-16. ISSN: 1080-7039.
11. Jorge Herrera-Murillo J., Rojas-Marín J., **Mugica-Álvarez V.**, Solórzano-Arias D., Beita-Guerrero V. 2017. Chemical characterization of filterable PM_{2.5} emissions generated from regulated

- stationary sources in the Metropolitan Area of Costa Rica. *Atmospheric Pollution Research*. <http://dx.doi.org/10.1016/j.apr.2017.01.007>. ISSN: 1309-1042
12. Jorge Herrera-Murillo J., Rojas-Marín J., **Mugica-Álvarez V.**, Solórzano-Arias D., Beita-Guerrero V. (2017). Polycyclic aromatic hydrocarbons in filterable PM 2.5 emissions generated from regulated stationary sources in the metropolitan area of Costa Rica. *Atmospheric Pollution Research*. ISSN: 1309-1042
 13. Velázquez-López E., Gutiérrez-Arzaluz M., **Mugica-Álvarez V.**, Torres-Rodríguez M. Síntesis de una membrana bimetálica Pd-Sn/Al₂O₃. *Revista de la Sociedad Mexicana de Ciencia y Tecnología de Membranas*. SMCYTM Año 4, No. 4, 2017, ISSN: 2395-8650. <http://www.smcytm.org.mx/revista/7cn2017.pdf>.
 14. Brenda L. Valle-Hernández, **Violeta Mugica-Álvarez**, Miguel Torres-Rodríguez, and José de Jesús Figueroa-Lara. 2017. Application trends of glycerol from biodiesel production. *International Journal of Agriculture, Environment and Bioresearch*. 2:4:142-159. ISSN: 2456-8643.
 15. Adolfo Hernández M., José A. Dávila G., **Violeta Mugica A.** 2017. Estimación de emisiones atmosféricas provenientes de vertederos de residuos sólidos urbanos. Discusión caso Valle de México. *Revista Iberoamericana de Ciencias*. 4: 57-68. ISSN 2334-2501
 16. Alvarado-Cruz, I., Sánchez-Guerra, M., Hernández-Cadena, L., De Vizcaya-Ruiz, A., **Mugica, V.**, Pelallo-Martínez, N. A., Solís-Heredia M. J., Byun Hang-Min, Baccarelli A., & Quintanilla-Vega, B. (2016). Increased methylation of repetitive elements and DNA repair genes is associated with higher DNA oxidation in children in an urbanized, industrial environment. *Mutation Research/Genetic Toxicology and Environmental Mutagenesis*. 813: 27-36. ISSN: 1383-5718
 17. Sánchez-Fuentes, C. E., Pergher, S. B., Gutiérrez-Arzaluz, M., **Mugica-Álvarez, V.**, Terrés, E., & Torres-Rodríguez, M. (2016). Interactions between the Ionic Liquid and the ZrO₂ Support in Supported Ionic Liquid Membranes for CO₂ Separation. *Technologies*, 4(4), 32. ISSN 2227-7080. doi.org/10.3390/technologies4040032
 18. Gutiérrez-Arzaluz, M., Noreña-Franco, L., Ángel-Cuevas, S., **Mugica-Álvarez, V.**, & Torres-Rodríguez, M. (2016). Catalysts with Cerium in a Membrane Reactor for the Removal of Formaldehyde Pollutant from Water Effluents. *Molecules*, 21(6), 668. ISSN 1420-3049
 19. Rodríguez-Espinosa, P. F., Flores-Rangel, R. M., **Mugica-Alvarez, V.**, Morales-Garcia, S. S. Sources of trace metals in PM₁₀ from a petrochemical industrial complex in Northern Mexico. *Air Quality, Atmosphere and Health*. 2016. 1-16. doi:10.1007/s11869-016-0409-0. ISSN: 1873-9318
 20. **Violeta Mugica-Álvarez***, Sandra Ramos-Guizar, Naxieli Santiago-de la Rosa, Miguel Torres-Rodríguez, and Luis Noreña-Franco. Black Carbon and Particulate Organic Toxics Emitted by Sugarcane Burning in Veracruz, México. 2016. *International Journal of Environmental Science and Development*, Vol. 7, No. 4: 290-294. DOI: 10.7763/IJESD.2016.V7.761. ISSN: 2010-0264
 21. Gutiérrez-Arzaluz M., Torres-Rodríguez M., **Mugica-Álvarez V.**, Aguilar-Pliego, J. Romero-Romo M. Catalytic wet formaldehyde oxidation 2016. *International Journal of Environmental Science and Development*, Vol. 7, No. 3: 166-171. DOI: 10.7763/IJESD.2016.V7.761. ISSN: 2010-0264
 22. Armienta, M. A., **Mugica, V.**, Reséndiz, I., & Arzaluz, M. G. (2016). Arsenic and metals mobility in soils impacted by tailings at Zimapán, Mexico. *Journal of Soils and Sediments*. 15: 1267-1278. DOI. 10.1007/s11368-015-1244-x. ISSN: 1439-0108.
 23. Granada-Ramírez O.L., Gutiérrez-Arzaluz M., Ávila M., Fernández L., Aguilar-Pliego J., **Mugica-Álvarez V.**, Torres-Rodríguez M. Oxidación de glicerol en fase acuosa con platino soportado en óxido de titanio. *Superficies y Vacío* 29 (1) 9-13, 2016. <http://smctsm.org.mx/ojs/index.php/SyV/article/view/22> ISSN: 1665-3521.
 24. **Mugica-Alvarez Violeta***, Santiago-de la Rosa Naxieli, Figueroa-Lara Jesús, Flores Rodríguez Julio, Miguel Torres Rodríguez, Magaña-Reyes Miguel. 2015. Emissions of PAHs derived from

- burning and processing of sugarcane in Chiapas and Morelos México. The Science of the Total Environment. 474-482. DOI: 10.1016/j.scitotenv.2015.04.089. ISSN: 0048-9697
25. **V. Mugica-Alvarez***, L. Ramos-Guillén, J. Figueroa-Lara, M. Torres-Rodríguez. Effectiveness of Greenhouse Gases Reduction Strategies and Policies in Mexico. 2015. International Journal of Environmental Science and Development. 6(4), 305-311. ISSN:2010-0264
 26. **V. Mugica-Alvarez***, V. Cortés-Jiménez, M. Vaca-Mier, V. Domínguez-Soria. 2015. Phytoremediation of mine tailings using *Lolium multiflorum*. International Journal of Environmental Science and Development. 6(4), 246-252. ISSN: 2010-0264.
 27. L. Juárez-Hernandez, J. Perez-Pariente, J. Aguilar-Pliego, **V. Mugica-Alvarez**, M. Gutierrez-Arzaluz, M. S. Grande, C. Marquez-Alvarez, E. Sastre. 2015. Mesoporous materials with enhanced porosity and acidity to obtain clean fuels from low-density polyethylene (LDPE) cracking. J Porous Material. 22: 269-281. DOI 10.1007/s10934-014-9893-5. ISSN: 1380-2224. United States
 28. Flores-Rangel, R. M., Rodríguez-Espinosa, P. F., de Oca-Valero, J. M., **Mugica-Álvarez, V.**, Ortiz-Romero-Vargas, M. E., Navarrete-López, M., Dorantes-Rosales H. J., Morales-García S. S. (2015). Temporal variation of PM10 and metal concentrations in Tampico, Mexico. Air Quality, Atmosphere & Health, 8(4): 367-378. Springer. DOI 10.1007/s11869-014-0291-6. ISSN: 1873-9318. Netherlands
 29. Espejo-Montes F. A., Millán-Vázquez F., Hernández-Moreno A., Barceló-Quintal I., **Mugica-Álvarez V.*** Modelado de la dispersión de PM2.5 y PM10 provenientes del Ingenio Emiliano Zapata en la Región de Zacatepec, Morelos. Revista Latinoamericana el Ambiente y las Ciencias. 6(12):1506-1510. (ISSN 2007-512X).
 30. Santiago DLR. N., Espejo M. F., Millán V.F., Jiménez G.B., Blanco J. S., **Mugica A.V.** Comparación de un método óptico y un termo-óptico en la cuantificación de carbono negro emitido por la quema de biomasa. Revista Latinoamericana el Ambiente y las Ciencias. 6(12):1511-1516. (ISSN 2007-512X).
 31. Santiago DLR. N., Espejo M. F., Millán V.F., Blanco J. S., **Mugica A.V.** Análisis de la calidad del aire en Zacatepec, Morelos durante la época de la zafra de la caña de azúcar. Revista Latinoamericana de Ciencias Ambientales. 6(12):599-604. (ISSN 2007-512X).
 32. Valdés A. D.A., Millán V. F. Gutiérrez A. M., **Mugica A. V.**, Aguilar P. J., Torres R. M. Síntesis de catalizadores de platino soportado en SBA-15 para la remoción de formaldehído. Revista Latinoamericana el Ambiente y las Ciencias. 6(12):1040-1044. (ISSN 2007-512X). Número especial de memorias del XIV Congreso Internacional y XX Congreso Nacional de Ciencias Ambientales. Puebla 3-5 junio 2015.
 33. Anbu Landa Faz, Santiago R. J. L., Olguín L. P., Castorena C. G., **Mugica A. V.**, Roldán C. T. G. Aprovechamiento de aceite gastado de cocina para la producción de biosurfactante mediante la cepa IMP-P. Revista Latinoamericana el Ambiente y las Ciencias. 6(12):976-981. (ISSN 2007-512X).
 34. Hernández-Moreno, A., & **Mugica-Álvarez, V.*** 2014. Instantaneous emissions model set in GIS for the TRANSIMS outputs. Transportation Research Part D: Transport and Environment. 33: 155-165. DOI: 10.1016/j.trd.2014.06.002. England
 35. Hernández-Castillo O., Mugica-Álvarez V. *, Castañeda-Briones M.T., Murcia J.M., García-Franco F. and Falcón Briseño Y. 2014. Aerobiological Study in the Mexico City Subway System. Aerobiología, Springer, pp 1-11. DOI: 10.1007/s10453-014-9334-6. ISSN: 0393-5965. Netherlands
 36. Camposeco R., Castillo S., **Mugica V.**, Mejía-Centeno Isidro, Marín J. 2014. Role of V₂O₅-WO₃/H₂Ti₃O₇-nanotube-model catalysts in the enhancement of the catalytic activity for the SCR-

- NH₃ process. Chemical Engineering Journal. 242: 313-320. <http://dx.doi.org/10.1016/j.cej.2014.01.002>. ISSN: 1385-8947. Switzerland
37. Camposeco, R., Castillo, S., **Mugica, V.**, Mejía-Centeno, I., & Marín, J. 2014. Novel V2O5/NTiO2–Al2O3 nanostructured catalysts for enhanced catalytic activity in NO reduction by NH3. Catalysis Communications, 45, 54-58. ISSN: 1566-7367. United States of America.
 38. Guerra, R., Vera-Aguilar, E., Uribe-Ramirez, M., Gookin, G., Camacho, J., Osornio-Vargas, A. R., **Mugica-Alvarez V.**, Angulo-Olais R., Campbell A., Froines J., Kleinman T.M., & De Vizcaya-Ruiz, A. 2013. Exposure to inhaled particulate matter activates early markers of oxidative stress, inflammation and unfolded protein response in rat striatum. Toxicology letters, 222(2), 146-154. ISSN: 0378-4274. Ireland
 39. Hernández-Moreno, A., & **Mugica-Álvarez, V.*** 2013. Vehicular fleets forecasting to project pollutant emissions: Mexico City metropolitan area case. Transport Policy, 27, 189-199. ISSN: 0967-070X
 40. E. V. Cortés-Jiménez, **V. Mugica-Álvarez**, M. C. A. González-Chávez, R. Carrillo-González, M. Martínez Gordillo & M. Vaca Mier. 2013. Natural revegetation of alkaline tailing heaps at Taxco, Guerrero, Mexico, International Journal of Phytoremediation, 15:2, 127-141. ISSN: 1522-6514. United States
 41. Lara-Medina, J.J., Torres-Rodríguez, M., Gutiérrez-Arzaluz M., **Mugica-Alvarez V.*** 2012. Separation of CO₂ and N₂ with a lithium-modified silicalite-1 zeolite membrane. Int. J. Greenhouse Gas Control, 10: 494-500. doi.org/10.1016/j.ijggc.2012.07.014. ISSN: 1750-5836. United Kingdom
 42. Torres M., Gutiérrez M., **Mugica V.**, Aguilar J., Pergher S. 2012. Alkylation of Benzene with Propylene in a Flow-Through Membrane Reactor and Fixed-Bed Reactor. Materials, 5, 872-881; doi:10.3390/ma5050872. ISSN 1996-1944. Switzerland.
 43. **Mugica-Alvarez V.***, Figueroa-Lara J., Romero-Romo M., Sepúlveda-Sánchez J., López-Moreno T. 2012. Concentrations and properties of airborne particles in the Mexico City subway system. Atmospheric Environment. 49:284-293. doi:10.1016/j.atmosenv.2011.11.038.
 44. Camposeco R., Castillo S., Mejía I., **Mugica V.**, Carrera R., Montoya A., Morán-Pineda M., Navarrete J., Gómez R. 2012. Active TiO₂ nanotubes for CO oxidation at low temperature. Catalysis Communications. 17:81-88.
 45. Saúl Angel-Cuevas, Mirella Gutiérrez-Arzaluz, Julia Aguilar Pliego, **Violeta Mugica-Alvarez**, Luis E. Noreña-Granco y Miguel Torres-Rodríguez. 2011. Remoción de formaldehído de efluentes acuosos mediante oxidación húmeda catalítica. Avances en Ciencias e Ingeniería. Vol. 2 No 4:13-23.
 46. Torres, M., Gutiérrez, M., **Mugica, V.**, Romero, M., López, L. 2011. Oligomerization of isobutene with a beta zeolite membrane. Effect of the acid properties of the catalytic membrane. Catalysis Today. 166:205-208. doi:10.1016/j.cattod.2010.08.002
 47. Valle-Hernández B.L., **Mugica-Álvarez V.***, Salinas-Talavera E., Amador-Muñoz O., Murillo-Tovar M.A., Villalobos-Pietrini R., De Vizcaya-Ruiz A. 2010. Temporal variation of nitro-polycyclic aromatic hydrocarbons in PM₁₀ and PM_{2.5} collected in Northern Mexico City. Science of The Total Environment. 408: 22, 2010, Pages 5429-5438. 25
 48. **Mugica V.***, Hernández S., Torres M., García R. 2010. Seasonal Variation of Polycyclic Aromatic Hydrocarbons Exposure Levels in Mexico City. Journal of the Air & Waste Management Association. 60:548–555. DOI:10.3155/1047-3289.60.5.548. ISSN: 1096-2247

2. Libros de texto, manuales y capítulos de libro

1. Naxieli Santiago de la Rosa, **Violeta Mugica Álvarez***. 2018. Quema de la Caña de Azúcar, carbono negro y cambio climático, en *Reflexiones del Cambio Climático desde la Academia*. 213-239. 2018. ISBN: 9786072813144. Ed. Universidad Autónoma Metropolitana-Azcapotzalco
2. M. Gutiérrez-Arzaluz, **V. Mugica-Álvarez**, M. Torres-Rodríguez. Synthesis of Catalytic Membranes for the Oxidation of Organic Pollutants in Wastewater. Membranes - Materials, Simulations, and Applications. Part II Ceramic Membranes. Springer. Chapter 6, 2017, pp. 51-60. ISBN: 978-3-319-45314-9. <http://www.springer.com/978-3-319-45314-9>
3. M. Torres-Rodríguez, L. López-Pérez, M. Gutiérrez-Arzaluz and **V. Mugica-Álvarez**. Sulfated TiO₂-ZrO₂ Membrane as Synthesized by Sol-Gel Method: Application in the Olefin Oligomerization. Membranes - Materials, Simulations, and Applications. Part II Ceramic Membranes Springer. Chapter 4, 2017, pp. 33-40. ISBN: 978-3-319-45314-9. Maciel-Cerda Editor <http://www.springer.com/978-3-319-45314-9>
4. **V. Mugica-Alvarez***, F. Hernández-Rosas, K. Landeros-Mugica, J. Urbina-Soria. (2016). Cosecha de caña sustentable. UAM-Azcapotzalco, SEMARNAT, Colpos-Córdoba, UNAM. Informe Final al Fondo Climático, SEMARNAT. Ciudad de México. Pp 150.
5. L. Noreña, J. Aguilar, **V. Mugica**, M. Gutiérrez, M. Torres. 2012. Materials and methods for the chemical catalytic cracking of plastic waste. Recycling / Book 1", Ed. Dimitris S. Achilias In Tech. ISBN 979-953-307-329-2. 151-174.
6. **Violeta Mugica**, Yessica Carreón, Miguel Torres, Mirella Gutiérrez, Luis Noreña. 2012. Contaminación de la Zona Lacustre de Xochimilco en La Ciudad de México. En "Aguas, suelos y vegetación en cuencas iberoamericanas"; A. Marco da Silva y G. Galindo Ed. Editorial Díaz de Santos. España. 6: pp. 197-214.
7. **V. Mugica***, R. Vallesa, J. Aguilar, J. Figueroa and F. Mugica (2011). PM_{2.5} Source Apportionment Applying Material Balance and Receptor Models in the MAMC, Monitoring, Control and Effects of Air Pollution, Andrzej G. Chmielewski (Ed.), ISBN: 8:103-118. 978-953-307-526-6, InTech, Available from: <http://www.intechopen.com/articles/show/title/pm2-5-source-apportionment-applying-material-balance-and-receptor-models-in-the-mamc>.
8. **Violeta Mugica***, Miguel Torres, Erika Salinas, Mirella Gutierrez and Rocío García. 2010. Polycyclic Aromatic Hydrocarbons in the Urban Atmosphere of Mexico City, pp. 75-97. In Air Pollution. Villanyl Vanda Ed. ISBN 978953307-143-5. Ed. Debeljuh, Scyio
9. **Violeta Mugica***, Jesús Figueroa, Adolfo Hernández. Evaluación del Programa para Mejorar la Calidad del Aire en la Zona Metropolitana del Valle de México (Proaire 2002-2010). SEMARNAT-Universidad Autónoma Metropolitana-Azcapotzalco. 2010.

