

Nahum Andres Medellin Castillo

Scopus Author Identifier: 13611164200

<https://www.scopus.com/authid/detail.uri?authorId=13611164200>

<https://orcid.org/0000-0001-9245-8016>

h-index: 14

Current position

Professor Full-Time

Autonomous University of San Luis Potosí, Faculty of Engineering, Center for Research and Postgraduate Studies. Master's Program in Water Technology and Management.

Multidisciplinary Program in Environmental Sciences (PMPCA)

Av Manuel Nava 6, Zona Universitaria, 78280, San Luis Potosí, SLP, México

+524448266260, nahum.medellin@uaslp.mx; nahumanca@hotmail.com

Subject Areas

Environmental Science • Chemical Engineering • Materials Science • Chemistry • Energy • Engineering • Agricultural and Biological Sciences • Physics and Astronomy • Biochemistry, Genetics and Molecular Biology • Pharmacology, Toxicology and Pharmaceutics • Earth and Planetary Sciences

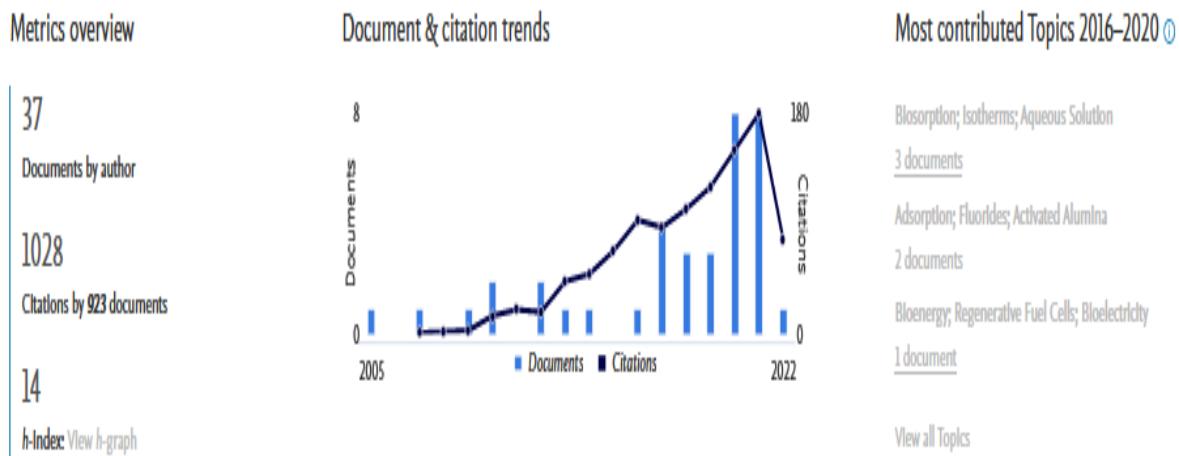
Education

PhD in Chemical Engineering Sciences. Faculty of Chemical Sciences, Graduate Program in Chemical Engineering, CIEP, Universidad Autónoma de San Luís Potosí, México

Master in Chemical Engineering Sciences. Faculty of Chemical Sciences, Graduate Program in Chemical Engineering, CIEP, Universidad Autónoma de San Luís Potosí, México

Bachelor in Chemical Engineering. Faculty of Chemical Sciences, Universidad Autónoma de San Luís Potosí, México

Citations (>1000 citations)



Publications

1. Medellin-Castillo N.A., Cruz-Briano S.A., Leyva-Ramos R., Moreno-Pirajan J.C., Torres-Dosal A., Giraldo-Gutierrez L., Labrada-Delgado G.J., Perez R.O., Rodriguez-Estupinan J.P., Reyes Lopez S.Y., Berber Mendoza M.S. Use of bone char prepared from an invasive species, pleco fish (*Pterygoplichthys* spp.), to remove fluoride and Cadmium(II) in water. *Journal of Environmental Management* 2020, 256.
2. Padilla-Ortega E., Medellin-Castillo N., Robledo-Cabrera A. Comparative study of the effect of structural arrangement of clays in the thermal activation: Evaluation of their adsorption capacity to remove Cd(II). *Journal of Environmental Chemical Engineering* 2020, 8(4).
3. Avila-Martinez A.K., Roque-Ruiz J.H., Torres-Perez J., Medellin-Castillo N.A., Reyes-Lopez S.Y. Allura Red dye sorption onto electrospun zirconia nanofibers. *Environmental Technology and Innovation* 2020, 18.
4. Parra-Marfil A., Ocampo-Perez R., Collins-Martinez V.H., Flores-Velez L.M., Gonzalez-Garcia R., Medellin-Castillo N.A., Labrada-Delgado G.J. Synthesis and characterization of hydrochar from industrial Capsicum annuum seeds and its application for the adsorptive removal of methylene blue from water. *Environmental Research* 2020, 184.
5. Flores-Rojas A.I., Diaz-Flores P.E., Medellin-Castillo N.A., Ovando-Medina V.M., Rodriguez-Ortiz J.C. Biomaterials based on chitosan/orange peel as a controlled release matrix for KNO₃: synthesis, characterization and their performance evaluation. *Iranian Polymer Journal (English Edition)* 2020, 29(11).

6. Roque-Ruiz J.H., Garibay-Alvarado J.A., Medellín-Castillo N.A., Reyes-Lopez S.Y. Preparation of Electrospun Hydroxyapatite-Glass Fibers for Removal of Cadmium (Cd+2) and Lead (Pb+2) from Aqueous Media. *Water, Air, and Soil Pollution* 2020, 231(10).
7. Leyva-Ramos, R., Ocampo-Pérez, R., Bautista-Toledo, I., Rivera-Utrilla, J., Medellín-Castillo, N.A., Aguilar-Madera, C.A. The adsorption kinetics of sodium dodecylbenzenesulfonate on activated carbon. Branched-pore diffusional model revisited and comparison with other diffusional models. *Chemical Engineering Communications* 2020, 207 (5).
8. Isaacs-Paez E.D., Medellín-Castillo N., Manriquez-Guerrero F., Cercado B. Characterization of Bone Char and Carbon Xerogel as Sustainable Alternative Bioelectrodes for Bioelectrochemical Systems. *Waste and biomass valorization* 2020, 11(9).
9. Reyna-Villanueva, L.R., M. Dias, J., Medellín-Castillo, N.A., Ocampo-Pérez, R., Martínez-Rosales, J.M., Peñaflor-Galindo, T., Alvarez Fuentes, G. Biodiesel production using layered double hidroxides and derived mixed oxides: The role of the synthesis conditions and the catalysts properties on biodiesel conversión. *Fuel*. 2019, 251 285-292. ISSN: 0016-2361.
10. Ocampo-Perez, R., Padilla-Ortega, E., Medellín-Castillo, N.A., Coronado-Oyarvide, P., Aguilar-Madera, C.G., Segovia-Sandoval, S.J., Flores-Ramírez, R., Parra-Marfil, A. Synthesis of biochar from chili seeds and its application to remove ibuprofen from water. Equilibrium and 3D modeling. *Sci. Total. Environ.* 2019 655 1397-1408. ISSN: 0048-9697.
11. Roque-Ruiz, J.H., Medellín-Castillo, N.A., Reyes-López, S.Y. Fabrication of α -alumina fibers by sol-gel and electrospinning of aluminum nitrate precursor solutions. *Results in Physics*. 2019, 12 193-204 ISSN: 2211-3797.
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- onto Oxidized Activated Carbon Fiber. *Water Air Soil Poll.* 2018, 229(8) 257. ISSN: 0049-6979.
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 20. Medellin-Castillo, N.A., Padilla-Ortega, E., Tovar-García, L.D., Leyva-Ramos, R., Ocampo-Pérez, R., Carrasco-Marín, F., Berber-Mendoza, M.S. Removal of fluoride from aqueous solution using acid and thermally treated bone char. *Adsorption.* 2016, 22(7) 951-961. ISSN: 0929-5607.
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Book chapters

1. Nahum Andres Medellin-Castillo, Miguel Mauricio Aguilera-Flores, and Bridinette Thiodjio Sendja. Removal of Pollutants from Water by Adsorbents Prepared from Animal Bone Wastes Pages 273-314, chapter book in Porous Materials Theory and Its Application for Environmental Remediation, Springer, ISSN 1612-1317, 2021.
2. Ponce-Hernández A., Maldonado-Miranda J.J., Medellín-Castillo N.A., Alonso-Castro A.J., Carranza-Alvarez C. (2020) Phytoremediation Technology: Sustainable Solution for Cleaning Up of Recalcitrant Pollutants from Disturbed Environs. In: Bhat R., Hakeem K., Saud Al-Saud N. (eds) Bioremediation and Biotechnology, Vol 3. Springer, Cham. https://doi.org/10.1007/978-3-030-46075-4_11
3. Segovia Sánchez, Ollin Citlalli; Medellín Castillo, Nahum Andrés; Cardona, Jaime A.; Schlüter, Sabine. Economic feasibility of wastewater treatment and sanitation in rural area. 2020. Environment and Resources Management in Latin America.
4. Carranza-Álvarez C., Medellín-Castillo N.A., Maldonado-Miranda J.J., Alfaro-de-la-Torre M.C. Water Quality Management in San Luis Potosí, México. Water Availability and Management in Mexico. Water Science and Technology Library, Vol. 999, 2019.

Reviewer

Fuel Processing Technology

Journal of Environmental Engineering

Journal of the Mexican Chemical Society

Clean-Soil, Air, Water

Environmental Science and Pollution Research

Journal of Environmental Chemical Engineering

International Journal of Environmental Science and Technology

Journal of Thermal Analysis and Calorimetry

Journal of Water Process Engineering

Chemosphere

Separation Science and Technology
Molecules
Journal of Molecular Liquids
Journal of Environmental Engineering
International Journal of Biological Macromolecules
Environment Protection Engineering
Data in Brief
Desalination and Water Treatment

Affiliations

National System of Researchers (Mexico) SNI (Level II)
Latin American Network of Environmental Sciences.
Mexican Carbon Association (AMEXCarb)- Founding Member.
Thematic Network on Water Quality and Availability Management-CONACyT-Founding Member.
University College of Sciences and Arts (Colegio Universitario de Ciencias y Artes, A.C.).