

Xochitl Dominguez-Benetton

Senior scientist –electrochemical technology

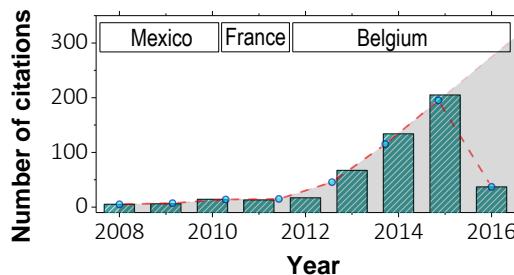
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List of publications

ResearcherID: K-7943-2015

<http://www.researcherid.com/rid/K-7943-2015>

CITATION INDICES



| Metrics | All | Since 2011 |
|-----------|-----|------------|
| Citations | 506 | 474 |
| h-index | 11 | 11 |
| I10-index | 12 | 12 |

This citation index was retrieved from Google Scholar. A projection to 2016 and 2017 is presented, considering that the rate of citations would hold constant for this period.

* Indicates I am the corresponding/senior author, on the publications cited below.

PUBLICATIONS

ARTICLES

| No. | Accession number WoS | Reference | Impact factor | Citations to date |
|-----|--|--|------------------|----------------------|
| 1 | 000359444600003 | <u>Article — Published</u> S Bajracharya, A ter Heijne, X Dominguez Benetton, K Vanbroekhoven, CJN Buisman, DPBTB Strik, D Pant (2015) Carbon dioxide reduction by mixed and pure cultures in microbial electrosynthesis using an assembly of graphite felt and stainless steel as a cathode. <i>Bioresource technology</i> . 195:14–24. Selected for issue cover. doi:10.1016/j.biortech.2015.05.081 | 4.494 | 6 |
| 2 | PubMed ID:25921205 NLM Unique ID:100953583 | <u>Article — Published</u> S Sevda, K Chayambuka, TR Sreekrishnan, D Pant, X Dominguez-Benetton* (2015) A comprehensive impedance journey to continuous microbial fuel cells. <i>Bioelectrochem</i> . 159:159–166. doi:10.1016/j.bioelechem.2015.04.008 | 4.172 | 1 |
| 3 | PubMed ID:25921205 NLM Unique ID:100953583 | <u>Article — Published</u> M Sharma, PM Sarma, D Pant, X Dominguez-Benetton* (2015) Optimization of electrochemical parameters for sulfate-reducing bacteria (SRB) based biocathode. <i>RSC Adv</i> . 5(49):39601–39611. doi: 10.1039/C5RA04120A | 3.84 | 2 |

| No. | Accession number WoS | Reference | Impact factor | Citations to date |
|-----|-------------------------|--|------------------|----------------------|
| 4 | NA | <u>Article — Published online</u> SB Pasupuleti, S Srikanth, X Dominguez-Benetton, SV Mohan, D Pant (2015) Dual gas diffusion cathode design for microbial fuel cell (MFC): optimizing the suitable mode of operation in terms of bioelectrochemical and bioelectro-kinetic evaluation. <i>Journal of Chemical Technology and Biotechnology</i> . doi: 10.1002/jctb.4613. | 2.494 | 4 |
| 5 | 000348230500001 | <u>Article — Published</u> D Sanchez-Herrera, D Pacheco-Catalan, R Valdez-Ojeda, B Canto-Canche, X Dominguez-Benetton, J Domínguez-Maldonado, L Alzate-Gaviria (2014) Characterization of anode and anolyte community growth and the impact of impedance in a microbial fuel cell. <i>BMC biotechnology</i> 14(1):102. doi:10.1186/s12896-014-0102-z. | 2.592 | 5 |
| 6 | 000338710700054 | <u>Article — Published</u> S Srikanth, M Maesen, X Dominguez-Benetton, K Vanbroekhoven, D Pant (2014) Enzymatic electrosynthesis of formate through CO ₂ sequestration/reduction in a bioelectrochemical system (BES). <i>Bioresource technology</i> 165:350-354. doi: 10.1016/j.biortech.2014.01.129. | 5.039 | 16 |
| 7 | NA | <u>Article — Published online</u> S Sevda, X Dominguez-Benetton, FHM Graichen, K Vanbroekhoven, H De Wever, TR Sreekrishnan, D Pant (2014) Shift to continuous operation of an air-cathode microbial fuel cell long-running in fed-batch mode boosts power generation. <i>International Journal of Green Energy</i> . doi: 10.1080/15435075.2014.909363. | 1.469 | 3 |
| 8 | 000342528600027 | <u>Critical Review — Published</u> M Sharma, S Bajracharya, S Gildemyn, SA. Patil, Y Alvarez-Gallego, D Pant, K Rabaey, X Dominguez-Benetton* (2014) A critical revisit of the key parameters used to describe microbial electrochemical systems. <i>Electrochimica Acta</i> 140:191–208. doi:10.1016/j.electacta.2014.02.111 | 4.086 | 20 |
| 9 | NA | <u>Short article — Published</u> FHM Graichen, S Sandipam, X Dominguez-Benetton, K Vanbroekhoven, S Bajracharya, D Pant (2014) Bioelektrochemische Umwandlung von CO ₂ zu Chemikalien: Electrosynthese mit Bakterien und Enzymen. <i>Chemie Ingenieur Technik</i> 86(9):1444-1445. | 0.698 | 0 |
| 10 | 000340989800036 | <u>Article — Published</u> S Sevda, X Dominguez-Benetton, H DeWever, K Vanbroekhoven, TR Sreekrishnan, D Pant (2014) Evaluation and enhanced operational performance of microbial fuel cells under alternating anodic open circuit and closed circuit modes with different substrates. <i>Biochemical Engineering Journal</i> 90:294–300. doi:10.1016/j.bej.2014.06.024. | 2.368 | 3 |
| 11 | 000337145900058 | <u>Article — Published</u> G Lepage, G Perrier, G Merlin, N Aryal, X Dominguez-Benetton* (2014) Multifactorial evaluation of the electrochemical response of a microbial fuel cell. <i>RSC Advances</i> 4 (45), 23815-23825. doi: 10.1039/C4RA03879G. | 3.708 | 4 |

| No. | Accession number WoS | Reference | Impact factor | Citations to date |
|-----|-------------------------|---|------------------|----------------------|
| 12 | 000338710700056 | <i>Article — Published</i> M Sharma, JL Varanasi, P Jain, P Dureja, B Lal, X Dominguez-Benetton, D Pant, PM Sarma (2014) Influence of headspace composition on product diversity by sulphate reducing bacteria biocathode. <i>Bioresource Technology</i> 165:365–371. doi:10.1016/j.biortech.2014.03.075. | 5.039 | 5 |
| 13 | NA | <i>Article — Published online</i> D Royzman, X Dominguez-Benetton, JC Yuan, T Shokuhfar, C Takoudis, MT Mathew, C Sukotjo (2014) The role of nicotine on the corrosive behavior of a Ti-6Al-4V dental implant. <i>Clinical Implant Dentistry and Related Research</i> doi: 10.1111/cid.12239. | 2.796 | 2 |
| 14 | 000322292800090 | <i>Review — Published</i> A ElMekawy, HM Hegab, X Dominguez-Benetton, D Pant (2013) Internal resistance of microfluidic microbial fuel cell: challenges and potential opportunities. <i>Bioresource technology</i> 142:672–682. doi:10.1016/j.biortech.2013.05.061. | 5.039 | 48 |
| 15 | 000320883500008 | <i>Article — Published</i> M Sharma, N Aryal, PM Sarma, K Vanbroekhoven, B Lal, X Dominguez-Benetton, D. Pant (2013) Bioelectrocatalyzed reduction of acetic and butyric acids via direct electron transfer by a mixed culture of sulfate-reducers drives electrosynthesis of alcohols and acetone. <i>Chemical Communications</i> 49: 6495–6497. doi: 10.1039/C3CC42570C. | 6.718 | 31 |
| 16 | 000316831800019 | <i>Article — Published</i> S Sevda, X Dominguez-Benetton, K Vanbroekhoven, H De Wever, TR Sreekrishnan, D Pant (2013) High strength wastewater treatment accompanied by power generation using air cathode microbial fuel cell. <i>Applied Energy</i> 105: 194–206. doi:10.1016/j.apenergy.2012.12.037 | 5.261 | 71 |
| 17 | NA | <i>Review — Published</i> X Dominguez-Benetton*, S Sandipam, Y Satyawali, K Vanbroekhoven, D Pant* (2013) Enzymatic electrosynthesis: an overview on the progress in enzyme-electrodes for the production of electricity, fuels and chemicals. <i>Journal of Microbial & Biochemical Technology</i> 1-20. doi: 10.4172/1948-5948.S6-007 | 2.16 | 11 |
| 18 | 000323024600001 | <i>Article — Published</i> R Rousseau, X Dominguez-Benetton, ML Délia, A Bergel (2013) Microbial bioanodes with high salinity tolerance for microbial fuel cells and microbial electrolysis cells <i>Electrochemistry Communications</i> 23:1-4. doi:10.1016/j.elecom.2013.04.002. | 4.287 | 22 |
| 19 | 000326203500001 | <i>Article — Published</i> S Sevda, X Dominguez-Benetton, K Vanbroekhoven, TR Sreekrishnan, D Pant (2013) Characterization and comparison of the performance of two different separator types in air-cathode microbial fuel cell treating synthetic wastewater. <i>Chemical Engineering Journal</i> 228:1–11. doi:10.1016/j.cej.2013.05.014. | 4.058 | 36 |

| No. | Accession number WoS | Reference | Impact factor | Citations to date |
|-----|-------------------------|---|------------------|----------------------|
| 20 | 000309544700018 | <i>Critical Review — Published</i> X Dominguez-Benetton* , S Sevda, K Vanbroekhoven, D Pant (2012) The accurate use of impedance analysis for the study of microbial electrochemical systems. <i>Chemical Society Reviews</i> 41:7228–7246. doi: 10.1039/C2CS35026B. | 30.425 | 61 |
| 21 | 000311873800061 | <i>Article — Published</i> Y Alvarez-Gallego, X Dominguez-Benetton , D Pant, L Diels, K Vanbroekhoven, I Genné, P Vermeiren (2012) Development of gas diffusion electrodes for cogeneration of chemicals and electricity. <i>Electrochimica Acta</i> 82:415–426. doi:10.1016/j.electacta.2012.06.096 | 4.086 | 25 |
| 22 | 000282031900001 | <i>Article — Published</i> X Dominguez-Benetton* , SG Navarro-Avila, C Carrera-Figueiras (2010) Electrochemical evaluation of Ti/TiO ₂ -polyaniline anodes for microbial fuel cells using hypersaline microbial consortia for synthetic-wastewater treatment. <i>Journal of New Materials for Electrochemical Systems</i> 13:1–6. | 0.66 | 19 |
| 23 | NA | <i>Article — Published</i> M Vargas Rodríguez, D Cabañas Vargas, M Gamboa Marrufo, X Dominguez-Benetton* (2009) Evaluation of the biosorption process with orange peels for the elimination of commercial colorant Lanasol Navy CE in textile industry wastewaters. <i>Inginería</i> 13(2):39–43. | 0.038 | 1 |
| 24 | 000255330400028 | <i>Article — Published</i> H Castaneda, X Dominguez-Benetton (2008) SRB-biofilm influence in active corrosion sites formed at the steel-electrolyte interface when exposed to artificial seawater conditions. <i>Corrosion Science</i> 50(4):1169–1183. doi:10.1016/j.corsci.2007.11.032. | 3.686 | 105 |
| 25 | NA | <i>Conference proceedings — Published</i> X Dominguez-Benetton* , D Ramirez Espinosa (2007) Biocomplexity and bioelectrochemical influence of anaerobic biofilms in gasoline distribution pipelines, <i>Electrochemical Society Transactions</i> . 3(13): 199–212. | NA | NA |
| 26 | NA | <i>Conference proceedings — Published</i> D Ramírez Espinosa, X Dominguez-Benetton* (2007) Study of Anaerobic Biofilms from Gasoline Distribution Pipelines, <i>Electrochemical Society Transactions</i> . 3(24):25–31. | NA | NA |

CONFERENCE PROCEEDINGS (FULL)

| No. | Reference |
|-----|---|
| 27 | <i>Conference proceedings — Published</i> X Domínguez Benetton , R Rojas Herrera, E Alcocer Campos, M Martín López (2008) Frequency response and biodiversity analysis of carbon steel corrosion in laboratory gasoline containing devices with defined aqueous fractions, National Association of Corrosion Engineers (NACE) Mexican Section. |
| 28 | <i>Conference proceedings — Published</i> EC Alcocer Campos, X Domínguez Benetton (2008) Electrochemical evaluation of a microbial consortium during anaerobic carbon steel corrosion under gasoline-supplemented electrolytes, National Association of Corrosion Engineers (NACE) Mexican Section.. |

| No. | Reference |
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| 29 | <i>Conference proceedings — Published</i> X Dominguez Benetton , H. Castañeda (2005) SRB-Biofilm growth and influence in corrosion monitoring by electrochemical impedance spectroscopy, Corrosion 2005, National Association of Corrosion Engineers (NACE), TEG-187. Paper 05486. |
| 30 | <i>Conference proceedings — Published</i> I Rosas Hernández, X Domínguez Benetton, ET Quintana Cano (2008) Facultative bacteria resistant to mercurial compounds isolated from industrial environments with gasoline, Proceedings of the V International Congress of Biochemical Engineering, Mexico. |
| 31 | <i>Conference proceedings — Published</i> X Dominguez Benetton , H Castañeda (2004) Impedance distributions applied to a transport model for corrosion-influencing anaerobic biofilms (Distribuciones de impedancia aplicadas a un modelo de transporte para biopelículas anaerobias que influyen en la corrosión), Proceedings of the XIX Congress of the Mexican Electrochemical Society, BE.2(1-13). |
| 32 | <i>Conference proceedings — Published</i> A Padilla-Viveros, X Domínguez Benetton, C Valenzuela Balderas, E Garcia-Ochoa, D Alazard (2003) Steel corrosion by sulphate-reducing bacteria grown under oligotrophic conditions. Proceedings of the Second International Conference of Petroleum Biotechnology, Mexico. |

BOOKS

| No. | Reference |
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| 33 | <i>Book co-author — Published</i> X Domínguez Benetton et al. over 50 contributors (2010) Microbial genetic resources of Mexico: national diagnosis. SUBNARGEM, SAGARPA Eds. pp 161, Mexico. ISBN: 978-607-715-027-5. |
| 34 | <i>Book co-author — Published</i> X Domínguez Benetton , et al. 21 contributors (2005) Petroleum transformation (Transformación del Petróleo). In: Visual petroleum library (Biblioteca Visual del Petróleo). Grupo de Fomento Editorial Instituto Mexicano del Petróleo, Ed. Diagrama. 3 Volumes. Mexico. ISBN: 970-9796-00-3.. |

BOOK CHAPTERS

| No. | Reference |
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| 35 | <i>Chapter in book — Published</i> X Dominguez-Benetton , S Sevda, E Dalak, TR Sreekrishnan, K Vanbroekhoven, D Pant (2012) Microbial Electrochemical Cells (MXCs): Novel Approaches for Sustainable Energy Production and Fuel Recovery from Wastes and Wastewaters Biofuels in Practice: Technological, socio-economical and Sustainability, ILM Publications pp 270. ISBN-13: 978-1906799113. |
| 36 | <i>Chapter in book — Published</i> X Dominguez-Benetton , G Ciudad (2011) Bioelectrochemical systems. In: Production of biofuels and its impacts: cases of study. Patiño Díaz R.T., Valdés Delgado A.F. Eds. BIALEMA Network, CYTED, pp. 64-76. Cuba. ISBN: 978-959-713-685-9. |

PATENTS

I do not have granted patents up to date, but I have patent applications wherein two (marked by *) are being evaluated for industrial pre-feasibility or for spin-off prospection.

| No. | Reference | Priority date | Status |
|-----|--|---------------|----------------------|
| 37 | <i>Patent application — EP15150649 *</i> X Dominguez Benetton , Y Alvarez Gallego, Porto-Carrero C, Chayambuka K, Gijbels K (2015) An electrochemical process for isolating a metal or metalloid ion from a water soluble precursor. | 09.01.2015 | European Application |
| 38 | <i>Patent application — EP14179927 *</i> X Dominguez Benetton , Y Alvarez-Gallego (2014) A device and method for the production of hydrogen peroxide. | 05.08.2014 | European Application |
| 39 | <i>Patent application — WO2014131799 A1</i> D Pant D, Y Alvarez-Gallego, X Dominguez Benetton , B Bouwman (2013) Current density distributor for use in an electrode. | 26.02.2013 | PCT |
| 40 | <i>Patent application — EP15150649 A1</i> L Soussan, X Dominguez-Benetton , B Erable, L Etcheverry, ML Delia, A Bergel (2011) Process for the electrochemical reduction of CO ₂ catalysed by an electrochemically active biofilm. | 31.08.2011 | PCT |

PRESENTATIONS

SCIENTIFIC CONFERENCES

| No. | Reference |
|-----|---|
| 1 | Bernardino Virdis and X. Dominguez-Benetton (2015) Reduced graphene oxide (rGO) fosters thick and highly-performing percolating electrochemically-active biofilms. 5 th International ISMET Meeting. Tempe, Arizona, USA. |
| 2 | X. Dominguez-Benetton (2015) Bare crystalline nanoparticles made electrochemically. Third International Conference on Advanced Complex Inorganic Nanomaterials ACIN 2015, Namur, Belgium |
| 3 | X. Dominguez-Benetton , Modin O., ter Heijne A., Hennebel K., Rabaey K. (2014) Bioelectrochemical recovery of metals: where are we and where to concentrate efforts in the framework of international criticality? 2 nd European Meeting of the International Society of Microbial Electrochemistry and Technology, Alcala de Henares, Spain. |
| 4 | X. Dominguez-Benetton , Bergel A., Pant D., Rabaey K. (2013) The reality behind the race for the highest current density with electrochemically-active biofilms. Oral presentation. 64th Annual Meeting of the International Society of Electrochemistry, Queretaro, Mexico. |
| 5 | X. Dominguez-Benetton , Korneel Rabaey (2013) Microbial electrocatalysis. Tutorial Lecture. 64th Annual Meeting of the International Society of Electrochemistry, Queretaro, Mexico. <i>Invited</i> . |
| 6 | Vanbroekhoven K., Sharma M., X. Dominguez-Benetton , Sarma P.M., Pant D. (2013) Bioelectrocatalyzed reduction of organic acids by sulfate reducing bacteria. Oral presentation. 64th Annual Meeting of the International Society of Electrochemistry, Queretaro, Mexico. |
| 7 | Alvarez-Gallego Y., Dalak E., X. Dominguez-Benetton (2013) Fuel cells revisited as chemical production Technology. 64th Annual Meeting of the International Society of Electrochemistry, Queretaro, Mexico. |
| 8 | X. Dominguez-Benetton , Sevda S., Pant D. (2013) EIS response of a microbial fuel cell operating in continuous mode as a function of hydraulic retention time and external resistance. In 9th International Symposium on Electrochemical Impedance Spectroscopy. Oral presentation. Okinawa, Japan. |
| 9 | X. Dominguez-Benetton , Sharma Mohita, Sarma Priyangshu M., Alvarez-Gallego Yolanda, Pant D. (2013) Parametric Frequency Response Analysis of Cathodic SRB Electrocatalysis. In 9th International Symposium on Electrochemical Impedance Spectroscopy. Oral presentation. Okinawa, Japan. |
| 10 | X. Dominguez-Benetton , Dalak E., Alvarez-Gallego Y. (2013) EIS as electroanalytic tool for in-situ determination of hydroxylamine product in a NO-H ₂ fuel cell. In 9th International Symposium on Electrochemical Impedance Spectroscopy. Oral presentation. Okinawa, Japan. |

| No. | Reference |
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| 11 | X. Dominguez-Benetton, Cho E., Royhman D., Wimmer M.A., Shokuhfar T., Sukotjo C. Mathew T. M. (2013) Frequency response of dental implant materials exposed to nicotine under physiological conditions. In 9th International Symposium on Electrochemical Impedance Spectroscopy. Oral presentation. Okinawa, Japan. |
| 12 | X. Dominguez-Benetton, Dalak E., Alvarez-Gallego Y. (2013) Reactor and stack design, validation and optimization for the co-generation of chemicals and electricity through multiphysics modelling. In 9th European Congress of Chemical Engineering. The Hague, The Netherlands. |
| 13 | Dalak E., Vanbroekhoven K., Pant D., Dominguez-Benetton X. (2013) Multiphysics modeling as an efficient approach for design and optimization of single and stack microbial fuel cells. In 9th European Congress of Chemical Engineering. The Hague, The Netherlands. |
| 14 | Pant D., Alvarez Gallego Y., Bajracharya S., Dalak E., X. Dominguez-Benetton, Sharma M., Vanbroekhoven K. (2013) Development and characterization of low-cost, gas porous electrodes based on different carbon compositions and binder types for use in bioelectrochemical systems. In 12th Topical Meeting of the International Society of Electrochemistry & XXII International Symposium on Bioelectrochemistry and Bioenergetics of the Bioelectrochemical Society. Bochum, Germany. |
| 15 | X. Dominguez-Benetton (2012) Electrochemical impedance spectroscopy in the evaluation of microbial electrochemical technologies. 1 st Meeting of the International Society of Microbial Electrochemistry and Technology ISMET. Gent, Belgium. <i>Invited</i> . |
| 16 | X. Dominguez-Benetton, Sevda S., Vanbroekhoven K., Alvarez-Gallego Y., Pant D. (2012) Progress and perspectives on the utilization and analysis of electrochemical impedance spectroscopy for the study of microbial electrochemical systems. 63th Annual Meeting of the International Society of Electrochemistry, Prague, Czech Republic. |
| 17 | X. Dominguez-Benetton, C.J. Molina Arce, S.G. Navarro Ávila, R. Burgos Castillo, C. Carrera Figueiras, J.M. Dominguez Esquivel (2009) Enhanced anodes for low cost and high power density microbial fuel cells, XVIII International Materials Research Congress, Solar-Hydrogen and Biofuels Symposium, Cancun, Quintana Roo, Mexico. |
| 18 | X. Dominguez-Benetton (2009) Novel integrated strategy toward real time monitoring and optimization of high power density microbial fuel cells, Oral presentation, XVIII International Materials Research Congress, Solar-Hydrogen and Biofuels Symposium, Cancun, Quintana Roo, Mexico. |
| 19 | X. Dominguez-Benetton (2009) The Biopharmaceutical Industry of Yucatan Symposium “Microorganisms and their application in industry and agriculture” and “South-East Mexican Region of Genetic Microbial Resources”, Merida, Yucatan, Mexico. <i>Invited</i> |
| 20 | X. Dominguez-Benetton, Sergio Giovanni Navarro Ávila, Alejandro Ávila Ortega, Cristian Carrera Figueiras (2008) Electrochemical evaluation of Ti/TiO ₂ /polyaniline anodes for microbial fuel cells using hypersaline microbial consortia for synthetic-wastewater treatment., XVII International Materials Research Congress, Solar-Hydrogen and Biofuels Symposium, Cancun, Quintana Roo, Mexico. |
| 21 | X. Dominguez-Benetton, J.A. Lopez Barrera, A. Ávila Ortega (2008) Electrochemical characterization of bacterial deterioration of quarry stone coated with hexamethyldisiloxane plasma-polymer films for historic monument-preservation and restoration, XVII International Materials Research Congress, Archeological and Arts Issues in Materials Science, Awarded as best oral presentation, Cancun, Quintana Roo, Mexico. |
| 22 | X. Dominguez-Benetton, Rojas-Herrera R., Alcocer Campos E., Martín López M. (2008) Frequency response and biodiversity analysis of carbon steel corrosion in laboratory gasoline containing devices with defined aqueous fractions. XVII International Materials Research Congress, Archeological and Arts Issues in Materials Science, Cancun, Quintana Roo, Mexico. |
| 23 | X. Dominguez-Benetton (2008) Transference of electrons between microbial biofilms and metals, IV Regional Conference on Biotechnology and Bioengineering of South-West Mexico, Merida, Yucatan. <i>Invited</i> |
| 24 | Ramirez Espinosa D., X. Dominguez-Benetton (2007) Anaerobic biofilms of gasoline pipelines and their influence in corrosion, XIV National Congress of Biotechnology and Bioengineering, Morelia, Michoacan, Mexico. |
| 25 | Nava R. Veronica, X. Dominguez-Benetton (2006) Microbial complexity and multicellular strategies related to recalcitrant compounds degradation of Mexican gasoline, UNIDO (United Nations) Bioremediation Workshop, Guanajuato, Guanajuato, Mexico. <i>Invited</i> . |
| 26 | X. Dominguez-Benetton, D. Ramirez Espinosa (2006) Biocomplexity and Bioelectrochemical Influence of Anaerobic Biofilms in Gasoline Distribution Pipelines, Corrosion of Infrastructure Section, 210th ECS Meeting (The Electrochemical Society), Cancun, Mexico. |
| 27 | X. Dominguez-Benetton, H. Castañeda (2005) SRB-Biofilm growth and influence in corrosion monitoring by electrochemical impedance spectroscopy, Paper 05486, TEG-187, Corrosion 2005, NACE, Houston, Texas, EUA. |

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| 28 | X. Dominguez-Benetton, H. Castañeda (2004) Impedance distributions applied to a transport model for anaerobic biofilms with influence in corrosion, Symposium on bioelectrochemistry, XIX National Electrochemistry Congress, San Luis Potosi, Mexico. |
| 29 | Padilla-Viveros, X. Dominguez-Benetton, C. Valenzuela Balderas, E. Garcia-Ochoa y D. Alazard (2003) Steel corrosion by sulphate-reducing bacteria grown under oligotrophic conditions, Second International Conference on Petroleum Biotechnology, Mexico. |
| 30 | X. Dominguez-Benetton, C. Valenzuela Balderas, Padilla Viveros A., Garcia Ochoa E., D. Alazard (2003) Iron corrosion as sole energy source of sulphate-reducing bacteria, X National Congress of Biotechnology and Bioengineering, Puerto Vallarta, Mexico. |

INVITED LECTURES AT SCHOLARLY INSTITUTIONS

| No. | Reference |
|-----|--|
| 31 | X. Dominguez-Benetton (2015) Reengineering electrochemistry for resource recovery: shifting the paradigm from removal to synthesis European Summer School on Electrochemical Engineering, Wetsus, Leeuwarden, The Netherlands. <i>Invited</i> |
| 32 | X. Dominguez-Benetton (2015) The paradigm shift towards resource recovery: recovery of valuable metals from wastewaters Seminar, Resource Recovery Technology Consortium, UGent, Belgium. <i>Invited</i> |
| 33 | X. Dominguez-Benetton (2014) Electro-driven separations and conversions to recover critical elements. IMETE Summer School 2014, UGent. Gent, Belgium. <i>Invited</i> |
| 34 | X. Dominguez-Benetton (2014) EIS as a tool in bioelectrochemistry. Workshop Electrochemical Impedance Spectroscopy - Fundamentals and Applications. DECHEMA. Frankfurt, Germany. <i>Invited</i> |
| 35 | X. Dominguez-Benetton (2007) Industrial Biofilms, Biocorrosion and Microbial Fuel Cells: Electrochemical Monitoring, XIX Culture and Science Week, Chemical Engineering Faculty, Autonomous University of Yucatan, Merida, Yucatan. <i>Invited</i> |
| 36 | X Dominguez-Benetton (2007) Biocomplexity and bioelectrochemistry in gasoline-distribution pipelines, CIIEMAD, IPN, Mexico. <i>Invited</i> |
| 37 | X Dominguez-Benetton (2007) Biocomplexity and Bioelectrochemical Influence of Biofilms in Carbon Steel Deterioration, Institute of Environment & Resources. Technical University of Denmark, Copenhagen, Denmark. <i>Invited</i> |
| 38 | X Dominguez-Benetton (2006) History and Perspectives of Biotechnology, Graduate Social Sciences and Humanities Division, UAM-Xochimilco, Mexico. <i>Invited</i> |
| 39 | X Dominguez-Benetton (2006) Biofilms and their bioelectrochemical influence: modelling, monitoring and control, UPIBI-IPN, Mexico, March 2006. <i>Invited</i> |
| 40 | X Dominguez-Benetton, C. Valenzuela Balderas, D. Alazard (2003) Study of the initiation of microbial corrosion of pipelines by anaerobic sulphide-producing bacteria, Final Projects Journey, UPIBI-IPN. |

POSTER PRESENTATIONS AT SCIENTIFIC CONFERENCES

| No. | Reference |
|-----|--|
| 41 | S Rajamani, JM Dominguez, Y Alvarez-Gallego, X. Dominguez-Benetton (2015) Ionic liquids as effective catalysts for hydrocracking: a proof of concept. Petrophase 2015, Cancun, Mexico. |
| 42 | Bajracharya S., Sandipam S., X. Dominguez-Benetton, Vanbroekhoven K., Pant D. (2013) Microbial/enzymatic electrosynthesis in bioelectrochemical systems for renewable chemical production. 2nd CO ₂ conference, Essen, Germany. |
| 43 | Alvarez-Gallego Y., Sheng S., X. Dominguez-Benetton, Pant D., Pescarmona P., Vankelecom I.F.J., Genne I., Diels L. (2012) Gas diffusion electrodes for the synthesis of hydroxylamine in a NO-H ₂ Fuel Cell, Poster presentation, 63th Annual Meeting of the International Society of Electrochemistry, Prague, Czech Republic. |
| 44 | X. Dominguez-Benetton, Dalak. E., Vanbroekhoven K., Pant D. (2012) Multiphysics modeling as an efficient tool for design and optimization of microbial-fuel cells, 63 th Annual Meeting of the International Society of Electrochemistry, Prague, Czech Republic. |

| No. | Reference |
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| 45 | S.G. Navarro Ávila, R. Burgos Castillo, C. Carrera Figueiras, J.M. Dominguez Esquivel, X. Dominguez-Benetton (2009) New microbial fuel cell design using polyaniline-coated anodes and <i>Geobacter sulfurreducens</i> , XVIII International Materials Research Congress, Solar-Hydrogen and Biofuels Symposium, Cancun, Quintana Roo, Mexico. |
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| 48 | Sergio G. Navarro Ávila, X. Dominguez-Benetton (2008) Design, Construction, Operation and Electrochemical Characterization of Microbial Fuel Cells using Polyaniline-Coated Anodes , XVII International Materials Research Congress, Solar-Hydrogen and Biofuels, <u>Awarded second best poster</u> , presentation in Solar-Hydrogen and Biofuels Symposium, Cancun, Quintana Roo. |
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| 51 | Adriana I. Chable Cortez, Cristian Carrera Figueiras, Alejandro Ávila Ortega, X. Dominguez-Benetton (2008) Vinyl-trietoxi-silane as a coating for preventing biodeterioration of Macedonia Maya , IV Regional Conference on Biotechnology and Bioengineering of South-West Mexico, Merida, Yucatan. |
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| 53 | Navarro Ávila Sergio, Cristian Carrera Figueiras, X. Dominguez-Benetton (2008) Microbial fuel cells with anodes coated with polyaniline for wastewater remediation , IV Regional Conference on Biotechnology and Bioengineering of South-West Mexico, Merida, Yucatan. |
| 54 | X. Dominguez-Benetton , Rosas Hernández I., Quintana Cano E. T. (2007) Facultative bacteria resistant to mercurial compounds isolated from industrial environments with gasoline , III National Congress of Student Research and III Congress of Polytechnic Research, Mexico. |
| 55 | Rosas Hernández I., T. Quintana Erika, X. Dominguez-Benetton (2006) The organomercurials remediation challenge in Mexico: alternatives for microbial bioaccumulation and biodegradation , UNIDO (United Nations) Bioremediation Workshop, Guanajuato, Guanajuato, Mexico. |
| 56 | Mata R. Cristian, Ramirez Espinosa D., X. Dominguez-Benetton , Nava R. Veronica (2006) Characterization of gasoline pipelines' microbial populations potentially useful for bioremediation UNIDO (United Nations) Bioremediation Workshop, Guanajuato, Guanajuato, Mexico. |
| 57 | D. Ramirez Espinosa, X. Dominguez-Benetton (2006) Study of Anaerobic Biofilms from Gasoline Distribution Pipelines , Corrosion General Poster Session and General Society Student Poster Session, 210th ECS Meeting (The Electrochemical Society), Cancun, Mexico. |

PUBLICATIONS ON THE GO

ARTICLES

| No. | Type of paper | Reference | Journal |
|-----|--------------------|---|---|
| 1 | Research paper | <u>Ready for submission (waiting for IP clearance)</u> S Rajamani, JM Dominguez, Y Alvarez-Gallego, X Dominguez-Benetton <u>Ionic liquids as catalysts for hydrocracking</u> | <i>Chemical Communications</i> IF 6.834 |
| 2 | Perspective Review | <u>Ready for submission (waiting for IP clearance)</u> S Rajamani, JM Dominguez, FI Lopez, MA Vázquez, Y Alvarez-Gallego, X Dominguez-Benetton <u>Upgrading of crude oil properties with ionic liquids</u> | <i>Chemical Society Reviews</i> IF 33.383 |
| 3 | Research paper | <u>Ready for submission (waiting for student to submit)</u> SJ Andersen, K Rabaey, X Dominguez Benetton <u>Electrochemical impedance of anion exchange membrane electrolysis for recovery and acidification of acetate</u> | <i>Journal of Membrane Science</i> IF 5.056 |
| 4 | Research paper | <u>Ready for submission (adjusting format as per journal requirements)</u> M Sharma, D Pant, Y Alvarez-Gallego, PM Sarma, W Achouak, X Dominguez Benetton <u>Study on properties of electrode materials for designing suitable biocathode for microbial electrosynthesis</u> | <i>Energy and Environmental Science</i> IF 20.523 |
| 5 | Review | <u>Invited review (submitted – under revision)</u> X Dominguez-Benetton, Oskar Modin, A ter-Heijne, Jeet Chandrakant Varia, J Fransaer, T Hennebel, K Rabaey <u>Metal recovery by microbial electro-metallurgy</u> | <i>Progress in Materials Science</i> IF 27.417 |
| 6 | Research paper | <u>Submitted (submitted MERES-15-00458-3)</u> X Dominguez-Benetton, JJ Godon , R Rousseau, B Erable, A Bergel, ML Délia <u>Exploring natural vs. synthetic minimal media to boost current generation with electrochemically-active marine biofilms</u> | <i>Journal of Environmental Chemical Engineering</i> IF 1.054 |
| 7 | Review | <u>Invited review (submitted – under revision)</u> S Rajamani JM Dominguez-Esquivel, AD Miranda-Olvera, FI Lopez, MA Vázquez, M Ramos, Y Alvarez-Gallegoa, X Dominguez-Benetton* <u>Upgrading crude oil using ionic liquids</u> | <i>Chemical Society Reviews</i> IF 33.383 |