Ficha Docente Formulario Antecedentes

Nombre del académico	**Juan Manuel Lema Rodicio**
Carácter del vínculo (claustro/núcleo, colaborador o visitante)	Colaborador
Título, institución, país	Licenciado en ciencias Químicas, Universidad de Santiago de Compostela, España.
Grado máximo (especificar área disciplinar), institución, año de graduación y país[1]	Doctor en ciencias Químicas, Universidad de Santiago de Compostela, 1975, España.
Línea(s) de investigación o áreas de trabajo	Tratamiento biológico de emisiones contaminantes industriales, Área de Biotecnología Ambiental.
Número de tesis de magíster[2] dirigidas en los últimos 10 años (finalizadas)	***2006-2010*** ***No aplica*** ***2011-2016*** ***No aplica***
Número de tesis de doctorado dirigidas en los últimos 10 años (finalizadas)	***2006-2010*** 1. Jorge Rodríguez Rodríguez (2006) Modelling anaerobic mixed culture fermentations Universidad de Santiago de Compostela. 2. Gemma Eibes González (2007) Degradación enzimática de hidrocarburos aromáticos policíclicos mediante manganeso peroxidasa en reactores con disolventes orgánicos. Universidad de Santiago de Compostela. 3. Francisco José Molina Pérez (2007) Comportamiento dinámico de digestores anaerobios Universidad de Santiago de Compostela. 4. Gemma Eibes González (2007) Degradación enzimática de hidrocarburos aromáticos policíclicos mediante manganeso peroxidasa en reactores con disolventes orgánicos. Universidad de Santiago de Compostela. 5. Sonia Suárez Martínez (2008) Strategies for the treatment of municipal and hospital wastewaters containing Pharmaceutical and Personal Care Products. Universidad de Santiago de Compostela. 6. Rocío Pena Rois (2009). Alternativas para la optimización de la producción industrial de bioetanol a partir de cereales. Universidad de Santiago de Compostela.

[1] Si se estima necesario, indicar todos los grados académicos obtenidos o equivalentes.
[2] Marcar con negrilla las tesis dirigidas en el mismo programa.

	7. Carlos García Diéguez (2010) Modelling and control of anaerobic wastewater treatment processes. Universidad de Santiago de Compostela ***2011-2016*** 1. Denisse Serrano Palacios (2011). Effect of activated carbon on the removal of organic micropollutantws in activated sludge and membrane bioreactors. Universidad de Santiago. 2. Rubén Reif López (2011). Feasibility of membrane bioreactors for the removal of pharmaceutical and personal care products present in sewage. Universidad de Santiago de Compostela 3. Angélica I. Rodarte Morales (2012) Degradation of pharmaceutical compounds by ligninolytic fungi. Universidad de Santiago de Compostela. 4. Roberto Taboada Puig (2013) Removal of Endocrine Disrupting Chemicals by the Ligninolytic Enzyme Versatile Peroxidase. Universidad de Santiago de Compostela. 5. María López Abelairas (2014) Bioprocesses for production of fuels, chemicals and polymers from lignocellulosic materials. Universidad de Santiago de Compostela. 6. Eduardo Fernandez Fontaíña (2015). Removal mechanisms of organic micropollutants in activated sludge reactors. Universidad de Santiago de Compostela. 7. Leticia Regueiro Abelleira (2015) Microbiome-based monitoring as Strategy for an enhanced operation of anaerobic (co-) digestion systems. Universidad de Santiago de Compostela. 8. Santiago García Gen (2015) Modelling, optimisation and control of anaerobic co-digestion processes. Universidad de Santiago de Compostela. 9. Rebeca González Cabaleiro (2015) Bioenergetics-based modelling of microbial ecosystems for biotechnological applications. Universidad de Santiago de Compostela. 10. Natalia Gomez Venegas (2016). Exploitation of the ligninocellulosic by-product raquis, obtained from the extraction of palm oil for the production of etanol. Universidad de Antioquia. Colombia
Número de tesis dirigidas <u>en el programa</u>, en los últimos 10 años (finalizadas)	***2006-2010*** ***No aplica*** ***2010-2016*** 1. Francisca Rosenkranz Fernández (2013) Estudio del comportamiento de reactores anaerobios de tipo ASBR frente a compuestos de difícil degradación y/o efectos negativos. **Doctorado en Biotecnología;**

	PUCV & USM.
Listado de publicaciones en los últimos 10 años. En caso de publicaciones con más de un autor, indicar en negrita el <u>autor principal</u>.	**Publicaciones indexada ISI**: ***2006-2010*** 1. **M. Carballa**, F. Omil, A.C. Alder, J.M. Lema **(2006)**. "Comparison between the conventional anaerobic digestion of sewage sludge and its combination with a chemical or thermal pre-treatment concerning the removal of pharmaceuticals and personal care products. **Water Science and Technology**. 53 (8): 109-117; DOI: 10.2166/wst.2006.241; ISSN 0273-1223; IF (2015) 1.064 2. P. Fernández-Álvarez, J. Vila, **J.M. Garrido**, M. Grifoll, J.M. Lema **(2006)**. "Trials of bioremediation on a beach affected by the heavy oil spill of the Prestige". **Journal of Hazardous Materials**. 137 (3): 1523-1531; DOI: 10.1016/j.jhazmat.2006.04.035; ISSN 0304-3894; IF (2015) 4.836 3. **J. Rodríguez**, J.M. Lema, C.C.M. van Loosdrecht, R. Kleerebezem **(2006)**. "Variable stoichiometry with thermodynamic control in ADM1". **Water Science & Technology**. 54 (4): 101-110; DOI: 10.2166/wst.2006.531; ISSN 0273-1223; IF (2015) 1.064 4. L. Valentín, G. Feijoo, **M.T. Moreira**, J.M. Lema **(2006)**. Biodegradation of polycyclic aromatic hydrocarbons in forest and salt marsh soils by white-rot fungi". **International Biodeterioration and Biodegradation**. 58: 15-21; DOI: 10.1016/j.ibiod.2006.04.002; ISSN 0964-8305; IF (2015) 2.429 5. **J. Rodríguez**, G. Ruiz, F. Molina, E. Roca, J.M. Lema **(2006)**. "A hydrogen-based variable-gain controller for anaerobic digestion processes". **Water Science & Technology**. 54 (2): 57-62; DOI: 10.2166/wst.2006.486; ISSN 0273-1223; IF (2015) 1.064 6. G. Eibes, T. Cajthaml, M.T. Moreira, **G. Feijoo**, J.M. Lema **(2006)**. "Enzymatic degradation of anthracene, dibenzothiophene and pyrene by manganese peroxidase in media containing acetone". **Chemosphere**. 64: 408-414; DOI: 10.1016/j.chemosphere.2005.11.075; ISSN 0045-6535; IF (2015) 3.698 7. **J. Rodríguez**, R. Kleerebezem, J.M. Lema, M. van Loosdrecht **(2006)**. "Modeling product formation in anaerobic mixed culture fermentations". **Biotechnology and Bioengineering**. 93 (3): 592-606; DOI: 10.1002/bit.20765; ISSN 0006-3592; IF (2015) 4.243 8. A. Franco, E. Roca, **J.M. Lema (2006)**. "Granulation in high-load denitrifying upflow sludge bed (USB) pulsed reactors". **Water Research**. 40 (5): 871-880; DOI: 10.1016/j.watres.2005.11.044; ISSN 0043-1354; IF (2015) 5.991 9. J.C. Quintero, M.T. Moreira, J.M. Lema, **G. Feijoo (2006)**. "An

anaerobic bioreactor allows the efficient degradation of HCH isomers in soil slurry". **Chemosphere**. 63 (6): 1005-1013; DOI: 10.1016/j.chemosphere.2005.08.043; ISSN 0045-6535; IF (2015) 3.698

10. **C. López**, M.T. Moreira, G. Feijoo, J.M. Lema **(2007)**. "Dynamic modeling of an enzymatic membrane reactor for the treatment of xenobiotic compounds". **Biotecnnology and Bioengineering**. 97 (5): 1128-1137; DOI: 10.1002/bit.21311; ISSN 0006-3592; IF (2015) 4.243

11. P. Fernández-Álvarez, J. Vila, **J. M. Garrido**, M. Grifoll, G. Feijoo, J.M. Lema **(2007)**. "Evaluation of biodiesel as bioremediation agent for the treatment of the shore affected by the heavy oil spill of the Prestige". **Journal of Hazardous Materials**. 147 (3): 914-922; DOI: 10.1016/j.jhazmat.2007.01.135; ISSN 0304-3894; IF (2015) 4.836

12. **F. Molina**, G. Ruiz-Filippi, C. García, E. Roca, J.M. Lema **(2007)**. "Winery effluent treatment at an anaerobic hybrid USBF pilot plant under normal and abnormal operation". **Water Science and Technology**. 56 (2): 25-31; DOI: 10.2166/wst.2007.468; ISSN 0273-1223; IF (2015) 1.064

13. **B. Fernández**, I. Seijoo, G. Ruiz-Filippi, E. Roca, L. Tarenzi, J.M. Lema **(2007)**. "Characterization, management and treatment of wastewater from white wine production". **Water Science and Technology**. 56 (2): 121-128; DOI: 10.2166/wst.2007.480; ISSN 0273-1223; IF (2015) 1.064

14. **M. Castellano**, G. Ruiz-Filippi, W. González, E. Roca, J.M. Lema **(2007)**. "Selection of variables using factorial discriminant analysis for the state identification of an anaerobic UASB-UAF hybrid pilot plant, fed with winery effluents". **Water Science and Technology**. 56 (2): 139-145; DOI: 10.2166/wst.2007.482; ISSN 0273-1223; IF (2015) 1.064

15. **M. Carballa**, F. Omil. T. Ternes, J.M. Lema **(2007)**. "Fate of pharmaceutical and personal care products (PPCPs) during anaerobic digestion of sewage sludge". **Water Research**. 41 (10): 2139-2150; DOI: 10.1016/j.watres.2007.02.012; ISSN 0043-1354; IF (2015) 5.991

16. **M. Carballa**, G. Manterola, L. Larrea, T. Ternes, F. Omil, J.M. Lema **(2007)**. "Influence of ozone pre-treatment on sludge anaerobic digestion: Removal of pharmaceutical and personal care products". **Chemosphere**. 67 (7): 1444-1452; DOI: 10.1016/j.chemosphere.2006.10.004; ISSN 0045-6535; IF (2015) 3.698

17. L. Valentín, T.A. Lu-Chau, C. López, G. Feijoo, **M.T. Moreira**, J.M. Lema **(2007)**. "Biodegradation of dibenzothiophene, fluoranthene, pyrene and chrysene in a soil slurry reactor by the white-rot fungus Bjerkandera sp BOS55". **Process Biochemistry**. 42 (4): 641-648; DOI: 10.1016/j.procbio.2006.11.011; ISSN 1359-5113; IF (2015) 2.529

	18. **A. Franco**, E. Roca, J.M. Lema **(2007)**. "Enhanced start-up of upflow anaerobic filters by pulsation". **Journal of Environmental Engineering**. 133 (2): 186-190; DOI: 10.1061/(ASCE)0733-9372(2007)133:2(186); ISSN 0733-9372; IF (2013) 1.399 19. **M. Carballa**, F. Omil, J.M. Lema **(2007)**. "Calculation methods to perform mass balances of micropollutants in sewage treatment plants. Application to pharmaceutical and personal care products (PPCPs). **Environmental Science and Technology**. 41 (3): 884-890; DOI: 10.1021/es061581g; ISSN 0013-936X; IF (2015) 5.393 20. G. Eibes, **M.T. Moreira**, G. Feijoo, A.J. Daugulis, J.M. Lema **(2007)**. "Operation of a two-phase partitioning bioreactor for the oxidation of anthracene by the enzyme manganese peroxidase". **Chemosphere**. 66: 1744-1751; DOI: 10.1016/j.chemosphere.2006.07.009; ISSN 0045-6535; IF (2015) 3.698 21. **J.C. Quintero**, M.T. Moreira, G. Feijoo, and J.M. Lema **(2008)**. "Screening of white-rot fungal species for their capacity to degrade lindane and other isomers of hexachlorocyclohexane (HCH)". **Ciencia e Investigación Agraria**. 35 (2): 123-132; ISSN 0718-1620; IF (2015) 0.404 22. **M. Carballa**, F. Omil, J.M. Lema **(2008)**. "Comparison of predicted and measured concentrations of selected pharmaceuticals, fragrances and hormones in Spanish sewage". **Chemosphere**. 72 (8): 1118-1123; DOI: 10.1016/j.chemosphere.2008.04.034; ISSN 0045-6535; IF (2015) 3.698 23. **J. Rodríguez**, J. M. Lema, R. Kleerebezem **(2008)**. "Energy-based models for environmental biotechnology". **Trends in Biotechnology**. 26 (7): 366-374; DOI: 10.1016/j.tibtech.2008.04.003; ISSN 0167-7799; IF (2015) 12.065 24. **G. Eibes**, M.T. Moreira, G. Feijoo, J.M. Lema **(2008)**. "Enzymatic degradation of low soluble compounds in monophasic water: solvent reactors. Kinetics and modeling of anthracene degradation by MnP. **Biotechnology and Bioengineering**. 100 (4): 619-626; DOI: 10.1002/bit.21806; ISSN 0006-3592; IF (2015) 4.243 25. G. Feijoo, **M.T. Moreira**, P. Álvarez, T. Lú-Chau, J.M. Lema **(2008)**. "Evaluation of the enzyme manganese peroxidase in an industrial sequence for the lignin oxidation and bleaching of eucalyptus kraft pulp". **Journal of Applied Polymer Science**. 109 (2): 1319-1327; DOI: 10.1002/app.28084; ISSN 0021-8995; IF (2015) 1.866 26. **F. Molina**, C. García, E. Roca, J.M. Lema **(2008)**. "Characterization of anaerobic granular sludge developed in UASB reactors that treat ethanol, carbohydrates and hydrolyzed protein based wastewaters". **Water Science and Technology**. 57 (6): 837-842; DOI: 10.2166/wst.2008.067; ISSN 0273-1223; IF (2015) 1.064

27. R. Reif, S. Suárez, **F. Omil**, J.M. Lema **(2008)**. "Fate of pharmaceuticals and cosmetic ingredients during the operation of a MBR treating sewage". **Desalination**. 221 (1-3): 511-517; DOI: 10.1016/j.desal.2007.01.111; ISSN 0011-9164; IF (2015) 4.412

28. **J. Rodríguez**, E. Roca, J.M. Lema, O. Bernard **(2008)**. "Determination of the adequate minimum model complexity required in anaerobic bioprocesses using experimental data". **Journal of Chemical Technology and Biotechnology**. 83 (12): 1694-1702; DOI: 10.1002/jctb.1990; ISSN 0268-2575; IF (2015) 2.738

29. **F. Omil**, H. Rojas, F. Thalasso, J.M. Lema **(2008)**. "Biofiltration of a methanol containing air strewn in a dry tubular biofilm reactor using ceramic rings as carrier". **Environmental Progress**. 27 (1): 117-124; DOI: 10.1002/ep.10249; ISSN 0278-4491; IF (2010) 1.308

30. **J. Rodríguez**, J. M. Lema, R. Kleerebezem **(2008)**. "Energy-based models for environmental biotechnology". **Trends in Biotechnology**. 26 (7): 366-374; DOI: 10.1016/j.tibtech.2008.04.003; ISSN 0167-7799; IF (2015) 12.065

31. J.M. Lema, **F. Molina**, M. Castellano, C. García, E. Roca. **(2009)**. "Selection of variables for on-line monitoring, diagnosis, and control of anaerobic digestion processes". **Water Science and Technology**. 60 (3): 615-622; DOI: 10.2166/wst.2009.379; ISSN 0273-1223; IF (2015) 1.064

32. **M. Carballa**, F. Omil, J.M. Lema **(2009)**. "Influence of different pretreatments on anaerobically digested sludge characteristics: Suitability for final disposal". **Water Air and Soil Pollution**. 199: 311-321; DOI: 10.1007/s11270-008-9880-z; ISSN 0049-6979; IF (2015) 1.551

33. F. Molina, G. Ruiz, C. García, J.M. Lema, **E. Roca (2009)**. "Pilot-scale validation of a new sensor for on-line analysis of volatile fatty acids and alkalinity in anaerobic wastewater treatment plants". **Environmental Engineering Science**. 26 (3): 641-649; DOI: 10.1089/ees.2007.0308; ISSN 1092-8758; IF (2015) 1.481

34. G. Eibes, **T.A. Lú-Chau**, J.J. Ruiz-Dueñas, G. Feijoo, M.J. Martínez A. T. Martínez, J. M. Lema **(2009)**. "Effect of culture temperature on the heterologous expression of Pleurotus eryngii versatile peroxidase in Aspergillus hosts". **Bioprocess and Biosystems Engineering**. 32: 129-134; DOI: 10.1007/s00449-008-0231-7; ISSN 1615-7591; IF (2015) 1.901

35. S. Suárez, J.M. Lema, **F. Omil (2009)**. "Pre-treatment of hospital wastewater by coagulation-flocculation and flotation". **Bioresource Technology**. 100 (7): 2138-2146; DOI: 10.1016/j.biortech.2008.11.015; ISSN 0960-8524; IF (2015) 4.917

36. **J.A. Álvarez**, L. Otero, J.M. Lema **(2010)**. "A methodology for optimising feed composition for anaerobic co-digestion of agro-industrial wastes". **Bioresource Technology**. 101 (4): 1153-1158; DOI: 10.1016/j.biortech.2009.09.061; ISSN 0960-8524; IF (2015) 4.917

37. D. Serrano, J.M. Lema, **F. Omil (2010)**. "Influence of the employment of adsorption and coprecipitation agents for the removal of PPCPs in conventional activated sludge (CAS) systems". **Water Science & Technology**. 62 (3): 728-735; DOI: 10.2166/wst.2010.914; ISSN 0273-1223; IF (2015) 1.064

38. L. Lloret, G. Eibes, T.A. Lú-Chau, **M.T. Moreira**, G. Feijoo, J.M. Lema **(2010)**. "Laccase-catalyzed degradation of anti-inflammatories and estrogens". **Biochemical Engineering Journal**. 51 (3): 1 (2015) 2.463

39. **J.A. Álvarez**, L. Otero, J.M. Lema, F. Omil **(2010)**. "The effect and fate of antibiotics during the anaerobic digestion of pig manure". **Bioresource Technology**. 101 (22): 8581-8586; DOI: 10.1016/j.biortech.2010.06.075; ISSN 0960-8524; IF (2015) 4.917

40. **A. Hospido**, M. Carballa, M.T. Moreira, F. Omil, J.M. Lema, G. Feijoo **(2010)**. "Environmental assessment of anaerobically digested sludge reuse in agriculture: Potential impacts of emerging micropollutants". **Water Research**. 44 (10): 3225-3233; DOI: 10.1016/j.watres.2010.03.004; ISSN 0043-1354; IF (2015) 5.991

41. **G. Eibes**, C. McCann, A. Pedezert, M.T. Moreira, G. Feijoo, J.M. Lema **(2010)**. "Study of mass transfer and biocatalyst stability for the enzymatic degradation of anthracene in a two-phase partitioning bioreactor". **Biochemical Engineering Journal**. 51 (1-2): 79-85; DOI: 10.1016/j.bej.2010.05.006;) ISSN 1369-703X; IF (2015) 2.463

42. S. Suárez, J.M. Lema, **F. Omil (2010)**. "Removal of Pharmaceutical and Personal Care Productys (PPCPs) under nitrifying and denitrifying and denitrifying conditions". **Water Research**. 44 (10): 3214-3224; DOI: 10.1016/j.watres.2010.02.040; ISSN 0043-1354; IF (2014) 5.991

2011-2016

1. L. Lloret, **G. Eibes**, G. Feijoo, M.T. Moreira, J.M. Lema **(2011)**. "Immobilization of laccase by encapsulation in a sol-gel matrix and its characterization and use for the removal of estrogens". **Biotechnology Progress**. 27 (6): 1570-1579; DOI: 10.1002/btpr.694; ISSN 8756-7938; IF (2015) 2.167

2. **C. López**, M.T. Moreira, G. Feijoo, J.M. Lema **(2011)**. "Economic comparison of enzymatic reactors and advanced oxidation processes applied to the degradation of phenol as a model compound". **Biocatalysis and Biotransformation**. 29 (6): 344-353; DOI: 10.3109/10242422.2011.638056; ISSN 1024-2422; IF (2015) 0.892

3. D. Serrano, S. Suárez, J.M. Lema, **F. Omil (2011)**. "Removal of persistent pharmaceutical micropollutants from sewage by addition of PAC in a sequential membrane bioreactor". **Water Research**. 45 (16): 5323-5333; DOI: 10.1016/j.watres.2011.07.037; ISSN 0043-1354; IF (2015) 5.991

4. **R. Taboada-Puig**, T. Lú-Chau, G. Eibes, M.T. Moreira, G. Feijoo, J.M. Lema **(2011)**. "Biocatalytic generation of Mn(III)-chelate as a chemical oxidant of different Environmental Contaminants". **Biotechnology Progress**. 27 (3): 668-676; DOI: 10.1002/btpr.585; ISSN 8756-7938; IF (2015) 2.167

5. **A.I. Rodarte-Morales**, G. Feijoo, M.T. Moreira, J.M. Lema **(2011)**. "Degradation of selected pharmaceutical and personal care products (PPCPs) by white-rot fungi". **World Journal of Microbiology and Biotechnology**. 27 (8): 1839-1846; DOI: 10.1007/s11274-010-0642-x; ISSN 0959-3993; IF (2015) 1.532

6. **R. Reif**, A. Besancon, K. Le Corre, B. Jefferson, J.M. Lema, F. Omil **(2011)**. "Comparison of PPCPs removal on a parallel-operated MBR and AS system and evaluation of effluent post-treatment on vertical flow reed beds". **Water Science & Technology**. 63 (10): 2411-2417; DOI: 10.2166/wst.2011.123; ISSN 0273-1223; IF (2015) 1.064

7. **G. Eibes**, G. Dibernardi, G. Feijoo, M.T. Moreira, J.M. Lema **(2011)**. "Oxidation of pharmaceutically active compounds by a ligninolytic fungal peroxidase". **Biodegradation**. 22 (3): 539-550; DOI: 10.1007/s10532-010-9426-0; ISSN 0923-9820; IF (2015) 2.208

8. R. Taboada-Puig, C. Junghanns, P. Demarche, M.T. Moreira, G. Feijoo, J.M. Lema, **S.N. Agathos (2011)**. "Combined cross-linked enzyme aggregates from versatile peroxidase and glucose oxidase: Production, partial characterization and application for the elimination of endocrine disruptors". **Bioresource Technology**. 102 (11): 6593-6599; DOI: 10.1016/j.biortech.2011.03.018; ISSN 0960-8524; IF (2015) 4.917

9. **R. Reif**, A. Santos, S. J. Judd, J.M. Lema, F. Omil **(2011)**. "Occurrence and fate of pharmaceutical and personal care products in a sewage treatment works". **Journal of Environmental Monitoring**. 13: 137-144; DOI: 10.1039/c0em00175a; ISSN 1464-0325; IF (2014) 2.179

10. R. Taboada-Puig, T. Lú-Chau, **M.T. Moreira**, G. Feijoo, M.J. Martínez, J.M. Lema **(2011)**. "A new strain of Bjerkandera sp. production, purification and characterization of versatile peroxidase". **World Journal of Microbiology and Biotechnology**. 27 (3): 115-122; DOI: 10.1007/s11274-010-0435-2; ISSN 0959-3993; IF (2015) 1.532

	11. **L. Lloret**, G. Eibes, G. Feijoo, M.T. Moreira, J.M. Lema **(2012)**. "Continuous operation of a fluidized bed reactor for the removal of estrogens by immobilized laccase on Eupergit supports". **Journal of Biotechnology**. 162 (4): 404-406; DOI: 10.1016/j.jbiotec.2012.04.007; ISSN 0168-1656; IF (2015) 2.667 12. L. Regueiro, P. Veiga, M. Figueroa, J. Alonso-Gutiérrez, A.J.M. Stams, J.M. Lema, **M. Carballa (2012)**. "Relationship between microbial activity and microbial community structure in six full-scale anaerobic digesters". **Microbiological Research**. 167 (10): 581-589; DOI: 10.1016/j.micres.2012.06.002; ISSN 0944-5013; IF (2015) 2.723 13. E. Fernández-Fontaíña, F. Omil, J.M. Lema, **M. Carballa (2012)**. "Influence of nitrifying conditions on the biodegradation and sorption of emerging micropollutants". **Water Research**. 46 (16): 5434-5444; DOI: 10.1016/j.watres.2012.07.037; ISSN0043-1354; IF (2015) 5.991 14. L. Regueiro, **M. Carballa**, J.A. Álvarez, J.M. Lema **(2012)**. "Enhanced methane production from pig manure anaerobic digestion using fish and biodiesel wastes as co-substrates". **Bioresource Technology**. 123: 507-513; DOI: 10.1016/j.biortech.2012.07.109; ISSN 0960-8524; IF (2015) 4.917 15. **A. Rodarte**, G. Feijoo, M.T. Moreira, J.M. Lema **(2012)**. "Operation of stirred tank reactors (STRs) and fixed-bed reactors (FBRs) with free and immobilized Phanerochaete chrysosporium for the continuous removal of pharmaceutical compounds". **Biochemical Engineering Journal**. 66: 38-45; DOI: 10.1016/j.bej.2012.04.011; ISSN 1369-703X; IF (2015) 2.463 16. **S. Suárez**, R. Reif, J.M. Lema, F. Omil **(2012)**. "Mass balance of pharmaceutical and personal care products in a pilot-scale single-sludge system: Influence of T, SRT and recirculation ratio. **Chemosphere**. 89 (2): 164-171; DOI: 10.1016/j.chemosphere.2012.05.094; ISSN 0045-6535; IF (2015) 3.698 17. A. Arca-Ramos, **G. Eibes**, M.T. Moreira, G. Feijoo, J.M. Lema **(2012)**. "Surfactant-assisted two phase partitioning bioreactors for laccase.-catalyzed degradation of anthracene". **Process Biochemistry**. 47 (7): 1115-1121; DOI: 10.1016/j.procbio.2012.04.002; ISSN 1359-5113; IF (2015) 2.529 18. C. Mery, L. Guerrero, J. Alonso-Gutiérrez, M. Figueroa, J. M. Lema, S. Montalvo, **R. Borja (2012)**. "Evaluation of natural zeolite as microorganism support medium in nitrifying batch reactors: Influence of zeolite particle size". **Journal of Environmental Science and Health. Part A: Toxic/Hazardous Substances and Environmental Engineering**. 47 (3): 420-427; DOI: 10.1080/10934529.2012.646129; ISSN 1093-4529; IF (2015) 1.276

19. L. Lloret, F. Hollmann, **G. Eibes**, G. Feijoo, M.T. Moreira, J.M. Lema **(2012)**. "Immobilisation of laccase on Eupergit supports and its application for the removal of endocrine disrupting chemicals in a packed-bed reactor". **Biodegradation**. 23 (3): 373-386; DOI: 10.1007/s10532-011-9516-7; ISSN 0923-9820; IF (2015) 2.208

20. L. Lloret**, G. Eibes**, G. Feijoo, M.T. Moreira, J.M. Lema **(2012)**. "Degradation of estrogens by laccase from Myceliophthora thermophila in fed-batch and enzymatic membrane reactors". **Journal of Hazardous Materials**. 213: 175-183; DOI: 10.1016/j.jhazmat.2012.01.082; ISSN 0304-3894; IF (2015) 4.836

21. **A.I. Rodarte-Morales**, G. Feijoo, M.T. Moreira, J.M. Lema **(2012)**. "Biotransformation of three pharmaceutical active compounds by the fungus Phanerochaete chrysosporium in a fed batch stirred reactor under air and oxygen supply". **Biodegradation**. 23 (1): 145-156; DOI: 10.1007/s10532-011-9494-9; ISSN 0923-9820; IF (2015) 2.208

22. **L. Lloret**, G. Eibes, M.T. Moreira, G. Feijoo, J.M. Lema **(2013)**. "Removal of Estrogenic Compounds from Filtered Secondary Wastewater Effluent in a Continuous Enzymatic Membrane Reactor. Identification of Biotransformation Products". **Environmental Science and Technology**. 47 (9): 4536-4543; DOI: 10.1021/es304783k; ISSN 0013-936X; IF (2015) 5.393

23. **R. Taboada-Puig**, T.A. Lú-Chau, M.T. Moreira, G. Feijoo, J.M. Lema **(2013)**. "Activation of kraft lignin by an enzymatic treatment with a versatile peroxidase from Bjerkandera sp. R1". **Applied Biochemistry and Biotechnology**. 169 (4): 1262-1278; DOI: 10.1007/s12010-012-0023-z; ISSN 0273-2289; IF (2015) 1.606

24. **L. Lloret**, G. Eibes, M.T. Moreira, G. Feijoo, J.M. Lema, M. Miyazaki **(2013)**. "Improving the catalytic performance of laccase using a novel continuous-flow microreactor". **Chemical Engineering Journal**. 223: 497-506; DOI: 10.1016/j.cej.2013.03.018; ISSN 1385-8947; IF (2015) 5.310

25. E. Fernández-Fontaíña, I. Pinho, **M. Carballa**, F. Omil, J.M. Lema **(2013)**. "Biodegradation kinetic constants and sorption coefficients of micropollutants in membrane bioreactors". **Biodegradation**. 24 (2): 165-177; DOI: 10.1007/s10532-012-9568-3; ISSN 0923-9820; IF (2015) 2.208

26. P. Dagá, **G. Feijoo**, M.T. Moreira, D. Costas, A.G. Villanueva, J.M. Lema **(2013)**. "Bioencapsulated probiotics increased survival, growth and improved gut flora of turbot (Psetta maxima) larvae". **Aquaculture International**. 21 (2): 337-345; DOI: 10.1007/s10499-012-9556-y; ISSN 0967-6120; IF (2015) 0.960

27. **L. Lloret**; G. Eibes; M.T. Moreira; G. Feijoo; J.M. Lema. **(2013)** On the use of a high-redox potential laccase as na alternative for the transformation of non-steroidal anti-inflammatory drugs (NSAIDs). **Journal of Molecular Catalysis B: Enzymatic**. 97, pp. 233 - 242. ISSN 1381-1177; IF (2015) 2.189

28. M. López-Abelairas; R. Pena; L. Fleischhacker; **T.A. Lú-Chau**; J.M. Lema **(2013)**. Operational strategies for producing bioethanol in a continuous single-stage reactor. **Bioprocess and Biosystems Engineering**. 36 - 12, pp. 1929 - 1937. ISSN 1615-7591; IF (2015) 1.901

29. **F. Rosenkranz**; L. Cabrol; M. Carballa; A. Donoso-Bravo; L. Cruz; G. Ruiz-Filippi; R. Chamy; J.M. Lema. **(2013)** Relationship between phenol degradation efficiency and microbial community structure in an anaerobic SBR. **Water Research**. 47 - 17, pp. 6739 - 6749. ISSN 0043-1354; IF (2015) 5.991

30. **R. González-Cabaleiro**; J.M. Lema; J. Rodríguez; R. Kleerebezem **(2013)**. Linking thermodynamics and kinetics to assess pathway reversibility in anaerobic bioprocesses. **Energy & Environmental Science**. 6, pp. 3780 - 3789. ISSN 1754-5692; IF (2015) 25.427

31. **M. López-Abelairas**; M. Álvarez-Pallín; D. Salvachúa; T.A. Lú-Chau; M.J. Martínez; J.M. Lema **(2013)**. Optimisation of the biological pretreatment of wheat straw with White-rot fungi for ethanol production. **Bioprocess and Biosystems Engineering**. 36 - 9, pp. 1251 - 1260. ISSN 1615-7591; IF (2015) 1.901

32. **M. López-Abelairas**; T.A. Lú-Chau; J.M. Lema. **(2013)**. Fermentation of biologically pretreated wheat straw for etanol production: Comparison of fermentative microorganisms and process configurations. **Applied Biochemistry and Biotechnology**. 170 - 8, pp. 1838 - 1852. ISSN 0273-2289; IF (2015) 1.606

33. D. Serrano; **F. Omil**; J.M. Lema; D. Patureau **(2013)**. Application of a three-compartment model as a tool to understand the partition of 17α-Ethinylestradiol in mixed liquor systems. **Environmental Progress & Sustainable Energy**. 32 - 2, pp. 257 - 262. ISSN 1944-7442; IF (2015) 1.631

34. **L. Lloret**; G. Eibes; G. Feijoo; M.T. Moreira; J.M. Lema **(2013)**. Application of response surface methodology to study the removal of estrogens in a laccase-mediated continuous membrane reactor. **Biocatalysis and Biotransformation**. 31 - 4, pp. 197 - 207. ISSN 1024-2422; IF (2015) 0.892

35. **I. Rodríguez-Verde**; L. Regueiro; M. Carballa; A. Hospido; J.M. Lema. **(2014)** Assessing anaerobic co-digestion of pig manure with agroindustrial wastes: The link between environmental impacts and operational parameters. **Science of the Total Environment**. 497-498,

pp. 475 - 483. ISSN 0048-9697; IF (2015) 3.976

36. T. Alvariño; S. Suárez; J.M. Lema; **F. Omil**. **(2014)** Understanding the removal mechanisms of PPCPs and the influence of main technological parameters in anaerobic UASB and aerobic CAS reactors. **Journal of Hazardous Materials**. 278, pp. 506 - 513. ISSN 0304-3894; IF (2015) 4.836

37. L. Lijó; **S. González-García**; J. Bacenetti; M. Fiala; G. Feijoo; J.M. Lema; M.T. Moreira **(2014)**. Life Cycle Assessment of electricity production in Italy from anaerobic co-digestion of pig slurry and energy crops. **Renewable Energy**. 68, pp. 625 - 635. ISSN 0960-1481; IF (2015) 3.404

38. I. Rodríguez-Verde; L. Regueiro; R. Pena; J.A. Álvarez; J.M. Lema; **M. Carballa (2014)**. Feasibility of spent metalworking fluids as co-substrate for anaerobic co-digestion. **Bioresource Technology**. 155, pp. 281 - 288. ISSN 0960-8524; IF (2015) 4.917

39. **A. Arca-Ramos**; G. Eibes; M.T. Moreira; G. Feijoo **(2014)**. Vegetable oils as NAPLs in two phase partitioning bioreactors for the degradation of anthracene by laccase. **Chemical Engineering Journal**. 240, pp. 281 - 289. ISSN 1385-8947; iF (2015) 5.310

40. **M. Sharma**; P. Jain; J.L. Varanasi; B. Lal; J. Rodríguez; J.M. Lema; P.M. Sarma **(2014)**. Enhanced performance of sulfate reducing bacteria based biocathode using stainless steel mesh on activated carbon fabric electrode. **Bioresource Technology**. 150, pp. 172 - 180. ISSN 0960-8524; IF (2015) 4.917

41. S. García-Gen; J.M. Lema; **J. Rodríguez (2014)**. Generalised modelling approach for anaerobic co-digestion of fermentable substrates. **Bioresource Technology**. 147, pp. 525 - 533. ISSN 0960-8524; IF (2015) 4.917

42. Santiago García-Gen; **Jorge Rodríguez**; Juan M. Lema **(2014)**. Optimisation of substrate blends in anaerobic co-digestion using adaptive linear programming. **Bioresource Technology**. 173, pp. 159 - 167. ISSN 0960-8524; IF (2015) 4.917

43. **L. Regueiro**; M. Carballa; J.M. Lema **(2014)**. Outlining microbial community dynamics during temperature drop and subsequent recovery period in anaerobic co-digestion systems. **Journal of Biotechnology**. 192, pp. 179 - 186. ISSN 0168-1656; IF (2015) 2.667

44. **E. Fernández-Fontaíña**; M. Carballa; F. Omil; J.M. Lema **(2014)**. Modelling cometabolic biotransformation of organic micropollutants in nitrifying reactors. **Water Research**. 65, pp. 371 - 383. ISSN 0043-1354; IF (2015) 5.991

45. **L. Regueiro**; J.M. Lema; M. Carballa **(2015)**. Key microbial communities steering the functioning of anaerobic digesters during

	hydraulic and organic overloading shocks. **Bioresource Technology.** 197, pp. 208 - 216. ISSN 0960-8524; IF (2015) 4.917 46. S. García-Gen; **J. Rodríguez**; J.M. Lema **(2015)**. Control strategy for maximum anaerobic co-digestion performance. **Water Research**. 80, pp. 209 - 216. ISSN 0043-1354; IF (2015) 5.991 47. **G. Eibes**; Arca-Ramos; G. Feijoo; J.M. Lema; M.T. Moreira **(2015)**. Enzymatic technologies for remediation of hydrophobic organic pollutants in soil. **Applied Microbiology and Biotechnology**. 99 - 21, pp. 8815 - 8829. ISSN 0175-7598; IF (2015) 3.376 48. **A. Arca-Ramos**; G. Eibes; G. Feijoo; J.M. Lema; M.T. Moreira **(2015)**. Potentiality of a ceramic membrane reactor for the laccase-catalyzed removal of bisphenol. A from secondary effluents. **Applied Microbiology and Biotechnology**. 99 -21, pp. 9299 - 9308. ISSN 0175-7598; IF (2015) 3.376 49. R. Taboada-Puig; **T.A. Lú-Chau**; G. Eibes; G. Feijoo; M.T. Moreira; J. M. Lema. **(2015)**. Continuous removal of endocrine disruptors by Versatile Peroxidase using a two-stage system. **Biotechnology Progress**. 31 - 4, pp. 908 - 916. ISSN 8756-7938; IF (2015) 2.167 50. **M. Carballa**; L. Regueiro; J.M. Lema. **(2015)**. Microbial management of anaerobic digestion: exploiting the microbiome-functionality nexus. **Current Opinion in Biotechnology**. 33, pp. 103-111, ISSN 0958-1669; IF (2015) 8.314 51. J.E. Méndez-Hernández; **G. Eibes**; A. Arca-Ramos; T.A. Lú-Chau; G. Feijoo; M.T. Moreira; J.M. Lema **(2015)**. Continuous removal of Nonylphenol by Versatile Peroxidase in a two-stage membrane bioreactor. **Applied Biochemistry and Biotechnology**. 175 - 6, pp. 3038 - 3047. ISSN 0273-2289; IF (2015) 1.606 52. S. García-Gen; P. Sousbie; G. Rangaraj; J.M. Lema; **J. Rodríguez**; Jean-Philippe Steyer; M. Torrijos **(2015)**. Kinetic modelling of anaerobic hydrolysis of solid wastes, including disintegration processes. **Waste Management**. 35, pp. 96 - 104. ISSN 0956-053X; IF (2015) 3.829 53. **A. Arca-Ramos**; G. Eibes; G. Feijoo; J.M. Lema; M.T. Moreira **(2015)**. Coupling extraction and enzyme catalysis for the removal of anthracene present in polluted soils. **Biochemical Engineering Journal**. 93, pp. 289 - 293. ISSN 1369-703X; IF (2015) 2.463 54. T. Alvarino; S. Suarez; E. Katsou; J.R. Vazquez-Padin; J.M. Lema; **F. Omil**. **(2015)**. Removal of PPCPs from the sludge supernatant in a one stage nitritation/anammox process. **Water Research**. 68, pp. 701 - 709. ISSN 0043-1354; IF (2015) 5.991 55. **L. Regueiro**; P. Veiga; M. Figueroa; J.M. Lema; M. Carballa **(2015)**. Influence of transitional states on the microbial ecology of anaerobic

digesters treating solid wastes. **Applied Microbiology and Biotechnology**. 98 - 5, pp. 2015 – 2027. ISSN 0175-7598; IF (2015) 3.376

Indexada (identificar tipo de indexación: SCIELO, LATINDEX, u otra):

2006-2010

1. J.C. Quintero, G. Feijoo, J.M. Lema (2006). "Producción de enzimas ligninolíticas com hongos basidiomicetos cultivados sobre materiales lignocelulósicos". VITAE, Revista de la Facultad de Química Farmacéutica 13(2): 61-67; ISSN 0121-4004. (Latindex)

2. E. García-Sandá, J.M. Lema, F. Omil (2006). "Gestión integral de flotantes separados durante el tratamiento de aguas residuales d ela industria láctea". Alimentación Equipos y Tecnología. 212: 70-75; ISSN 0212-1689. (Latindex).

3. C. López, J.C. García-Monteagudo, M.T. Moreira, G. Feijoo, J.M. Lema (2007). "Is the presence of dicarboxylic acids required in the MnP cycle?. Study of Mn3+ stability by cyclic voltammetry". Enzyme and Microbial Technology. 42 (1): 72-75; DOI: 10.1016/j.enzmictec.2007.08.002; ISSN 0141-0229. (Scopus).

4. P. Álvarez, J.M. Garrido, J.M. Lema (2007). "Experimentos de biorrecuperación tras el accidente del Prestige". Ingeniería Química. 142-152; ISSN 1695-5196 (Latindex).

5. G. Eibes, M.T. Moreira, G. Feijoo, J.M. Lema (2008). "Tecnologías enzimáticas para la eliminación de compuestos de baja solubilidad en agua". Afinidad. 536 (65): 276-285; ISSN 0001-9704. (Latindex).

6. S. Suárez, M. Carballa, F. Omil, J.M. Lema (2008). "How are pharmaceutical and personal care products (PPCPs) removed from urban wastewaters?". Reviews in Environmental Science and Biotechnology. 7: 125-138; DOI: 10.1007/s11157-008-9130-2; ISSN 1569-1705. (Scopus).

7. M. Carballa, G. Fink, F. Omil, J.M. Lema, T. Ternes (2008). "Determination of the solid-water distribution coefficient (Kd) for pharmaceuticals, estrogens and musk fragances in digested sludged". Water Research. 42 (1-2): 287-295; DOI: 10.1016/j.watres.2007.07.012; ISSN 0043-1354. (Scopus).

8. J.M. Lema, S. Suárez (2009). "Proyecto Novedar_Consolider: Concepción de la EDAR del siglo XXI". Infoenviro. 43: 35-37; ISSN 1699-2520; (Dialnet).

9. J.M. Lema, S. Suárez (2009). "Proyecto Novedar_Consolider: Nuevas propuestas tecnológicas para recuperar recursos y mejorar la eficiencia de las EDARs". Retema. 137: 60-69; ISSN 1130-9881. (Latindex).

	10. R. Taboada-Puig, T. Lú-Chau, M.T. Moreira, G. Feijoo, J.M. Lema (2010). "In vitro enzymatic generation of Mn(III)-malonate as a chemical oxidant of Orange II". Chemical Engineering Transactions. 20: 49-54; DOI: 10.3303/CET1020009; ISSN 1974-9791. (Scopus). 11. A. Rodarte-Morales, M.T. Moreira, G. Feijoo, J.M. Lema (2010). "Evaluation of two fungal strains for the degradation of pharmaceutical and personal care products (PPCPs)". Chemical Engineering Transactions. 20: 31-36; DOI: 10.3303/CET1020006; ISSN 1974-9791. (Scopus). ***2011-2016*** 1. C. M. Araya, L. Guerrero, J. Alonso, M. Figueroa, J.M. Lema, S. Montalvo, G. Vidal (2011). "Application of molecular biology techniques for the identification of microorganisms nitrifiying and denitrifying attached on natural zeolite". AIDIS. 4 (1): 36-45; ISSN 0718-378X; (Latindex). 2. I. Rodríguez-Verde, R. Pena, J.A. Álvarez, J.M Lema, M. Carballa (2012). "¿Son los fluidos de corte o taladrinas agotadas un buen cosustrato para codigestión anaerobia? Residuos. 130: 36-43; ISSN 1131-9526. (Latindex). 3. L. Lloret, G. Eibes, G. Feijoo, M.T. Moreira, J.M. Lema (2012). "Continuous biotransformation of estrogens by Laccase in an enzymatic membrane reactor". Chemical Engineering Transactions. 27: 31-36; DOI: 10.3303/CET1227006; ISSN 1974-9791. (Scopus). 4. A. Arca, G. Eibes, M.T. Moreira, G. Feijoo, J.M. Lema (2012). "Mass transfer enhancement by the addition of surfactant in a two phase partitioning bioreactor for the degradation of Anthracene by Laccase". Chemical Engineering Transactions. 27: 187-192; DOI: 10.3303/CET1227032; ISSN 1974-9791. (Scopus). 5. A. Rodarte, G. Feijoo, M.T. Moreira, J.M. Lema (2012). "Evaluation of two operational regimes: Fed-batch and continuous for the removal of pharmaceuticals in a fungal stirred tank reactor". Chemical Engineering Transactions. 27: 151-156; DOI: 10.3303/CET1227026; ISSN 1974-9791. (Scopus).
	No indexada (por ejemplo, libros, capítulos de libro, revistas con referato): ***2006-2010*** 1. J.M. Garrido, P. Fernández-Álvarez, J.M. Lema (2007). "Ensayos de biorrecuperación del litoral en la playa de Sorrizo". Editores: J. M. Garrido, J. M. Lema. "¿Qué aprendimos de la catástrofe del Prestige?. Lápices 4. ISBN-13: 978-84-611-8964-9. pp. 309-332 2. J. M. Garrido, J. M. Lema (Editores) (2007). "¿Qué aprendimos de la catástrofe del Prestige?. Lápices 4. ISBN-13: 978-84-611-8964-9. pp. 398

	3. S. Suárez, F. Omil, J.M. Lema (2008). "Presencia de compuestos farmacéuticos en aguas residuales y posibilidades de eliminación en estaciones depuradoras". Ed.: Damià Barceló. Aguas continentales. Cyan, Proyectos y Producciones Editoriales, S.A. ISBN: 978-84-00-08664-0. pp. 225-240 4. J.M. Lema, G. Eibes, C. López, M.T. Moreira (2008). "Application of enzymatic reactors for the degradation of highly and poorly soluble recalcitrant compounds". Ed. Andrés Illanes. Enzyme Biocatalysis. Principles and Applications. Springer. ISBN: 978-1-4020-8360-0/978-1-4020-8361-7. pp. 355-377 5. "Biocombustibles: Retos y oportunidades" (2009). Autores y editores: Juan M. Lema Rodicio, Pastora M. Bello Janeiro. ISBN: 13-978-84-613-4672-1. D.L. C 2942-2009. pp. 297 6. J.M. Lema, M. López (2009). "Retos y oportunidades de los biocombustibles". Autores y editores: Juan M. Lema Rodicio, Pastora M. Bello Janeiro. Biocombustibles: Retos y oportunidades. ISBN: 13-978-84-613-4672-1. D.L. C 2942-2009. pp. 1-19 7. F. Omil, J. M. Lema (2009). "Tecnologías para el tratamiento de microcontaminantes orgánicos". pp. 235-258. Tecnologías avanzadas para el tratamiento de aguas residuales. A. Mosquera-Corral (Editora). Lápices 4. ISBN: 13-978-84-692-5028-0. 8. J.M. Lema, C. López, G. Eibes, R. Taboada-Puig, M.T. Moreira, G. Feijoo (2010). “Reactor Engineering”. Biocatalysis Based on Heme Peroxidases. Peroxidases as potential industrial biocatalysts. Eds. Eduardo Torres, Marcela Ayala. ISBN: 978-3-642-12626-0 e ISBN: 978-3-642-12627-7. Springer. Chapter 10. pp. 245-290 9. S. Suárez, M. Carballa, R. Reif, D. Serrano, J.M. Lema, F. Omil (2010). “Mass balances of organic micropollutants in sewage treatment plants”. Innovative Technologies for Urban Wastewater Treatment Plants. Ed. Francisco Omil, Sonia Suárez. Lápices 4. ISBN: 13-978-84-693-3992-3. Chapter VIII. pp. 191-216 10. S. Suárez, F. Omil, J.M. Lema (2010). “Fate and removal of pharmaceuticals and personal care products (PPCPs) in a conventional activated sludge treatment process”. Water Pollution X. Ed. A.M. Marinov, C.A. Brebbia. WIT Press. ISBN: 978-1-84564-448-2. pp. 255-266 11. F. Omil, S. Suárez, M. Carballa, R. Reif, J.M. Lema (2010). “Criteria for conceiving sewage treatment plants for an enhanced removal of organic micropollutants”. Ed. D. Fatta-Kassinos, K. Bester, K. Kümmerer. Xenobiotics in the Urban Water Cycle. Springer. ISBN: 978-90-481-3508-0. pp. 16: 283-306

	2011-2016 1. M. Carballa, J.M. Lema (2011). "Aprovechamiento energético de residuos agroindustriales por codigestión anaerobia". Hacia el autoabastecimiento energético. Servizo de Publicacións e Intercambio Científico-USC. Santiago de Compostela. Ed.: Manuel Bao, Pastora M. Bello. Capítulo 13: 167-179. ISBN: 978-84-9887-747-2 2. S. Suárez, M. Carballa, R. Reif, D. Serrano, J.M. Lema, F. Omil (2012). "Mass balances of organic micropollutants in sewage treatment plants". Eds. Francisco Omil, Sonia Suárez. ISBN: 13-978-84-695-3514-1. Lápices 4. Chapter 8. pp. 199-224 3. S. Suárez, M. Carballa, F. Omil, J.M. Lema (2013). "Nuevos retos en la depuración de aguas residuales urbanas: La eliminación de microcontaminantes orgánicos". Tecnologías Avanzadas para el Tratamiento de Aguas Residuales, 2ª Edición. pp. 251-276. Ed. A. Mosquera-Corral. ISBN: 13: 978-84-692-5028-0
	Patentes: ***2006-2010*** 1. R. Taboada, T. Lú Chao, G. Eibes, M.T. Moreira, G. Feijoo, J.M. Lema (2010). "Procedimiento de degradación de compuestos orgánicos recalcitrantes presentes en efluentes industriales mediante un sistema en dos etapas". P201031162 (en trámite) ***2011-2016*** 1. D. Serrano, F. Omil, S. Suárez, J.M. Lema (2012). "Proceso para la eliminación de productos farmacéuticos presentes en aguas residuales". Oficina Española de Patentes y Marcas. Pat. Nº ES 2 362 298 B2 de 06.02.2012 2. D. Buntner, J.M. Garrido, J.M. Lema (2013). "Reactor biológico de membranas de tres etapas, metanogénica, aerobia y de filtración, para la depuración de aguas residuales". Nº de solicitud: P200901615. Fecha de autorización y publicación: 19.04.2013. Oficina Española de Patentes y Marcas. Pat. Nº. ES 2 385 002 B2.
Listado de proyectos de investigación en los últimos 10 años	● ***Proyectos FONDECYT (Iniciación, Regular, Postdoctoral)*** ***2006 – 2010*** ***No aplica*** ***2011 – 2016*** ***No aplica*** ● ***Proyectos FONDEF*** ***2006 – 2010*** ***No aplica*** ***2011 – 2016*** ***No aplica***

- ***Otros Proyectos***

2006 – 2010

1. Programa de Consolidación y estructuración de unidades de investigación competitivas. Grupo de Referencia Competitivo (GRC). **Consellería de Educación. Xunta de Galicia. (2006/111).** (2006-2009). Investigador Principal.

2. Conception of the Sewage Treatment Plant of the XXI C.entury. Development, implementation and evaluation of Technologies for the treatment and resources recovery from wastewaters. **Programa CONSOLIDER-Ingenio 2010. Ministerio de Educación y Ciencia (CSD2007-00055).** (2006-2010). Coordinador.

3. White biotechnology for added value products from renewable plant polymers: Design of tailor-made biocatalysts and new industrial bioprocesses (BIORENEW). **European Commission (NMP2-CT-2006-026456).** (2006-2010). Co-Investigador.

4. Desarrollo de sistemas sostenibles de producción y uso de biogás agroindustrial en España (PROBIOGAS). Proyecto Singular Estratégico (PSE). **Ministerio de Educacion y Ciencia. (PSE-120000-2007-16). SP2.** (2007-2008). Investigador Principal.

5. Reactores biológicos de membrana a escala piloto para la eliminación de microcontaminantes farmacéuticos y cosméticos. **Ministerio de Educacion y Ciencia. CTQ2007-66265/PPQ.** (2007-2010). Co-Investigador.

6. Diseño, operación y modelización de reactores enzimáticos bifásicos para la oxidación de compuestos orgánicos xenobióticos. **Ministerio de Educación y Ciencia, CTQ2007-66788/PPQ.** (2007-2010). Co-Investigador.

7. Desarrollo de sistemas sostenibles de producción y uso de biogás agroindustrial en España (PROBIOGAS). Proyecto Singular Estratégico (PSE). **Ministerio de Educación y Ciencia. (PSE-120000-2008-10). SP2.** (2008-2010). Investigador Principal.

8. Producción de energía mediante la digestión anaerobia de los residuos orgánicos provenientes de agroindustrias. Programa Iberoamericano de Ciencia y Tecnología para el Desarrollo (CYTED), Brasil, Chile, España, Portugal, Venezuela. **(Acción nº 708AC0363).** (2008-2011). Coordinador (España).

9. Estrategias para el tratamiento de compuestos farmacéuticos en estaciones de depuración de aguas residuales (ESTRAFARM). **Xunta de Galicia. (PGIDIT 08MDS005265PR).** (2008-2011). Investigador Principal.

10. Estudio de procesos biotecnológicos para el tratamiento de sobrenadantes de digestión anaerobia de residuos orgánicos. MCI**.**

	(Acción Integrada IT2009-0038). (2010-2010). Investigador Principal. 11. Red temática "Biotecnología de Materiales Ligninocelulósicos: Retos moleculares, enzimáticos y químicos para su aplicación industrial y medioambiental". **Ministerio de Ciencia e Innovación. (BIO2009-07866-E).** (2010-2012). Co-Investigador. 12. Convocatoria de Gestores en Valorización Tecnológica. Conception of the Sewage Treatment Plant of the XXI Century. Development, implementation and evaluation of Technologies for the treatment and resources recovery from wastewaters (NOVEDAR). **MEC-FECYT. (CTV-09-656).** (2010-2012). Investigador Principal. 13. Programa de consolidación y estructuración de unidades de investigación competitivas. Grupos de Referencia Competitiva. **Xunta de Galicia. (2010/37).** (2010-2012). Investigador Principal. 14. Producción fermentativa y bioelectroquímica de biocombustibles en cultivo mixto microbiano anaerobio. ACI-Colabora (India). **Ministerio de Ciencia e Innovación. (ACI2009-0924).** (2010-2012). Investigador Principal. 15. Engineering anaerobic mixed microbial communities for biofuels production (EnAnaMMic-BioF). **European Commission.** (2010-2013). Co-Investigador. 16. Desarrollo de tecnologías limpias para la optimización del diseño y operación de EDARs. **Xunta de Galicia. (10MDS265003PR).** (2010-2013). Co-Investigador. 17. Mecanismos de eliminación de microcontaminantes cosméticos y farmacéuticos en tecnologías innovadoras de tratamiento de aguas (INNOTRAZA). **Ministerio de Ciencia e Innovación. (CTQ2010-20240).** (2010-2013). Co-Investigador. ***2011 – 2016*** 1. Control óptimo de la co-digestión anaerobia con integración de la ecología microbiana en el modelado y diagnosis del proceso. **Ministerio de Ciencia e Innovación. (CTM2010-17196).** (2011-2013). Investigador principal. 2. Tecnologías basadas en reactores enzimáticos de membrana para la eliminación de compuestos disruptores endocrinos. **Ministerio de Ciencia e Innovación. (CTQ2010-20258).** (2011-2013). Co-Investigador. 3. Sustainable production of Biologically Active Molecules of Marine Based Origin (BAMMBO). **UE.** (2011-2014). Co-Investigador. 4. Low-cost recovery of reclaimed water from sewage mixed industrial effluents (REWATER). **EU. ERANET NEWINDIGO-DST. (PRI-PIMNIN-**

	2011-1487). (2012). Co-Investigador 5. Mecanismos de eliminación de microcontaminantes orgánicos durante la (co-)digestión anaerobia de lodos de EDAR (MicroDAN). **(EM 2012/087).** (2012-2015).Co-investigador. 6. Conceiving Wastewater Treatment in 2020. Energetic, environmental and economic challenges (Water_2020). **EU. (Cost Action ES-1202)**. (2012-2016). Investigador Principal.
Consultorías y/o asistencias técnicas en los últimos 10 años	***2006 – 2010*** ***No aplica*** ***2011 – 2016*** ***No aplica***