

# Anexo de Personal Investigador

A continuación, se indican las 5 contribuciones científicas en los últimos 5 años de los miembros del programa de doctorado que por razones de índole administrativa no puedan someter a evaluación su actividad investigadora.

## Línea 1. DISEÑO, PROYECTO, PLANIFICACIÓN Y CONSTRUCCIÓN EN INGENIERÍA CIVIL

Bueno Pacheco, Moisés

1. Article Open Access: **Durability and surface properties of low-noise pavements with recycled concrete aggregates** Mikhailenko, P., Piao, Z., Kakar, M.R., Bueno, M., Poulikakos, L.D. Journal of Cleaner Production, 2021, 319, 128788
2. Article Open Access: **Analysis of waste polyethylene (PE) and its by-products in asphalt binder** Kakar, M.R., Mikhailenko, P., Piao, Z., Bueno, M., Poulikakos, L. Construction and Building Materials, 2021, 280, 122492
3. Article Open Access: **Incorporation of recycled concrete aggregate (RCA) fractions in semi-dense asphalt (SDA) pavements: Volumetrics, durability and mechanical properties** Mikhailenko, P., Rafiq Kakar, M., Piao, Z., Bueno, M., Poulikakos, L. Construction and Building Materials, 2020, 264, 120166
4. Article Open Access: **Induction heating technology for improving compaction of asphalt joints** Bueno, M., Arraigada, M., Partl, M.N. International Journal of Pavement Engineering, 2020, 21(12), pp. 1532–1540
5. Article Open Access: **Chemo-Mechanical Evaluation of Asphalt Mixtures Reinforced With Synthetic Fibers** Bueno, M., Poulikakos, L.D. Frontiers in Built Environment, 2020, 6, 41

Coupe, Stephen J.

1. Article Open Access: **Effect of environmental and nutritional conditions on the formation of single and mixed-species biofilms and their efficiency in cadmium removal** Fathollahi, A., Coupe, S.J. Chemosphere, 2021, 283, 131152
2. Article Open Access: **Life cycle assessment (LCA) and life cycle costing (LCC) of road drainage systems for sustainability evaluation: Quantifying the contribution of different life cycle phases** Fathollahi, A., Coupe, S.J. Science of the Total Environment, 2021, 776, 145937
3. Article Open Access: **A meta-analysis of metal biosorption by suspended bacteria from three phyla** Fathollahi, A., Khasteganan, N., Coupe, S.J., Newman, A.P. Chemosphere, 2021, 268, 129290
4. Article Open Access: **Cu(II) biosorption by living biofilms: Isothermal, chemical, physical and biological evaluation** Fathollahi, A., Coupe, S.J., El-Sheikh, A.H., Nnadi, E.O. Journal of Environmental Management, 2021, 282, 111950
5. Article Open Access: **The biosorption of mercury by permeable pavement biofilms in stormwater attenuation** Fathollahi, A., Coupe, S.J., El-Sheikh, A.H., Sañudo-Fontaneda, L.A. Science of the Total Environment, 2020, 741, 140411



## Díaz Pascual, Joaquín

1. Article: **Bim in fire protection planning: Attributes and classes relevant to practice | Bim in der brandschutzplanung: Praxisrelevante attribute und klassen** Walter, J., Obermeier, T., Díaz, J. Bauingenieur, 2021, 96(5), pp. 182–192
2. Article Open Access: **Multidimensional construction planning and agile organized project execution-The 5D-PROMPT method** Leicht, D., Castro-Fresno, D., Díaz, J., Baier, C. Sustainability (Switzerland), 2020, 12(16), 6340
3. Book Chapter Open Access: **Integration of Real-Time data in BIM enables FM processes** Wills, N., Diaz, J. WIT Transactions on the Built Environment, 2017, 169, pp. 127–133
4. Article Open Access: **Optimization of a hybrid tower for onshore wind turbines by Building Information Modeling and prefabrication techniques** Alvarez-Anton, L., Koob, M., Diaz, J., Minnert, J. Visualization in Engineering, 2016, 4(1), 3
5. Conference Paper: **A new training concept for implementation of 5D planning with regard to construction of large-scale projects** Herter, L., Silbe, K., Diaz, J. eWork and eBusiness in Architecture, Engineering and Construction - Proceedings of the 11th European Conference on Product and Process Modelling, ECPPM 2016, 2016, pp. 545–550

## Jato Espino, Daniel

1. Article Open Access: **Arcdrain: A GIS add-in for automated determination of surface runoff in urban catchments** Manchado, C., Roldán-Valcarce, A., Jato-Espino, D., Andrés-Doménech, I. International Journal of Environmental Research and Public Health, 2021, 18(16), 8802
2. [Artículo] Jato-Espino, D.; Sillanpää, N.; & Pathak, S. (2019). "Flood modelling in sewer networks using dependence measures and learning classifier systems". Journal of Hydrology, 578, 124013.
3. [Artículo] Vila-Cortavitarte, M.; Jato-Espino, D.; Tabakovic, A.; & Castro-Fresno, D. (2019). "Optimizing the valorization of industrial by-products for the induction healing of asphalt mixtures". Construction and Building Materials, 228, 116715.
4. [Artículo] Jato-Espino, D.; Yiwo, E.; Rodriguez-Hernandez, J.; & Canteras-Jordana, J. C. (2018). "Design and application of a sustainable urban surface rating system (SURSIST)". Ecological Indicators, 93, 1253-1263.
5. [Artículo] Diaz-Sarachaga, J. M.; Jato-Espino, D.; & Castro-Fresno, D. (2017). "Methodology for the development of a new sustainable infrastructure rating system for developing countries (SIRSDEC)". Environmental Science and Policy, 69, 65-72.

## Lastra González, Pedro

1. Article: **Critical assessment of new polymer-modified bitumen for porous asphalt mixtures** Gupta, A., Lastra-Gonzalez, P., Rodriguez-Hernandez, J., González González, M., Castro-Fresno, D. Construction and Building Materials, 2021, 307, 124957
2. Article Open Access: **Laboratory characterization of porous asphalt mixtures with aramid fibers** Gupta, A., Lastra-Gonzalez, P., Castro-Fresno, D., Rodriguez-Hernandez, J. Materials, 2021, 14(8), 1935
3. Article Open Access: **Selection of fibers to improve porous asphalt mixtures using multi-criteria analysis** Gupta, A., Castro-Fresno, D., Lastra-Gonzalez, P., Rodriguez-Hernandez, J. Construction and Building Materials, 2021, 266, 121198
4. Article: **Synthesis, characterisation and mechanical impact of novel capsules using porous aggregates containing asphalt rejuvenator as an effective way to restore aged binder**



- properties** Casado, R., Lastra-González, P., Castro-Fresno, D., Miranda Perez, L. International Journal of Pavement Engineering, 2021
5. Article: **A multi-criteria decision-making analysis for the selection of fibres aimed at reinforcing asphalt concrete mixtures** Slebi-Acevedo, C.J., Pascual-Muñoz, P., Lastra-González, P., Castro-Fresno, D. International Journal of Pavement Engineering, 2021, 22(6), pp. 763–779

#### Movilla Quesada, Diana

1. Lagos-Varas, M., Movilla-Quesada, D., Raposeiras, A. C., Arenas, J. P., Calzada-Pérez, M. A., Vega-Zamanillo, A., & Lastra- González, P. (2020). Influence of limestone filler on the rheological properties of bituminous mastics through susceptibility master curves. *Construction and Building Materials*, 231, 117126. <https://doi.org/10.1016/j.conbuildmat.2019.117126>
2. Movilla-Quesada, D., Raposeiras, A.C., Silva-Klein, L. T., Lastra- González, P., & Castro-Fresno, D. (2019). "Use of plastic scrap in asphalt mixtures added by dry method as a partial substitute for bitumen". *Waste Management*, 87, 751-760. <https://doi.org/10.1016/j.wasman.2019.03.018>
3. Movilla-Quesada, D., Raposeiras, A.C., & Olavarría, J. (2019). "Effects of Recycled Polyethylene Terephthalate (PET) on Stiffness of Hot Asphalt Mixtures". *Advances in Civil Engineering*, 2019. <https://doi.org/10.1155/2019/6969826>
4. Lagos-Varas, M., Movilla-Quesada, D., Arenas, J.P., Raposeiras, A.C., Castro-Fresno, D., Calzada-Pérez, M.A., Vega-Zamanillo, A., Maturana, J. (2019). "Study of the mechanical behavior of asphalt mixtures using fractional rheology to model their viscoelasticity". *Construction and Building Materials*, vol. 200, pp. 124-134. <https://doi.org/10.1016/j.conbuildmat.2018.12.073>
5. Raposeiras, A.C., Movilla-Quesada, D., Bilbao-Novoa, R., Cifuentes, C., Ferrer-Norambuena, G., Castro-Fresno, D. (2018) "The use of copper slags as an aggregate replacement in asphalt mixes with RAP: Physical–chemical and mechanical behavioural analysis". *Construction and Building Materials*, vol. 190, pp. 427- 438. <https://doi.org/10.1016/j.conbuildmat.2018.09.120>

#### Raposeiras Ramos, Aitor C.

1. Lagos-Varas, M., Movilla-Quesada, D., Raposeiras, A. C., Arenas, J. P., Calzada-Pérez, M. A., Vega-Zamanillo, A., & Lastra- González, P. (2020). Influence of limestone filler on the rheological properties of bituminous mastics through susceptibility master curves. *Construction and Building Materials*, 231, 117126. <https://doi.org/10.1016/j.conbuildmat.2019.117126>
2. Movilla-Quesada, D., Raposeiras, A.C., Silva-Klein, L. T., Lastra- González, P., & Castro-Fresno, D. (2019). "Use of plastic scrap in asphalt mixtures added by dry method as a partial substitute for bitumen". *Waste Management*, 87, 751-760. <https://doi.org/10.1016/j.wasman.2019.03.018>
3. Movilla-Quesada, D., Raposeiras, A.C., & Olavarría, J. (2019). "Effects of Recycled Polyethylene Terephthalate (PET) on Stiffness of Hot Asphalt Mixtures". *Advances in Civil Engineering*, 2019. <https://doi.org/10.1155/2019/6969826>
4. Lagos-Varas, M., Movilla-Quesada, D., Arenas, J.P., Raposeiras, A.C., Castro-Fresno, D., Calzada-Pérez, M.A., Vega-Zamanillo, A., Maturana, J. (2019). "Study of the mechanical behavior of asphalt mixtures using fractional rheology to model their viscoelasticity". *Construction and Building Materials*, vol. 200, pp. 124-134. <https://doi.org/10.1016/j.conbuildmat.2018.12.073>
5. Raposeiras, A.C., Movilla-Quesada, D., Bilbao-Novoa, R., Cifuentes, C., Ferrer-Norambuena,



G., Castro-Fresno, D. (2018) "The use of copper slags as an aggregate replacement in asphalt mixes with RAP: Physical–chemical and mechanical behavioural analysis". *Construction and Building Materials*, vol. 190, pp. 427- 438. <https://doi.org/10.1016/j.conbuildmat.2018.09.120>

#### Rico Arenal, Jokin

1. Article: **Effect of high temperature and accelerated aging in high density micro-concrete** Thomas, C., Tamayo, P., Setién, J., ...Polanco, J.A., Rico, J. *Construction and Building Materials*, 2021, 272, 121920
2. Article Open Access: **Siderurgical aggregate cement-treated bases and concrete using foundry sand** Del Angel, G.G., Aghajanian, A., Tamayo, P., Rico, J., Thomas, C. *Applied Sciences (Switzerland)*, 2021, 11(1), pp. 1–13, 435
3. Article Open Access: **Mechanical and durability properties of concrete with coarse recycled aggregate produced with electric arc furnace slag concrete** Tamayo, P., Pacheco, J., Thomas, C., de Brito, J., Rico, J. *Applied Sciences (Switzerland)*, 2020, 10(1), 216
4. Article: **Neutron shielding concrete incorporating B<sub>4</sub>C and PVA fibers exposed to high temperatures** Thomas, C., Rico, J., Tamayo, P., ...Ballester, F., Polanco, J.A. *Journal of Building Engineering*, 2019, 26, 100859
5. Article: **Effect of elevated temperature on the mechanical properties and microstructure of heavy-weight magnetite concrete with steel fibers** Thomas, C., Rico, J., Tamayo, P., ...Setién, J., Polanco, J.A. *Cement and Concrete Composites*, 2019, 103, pp. 80–88

#### Rueda Zamora, Ana Cristina

1. Article: **The Application of Ensemble Wave Forcing to Quantify Uncertainty of Shoreline Change Predictions** Vitousek, S., Cagigal, L., Montaña, J., ...Coco, G., Barnard, P.L. *Journal of Geophysical Research: Earth Surface*, 2021, 126(7), e2019JF005506
2. Article Open Access: **Climate-Based Emulator of Distant Swell Trains and Local Seas Approaching a Pacific Atoll** Cagigal, L., Rueda, A., Ricondo, A., ...Coco, G., Méndez, F.J. *Journal of Geophysical Research: Oceans*, 2021, 126(6), e2020JC016919
3. Article Open Access: **Blind testing of shoreline evolution models** Montaña, J., Coco, G., Antolínez, J.A.A., ...Vitousek, S., Vos, K. *Scientific Reports*, 2020, 10(1), 2137
4. Article Open Access: **A multivariate, stochastic, climate-based wave emulator for shoreline change modelling** Cagigal, L., Rueda, A., Anderson, D., ...Coco, G., Méndez, F.J. *Ocean Modelling*, 2020, 154, 101695
5. Article: **Historical and future storm surge around New Zealand: From the 19th century to the end of the 21st century** Cagigal, L., Rueda, A., Castanedo, S., ...Coco, G., Méndez, F.J. *International Journal of Climatology*, 2020, 40(3), pp. 1512–1525

## Línea 2. TERRENO, MATERIALES Y ESTRUCTURAS EN INGENIERÍA CIVIL

#### Arroyo Martínez, Borja

1. Article: **Analysis of notch effect in the fracture behaviour of additively manufactured PLA and graphene reinforced PLA** Cicero, S., Martínez-Mata, V., Castanon-Jano, L., Alonso-Estebanez, A., Arroyo, B. *Theoretical and Applied Fracture Mechanics*, 2021, 114, 103032



2. Article: **Hydrogen embrittlement processes in microalloyed steel notched tensile samples** Cayón, A., Gutiérrez-Solana, F., Arroyo, B., Álvarez, J.A. Theoretical and Applied Fracture Mechanics, 2021, 112, 102878
3. Article: **Estimation of the load-bearing capacity of tubular cantilever beams containing through-thickness circumferential U-notches** Cicero, S., Sánchez, M., Arroyo, B., Fuentes, J.D., Álvarez, J.A. Engineering Structures, 2021, 229, 111598
4. Article Open Access: **Study of hillock and zinc whisker evolution in five different cable tray coatings** Arroyo, B., Roth, M., Álvarez, J.A., ...Seco, J., Becedoniz, G. Metals, 2021, 11(2), pp. 1–22, 325
5. Article: **Threshold stress estimation in hydrogen induced cracking by Small Punch tests based on the application of the incremental step loading technique** Arroyo, B., Andrea, L., Gutiérrez-Solana, F., Álvarez, J.A., González, P. Theoretical and Applied Fracture Mechanics, 2020, 110, 102839

### Cimentada Hernández, Ana Isabel

1. Sainz-Aja, J.; Carrascal, I.; Polanco, J.; Cimentada, A.; Thomas, C.; Brito, J. **"Aging of recycled aggregates mortars by drying-wetting cycles"**. 2021. Construction and Building Materials, 307, 124934 JCR 6,141 Q1
2. Thomas, C.; Sainz-Aja, J.A.; Setién, J.; Cimentada, A.; Polanco, J.A. **"Resonance fatigue testing on high-strength self-compacting concrete"**. 2021. Journal of Building Engineering, 35, 102057 JCR 5,318 Q1
3. Arroyo, B.; Roth, M.; Álvarez, J.A.; Cimentada, A.I.; Cicero, S.; Seco, J.; Becedoniz, G. **"Study of Hillock and Zinc Whisker Evolution in Five Different Cable Tray Coatings"**. 2021. Metals, 11(2), 1-22, 325 JCR 2,351 Q1
4. Thomas, C., de Brito, J., Cimentada, A., Gil, V., Sainz-Aja, J.A. **"Macro- and micro-properties of multi-recycled aggregate concrete"**. 2020. Journal of Cleaner Production, 245, 118843 JCR 9,297 Q1
5. Thomas, C., Setién, J., Polanco, J.A., Cimentada, A.I., Medina, C. **"Influence of curing conditions on recycled aggregate concrete"**. 2018. Construction and Building Materials, 172: 618-625 JCR 4,046 Q1

### Freudenstein, Stephan

1. Article Open Access: **Development of numerical model for the design of low-noise ballasted track** Zhang, J., Lechner, B., Freudenstein, S., ...Hannema, G., Hecht, M. International Journal of Transport Development and Integration, 2020, 4(2), pp. 179–189
2. International patent WO2006063550 CONCRETE TRACK FOR RAIL VEHICLES Inventor: FREUDENSTEIN STEPHAN Applicants: PFLEIDERER INFRASTRUKTURTECHNIK GMBH & CO. KG; FREUDENSTEIN, STEPHAN
3. International patent WO2006131090 BALLASTLESS TRACK FOR RAIL VEHICLES Inventor: FREUDENSTEIN STEPHAN Applicant: RAIL ONE GMBH; FREUDENSTEIN, STEPHAN
4. International patent WO2009039836 CONCRETE SLEEPER AND METHOD FOR REGULATING THE POSITION OF RAILS Inventors: FREUDENSTEIN STEPHAN; BERNS GERHARD Applicant: RAIL ONE GMBH; FREUDENSTEIN, STEPHAN; BERNS, GERHARD
5. International patent WO2009100703 DEVICE FOR FASTENING A RAIL ONTO A CARRIER Inventors: PIERINGER, ARNOLD; FREUDENSTEIN, STEPHAN; BERNS, GERHARD; STAHL, WALTER Applicant: RAIL ONE GMBH; PIERINGER, ARNOLD; FREUDENSTEIN, STEPHAN; BERNS, GERHARD; STAHL, WALTER



## Ossa López, Alexandra

1. Article: **Evaluation of the complex dynamic modulus of asphaltic concretes manufactured with construction and demolition waste (CDW) aggregates** Esparza, L.-A., Ossa, A., Botero, E. Environmental Science and Pollution Research, 2020, 27(11), pp. 11575–11586
2. Gaxiola, A., Ossa, A. (2018). Time-dependent triaxial response under monotonic loading of asphalt concrete used in dams. Mechanics of time dependent materials. <https://doi.org/10.1007/s11043-018-9380-5>
3. Giralda, V., Botero, E., Ossa, A. (2018). Implementation of a model of elastoviscoplastic consolidation behavior in Flac 3D. Computers and Geotechnics. Vol. 98 pp 132-143
4. Ossa, A., Garcial, J.L., Botero, E. (2016). Use of recycled construction and demolition waste (CDW) aggregates: A sustainable alternative for the pavement construction industry. ", Journal of Cleaner Production. Vol. 135, pp. 379-386
5. Gaxiola, A., Ossa, A- (2018) Effect of water exposure on the physicochemical properties of impervious asphalt concrete". Journal of Materials in Civil Engineering. Vol. 10. No.30

## Miranda Manzanares, Marina

1. Article Open Access: **Critical length of encased stone columns** Miranda, M., Fernández-Ruiz, J., Castro, J. Geotextiles and Geomembranes, 2021, 49(5), pp. 1312–1323
2. Article Open Access: **The importance of sleepers spacing in railways** Sañudo Ortega, R., Pombo, J., Ricci, S., Miranda, M. Construction and Building Materials, 2021, 300, 124326
3. Article Open Access: **Improvement of the critical speed in high-speed ballasted railway tracks with stone columns: A numerical study on critical length** Fernández-Ruiz, J., Miranda, M., Castro, J., Medina Rodríguez, L. Transportation Geotechnics, 2021, 30, 100628
4. Article Open Access: **Smartphones and tablets applications in railways, ride comfort and track quality. Transition zones analysis** Rodríguez, A., Sañudo, R., Miranda, M., Gómez, A., Benavente, J. Measurement: Journal of the International Measurement Confederation, 2021, 182, 109644
5. Article: **Rail expansion devices and maximum dilation length in railway bridges. An experimental study** Garcia-Sanchez, D., Sañudo, R., Miranda, M., Tárrago, N., Lenart, S. Engineering Structures, 2021, 229, 111605

## Pérez Álvarez, Rubén

1. Article Open Access: **Determination of environmental factors for the implementation of the exploitability index in industrial aggregate mining using multi-criteria analysis** de Luis-Ruiz, J.M., Salas-Menocal, B.R., Fernández-Maroto, G., Pérez-Álvarez, R., Pereda-García, R. ISPRS International Journal of Geo-Information, 2021, 10(4), 196
2. Article Open Access: **Optimization of photogrammetric flights with uavs for the metric virtualization of archaeological sites. Application to Juliobriga (Cantabria, Spain)** de Luis-Ruiz, J.M., Sedano-Cibrián, J., Pereda-García, R., Pérez-álvarez, R., Malagón-Picón, B. Applied Sciences (Switzerland), 2021, 11(3), pp. 1–21, 1204
3. Article Open Access: **3D documentation with TLS of Caliphal Gate (Ceuta, Spain)** Pérez-Álvarez, R., de Luis-Ruiz, J.M., Pereda-García, R., Fernández-Maroto, G., Malagón-Picón, B. Applied Sciences (Switzerland), 2020, 10(15), 5377
4. Article: **Multicriteria analysis for the determination of the exploitability index of industrial aggregate outcrops** Fernández-Maroto, G., de Luis-Ruiz, J.M., Pereda-García,



- R., Malagón-Picón, B., Pérez-Álvarez, R. Archives of Mining Sciences, 2020, 65(1), pp. 103–115
5. Article: **Demarcation of coastal municipalities in Spain** Piña-García, F., Luis-Ruiz, J.M.D., Castillo-López, E., Pereda-García, R., Pérez-Alvarez, R. Journal of Coastal Research, 2019, 35(2), pp. 287–294

### Ramos Gutiérrez, Óscar Ramón

1. Conference Paper: **Vibration testing based on evolutionary optimization to identify structural failures and damage in glulam components** Peña-Lasso, J., Sanchez-Ruiz, R., Gaute, A., ...Sancibrian, R., Ramos, O.R. Proceedings of the International Conference on Structural Dynamic , EUROODYN, 2020, 1, pp. 912–921
2. Book Chapter: **Viaduct Over Genil River in the New Granada Bypass. A Three Tied-Arche Innovative Bridge** Ramos-Gutiérrez, Ó.R., Fernández-Dívar Sánchez, J., Ortega-Carreras, G., Pereira-Da Sousa, R.R., Pantaleón-Prieto, M.J. Structural Integrity, 2020, 11, pp. 690–697
3. Article: **Bridge length limits due to track-structure interaction in continuous girder prestressed concrete bridges** Ramos, Ó.R., Schanack, F., Carreras, G.O., de Vena Retuerto, J. Engineering Structures, 2019, 196, 109310
4. Article Open Access: **Structural integrity assessment of the welded joints of the constitution of 1812 bridge (Cádiz, Spain)** Díaz García, M.A., Cicero, S., Ramos Gutiérrez, O.R. Engineering Failure Analysis, 2018, 90, pp. 518–533
5. Book Chapter: **Arch bridges** Schanack, F., Ramos, O.R. Innovative Bridge Design Handbook: Construction, Rehabilitation and Maintenance, 2016, pp. 335–357

## Línea 3. INGENIERÍA DEL TRANSPORTE, MOVILIDAD, PLANIFICACIÓN URBANA Y TERRITORIAL

### Arellana Ochoa, Julián Alberto

1. Arellana, J., Oviedo, D., Guzman, L. A., & Alvarez, V. (2020). Urban transport planning and access inequalities: A tale of two Colombian cities. Research in Transportation Business & Management, 100554. <https://doi.org/10.1016/j.rtbm.2020.100554> WOS 2.189 Q1
2. Arellana, J., Saltaín, M., Larrañaga, A. M., González, V. I., & Henao, C. A. (2020). Developing an urban bikeability index for different types of cyclists as a tool to prioritise bicycle infrastructure investments. Transportation Research Part A: Policy and Practice, 139, 310-334. <https://doi.org/10.1016/j.tra.2020.07.010> WOS 3.992 Q1
3. Arellana, J., Saltaín, M., Larrañaga, A. M., Alvarez, V., & Henao, C. A. (2020). Urban walkability considering pedestrians' perceptions of the built environment: a 10-year review and a case study in a medium-sized city in Latin America. Transport reviews, 40(2), 183-203. <https://doi.org/10.1080/01441647.2019.1703842> WOS 6.704 Q1
4. Arellana, J., Fuentes, L., Cantillo, J., & Alvarez, V. (2019). Multivariate analysis of user perceptions about the serviceability of urban roads: case of Barranquilla. International Journal of Pavement Engineering, 1-10. <https://doi.org/10.1080/10298436.2019.1577420> WOS 3.144 Q1
5. Larranaga, A. M., Arellana, J., Rizzi, L. I., Strambi, O., & Cybis, H. B. B. (2018) Using best-worst scaling to identify barriers to walkability: a study of Porto Alegre, Brazil. Transportation, 1-33. WOS 4.082 Q1



## Christidis, Panayotis

1. Abate, M., Christidis, P., Purwanto, A.J., 2020. Government support to airlines in the aftermath of the COVID-19 pandemic. *Journal of Air Transport Management* 89. <https://doi.org/10.1016/j.jairtraman.2020.101931> JCR 2.811 Q2
2. Christidis, P., 2016. Four shades of Open Skies: European Union and four main external partners. *Journal of Transport Geography* 50, 105–114. <https://doi.org/10.1016/j.jtrangeo.2015.04.005> JCR 2.675 Q1
3. Christidis, P., Christodoulou, A., 2020. The predictive capacity of air travel patterns during the global spread of the covid-19 pandemic: Risk, uncertainty and randomness. *International Journal of Environmental Research and Public Health* 17. <https://doi.org/10.3390/ijerph17103356> JCR 2.849 Q2
4. Christodoulou, A., Christidis, P., 2020a. Bridges across borders: A clustering approach to support EU regional policy. *Journal of Transport Geography* 83. <https://doi.org/10.1016/j.jtrangeo.2020.102666> JCR 3.834 Q1
5. Christodoulou, A., Christidis, P., 2019. Measuring cross-border road accessibility in the European Union. *Sustainability (Switzerland)* 11. <https://doi.org/10.3390/su11154000> JCR 2.576 Q2

## Ciuffo, Biagio

1. Article Open Access: **Requiem on the positive effects of commercial adaptive cruise control on motorway traffic and recommendations for future automated driving systems** Ciuffo, B., Mattas, K., Makridis, M., ...Vass, S., Szalay, Z. *Transportation Research Part C: Emerging Technologies*, 2021, 130, 103305
2. Article Open Access: **The post-pandemic recovery of transport activity: Emerging mobility patterns and repercussions on future evolution** Christidis, P., Christodoulou, A., Navajas-Cawood, E., Ciuffo, B. *Sustainability (Switzerland)*, 2021, 13(11), 6359
3. Article Open Access: **An estimation of heavy-duty vehicle fleet CO<sub>2</sub> emissions based on sampled data** Zacharof, N., Fontaras, G., Ciuffo, B., Tansini, A., Prado-Rujas, I. *Transportation Research Part D: Transport and Environment*, 2021, 94, 102784
4. Article Open Access: **OpenACC. An open database of car-following experiments to study the properties of commercial ACC systems** Makridis, M., Mattas, K., Anesiadou, A., Ciuffo, B. *Transportation Research Part C: Emerging Technologies*, 2021, 125, 103047
5. Article Open Access: **The impact of driving homogeneity due to automation and cooperation of vehicles on uphill freeway sections** Makridis, M., Leclercq, L., Mattas, K., Ciuffo, B. *European Transport Research Review*, 2020, 12(1), 15

## Cordera Piñera, Rubén

1. Article Open Access: **Behavioural changes in transport and future repercussions of the COVID-19 outbreak in Spain** Echaniz, E., Rodríguez, A., Cordera, R., ...Alonso, B., Sañudo, R. *Transport Policy*, 2021, 111, pp. 38–52
2. Article Open Access: **Modeling the impacts of autonomous vehicles on land use using a luti model** Cordera, R., Nogués, S., González-González, E., Moura, J.L. *Sustainability (Switzerland)*, 2021, 13(4), pp. 1–17, 1608
3. Article: **New urban planning challenges under emerging autonomous mobility: evaluating backcasting scenarios and policies through an expert survey** Nogués, S., González-González, E., Cordera, R. *Land Use Policy*, 2020, 95, 104652





4. Article Open Access: **Effects of the COVID-19 lockdown on urban mobility: Empirical evidence from the city of Santander (Spain)** Aloí, A., Alonso, B., Benavente, J., ...Rodríguez, A., Sañudo, R. Sustainability (Switzerland), 2020, 12(9), 3870
5. Article Open Access: **The impact of undesirable externalities on residential property values: spatial regressive models and an empirical study** Cordera, R., Chiarazzo, V., Ottomanelli, M., dell'Olio, L., Ibeas, A. Transport Policy, 2019, 80, pp. 177–187

#### Cuartas Hernández, Miguel

1. Article: **Machine learning algorithms for the prediction of non-metallic inclusions in steel wires for tire reinforcement** Cuartas, M., Ruiz, E., Ferreño, D., ...Arroyo, V., Gutiérrez-Solana, F. Journal of Intelligent Manufacturing, 2021, 32(6), pp. 1739–1751
2. Article Open Access: **Machine learning methods for the prediction of the inclusion content of clean steel fabricated by electric arc furnace and rolling** Ruiz, E., Ferreño, D., Cuartas, M., ...Esteve, F., Gutiérrez-solana, F. Metals, 2021, 11(6), 914
3. Article: **Prediction of mechanical properties of rail pads under in-service conditions through machine learning algorithms** Ferreño, D., Sainz-Aja, J.A., Carrascal, I.A., ...Casado, J.A., Diego, S. Advances in Engineering Software, 2021, 151, 102927
4. Article: **Release of pollutants in MBT landfills: Laboratory versus field** Molleda, A., López, A., Cuartas, M., Lobo, A. Chemosphere, 2020, 249, 126145
5. Article: **A decision support tool for planning biowaste management systems** Delgado, M., López, A., Cuartas, M., Rico, C., Lobo, A. Journal of Cleaner Production, 2020, 242, 118460

#### González González, M. Esther

1. Article Open Access: **Modeling the impacts of autonomous vehicles on land use using a luti model** Cordera, R., Nogués, S., González-González, E., Moura, J.L. Sustainability (Switzerland), 2021, 13(4), pp. 1–17, 1608
2. Article: **New urban planning challenges under emerging autonomous mobility: evaluating backcasting scenarios and policies through an expert survey** Nogués, S., González-González, E., Cordera, R. Land Use Policy, 2020, 95, 104652
3. Article Open Access: **Parking futures: Preparing European cities for the advent of automated vehicles** González-González, E., Nogués, S., Stead, D. Land Use Policy, 2020, 91, 104010
4. Article Open Access: **Automated vehicles and the city of tomorrow: A backcasting approach** González-González, E., Nogués, S., Stead, D. Cities, 2019, 94, pp. 153–160
5. Article: **Planning regional sustainability: An index-based framework to assess spatial plans. Application to the region of Cantabria (Spain)** Nogués, S., González-González, E., Cordera, R. Journal of Cleaner Production, 2019, 225, pp. 510–523

#### Grande Andrade, Zacarias

1. Book Chapter: **A Bayesian Network Model for the Probabilistic Safety Assessment of Roads** Castillo, E., Grande, Z., Mora, E. Studies in Systems, Decision and Control, 2018, 142, pp. 89–100
2. Article: **Proactive, Backward Analysis and Learning in Road Probabilistic Bayesian Network Models** Castillo, E., Grande, Z., Mora, E., Xu, X., Lo, H.K. Computer-Aided Civil and Infrastructure Engineering, 2017, 32(10), pp. 820–835
3. Article: **Complexity Reduction and Sensitivity Analysis in Road Probabilistic Safety Assessment Bayesian Network Models** Castillo, E., Grande, Z., Mora, E., Lo, H.K., Xu, X. Computer-Aided Civil and Infrastructure Engineering, 2017, 32(7), pp. 546–561



4. Article: **Highway and Road Probabilistic Safety Assessment Based on Bayesian Network Models** Grande, Z., Castillo, E., Mora, E., Lo, H.K. Computer-Aided Civil and Infrastructure Engineering, 2017, 32(5), pp. 379–396
5. Article: **Bayesian Networks-Based Probabilistic Safety Analysis for Railway Lines** Castillo, E., Grande, Z., Calviño, A. Computer-Aided Civil and Infrastructure Engineering, 2016, 31(9), pp. 681–700

Sañudo Ortega, Roberto

1. Article Open Access: **Smartphones and tablets applications in railways, ride comfort and track quality. Transition zones analysis** Rodríguez, A., Sañudo, R., Miranda, M., Gómez, A., Benavente, J. Measurement: Journal of the International Measurement Confederation, 2021, 182, 109644
2. Article: **Rail expansion devices and maximum dilation length in railway bridges. An experimental study** Garcia-Sanchez, D., Sañudo, R., Miranda, M., Tárrago, N., Lenart, S. Engineering Structures, 2021, 229, 111605
3. Article Open Access: **Addressing the importance of service attributes in railways** Sañudo, R., Echaniz, E., Alonso, B., Cordera, R. Sustainability (Switzerland), 2019, 11(12), 3411
4. Article Open Access: **Trip distribution model for regional railway services considering spatial effects between stations** Cordera, R., Sañudo, R., dell'Olio, L., Ibeas, Á. Transport Policy, 2018, 67, pp. 77–84
5. Article: **Analysis of the influence of support positions in transition zones. A numerical analysis** Sañudo, R., Cerrada, M., Alonso, B., dell'Olio, L. Construction and Building Materials, 2017, 145, pp. 207–217

