

Relació d'articles amb APC 2023 assignades a articles publicats pel personal investigador de la UPC per a la seva publicació en accés obert immediat¹

1. Grups de recerca que tenen igual o més de 10 PAR tipus 1 per EDP

ADBD - Anàlisi de Dades Complexes per a les Decisions Empresarials

- ORIOL, X., TENIENTE, E., MAYNOU, M. and NADAL, S., 2023. Generating valid test data through data cloning. *Future Generation Computer Systems*, vol. 144, pp. 179–191. DOI 10.1016/j.future.2023.02.020.

- CORTEZ-ORDOÑEZ, A., VÁZQUEZ, P.-P. and SANCHEZ-ESPIGARES, J.A., 2023. Scalability evaluation of forecasting methods applied to bicycle sharing systems. *Heliyon*, vol. 9, no. 10, pp. e20129. DOI 10.1016/j.heliyon.2023.e20129.

- DELICADO, P., 2023. Comments on: Shape-based functional data analysis. *TEST*, DOI 10.1007/s11749-023-00904-8.

ALBCOM - Algorísmia, Bioinformàtica, Complexitat i Mètodes Formals

- COMA-PUIG, B., CALVO, A., CARMONA, J. and GAVALDÀ, R., 2023. A case study of improving a non-technical losses detection system through explainability. *Data Mining and Knowledge Discovery*, DOI 10.1007/s10618-023-00927-7.

- FREIXAS, J. and SAMANIEGO, D., 2023. On the Felsenthal Power Index. *Group Decision and Negotiation*, vol. 32, no. 6, pp. 1273–1288. DOI 10.1007/s10726-023-09843-z.

- BONACINA, I., GALESÌ, N. and LAURIA, M., 2023. On vanishing sums of roots of unity in polynomial calculus and sum-of-squares. *computational complexity*, vol. 32, no. 2. DOI 10.1007/s00037-023-00242-z.

- MOLINERO, X., RIQUELME, F., ROURA, S. and SERNA, M., 2023. Multidimension: a dimensionality extension of simple games. *Computational and Applied Mathematics*, vol. 42, no. 8. DOI 10.1007/s40314-023-02471-y.

- FREIXAS, J. and SAMANIEGO, D., 2023. Some characterizations of resolute majority rules. *Annals of Operations Research*, DOI 10.1007/s10479-023-05621-x.

- DANI, V., DÍAZ, J., HAYES, T.P. and MOORE, C., 2023. Reconstruction of random geometric graphs: Breaking the $\Omega(r)$ distortion barrier. *European Journal of Combinatorics*, pp. 103842. DOI 10.1016/j.ejc.2023.103842.

ANiComp - Anàlisi Numèrica i Computació Científica

- AGUIRRE, A., CODINA, R. and BAIGES, J., 2023. A variational multiscale stabilized finite element formulation for Reissner–Mindlin plates and Timoshenko beams. *Finite*

¹ A finals d'any la UPC s'ha beneficiat d'APC no gastades per altres universitats. Per aquest motiu, alguns grups de recerca poden haver gaudit d'alguna APC més que les distribuïdes d'acord amb els criteris UPC.

Elements in Analysis and Design, vol. 217, pp. 103908. DOI 10.1016/j.finel.2023.103908.

- MORENO, L., CASTAÑAR, I., CODINA, R., BAIGES, J. and CATTONI, D., 2023. Numerical simulation of Fluid–Structure Interaction problems with viscoelastic fluids using a log-conformation reformulation. *Computer Methods in Applied Mechanics and Engineering*, vol. 410, pp. 115986. DOI 10.1016/j.cma.2023.115986.

CATMech - Centre Avançat de Tecnologies Mecàniques

- FAKHRAEI, J., ARCOS, R., PÀMIES, T., LIRAVI, H. and ROMEU, J., 2023. Modified 2.5D singular boundary methods to deal with spurious eigensolutions in exterior acoustic problems. *Journal of Sound and Vibration*, vol. 550, pp. 117597. DOI 10.1016/j.jsv.2023.117597.

- BERNAT-MASO, E., MARTÍNEZ, B., MERCEDES, L. and MENDIZÁBAL, V., 2023. Energy harvester based on low cost piezoelectric membrane for road traffic application. *Microsystem Technologies*, vol. 29, no. 7, pp. 985–998. DOI 10.1007/s00542-023-05490-1.

- DROUGKAS, A., 2023. A mixed micromechanical homogenisation scheme for the prediction of the 3D orthotropic elastic properties of different masonry bond typologies. *Structures*, vol. 56, pp. 105006. DOI 10.1016/j.istruc.2023.105006.

CDIF - Centre de Diagnòstic Industrial i Fluidodinàmica

- PRESAS, A., VALERO, C., VALENTÍN, D., EGUSQUIZA, M., DIOGO PINTO, P., GONÇALVES DE CARVALHO, A., CORONATI, A. and EGUSQUIZA, E., 2023. Water saving options in hydropower by means of variable speed operation: A prototype study in a mid-head Francis turbine. *Energy Conversion and Management*, vol. 291, pp. 117296. DOI 10.1016/j.enconman.2023.117296.

- MORAGA, G., XIA, X., ROIG, S., VALERO, C., VALENTÍN, D., EGUSQUIZA, M., ZHOU, L., EGUSQUIZA, E. and PRESAS, A., 2024. Experimental study on the influence of vibration amplitude on the fluid damping of a submerged disk. *Journal of Sound and Vibration*, vol. 569, pp. 118099. DOI 10.1016/j.jsv.2023.118099.

CELBIOTECH - Enginyeria Paperera

- AMINI, E., VALLS, C. and RONCERO, M.B., 2023. Promising nanocomposites for food packaging based on cellulose – PCL films reinforced by using ZnO nanoparticles in an ionic liquid. *Industrial Crops and Products*, vol. 193, pp. 116246. DOI 10.1016/j.indcrop.2023.116246.

- AMINI, E., VALLS, C. and RONCERO, M.B., 2023. Ionic liquid, ultrasound-assisted synthesis of lignin nanoparticles for barrier-enhanced all-cellulose nanocomposite films. *Wood Science and Technology*, vol. 57, no. 6, pp. 1319–1344. DOI 10.1007/s00226-023-01498-y.

- QUINTANA, E., VALLS, C. and RONCERO, M.B., 2024. Dissolving-grade pulp: a sustainable source for fiber production. *Wood Science and Technology*, DOI 10.1007/s00226-023-01519-w.

CEMAD - Caracterització Elèctrica de Materials i Dispositius

- RUBIO-MARCOS, F., PAMIES, P., DEL CAMPO, A., TIANA, J., ORDOÑEZ-PIMENTEL, J., VENET, M., ROJAS-HERNANDEZ, R.E., OCHOA, D.A., FERNÁNDEZ, J.F. and GARCÍA, J.E., 2023. Light-induced strain and its correlation with the optical absorption at charged domain walls in polycrystalline ferroelectrics. *Applied Materials Today*, vol. 32, pp. 101838. DOI 10.1016/j.apmt.2023.101838.

- LÓPEZ-BLANCO, S., OCHOA, D.A., AMORÍN, H., CASTRO, A., ALGUERÓ, M. and GARCÍA, J.E., 2023. Fine-grained high-performance Ba_{0.85}Ca_{0.15}Zr_{0.1}Ti_{0.9}O₃ piezoceramics obtained by current-controlled flash sintering of nanopowders. *Journal of the European Ceramic Society*, vol. 43, no. 16, pp. 7440–7445. DOI 10.1016/j.jeurceramsoc.2023.08.012.

- LÓPEZ-BLANCO, S., VENDRELL, X., MESTRES, L., OCHOA, D.A. and GARCÍA, J.E., 2023. Particle size effect on the microstructure and the aging process of flash-sintered barium titanate from micro and nanopowders. *Journal of Materials Chemistry C*, vol. 11, no. 37, pp. 12740–12749. DOI 10.1039/d3tc02143b.

CERTEC - Centre d'Estudis del Risc Tecnològic

- VACCA, P., ÀGUEDA, A., PLANAS, E., CABALLERO, D. and PASTOR, E., 2023. Methodology for the analysis of structural vulnerability of WUI settlements. *Fire Safety Journal*, vol. 140, pp. 103853. DOI 10.1016/j.firesaf.2023.103853.

- PLANAS, E., PAUGAM, R., ÀGUEDA, A., VACCA, P. and PASTOR, E., 2023. Fires at the wildland-industrial interface. Is there an emerging problem? *Fire Safety Journal*, vol. 141, pp. 103906. DOI 10.1016/j.firesaf.2023.103906.

CITCEA-UPC - Centre d'Innovació Tecnològica en Convertidors Estàtics i Accionaments

- COLLADOS-RODRIGUEZ, C., WESTERMAN SPIER, D., CHEAH-MANE, M., PRIETO-ARAUJO, E. and GOMIS-BELLMUNT, O., 2023. Preventing loss of synchronism of droop-based grid-forming converters during frequency excursions. *International Journal of Electrical Power & Energy Systems*, vol. 148, pp. 108989. DOI 10.1016/j.ijepes.2023.108989.

- MATEU-BARRIENDOS, E., CHEAH-MANE, M., PRIETO-ARAUJO, E., MEHRJERDI, H. and GOMIS-BELLMUNT, O., 2023. Oscillatory frequency characterization based on impedance analysis. *International Journal of Electrical Power & Energy Systems*, vol. 152, pp. 109208. DOI 10.1016/j.ijepes.2023.109208.

CITES - Grup de Recerca en Ciència i Tecnologia de la Sostenibilitat

- RAMÍREZ-PADILLA, C., TURON, A., RETAMAL, C., ALCARAZ, O. and SUREDA, B., 2024. Achieving the 1.5 °C goal with equitable mitigation in Latin American countries. *Mitigation and Adaptation Strategies for Global Change*, vol. 29, no. 1. DOI 10.1007/s11027-023-10101-5.

CNDS - Xarxes de Computadors i Sistemes Distribuïts

- CERDÀ-ALABERN, L., IUHASZ, G. and GEMMI, G., 2023. Anomaly detection for fault detection in wireless community networks using machine learning. *Computer Communications*, vol. 202, pp. 191–203. DOI 10.1016/j.comcom.2023.02.019.

- LLISTERRI GIMÉNEZ, N., MIQUEL SOLÉ, J. and FREITAG, F., 2023. Embedded federated learning over a LoRa mesh network. *Pervasive and Mobile Computing*, vol. 93, pp. 101819. DOI 10.1016/j.pmcj.2023.101819.

CoDALab - Control, Dades i Intel·ligència Artificial

- BARRERA, K., RODELLAR, J., ALFÉREZ, S. and MERINO, A., 2023. Automatic normalized digital color staining in the recognition of abnormal blood cells using generative adversarial networks. *Computer Methods and Programs in Biomedicine*, vol. 240, pp. 107629. DOI 10.1016/j.cmpb.2023.107629.

CommSensLab-UPC - Centre Específic de Recerca en Comunicació i Detecció UPC

- FERNANDEZ, L., MUNOZ-MARTIN, J.F., RUIZ-DE-AZUA, J.A., CALVERAS, A. and CAMPS, A., 2023. Design and validation of a dual-band circular polarization patch antenna and stripline combiner for the FSSCat mission. *Acta Astronautica*, vol. 208, pp. 194–204. DOI 10.1016/j.actaastro.2023.03.042.

- AKAZZIM, Y., ARIAS, C.P., JOFRE, M., EL MRABET, O., ROMEU, J. and JOFRE-ROCA, L., 2024. UWB Microwave Functional Brain Activity Extraction for Parkinson's Disease Monitoring. *IEEE Sensors Journal*, pp. 1–1. DOI 10.1109/jsen.2023.3341168.

CRAAX - Centre de Recerca d'Arquitectures Avançades de Xarxes

- JULLIAN, O., OTERO, B., RODRIGUEZ, E., GUTIERREZ, N., ANTONA, H. and CANAL, R., 2023. Deep-Learning Based Detection for Cyber-Attacks in IoT Networks: A Distributed Attack Detection Framework. *Journal of Network and Systems Management*, vol. 31, no. 2. DOI 10.1007/s10922-023-09722-7.

- ROJAS, O., MENDOZA, L., OTERO, B., VILLAMIZAR, J., CALDERÓN, G., CASTILLO, J.E. and MIRANDA, G., 2023. A dispersion analysis of uniformly high order, interior and boundaries, mimetic finite difference solutions of wave propagation problems. *GEM - International Journal on Geomathematics*, vol. 15, no. 1. DOI 10.1007/s13137-023-00242-9.

- GUTIÉRREZ, N., OTERO, B., RODRÍGUEZ, E., UTRERA, G., MUS, S. and CANAL, R., 2024. A Differential Privacy protection-based federated deep learning framework to fog-

embedded architectures. *Engineering Applications of Artificial Intelligence*, vol. 130, pp. 107689. DOI 10.1016/j.engappai.2023.107689.

CSC - Components and Systems for Communications Research Group

- LI, W., MONTORO, G. and GILABERT, P.L., 2024. GPU versus FPGA implementation of a digital predistortion linearizer for wideband radiofrequency power amplifiers. *AEU - International Journal of Electronics and Communications*, vol. 174, pp. 155040. DOI 10.1016/j.aeue.2023.155040.

DCCG - Discrete, Combinational, and Computational Geometry

- GARIJO, D., MÁRQUEZ, A. and SILVEIRA, R.I., 2023. Continuous Mean Distance of a Weighted Graph. *Results in Mathematics*, vol. 78, no. 4. DOI 10.1007/s00025-023-01902-w.

DF-GeoTech - Dinamica de Fluids i Aplicacions Geofísiques i Tecnològiques

- ALTMAYER, S.A., 2023. Forced vortex merging and splitting events in ferrofluidic Couette flow. *Journal of Magnetism and Magnetic Materials*, vol. 574, pp. 170666. DOI 10.1016/j.jmmm.2023.170666.

- ALARCÓN, M., RODRÍGUEZ-SOLÀ, R., CASAS-CASTILLO, M.C., MOLERO, F., SALVADOR, P., PERIAGO, C. and BELMONTE, J., 2023. Influence of synoptic meteorology on airborne allergenic pollen and spores in an urban environment in Northeastern Iberian Peninsula. *Science of The Total Environment*, vol. 896, pp. 165337. DOI 10.1016/j.scitotenv.2023.165337.

- RIBAS, F., PORTOS-AMILL, L., FALQUÉS, A., ARRIAGA, J., MARCOS, M. and RUESSINK, G., 2023. Impact of mean sea-level rise on the long-term evolution of a mega-nourishment. *Climatic Change*, vol. 176, no. 5. DOI 10.1007/s10584-023-03503-6.

DONLL - Dinamica no Lineal, Optica no Lineal i Lasers

- BOARETTO, B.R.R., BUDZINSKI, R.C., ROSSI, K.L., MASOLLER, C. and MACAU, E.E.N., 2023. Spatial permutation entropy distinguishes resting brain states. *Chaos, Solitons & Fractals*, vol. 171, pp. 113453. DOI 10.1016/j.chaos.2023.113453.

- ARISTIDES, R.P., PONS, A.J., CERDEIRA, H.A., MASOLLER, C. and TIRABASSI, G., 2023. Parameter and coupling estimation in small networks of Izhikevich's neurons. *Chaos: An Interdisciplinary Journal of Nonlinear Science*, vol. 33, no. 4. DOI 10.1063/5.0144499.

- BABAYIGIT, C., GRINEVICIUTE, L., NIKITINA, J., MELNIKAS, S., GAILEVICIUS, D. and STALIUNAS, K., 2023. Inverse designed photonic crystals for spatial filtering. *Applied Physics Letters*, vol. 122, no. 24. DOI 10.1063/5.0150756.

- TIANA-ALSINA, J. and MASOLLER, C., 2023. Quantifying the synchronization of the spikes emitted by coupled lasers. *Chaos: An Interdisciplinary Journal of Nonlinear Science*, vol. 33, no. 7. DOI 10.1063/5.0150971.

DOPS - Disseny i Optimització de Processos i Serveis

- LEDUCHOWICZ-MUNICIO, A., DOMENECH, B., FERRER-MARTÍ, L., UDAETA, M.E.M. and GIMENES, A.L.V., 2023. Women, equality, and energy access: Emerging lessons for last-mile rural electrification in Brazil. *Energy Research & Social Science*, vol. 102, pp. 103181. DOI 10.1016/j.erss.2023.103181.

- CODINA, E., DOMENECH, B., JUANPERA, M., PALOMO-AVELLANEDA, L. and PASTOR, R., 2023. Is switching to solar energy a feasible investment? A techno-economic analysis of domestic consumers in Spain. *Energy Policy*, vol. 183, pp. 113834. DOI 10.1016/j.enpol.2023.113834.

ENMA - Enginyeria del Medi Ambient

- BARBERO, M., CANALS CASALS, L., COLET-SUBIRACHS, A., SALOM, J. and CORCHERO, C., 2023. Demand response approaches in a research project versus a real business. *Sustainable Energy, Grids and Networks*, vol. 35, pp. 101090. DOI 10.1016/j.segan.2023.101090.

- ALEGRÍA-SALA, A., LOPEZ, D.M., CASALS, L.C., FONOLLOSA, J. and MACARULLA, M., 2024. The dilemma of variables assumptions in thermal comfort calculations for educational buildings: To Simplify or Not? *Journal of Building Engineering*, vol. 84, pp. 108404. DOI 10.1016/j.job.2023.108404.

GAECEQS - Grup d'Accionaments Electromecànics, Conversió de l'Energia i Qualitat del Subministrament

- KRAHMER, D.M., MARTYNENKO, V., OSENDA, A.P. and J. SÁNCHEZ EGEA, A., 2023. Correlating dry wear turning and pin-on-disc tests: a cost-effective approach to machinability evaluation for low carbon steel grades. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, vol. 45, no. 12. DOI 10.1007/s40430-023-04550-x.

GBMI - Grup de Biotecnologia Molecular i Industrial

- TORRENT-BURGUÉS, J., 2023. Tear Film Constituents and Medicines for Eyes Investigated as Langmuir Films. *BioNanoScience*, vol. 13, no. 3, pp. 1324–1338. DOI 10.1007/s12668-023-01112-2.

- FERRERES, G., IVANOVA, K., TORRENT-BURGUÉS, J. and TZANOV, T., 2023. Multimodal silver-chitosan-acylase nanoparticles inhibit bacterial growth and biofilm formation by Gram-negative *Pseudomonas aeruginosa* bacterium. *Journal of Colloid and Interface Science*, vol. 646, pp. 576–586. DOI 10.1016/j.jcis.2023.04.184.

- GOMEZ-GUTIERREZ, P., RUBIO-MARTINEZ, J. and PEREZ, J.J., 2023. Discovery of Hit Compounds Targeting the P4 Allosteric Site of K-RAS, Identified through Ensemble-Based Virtual Screening. *Journal of Chemical Information and Modeling*, vol. 63, no. 20, pp. 6412–6422. DOI 10.1021/acs.jcim.3c01212.

GCO - Grup de Comunicacions Òptiques

- COMELLAS, J., HARIO, F. and JUNYENT, G., 2023. Quantifying Bypass Traffic in Partially Meshed Transparent Optical Networks. *Journal of Network and Systems Management*, vol. 31, no. 3. DOI 10.1007/s10922-023-09751-2.

- RUIZ-MORENO, S., SONEIRA, M. and PEREZ-PUEYO, R., 2023. Practical identification of cobalt-based blue pigments detecting the induced photoluminescence by a He-Ne laser using a Raman spectrometer. *Journal of Raman Spectroscopy*, DOI 10.1002/jrs.6636.

- AHMADIAN, M., RUIZ, M., COMELLAS, J. and VELASCO, L., 2024. DARIUS: A Digital Twin to Improve the Performance of Quantum Key Distribution. *Journal of Lightwave Technology*, pp. 1–12. DOI 10.1109/jlt.2023.3321774.

Geo2Aqua - Monitoring, modelling and geomatics for hydro-geomorphological processes

- SANZ-RAMOS, M., LÓPEZ-GÓMEZ, D., BLADÉ, E. and DEGHAN-SOURAKI, D., 2023. A CUDA Fortran GPU-parallelised hydrodynamic tool for high-resolution and long-term eco-hydraulic modelling. *Environmental Modelling & Software*, vol. 161, pp. 105628. DOI 10.1016/j.envsoft.2023.105628.

- MARTÍNEZ-GOMARIZ, E., BARBERO, C., SANCHEZ-JUNY, M., FORERO-ORTIZ, E. and SANZ-RAMOS, M., 2023. Dams or ponds classification based on a new criterion to assess potential flood damage to roads in case of failure. *Natural Hazards*, vol. 117, no. 1, pp. 625–653. DOI 10.1007/s11069-023-05875-5.

- COROMINAS, J., GUZZETTI, F., LAN, H., MACCIOTTA, R., MARUNTERANU, C., MCDUGALL, S. and STROM, A., 2023. Revisiting landslide risk terms: IAEG commission C-37 working group on landslide risk nomenclature. *Bulletin of Engineering Geology and the Environment*, vol. 82, no. 12. DOI 10.1007/s10064-023-03474-z.

GEOMVAP - Geometria de Varietats i Aplicacions

- COQUINOT, B., MIR, P. and MIRANDA, E., 2023. Singular cotangent models in fluids with dissipation. *Physica D: Nonlinear Phenomena*, vol. 446, pp. 133655. DOI 10.1016/j.physd.2023.133655.

- MATVEEVA, A. and MIRANDA, E., 2023. Reduction theory for singular symplectic manifolds and singular forms on moduli spaces. *Advances in Mathematics*, vol. 428, pp. 109161. DOI 10.1016/j.aim.2023.109161.

- CASANELLAS, M., FERNÁNDEZ-SÁNCHEZ, J., GARROTE-LÓPEZ, M. and SABATÉ-VIDALES, M., 2023. Designing Weights for Quartet-Based Methods When Data are Heterogeneous Across Lineages. *Bulletin of Mathematical Biology*, vol. 85, no. 7. DOI 10.1007/s11538-023-01167-y.

- BRUGUÉS, J., HOHLOCH, S., MIR, P. and MIRANDA, E., 2023. Constructions of b-semitoric systems. *Journal of Mathematical Physics*, vol. 64, no. 7. DOI 10.1063/5.0152551.

GHS - Grup d'Hidrologia Subterrànea

- PÉREZ-ILLANES, R., SOLE-MARI, G. and FERNÁNDEZ-GARCIA, D., 2024. Smoothed Particle Hydrodynamics for anisotropic dispersion in heterogeneous porous media. *Advances in Water Resources*, vol. 183, pp. 104601. DOI 10.1016/j.advwatres.2023.104601.

- CID-ESCOBAR, D., FOLCH, A., FERRER, N., KATUVA, J. and SANCHEZ-VILA, X., 2024. An assessment tool to improve rural groundwater access: Integrating hydrogeological modelling with socio-technical factors. *Science of The Total Environment*, vol. 912, pp. 168864. DOI 10.1016/j.scitotenv.2023.168864.

GiES - Geofísica i Enginyeria Sísmica

- GARCÍA-VILANA, S. and SÁNCHEZ-MOLINA, D., 2023. Constitutive relationships for osteonal microcracking in human cortical bone using statistical mechanics. *Continuum Mechanics and Thermodynamics*, DOI 10.1007/s00161-023-01257-1.

GNOM - Grup d'Optimització Numèrica i Modelització

- CASTRO, J., ESCUDERO, L.F. and MONGE, J.F., 2023. On solving large-scale multistage stochastic optimization problems with a new specialized interior-point approach. *European Journal of Operational Research*, vol. 310, no. 1, pp. 268–285. DOI 10.1016/j.ejor.2023.03.042.

- BAENA, D. and CASTRO, J., 2023. The Chebyshev center as an alternative to the analytic center in the feasibility pump. *Optimization Letters*, vol. 17, no. 8, pp. 1757–1790. DOI 10.1007/s11590-023-02018-4.

GReCEF- Grup de Recerca en Ciència i Enginyeria de Fluids

- JOFRE, L., BERNADES, M. and CAPUANO, F., 2023. Dimensionality reduction of non-buoyant microconfined high-pressure transcritical fluid turbulence. *International Journal of Heat and Fluid Flow*, vol. 102, pp. 109169. DOI 10.1016/j.ijheatfluidflow.2023.109169.

- BERNADES, M., JOFRE, L. and CAPUANO, F., 2023. Kinetic-energy- and pressure-equilibrium-preserving schemes for real-gas turbulence in the transcritical regime. *Journal of Computational Physics*, vol. 493, pp. 112477. DOI 10.1016/j.jcp.2023.112477.

- GARCIA, F., 2023. Magnetically induced gluing bifurcations of three-tori in spherical Couette flows. *Physics of Fluids*, vol. 35, no. 11. DOI 10.1063/5.0174155.

GRIC - Grup de Recerca i Innovació de la Construcció

- BOIX-COTS, D., PARDO-BOSCH, F. and PUJADAS, P., 2023. A systematic review on multi-criteria group decision-making methods based on weights: Analysis and classification scheme. *Information Fusion*, vol. 96, pp. 16–36. DOI 10.1016/j.inffus.2023.03.004.

- PARDO-BOSCH, F., BLANCO, A., MENDOZA, N., LIBREROS, B., TEJEDOR, B. and PUJADAS, P., 2023. Sustainable deployment of energy efficient district heating: city business model. *Energy Policy*, vol. 181, pp. 113701. DOI 10.1016/j.enpol.2023.113701.

- BAQUERO, M.T., VERGÉS, R., GASPAS, K. and FORCADA, N., 2023. A Field Investigation of the Thermal Comfort of Older Adults in Cold Winter Climates. *Indoor Air*, vol. 2023, pp. 1–14. DOI 10.1155/2023/9185216.

- MIAO, S., GANGOLELLS, M. and TEJEDOR, B., 2023. A Comprehensive Assessment of Indoor Air Quality and Thermal Comfort in Educational Buildings in the Mediterranean Climate. *Indoor Air*, vol. 2023, pp. 1–25. DOI 10.1155/2023/6649829.

GRU - Grup de Recerca Urbanisme

- MORENO, J. and FRANQUESA, J., 2023. Architecture learning environments: Pedagogy and space in the Universitat Politècnica de Catalunya's Sant Cugat Campus. *Computer Applications in Engineering Education*, vol. 31, no. 6, pp. 1608–1632. DOI 10.1002/cae.22661.

HorPTA - Horticultura: producció, transformació i aprofitament

- PALOU, A., JIMÉNEZ, P., CASALS, J. and MASALÓ, I., 2023. Evaluation of the Near Infrared Spectroscopy (NIRS) to predict chemical composition in *Ulva ohnoi*. *Journal of Applied Phycology*, vol. 35, no. 5, pp. 2007–2015. DOI 10.1007/s10811-023-02939-8.

- VÁSQUEZ-CASTILLO, F.M., HERNÁNDEZ, E., UREÑA-PERALTA, M.O. and ACHAERANDIO, I., 2023. Comparative study of block cryoconcentration in pomegranate juice: Centrifugation versus vacuum. *Journal of Food Process Engineering*, vol. 46, no. 11. DOI 10.1111/jfpe.14435.

IDEAI-UPC - Intelligent Data sciEnce and Artificial Intelligence Research Group

- HERNÁNDEZ-CARNERERO, À., SÀNCHEZ-MARRÈ, M., MORA-JIMÉNEZ, I., SOGUERO-RUIZ, C., MARTÍNEZ-AGÜERO, S. and ÁLVAREZ-RODRÍGUEZ, J., 2023. Dimensionality reduction and ensemble of LSTMs for antimicrobial resistance prediction. *Artificial Intelligence in Medicine*, vol. 138, pp. 102508. DOI 10.1016/j.artmed.2023.102508.

- CASTELL-UROZ, I. and BARLET-ROS, P., 2023. TrackSign-labeled web tracking dataset. *Computer Networks*, vol. 226, pp. 109687. DOI 10.1016/j.comnet.2023.109687.

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IEB - Instrumentació Electrònica i Biomèdica

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IMP - Information Modeling and Processing

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inSSIDE - integrated Software, Services, Information and Data Engineering

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IonSAT - Grup de determinació Ionosfèrica i navegació per SATèl·lit i sistemes Terrestres

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ISG-MAK - Information Security Group - Mathematics Applied to Cryptography

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LAB - Laboratori d'Aplicacions Bioacústiques

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LACÀN - Mètodes Numèrics en Ciències Aplicades i Enginyeria

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L'AIRE - Laboratory of Aeronautical and Industrial Research and Studies

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LIM/UPC - Laboratori d'Enginyeria Marítima

- GROSSMANN, F., HURTHUR, D., VAN DER ZANDEN, J., SÁNCHEZ-ARCILLA, A. and ALSINA, J.M., 2023. Near-Bed Sediment Transport Processes During Onshore Bar Migration in Large-Scale Experiments: Comparison With Offshore Bar Migration. *Journal of Geophysical Research: Oceans*, vol. 128, no. 3. DOI 10.1029/2022jc018998.

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MATCAR - Materials de Construcció i Carreteres

- JULIÁN RIVERA, J., BATTISTA, N.D., OVIEDO, A., REBOLLO, O.R., ZAPATA FERRERO, I., FENSEL, E.A., LUIS DELBONO, H. and MARTÍNEZ, A.H., 2023. Cold mix asphalt with polymeric stone for low traffic volume roads. *Construction and Building Materials*, vol. 401, pp. 132714. DOI 10.1016/j.conbuildmat.2023.132714.

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MNT-Solar - Grup de Micro i Nano Tecnologies per Energia Solar

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OMGRAPH - Optimisation Methods on Graphs

- ABIAD, A., CARMONA, Á., ENCINAS, A.M. and JIMÉNEZ, M.J., 2023. The M-matrix group inverse problem for distance-biregular graphs. *Computational and Applied Mathematics*, vol. 42, no. 4. DOI 10.1007/s40314-023-02301-1.

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PM - Programming Models

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POLQUITEX - Materials Polimèrics i Química Textil

- COLOM, X., GIRBAU, J., MARIN, M., FORMELA, K., SAEB, M.R., CARRILLO, F. and CAÑAVATE, J., 2023. New approach in the reuse of modified ground tire rubber as thermal and acoustic insulation to be used in civil engineering. *Journal of Material Cycles and Waste Management*, vol. 25, no. 6, pp. 3557–3566. DOI 10.1007/s10163-023-01778-6.

POLTEPO - Polímers Termoestables Epoxídics

- KONURAY, O., FERNÁNDEZ-FRANCOS, X. and RAMIS, X., 2023. Structural Design of CANs with Fine-Tunable Relaxation Properties: A Theoretical Framework Based on Network Structure and Kinetics Modeling. *Macromolecules*, vol. 56, no. 13, pp. 4855–4873. DOI 10.1021/acs.macromol.3c00482.

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QURBIS - Quality of Urban Life: Innovation, Sustainability and Social Engagement

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R2EM - Resource Recovery and Environmental Management

- REIG, M., VECINO, X., VALDERRAMA, C., SIRÉS, I. and LUIS CORTINA, J., 2023. Waste-to-energy bottom ash management: Copper recovery by electrowinning. *Separation and Purification Technology*, vol. 311, pp. 123256. DOI 10.1016/j.seppur.2023.123256.

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- VINARDELL, S., NICOLAS, P., SASTRE, A.M., CORTINA, J.L. and VALDERRAMA, C., 2023. Sustainability Assessment of Green Ammonia Production To Promote Industrial Decarbonization in Spain. *ACS Sustainable Chemistry & Engineering*, vol. 11, no. 44, pp. 15975–15983. DOI 10.1021/acssuschemeng.3c04694.

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REMM - Recerca en Estructures i Mecànica de Materials

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RIIS - Grup de Recerca en Recursos i Indústries Intel·ligents i Sostenibles

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ROBiri - Grup de Percepció i Manipulació Robotitzada de l'IRI

- DHAMANASKAR, A., DIMICCOLI, M., CORONA, E., PUMAROLA, A. and MORENO-NOGUER, F., 2023. Enhancing egocentric 3D pose estimation with third person views. *Pattern Recognition*, vol. 138, pp. 109358. DOI 10.1016/j.patcog.2023.109358.

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SEPIC - Sistemes Electrònics de Potència i de Control

- CASTILLA, M., MIRET, J., DE VICUÑA, L.G., BORRELL, Á. and ALFARO, C., 2023. Improving voltage imbalance in inverter-based islanded microgrids during line-to-line short circuits. *IET Power Electronics*, vol. 16, no. 11, pp. 1889–1901. DOI 10.1049/pel2.12510.

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SISCOM - Smart Services for Information Systems and Communication Networks

- ASTUDILLO LEÓN, J.P., DE LA CRUZ LLOPIS, L.J. and RICO-NOVELLA, F.J., 2023. A machine learning based Distributed Congestion Control Protocol for multi-hop wireless networks. *Computer Networks*, vol. 231, pp. 109813. DOI 10.1016/j.comnet.2023.109813.

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SMARt - Sustainability and Metabolism in Architecture and Technology

- PONS-VALLADARES, O., CASANOVAS-RUBIO, M. del M., ARMENGOU, J. and DE LA FUENTE, A., 2023. Approach for sustainability assessment for footbridge construction technologies: Application to the first world D-shape 3D-Printed fiber-reinforced mortar footbridge in Madrid. *Journal of Cleaner Production*, vol. 394, pp. 136369. DOI 10.1016/j.jclepro.2023.136369.

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SOC-STEM - Impacte Social de les STEM

- PEÑA, M. and DE LES VALLS, E.M., 2023. Inclusion of the gender equality sustainable development goal in engineering teaching and research. *Environment, Development and Sustainability*, DOI 10.1007/s10668-023-03667-2.

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TECNOFAB - Grup de Recerca en Tecnologies de Fabricació

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eb-POLICOM - Polímers i Compòsits Ecològics i Biodegradables

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3. Altres

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