

Scientific outputs

UIDB/00285/2020

2022



CEMMPRE

Centre for Mechanical Engineering,
Materials and Processes

Indice

Indice.....	2
Books and Chapters.....	3
International Book Chapters.....	3
Edition of International Book.....	3
National Book Chapters	3
Papers in Journals	4
Papers in International Journals.....	4
Papers in National Journals	21
Conferences	21
Attendance to International Conference with Presentation	21
Papers in International Proceedings	35
Attendance to National Conference with Presentation	42
Papers in National Proceedings	46
Organization of Seminars and Conferences	47
Theses.....	48
PhD theses.....	48
MSc theses.....	49
Software algorithmic	59
Laboratory prototypes	60
Patents	60

Books and Chapters

International Book Chapters

1. A.E. Marques, P.A. Prates, A.R. Fonseca, M.C. Oliveira, M.S. Soares, J.V. Fernandes, B.M. Ribeiro, “Machine Learning for the Prediction of Edge Cracking in Sheet Metal Forming Processes”, In book: Machine Learning and Artificial Intelligence with Industrial Applications. Management and Industrial Engineering. Publisher: Springer, Editors: D. Carou, A. Sartal, J.P. Davim https://doi.org/10.1007/978-3-030-91006-8_6
2. A.P. Piedade, A.C. Pinho, “4D-printed stimuli-responsive hydrogels: modeling and fabrication, in Smart Materials in Additive Manufacturing”, Volume 1: 4D Printing Principles and Fabrication, Additive Manufacturing Materials and Technologies. Elsevier, 2022, 151-192. <https://doi.org/10.1016/B978-0-12-824082-3.00027-1>
3. J.M.C.B. Correa Frade, L.I. Librelotto, P.C.M. Ferroli, R. M. Ferreira Leal, “Modelagem Tridimensional no Design: de que Forma Materiais e Técnicas Construtivas Influenciam no Processo Criativo?”, p. 133 -158. In: Design & Narrativas Criativas nos Processos de Prototipagem. São Paulo: Blucher, 2022. <https://doi.org/10.5151/9786555501421-07>

Edition of International Book

1. L.Louro, P. Fonseca, P. Neto, R. Ventura (Eds.), IEEE International Conference on Autonomous Robot Systems and Competitions (ICARSC), IEEE, 2022, ISBN: 978-1-6654-8217-2
2. P.A. Prates, A.F.G. Pereira (Eds.), Recent Advances and Applications of Machine Learning in Metal Forming Processes (Edition), MDPI, 2022. ISBN 978-3-0365-5772-4
3. R.Branco, F. Berto, S. Wu (Eds.) Computational Methods for Fatigue and Fracture, Metals, MDPI AG, Switzerland, 2022, ISBN 978-3-0365-5299-6.
4. R.M. Leal, I. Galvão (Eds.), Recent developments in non-conventional welding of materials, MDPI, 2022. 978-3-0365-3874-7.

National Book Chapters

1. A.P. Chung, R. Francisco, A.P. Piedade, and P.V. Morais. “Comunidades observadas por microscopia electronica de varrimento”. Ebook, senior science illustration, *Comunicação de ciência em microbiologia*. Edited by Sociedade Portuguesa de Microbiologia (SPM) on International Day of Microorganism, September 2022. https://spm-microbiologia.files.wordpress.com/2022/09/ebook_spm.pdf.

2. T.C. Francisco and R. Francisco. “Diversidade de Bactérias2. Ebook, senior science illustration, *Comunicação de ciência em microbiologia*. Edited by *Sociedade Portuguesa de Microbiologia* (SPM) on International Day of Microorganism, September 2022. https://spm microbiologia.files.wordpress.com/2022/09/ebook_spm.pdf

Papers in Journals

Papers in International Journals

1. A.A. S. Correia, M. I. Moita Pinto, and K. D. T. Monteiro, “Reduced-scale geosynthetics retaining walls: deformation prediction by an expedited method,” *International Journal of Physical Modelling in Geotechnics*, vol. 22, no. 2, pp. 55–69, Mar. 2022, doi: 10.1680/jphmg.20.00007.
2. A.AL-Rjoub, A. Cavaleiro, T. bin Yaqub, M. Evaristo, N. M. Figueiredo, and F. Fernandes, “TiAlSiN(Ag) coatings for high temperature applications: The influence of Ag alloying on the morphology, structure, thermal stability and oxidation resistance,” *Surf Coat Technol*, vol. 442, no. SI, Jul. 2022, doi: 10.1016/j.surfcoat.2022.128087.
3. A.AL-Rjoub, T. bin Yaqub, A. Cavaleiro, and F. Fernandes, “The influence of V addition on the structure, mechanical properties, and oxidation behaviour of TiAlSiN coatings deposited by DC magnetron sputtering,” *Journal of Materials Research and Technology-JMR&T*, vol. 20, pp. 2444–2453, Sep. 2022, doi: 10.1016/j.jmrt.2022.08.009.
4. A.Arantes, A. F. Alhais, and L. M. D. F. Ferreira, “Application of a purchasing portfolio model to define medicine purchasing strategies: An empirical study,” *Socioecon Plann Sci*, vol. 84, p. 101318, Dec. 2022, doi: 10.1016/j.seps.2022.101318.
5. A.Bougarech, S. Zaidi, A. F. Sousa, S. Abid, A. J. D. Silvestre, and M. Abid, “Bisfuranic copolyesters bearing nitrated units: synthesis, thermal properties and degradation essays,” *Journal of Polymer Research*, vol. 29, no. 5, May 2022, doi: 10.1007/s10965-022-03061-y.
6. A.Cunha et al., “420 stainless steel-Cu parts fabricated using 3D Multi-Material Laser Powder Bed Fusion: a new solution for plastic injection moulds,” *Mater Today Commun*, vol. 32, Aug. 2022, doi: 10.1016/j.mtcomm.2022.103852.
7. A.Cunha et al., “Laser powder bed fusion of the steels used in the plastic injection mould industry: a review of the influence of processing parameters on the final properties,” *International Journal of Advanced Manufacturing Technology*, vol. 121, no. 7–8, pp. 4255–4287, Aug. 2022, doi: 10.1007/s00170-022-09588-0.
8. A.Cunha et al., “Production of a multi-functional 420 stainless steel-copper surface by laser texturing and hot pressing: a new solution for plastic injection moulds,” *International Journal of Advanced Manufacturing Technology*, vol. 123, no. 3–4, pp. 1341–1352, Nov. 2022, doi: 10.1007/s00170-022-10252-w.

9. A.E. Marques et al., "Machine Learning for Predicting Fracture Strain in Sheet Metal Forming," *Metals (Basel)*, vol. 12, no. 11, Nov. 2022, doi: 10.3390/met12111799.
10. A.F. Kanaan and A. P. Piedade, "Electro-responsive polymer-based platforms for electrostimulation of cells," *Mater Adv*, vol. 3, no. 5, pp. 2337–2353, Mar. 2022, doi: 10.1039/d1ma01012c.
11. A.F. Sousa and A. J. D. Silvestre, "Plastics from renewable sources as green and sustainable alternatives," *Curr Opin Green Sustain Chem*, vol. 33, p. 100557, Feb. 2022, doi: 10.1016/j.cogsc.2021.100557.
12. A.Frois, A. R. Mendes, S.A. Pereira Sonia Alves and C.S. Louro, "Metal Release and Surface Degradation of Fixed Orthodontic Appliances during the Dental Levelling and Aligning Phase: A 12-Week Study," *Coatings*, vol. 12, no. 5, May 2022, doi: 10.3390/coatings12050554.
13. A.G.M. Ferreira, J. B. Santos, J. Jalkh, S. Khalighi, P. F. Cruz, and R. M. M. Brito, "Pressure Effect on the Speed of Sound of Waste Cooking Oil Biodiesel," *J Chem Eng Data*, vol. 67, no. 10, pp. 3046–3058, Oct. 2022, doi: 10.1021/acs.jced.2c00473.
14. A.Lalmi, G. Fernandes, and S. S. Boudemagh, "Synergy between Traditional, Agile and Lean management approaches in construction projects: bibliometric analysis," *Procedia Comput Sci*, vol. 196, pp. 732–739, 2022, doi: 10.1016/j.procs.2021.12.070.
15. A.-M. Chiorcea-Paquim and A. M. Oliveira-Brett, "Amyloid beta peptides electrochemistry: A review," *Curr Opin Electrochem*, vol. 31, Feb. 2022, doi: 10.1016/j.coelec.2021.100837.
16. A.-M. Chiorcea-Paquim, "8-oxoguanine and 8-oxodeoxyguanosine Biomarkers of Oxidative DNA Damage: A Review on HPLC-ECD Determination," *Molecules*, vol. 27, no. 5, Mar. 2022, doi: 10.3390/molecules27051620.
17. A.M. Habraken et al., "Analysis of ESAFORM 2021 cup drawing benchmark of an Al alloy, critical factors for accuracy and efficiency of FE simulations," *International Journal of Material Forming*, vol. 15, no. 5, Sep. 2022, doi: 10.1007/s12289-022-01672-w.
18. A.M. Sousa, A. M. Amaro, and A. P. Piedade, "3D Printing of Polymeric Bioresorbable Stents: A Strategy to Improve Both Cellular Compatibility and Mechanical Properties," *Polymers (Basel)*, vol. 14, no. 6, p. 1099, Mar. 2022, doi: 10.3390/polym14061099.
19. A.Monjon, P. Santos, S. Valvez, and P. N. B. Reis, "Hybridization Effects on Bending and Interlaminar Shear Strength of Composite Laminates," *Materials*, vol. 15, no. 4, Feb. 2022, doi: 10.3390/ma15041302.
20. A.P. Chung, R. Francisco, P. v. Morais, and R. Branco, "Genome mining to unravel potential metabolic pathways linked to gallium bioleaching ability of bacterial mine isolates," *Front Microbiol*, vol. 13, Sep. 2022, doi: 10.3389/fmicb.2022.970147.
21. A.S. Cruces, A. Exposito, R. Branco, L. P. Borrego, F. v Antunes, and P. Lopez-Crespo, "Study of the notch fatigue behaviour under biaxial conditions of maraging steel produced by selective laser melting," *Theoretical and Applied Fracture Mechanics*, vol. 121, Oct. 2022, doi: 10.1016/j.tafmec.2022.103469.

22. A.S. Gaspar et al., "Poly(beta-pinene) as an efficient biobased tackifier for metallocene poly (ethylene) based hotmelt adhesives," *Int J Adhes Adhes*, vol. 114, Apr. 2022, doi: 10.1016/j.ijadhadh.2022.103111.
23. A.Silva, V. Lenzi, A. Cavaleiro, S. Carvalho, and L. Marques, "FELINE: Finite element solver for hydrodynamic lubrication problems using the inexact Newton method" *Comput Phys Commun*, vol. 279, Oct. 2022, doi: 10.1016/j.cpc.2022.108440.
24. B.Agostinho, A. J. D. Silvestre, and A. F. Sousa, "From PEF to rPEF: disclosing the potential of deep eutectic solvents in continuous de-/re-polymerization recycling of biobased polyesters," *Green Chemistry*, vol. 24, no. 8, pp. 3115–3119, 2022, doi: 10.1039/D2GC00074A.
25. B.C. Almeida et al., "Development of Enzymatic Variants for the Synthesis of Bioresorbable Polyesters," *Org Process Res Dev*, vol. 26, no. 8, pp. 2351–2363, Aug. 2022, doi: 10.1021/acs.oprd.1c00480.
26. B.Dalkiran and C. M. A. Brett, "Poly(safranine T)-deep eutectic solvent/copper oxide nanoparticle-carbon nanotube nanocomposite modified electrode and its application to the simultaneous determination of hydroquinone and catechol," *Microchemical Journal*, vol. 179, Aug. 2022, doi: 10.1016/j.microc.2022.107531.
27. B.M. Marques, D. M. Neto, and J. L. Alves, "Assessing the Accuracy of Different Remapping Methods in Adaptive Mesh Refinement," *Key Eng Mater*, pp. 316–322, Jul. 2022, doi: 10.4028/p-1r2x8g.
28. B.M.C. Oliveira, R. F. Santos, A. P. Piedade, P. J. Ferreira, and M. F. Vieira, "Co-W Barrier Layers for Metallization of Copper Interconnects: Thermal Performance Analysis," *Nanomaterials*, vol. 12, no. 10, May 2022, doi: 10.3390/nano12101752.
29. B.Rito et al., "Post-measurement compressed calibration for ICP-MS-based metal quantification in mine residues bioleaching," *Sci Rep*, vol. 12, no. 1, p. 16007, Sep. 2022, doi: 10.1038/s41598-022-19620-8.
30. B.Vasconcelos, R. Serra, J. Oliveira, and C. Fonseca, "Characterization and Tribological Behavior of Electroless-Deposited Ni-P-PTFE Films on NBR Substrates for Dynamic Contact Applications," *Coatings*, vol. 12, no. 10, Oct. 2022, doi: 10.3390/coatings12101410.
31. B.Zakavi, A. Kotousov, and R. Branco, "An analytical-based approach for simulating fatigue crack growth in round bars," *Int J Fract*, vol. 234, no. 1–2, SI, pp. 57–68, Apr. 2022, doi: 10.1007/s10704-021-00558-3.
32. C.A. Pinto, J. T. Farinha, H. Raposo, and D. Galar, "Stochastic versus Fuzzy Models-A Discussion Centered on the Reliability of an Electrical Power Supply System in a Large European Hospital," *Energies (Basel)*, vol. 15, no. 3, Feb. 2022, doi: 10.3390/en15031024.
33. C.Bouyahya et al., "Isosorbide and 2,5-Furandicarboxylic Acid Based (Co)Polyesters: Synthesis, Characterization, and Environmental Degradation," *Polymers (Basel)*, vol. 14, no. 18, p. 3868, Sep. 2022, doi: 10.3390/polym14183868.

34. C.D. Boeira et al., "Adhesion of Amorphous Carbon Nanofilms on Ferrous Alloy Substrates Using a Nanoscale Silicon Interlayer: Implications for Solid-State Lubrication," *ACS Appl Nano Mater*, vol. 5, no. 3, pp. 3763–3772, Mar. 2022, doi: 10.1021/acsanm.1c04429.
35. C.F.A. Alves, R. Serra, R. Bayat, F. Ferreira, A. Cavaleiro, and S. Carvalho, "Synergetic effect of thickness and oxygen addition on the electrochemical behaviour of tantalum oxide coatings deposited by HiPIMS in DOMS mode," *Electrochim Acta*, vol. 423, Aug. 2022, doi: 10.1016/j.electacta.2022.140497.
36. C.M. Amaro, B. B. Gomes, R. Mendes, and M. A. Castro, "Effect of different height and distance oppositions on basketball shooting precision," *Journal of Physical Education and Sport*, vol. 22, no. 5, 2022.
37. C.M. Amaro, S. Nolasco, L. Roseiro, A. M. Amaro, and M. A. Castro, "sEMG Analysis of Upper Limb Muscles during Backhand Smash Using Badminton Rackets of Different Stiffness," *Applied Sciences-Basel*, vol. 12, no. 19, Oct. 2022, doi: 10.3390/app12199483.
38. C.M. Andrade, D. M. Neto, and M. C. Oliveira, "Prediction of Solid-State Phase Transformations for the Ti-6Al-4V Alloy," *Key Eng Mater*, pp. 305–315, Jul. 2022, doi: 10.4028/p-r0d8ov.
39. C.M.A. Brett, "Electrochemical Impedance Spectroscopy in the Characterisation and Application of Modified Electrodes for Electrochemical Sensors and Biosensors," *Molecules*, vol. 27, no. 5, Mar. 2022, doi: 10.3390/molecules27051497.
40. C.M.R. Abreu et al., "Preparation of nonmigratory flexible poly(vinyl chloride)-b-poly(n-butyl acrylate)-b-poly(vinyl chloride) via aqueous reversible deactivation radical polymerization in a pilot reactor," *React Funct Polym*, vol. 170, p. 105138, Jan. 2022, doi: 10.1016/j.reactfunctpolym.2021.105138.
41. C.Marques-Pereira, D. N. Proença, and P. v. Morais, "The Role of Serratamolide-like Amino Lipids Produced by Bacteria of Genus *Serratia* in Nematicidal Activity," *Pathogens*, vol. 11, no. 2, p. 198, Feb. 2022, doi: 10.3390/pathogens11020198.
42. C.Mican, G. Fernandes, and M. Araújo, "A method for project portfolio risk assessment considering risk interdependencies – a network perspective," *Procedia Comput Sci*, vol. 196, pp. 948–955, 2022, doi: 10.1016/j.procs.2021.12.096.
43. C.Mican, G. Fernandes, and M. Araujo, "Disclosing the Tacit Links between Risk and Success in Organizational Development Project Portfolios," *Sustainability*, vol. 14, no. 9, May 2022, doi: 10.3390/su14095235.
44. C.Monteiro et al., "Perception of the Special Troops (Commando) Soldiers Regarding Physical Fitness, Motor Control and Psychological Skills," *Applied Sciences*, vol. 12, no. 7, p. 3258, Mar. 2022, doi: 10.3390/app12073258.
45. C.S.Kumar, S. K. Patel, and F. Fernandes, "Performance of Al₂O₃/TiC mixed ceramic inserts coated with TiAlSiN, WC/C and DLC thin solid films during hard turning of AISI 52100 steel," *Journal of Materials Research and Technology-JMR&T*, vol. 19, pp. 3380–3393, Jul. 2022, doi: 10.1016/j.jmrt.2022.06.092.

46. C.T.B.Paula et al., "ROS-degradable PEG-based wound dressing films with drug release and antibacterial properties," *Eur Polym J*, vol. 177, Aug. 2022, doi: 10.1016/j.eurpolymj.2022.111447.
47. D.Bogalho, R. Gomes, R. Mendes, G. Dias, and M. A. Castro, "Impact of Flexibility on Vertical Jump, Balance and Speed in Amateur Football Players," *Applied Sciences*, vol. 12, no. 11, p. 5425, May 2022, doi: 10.3390/app12115425.
48. D.E.L. Vieira, A. N. Salak, M. G. S. Ferreira, J. M. Vieira, and C. M. A. Brett, "Ce-substituted Mg-Al layered double hydroxides to prolong the corrosion protection lifetime of aluminium alloys," *Appl Surf Sci*, vol. 573, Jan. 2022, doi: 10.1016/j.apsusc.2021.151527.
49. D.G. Andrade, S. Sabari, I. Galvão, C. Leitão, and D. M. Rodrigues, "Temperature and torque in FSSW of steel sheets: experimental measurements and modelling," *Welding in the World*, Nov. 2022, doi: 10.1007/s40194-022-01418-x.
50. D.Gatoes, R. Alves, B. Alves, and M. T. Vieira, "Selective Laser Melting and Mechanical Properties of Stainless Steels," *Materials*, vol. 15, no. 21, Nov. 2022, doi: 10.3390/ma15217575.
51. D.M. Neto, E. R. Sergio, M. F. Borges, L. P. Borrego, and F. v Antunes, "Effect of load blocks on fatigue crack growth," *Int J Fatigue*, vol. 162, Sep. 2022, doi: 10.1016/j.ijfatigue.2022.107001.
52. D.M. Neto, J. Pedro, M. F. Borges, L. F. P. Borrego, E. R. Sérgio, and F. v. Antunes, "Numerical prediction of fatigue crack growth based on cumulative plastic strain versus experimental results for AA6082-T6," *Int J Fract*, Nov. 2022, doi: 10.1007/s10704-022-00680-w.
53. D.M. Neto, M. C. Oliveira, R. E. Dick, J. L. Alves, and L. F. Menezes, "Non-Uniform Effect of the Contact Conditions on the Earing Profile in Cylindrical Cups of Anisotropic Materials," *Key Eng Mater*, pp. 1188–1194, Jul. 2022, doi: 10.4028/p-9i8j3o.
54. D.M. Neto, M. F. Borges, E. R. Sergio, and F. V. Antunes, "Effect of Residual Stresses on Fatigue Crack Growth: A Numerical Study Based on Cumulative Plastic Strain at the Crack Tip," *Materials*, vol. 15, no. 6, Mar. 2022, doi: 10.3390/ma15062156.
55. D.M. Neto, M. F. Borges, F. Antunes V, and R. Sunder, "Numerical analysis of fatigue crack growth under SuperBlock2020 load sequence," *Eng Fract Mech*, vol. 260, Feb. 2022, doi: 10.1016/j.engfracmech.2021.108178.
56. D.N. Proença, W. B. Whitman, N. Shapiro, T. Woyke, N. C. Kyrpides, and P. v. Morais, "Faunimonas pinastri gen. nov., sp. nov., an endophyte from a pine tree of the family Pleomorphomonadaceae, class Alphaproteobacteria," *Int J Syst Evol Microbiol*, vol. 72, no. 12, Dec. 2022, doi: 10.1099/ijsem.0.005623.
57. E.Z. Berglund et al., "Effects of the COVID-19 Pandemic on Water Utility Operations and Vulnerability," *J Water Resour Plan Manag*, vol. 148, no. 6, Jun. 2022, doi: 10.1061/(ASCE)WR.1943-5452.0001560.

58. F.A.M.M. Goncalves, A. C. Fonseca, A. P. Cordeiro Rosemeyre and A.P. Piedade, H. Faneca, A. Serra, and J. F. J. Coelho, "Fabrication of 3D scaffolds based on fully biobased unsaturated polyester resins by microstereo-lithography," *Biomedical Materials*, vol. 17, no. 2, Mar. 2022, doi: 10.1088/1748-605X/ac4b46.
59. F.de Bon et al., "The scale-up of electrochemically mediated atom transfer radical polymerization without deoxygenation," *Chemical Engineering Journal*, vol. 445, p. 136690, Oct. 2022, doi: 10.1016/j.cej.2022.136690.
60. F.de Bon, F. Lorandi, J. F. J. Coelho, A. C. Serra, K. Matyjaszewski, and A. A. Isse, "Dual electrochemical and chemical control in atom transfer radical polymerization with copper electrodes," *Chem Sci*, vol. 13, no. 20, pp. 6008–6018, May 2022, doi: 10.1039/d2sc01982e.
61. F.de Bon, I. M. Azevedo, D. C. M. Ribeiro, R. C. Rebelo, J. F. J. Coelho, and A. C. Serra, "Scaling-Up an Aqueous Self-Degassing Electrochemically Mediated ATRP in Dispersion for the Preparation of Cellulose–Polymer Composites and Films," *Polymers (Basel)*, vol. 14, no. 22, p. 4981, Nov. 2022, doi: 10.3390/polym14224981.
62. F.Salles, M. C. Oliveira, D. M. Neto, J. L. Alves, L. F. Menezes, and J. V. Fernandes, "Influence of the Anisotropic Behavior on Equibiaxial Paths," *Key Eng Mater*, pp. 1007–1020, Jul. 2022, doi: 10.4028/p-u7u5i8.
63. F.Samadi et al., "An investigation on residual stress and fatigue life assessment of T-shape welded joints," *Eng Fail Anal*, vol. 141, Nov. 2022, doi: 10.1016/j.engfailanal.2022.106685.
64. G.F. Delgado, A. C. Pinho, and A. P. Piedade, "3D Printing for Cartilage Replacement: A Preliminary Study to Explore New Polymers," *Polymers (Basel)*, vol. 14, no. 5, Mar. 2022, doi: 10.3390/polym14051044.
65. G.Fernandes and D. O’Sullivan, "Project management practices in major university-industry R&D collaboration programs – a case study," *J Technol Transf*, Mar. 2022, doi: 10.1007/s10961-021-09915-9.
66. G.Fernandes, D. O’Sullivan, and L. M. D. F. Ferreira, "Addressing the Challenges to Successfully Manage University-Industry R&D Collaborations," *Procedia Comput Sci*, vol. 196, pp. 724–731, 2022, doi: 10.1016/j.procs.2021.12.069.
67. G.Santos Silva, L. Maj, J. Morgiel, M. T. Vieira, and A. S. Ramos, "Development of Actuators for Repairing Cracks by Coating W Wires with Reactive Multilayers," *Materials*, vol. 15, no. 3, Feb. 2022, doi: 10.3390/ma15030869.
68. G.V. Messa et al., "Computational Fluid Dynamic Modelling of Fully-Suspended Slurry Flows in Horizontal Pipes with Different Solids Concentrations," *KONA Powder and Particle Journal*, p. 2023008, 2022, doi: 10.14356/kona.2023008.
69. H.Hu, S. M. R. Lopes, A. Lopes V, and T. Lou, "Flexural Response of Axially Restricted RC Beams: Numerical and Theoretical Study," *Materials*, vol. 15, no. 17, Sep. 2022, doi: 10.3390/ma15176052.
70. H.Ju et al., "Multilayer Mo2N-Ag/SiNx films for demanding applications: Morphology, structure and temperature-cycling tribological properties," *Mater Des*, vol. 223, Nov. 2022, doi: 10.1016/j.matdes.2022.111128.

71. H.Khanmohammadi, W. Wijanarko, S. Cruz, M. Evaristo, and N. Espallargas, "Triboelectrochemical friction control of W- and Ag-doped DLC coatings in water-glycol with ionic liquids as lubricant additives," *RSC Adv*, vol. 12, no. 6, pp. 3573–3583, Jan. 2022, doi: 10.1039/d1ra08814a.
72. H.Lamsaf et al., "Zn and Zn-Fe Nanostructures with Multifunctional Properties as Components for Food Packaging Materials," *Nanomaterials*, vol. 12, no. 12, Jun. 2022, doi: 10.3390/nano12122104.
73. H.Vidinha, R. Branco, M. A. Neto, A. M. Amaro, and P. Reis, "Numerical Modeling of Damage Caused by Seawater Exposure on Mechanical Strength in Fiber-Reinforced Polymer Composites," *Polymers (Basel)*, vol. 14, no. 19, Oct. 2022, doi: 10.3390/polym14193955.
74. I.Carneiro, J. Fernandes V, and S. Simoes, "Deformation Behaviour of Cold-Rolled Ni/CNT Nanocomposites," *Applied Sciences-Basel*, vol. 12, no. 19, Oct. 2022, doi: 10.3390/app12199471.
75. I.Carvalho et al., "Silver oxide coatings deposited on leathers to prevent diabetic foot infections," *Surf Coat Technol*, vol. 442, no. S1, Jul. 2022, doi: 10.1016/j.surfcoat.2022.128338.
76. J.Antunes, K. Matos, I. Carvalho, F. Carvalho Sandra and Ferreira, and S. M. A. Cruz, "Physical Vapor Deposition Technology in Personal Protective Equipment Production: Improved Antibacterial and Hydrophobic Character of Textiles," *Coatings*, vol. 12, no. 10, Oct. 2022, doi: 10.3390/coatings12101399.
77. J.D. Castro, M. J. Lima, and S. Carvalho, "Corrosion resistance of Cu-Zr(O) N films in a simulated seawater environment," *Surf Coat Technol*, vol. 451, Dec. 2022, doi: 10.1016/j.surfcoat.2022.129050.
78. J.D. Castro, M. J. Lima, and S. Carvalho, "Wetting and corrosion properties of CuxOy films deposited by magnetron sputtering for maritime applications," *Appl Surf Sci*, vol. 584, May 2022, doi: 10.1016/j.apsusc.2022.152582.
79. J.Esteves, R. Dinis, O. Fernandes, M. A. Castro, R. Oliveira, and P. Pezarat-Correia, "Differences in postural control between healthy and subjects with chronic ankle instability," *Physical Therapy in Sport*, vol. 56, pp. 8–14, Jul. 2022, doi: 10.1016/j.ptsp.2022.05.014.
80. J.Franks et al., "Fatigue life improvement using low transformation temperature weld material with measurement of residual stress," *Int J Fatigue*, vol. 164, Nov. 2022, doi: 10.1016/j.ijfatigue.2022.107137.
81. J.M. Antunes, A. F. G. Pereira, and N. A. Sakharova, "Overview on the Evaluation of the Elastic Properties of Non-Carbon Nanotubes by Theoretical Approaches," *Materials*, vol. 15, no. 9, May 2022, doi: 10.3390/ma15093325.
82. J.M. Vasco-Olmo, F. A. Diaz, A. Camacho-Reyes, N. James, and F. Antunes V, "Experimental evaluation of plastic wake on growing fatigue cracks from the analysis of residual displacement fields," *Fatigue Fract Eng Mater Struct*, vol. 45, no. 5, pp. 1494–1504, May 2022, doi: 10.1111/ffe.13681.

83. J.M. Vasco-Olmo, F. A. Diaz, D. M. Neto, E. R. Sergio, F. Antunes V, and M. N. James, "Evaluation of small-scale yielding boundary using digital image correlation results," *Fatigue Fract Eng Mater Struct*, vol. 45, no. 4, pp. 1276–1291, Apr. 2022, doi: 10.1111/ffe.13674.
84. J.M.V. da Silva, L. M. D. F. Ferreira, and J. A. Barros Soares, "Outlining maritime cabotage public policies for the Brazilian transport system," *WMU Journal of Maritime Affairs*, vol. 21, no. 4, pp. 519–547, Dec. 2022, doi: 10.1007/s13437-022-00275-1.
85. J.Marouvo, N. Azevedo, F. Sousa, O. Fernandes, and M. A. Castro, "Postural analysis in flat-footed subjects," *Medicina Balear*, vol. 37, no. 5, pp. 48–55, Sep. 2022, doi: 10.3306/AJHS.2022.37.05.48.
86. J.Marouvo, P. Ferreira, and F. Simões, "Comparative Study of the Drilling Operation in Duplex Stainless Steels with Drills of Two and Three Cutting Edges," *Key Eng Mater*, pp. 1660–1670, Jul. 2022, doi: 10.4028/p-9qxyt3.
87. J.Marques, J. Liu, M. C. Cunha, K. J. van Meter, and N. B. Basu, "Nitrogen legacies in anthropogenic landscapes: a case study in the Mondego Basin in Portugal," *Environmental Science and Pollution Research*, vol. 29, no. 16, pp. 23919–23935, Apr. 2022, doi: 10.1007/s11356-021-16725-x.
88. J.N. Pires, A. S. Azar, F. Nogueira, C. Y. Zhu, R. Branco, and T. Tankova, "The role of robotics in additive manufacturing: review of the AM processes and introduction of an intelligent system," *Industrial Robot-The International Journal of Robotics Research and Application*, vol. 49, no. 2, pp. 311–331, Feb. 2022, doi: 10.1108/IR-06-2021-0110.
89. J.P.M. Ribeiro et al., "Expanding the use of affordable CuSO₄·5H₂O in ATRP techniques in homogeneous media," *Polymer (Guildf)*, vol. 241, p. 124526, Feb. 2022, doi: 10.1016/j.polymer.2022.124526.
90. J.R.C. Costa, J. R. Gois, J. R. Fernandes, K. Matyjaszewski, J. F. J. Coelho, and A. C. Serra, "Tosyl iodide - a new initiator for the photo-controlled iodine transfer polymerization of methacrylates under sunlight irradiation," *Polym Chem*, vol. 13, no. 7, pp. 929–936, Feb. 2022, doi: 10.1039/d1py01356d.
91. J.Rebello-Kornmeier, M. J. Marques, W. Gan, A. C. Batista, S. Paddea, and A. Loureiro, "Quantification of Residual Stress Relief by Heat Treatments in Austenitic Cladded Layers," *Materials*, vol. 15, no. 4, Feb. 2022, doi: 10.3390/ma15041364.
92. J.S. Jesus et al., "Influence of specimen orientation on fatigue crack growth in 7050-T7451 and 2050-T8 aluminium alloys," *Int J Fatigue*, vol. 164, Nov. 2022, doi: 10.1016/j.ijfatigue.2022.107136.
93. J.S. Jesus, L. P. Borrego, J. A. M. Ferreira, A. C. Costa J. D. and Batista, and C. Capela, "Fatigue crack growth in Ti-6Al-4V specimens produced by Laser Powder Bed Fusion and submitted to Hot Isostatic Pressing," *Theoretical and Applied Fracture Mechanics*, vol. 118, Apr. 2022, doi: 10.1016/j.tafmec.2021.103231.
94. J.S. Jesus, L. P. Borrego, J. A. M. Ferreira, J. D. Branco R. and Costa, and C. Capela, "Fatigue crack growth under mixed mode I + II in Ti-6Al-4V specimens produced by Laser powder Bed fusion," *Eng Fract Mech*, vol. 264, Apr. 2022, doi: 10.1016/j.engfracmech.2022.108327.

95. J.Singh, G. Wheatley, R. Branco, F. V. Antunes, R. M. Nejad, and F. Berto, "On the low-cycle fatigue behavior of aluminum alloys under influence of tensile pre-strain histories and strain ratio," *Int J Fatigue*, vol. 158, May 2022, doi: 10.1016/j.ijfatigue.2022.106747.
96. J.Y. Gao, F. Ferreira, and M. K. Lei, "Global model on oscillation discharge characteristics during deep oscillation magnetron sputtering of Cr target," *J Appl Phys*, vol. 132, no. 20, p. 203303, Nov. 2022, doi: 10.1063/5.0126989.
97. K.Aliakbari, R. M. Nejad, S. K. P. Toroq, W. Macek, and R. Branco, "Assessment of unusual failure in crankshaft of heavy-duty truck engine," *Eng Fail Anal*, vol. 134, Apr. 2022, doi: 10.1016/j.engfailanal.2022.106085.
98. K.Simonovic, T. Vitu, A. Cammarata, A. Cavaleiro, and T. Polcar, "Tribological behaviour of W-S-C coated ceramics in a vacuum environment," *Tribol Int*, vol. 167, Mar. 2022, doi: 10.1016/j.triboint.2021.107375.
99. L.Abad-Gil and C. M. A. Brett, "Poly(methylene blue)-ternary deep eutectic solvent/Au nanoparticle modified electrodes as novel electrochemical sensors: Optimization, characterization and application," *Electrochim Acta*, vol. 434, Dec. 2022, doi: 10.1016/j.electacta.2022.141295.
100. L.C.Dias, M. C. Cunha, E. Watkins, and G. Triantaphyllidis, "A multi-criteria assessment of policies to achieve the objectives of the EU marine litter strategy," *Mar Pollut Bull*, vol. 180, Jul. 2022, doi: 10.1016/j.marpolbul.2022.113803.
101. L.E.Ruiz, A. C. Pinho, and D. N. Resende, "3D Printing as a Disruptive Technology for the Circular Economy of Plastic Components of End-of-Life Vehicles: A Systematic Review," *Sustainability*, vol. 14, no. 20, Oct. 2022, doi: 10.3390/su142013256.
102. L.Fialho, C. F. A. Alves, and S. Carvalho, "A Decade of Progress on MAO-Treated Tantalum Surfaces: Advances and Contributions for Biomedical Applications," *NANOMATERIALS*, vol. 12, no. 14, Jul. 2022, doi: 10.3390/nano12142319.
103. L.M.Vilhena, C. M. Fernandes, J. Sacramento, A. M. R. Senos, and A. Ramalho, "Sliding wear and friction behaviour of WC-stainless steel and WC-Co composites," *Lubrication Science*, vol. 34, no. 4, pp. 247–257, Jun. 2022, doi: 10.1002/lc.1586.
104. L.Petrella et al., "Feasibility assessment of the Eye Scan Ultrasound System for cataract characterization and optimal phacoemulsification energy estimation: protocol for a pilot, nonblinded and monocentre study," *Pilot Feasibility Stud*, vol. 8, no. 1, p. 219, Sep. 2022, doi: 10.1186/s40814-022-01173-2.
105. L.Vilhena, B. Domingues, C. Fernandes, A. Senos, and A. Ramalho, "Mechanical and Tribological Characterization of WC-Co and WC-AISI 304 Composites by a Newly Developed Equipment," *Materials*, vol. 15, no. 3, Feb. 2022, doi: 10.3390/ma15031187.
106. L.Vilhena, F. Ferreira, J. C. Oliveira, and A. Ramalho, "Rapid and Easy Assessment of Friction and Load-Bearing Capacity in Thin Coatings," *Electronics (Basel)*, vol. 11, no. 3, Feb. 2022, doi: 10.3390/electronics11030296.

107. M.A. Mehmood et al., "Ceramic-reinforced HEA matrix composites exhibiting an excellent combination of mechanical properties," *Sci Rep*, vol. 12, no. 1, p. 21486, Dec. 2022, doi: 10.1038/s41598-022-25734-w.
108. M.A.R. Pereira, I. Galvao, J. D. Costa, A. M. Amaro, and R. M. Leal, "Joining of Fibre-Reinforced Thermoplastic Polymer Composites by Friction Stir Welding-A Review," *Applied Sciences-Basel*, vol. 12, no. 5, Mar. 2022, doi: 10.3390/app12052744.
109. M.A.R. Pereira, I. Galvao, J. D. Costa, R. M. Leal, and A. M. Amaro, "Joining of Polyethylene Using a Non-Conventional Friction Stir Welding Tool," *Materials*, vol. 15, no. 21, Nov. 2022, doi: 10.3390/ma15217639.
110. M.C. Cunha, D. Serpa, J. Marques, J. J. Keizer, and N. Abrantes, "On sustainable improvements of agricultural practices in the Bairrada region (Portugal)," *Environ Dev Sustain*, Feb. 2022, doi: 10.1007/s10668-022-02155-3.
111. M.C. Cunha, J. Marques, L. C. Dias, I. R. Cotera, and G. Triantaphyllidis, "A Delphi Based Approach to the Assessment of New Marine Litter Reduction and Processing Technologies," *Front Mar Sci*, vol. 9, Apr. 2022, doi: 10.3389/fmars.2022.886581.
112. M.C. Oliveira, I. Prcela, V. Cvitanić, D. M. Neto, J. L. Alves, and L. F. Menezes, "On the Effect of the Tension-Compression Ratio on Forming of Isotropic Materials," *Key Eng Mater*, pp. 1108–1121, Jul. 2022, doi: 10.4028/p-0873q9.
113. M.Cruz et al., "Biomechanical Device for Measurement of Adductors Strength and Aid in Self-Catheterisation of Spastic Patients," *Designs (Basel)*, vol. 6, no. 1, p. 7, Jan. 2022, doi: 10.3390/designs6010007.
114. M.F. Borges, F. v Antunes, D. M. Neto, F. A. Vasco-Olmo J. M. and Diaz, and M. N. James, "Validity of small-scale yielding regime in notched-cracked geometries," *Int J Fatigue*, vol. 154, Jan. 2022, doi: 10.1016/j.ijfatigue.2021.106563.
115. M.F. Moreira, A. F. Kanaan, and A. P. Piedade, "Indirect Additive Manufacturing: A Valid Approach to Modulate Sorption/Release Profile of Molecules from Chitosan Hydrogels," *Polymers (Basel)*, vol. 14, no. 13, Jul. 2022, doi: 10.3390/polym14132530.
116. M.F. Paulino, L. M. Roseiro, I. Balaco, M. A. Neto, and A. M. Amaro, "Evaluation of Bone Consolidation in External Fixation with an Electromechanical System," *APPLIED SCIENCES-BASEL*, vol. 12, no. 5, Mar. 2022, doi: 10.3390/app12052328.
117. M.J. Pereira et al., "Benefits of Pilates in the Elderly Population: A Systematic Review and Meta-Analysis," *Eur J Investig Health Psychol Educ*, vol. 12, no. 3, pp. 236–268, Mar. 2022, doi: 10.3390/ejihpe12030018.
118. M.J. Pereira et al., "Efficacy of Pilates in Functional Body Composition: A Systematic Review," *Applied Sciences*, vol. 12, no. 15, p. 7523, Jul. 2022, doi: 10.3390/app12157523.
119. M.Neves and P. Neto, "Deep reinforcement learning applied to an assembly sequence planning problem with user preferences," *International Journal of Advanced Manufacturing Technology*, vol. 122, no. 11–12, SI, pp. 4235–4245, Oct. 2022, doi: 10.1007/s00170-022-09877-8.

120. M.Pang, X. Liu, Y. Dong, and T. Lou, "Numerical Assessment on Bonded and Unbonded Prestressed Concrete Beams," *Buildings*, vol. 12, no. 10, Oct. 2022, doi: 10.3390/buildings12101658.
121. M.Pang, Y. Dong, X. Liu, W. Sun, and T. Lou, "Prediction of Structural Behavior of Continuous Reinforced Concrete Beams with Hybrid CFRP-Steel Bars," *Materials*, vol. 15, no. 21, Nov. 2022, doi: 10.3390/ma15217542.
122. M.R. Santos, L. C. Dias, M. C. Cunha, and J. R. Marques, "Multicriteria Decision Analysis Addressing Marine and Terrestrial Plastic Waste Management: A Review," *Front Mar Sci*, vol. 8, Jan. 2022, doi: 10.3389/fmars.2021.747712.
123. M.Reguart et al., "Highly sensitive and selective nanostructured microbiosensors for glucose and lactate simultaneous measurements in blood serum and in vivo in brain tissue," *Biosens Bioelectron*, vol. 199, Mar. 2022, doi: 10.1016/j.bios.2021.113874.
124. M.Safeea and P. Neto, "Precise positioning of collaborative robotic manipulators using hand-guiding," *International Journal of Advanced Manufacturing Technology*, vol. 120, no. 7–8, pp. 5497–5508, Jun. 2022, doi: 10.1007/s00170-022-09107-1.
125. M.Safeea, R. Bearee, and P. Neto, "An integrated framework for collaborative robot-assisted additive manufacturing," *J Manuf Process*, vol. 81, pp. 406–413, Sep. 2022, doi: 10.1016/j.jmapro.2022.06.067.
126. M.Santos, J. Santos, and L. Petrella, "Computational Simulation of Microflaw Detection in Carbon-Fiber-Reinforced Polymers," *Electronics (Basel)*, vol. 11, no. 18, p. 2836, Sep. 2022, doi: 10.3390/electronics11182836.
127. M.Saraiva, J. Pedro Fuentes-Garcia, J. P. Vilas-Boas, and M. A. Castro, "Relationship between physical activity level and sleep quality with postural control and hemodynamic response in the prefrontal cortex during dual-task performance," *Physiol Behav*, vol. 255, Oct. 2022, doi: 10.1016/j.physbeh.2022.113935.
128. M.Saraiva, M. A. Castro, and J. P. Vilas-Boas, "The Role of Sleep Quality and Physical Activity Level on Gait Speed and Brain Hemodynamics Changes in Young Adults-A Dual-Task Study," *Eur J Investig Health Psychol Educ*, vol. 12, no. 11, pp. 1673–1681, Nov. 2022, doi: 10.3390/ejihpe12110117.
129. M.Saraiva, O. J. Fernandes, J. P. Vilas-Boas, and M. A. Castro, "Standing Posture in Motor and Cognitive Dual-Tasks during Smartphone Use: Linear and Nonlinear Analysis of Postural Control," *Eur J Investig Health Psychol Educ*, vol. 12, no. 8, pp. 1021–1033, Aug. 2022, doi: 10.3390/ejihpe12080073.
130. M.Saraiva, S. Paszkiel, J. P. Vilas-Boas, and M. A. Castro, "Influence of Cognitive Task Difficulty in Postural Control and Hemodynamic Response in the Prefrontal Cortex during Static Postural Standing," *Applied Sciences*, vol. 12, no. 13, p. 6363, Jun. 2022, doi: 10.3390/app12136363.
131. M.Silva, A. S. Ramos, M. T. Vieira, and S. Simoes, "Joining of Ti6Al4V to Al2O3 Using Nanomultilayers," *Nanomaterials*, vol. 12, no. 4, Feb. 2022, doi: 10.3390/nano12040706.

132. M.Vieira, S. Moniz, B. S. Goncalves, T. Pinto-Varela, A. P. Barbosa-Povoa, and P. Neto, "A two-level optimisation-simulation method for production planning and scheduling: the industrial case of a human-robot collaborative assembly line," *Int J Prod Res*, vol. 60, no. 9, pp. 2942–2962, May 2022, doi: 10.1080/00207543.2021.1906461.
133. N.A. Sakharova, "Numerical Modelling of the Mechanical Behaviour of Carbon and Non-Carbon Nanotubes and Their Complex Structures," *Materials*, vol. 15, no. 21, p. 7515, Oct. 2022, doi: 10.3390/ma15217515.
134. N.A. Sakharova, A. F. G. Pereira, and J. M. Antunes, "Elastic Moduli of Non-Chiral Single-Walled Silicon Carbide Nanotubes: Numerical Simulation Study," *MATERIALS*, vol. 15, no. 22, Nov. 2022, doi: 10.3390/ma15228153.
135. N.A. Sakharova, J. M. Antunes, A.F.G. Pereira, B.M. Chaparro, and J.V. Fernandes, "Elastic Properties of Single-Walled Phosphide Nanotubes: Numerical Simulation Study," *NANOMATERIALS*, vol. 12, no. 14, Jul. 2022, doi: 10.3390/nano12142360.
136. N.B. Basu et al., "Managing nitrogen legacies to accelerate water quality improvement," *Nat Geosci*, vol. 15, no. 2, pp. 97–105, Feb. 2022, doi: 10.1038/s41561-021-00889-9.
137. N.Boughrara, Z. Benzarti, A. Khalfallah, M. Evaristo, and A. Cavaleiro, "Comparative study on the nanomechanical behavior and physical properties influenced by the epitaxial growth mechanisms of GaN thin films," *Appl Surf Sci*, vol. 579, Mar. 2022, doi: 10.1016/j.apsusc.2021.152188.
138. N.Boughrara, Z. Benzarti, A. Khalfallah, M. Oliveira J. C. and Evaristo, and A. Cavaleiro, "Thickness-dependent physical and nanomechanical properties of Al_xGa_{1-x}N thin films," *Mater Sci Semicond Process*, vol. 151, Nov. 2022, doi: 10.1016/j.mssp.2022.107023.
139. N.Hannachi, A. Khalfallah, C. Leitao, and D. Rodrigues, "Thermo-mechanical modelling of the Friction Stir Spot Welding process: Effect of the friction models on the heat generation mechanisms," *Proceedings of the Institution of Mechanical Engineers Part L-Journal of Materials-Design and Applications*, vol. 236, no. 8, pp. 1464–1475, Aug. 2022, doi: 10.1177/14644207211070965.
140. N.Karthik, B. Trindade, and N. Emami, "Mechanochemical preparation of core-shell structured hydrophobic UHMWPE-onion-like carbon composites," *J Mol Struct*, vol. 1255, May 2022, doi: 10.1016/j.molstruc.2022.132403.
141. N.Kumar, P. Sanguino, P. Faia, and B. Trindade, "Porous Si-Sn alloys produced by mechanical alloying and subsequent consolidation by sintering and hot-pressing," *Materials and Manufacturing Processes*, vol. 37, no. 2, pp. 169–176, Jan. 2022, doi: 10.1080/10426914.2021.1967979.
142. N.P. v Sebbe, F. Fernandes, V. F. C. Sousa, and F. J. G. Silva, "Hybrid Manufacturing Processes Used in the Production of Complex Parts: A Comprehensive Review," *Metals (Basel)*, vol. 12, no. 11, Nov. 2022, doi: 10.3390/met12111874.

143. N.Tavares, G. Dias, P. Carvalho, J. P. Vilas-Boas, and M. A. Castro, "Effectiveness of Therapeutic Exercise in Musculoskeletal Risk Factors Related to Swimmer's Shoulder," *Eur J Investig Health Psychol Educ*, vol. 12, no. 6, pp. 601–615, Jun. 2022, doi: 10.3390/ejihpe12060044.
144. P.A. Pereira, M. E. S. Serra, A. C. Serra, and J. F. J. Coelho, "Application of vinyl polymer-based materials as nucleic acids carriers in cancer therapy," *Wiley Interdisciplinary Reviews-Nanomedicine and Nanobiotechnology*, vol. 14, no. 5, Sep. 2022, doi: 10.1002/wnan.1820.
145. P.Carreira, D. Gatoes, N. Alves, and M. T. Ramos Ana Sofia and Vieira, "Searching New Solutions for NiTi Sensors through Indirect Additive Manufacturing," *Materials*, vol. 15, no. 14, Jul. 2022, doi: 10.3390/ma15145007.
146. P.Farias, R. Francisco, and P. v. Morais, "Potential of tellurite resistance in heterotrophic bacteria from mining environments," *iScience*, vol. 25, no. 7, p. 104566, Jul. 2022, doi: 10.1016/j.isci.2022.104566.
147. P.Freitas Rodrigues, R. S. Teixeira, N. v le Senechal, F. M. Braz Fernandes, and A. S. Paula, "The Influence of the Soaking Temperature Rotary Forging and Solution Heat Treatment on the Structural and Mechanical Behavior in Ni-Rich NiTi Alloy," *MATERIALS*, vol. 15, no. 1, Jan. 2022, doi: 10.3390/ma15010063.
148. P.N.B. Reis, M. A. Neto, and A. M. Amaro, "Multi-impact behaviour of composite laminates under constant and different energy levels," *Compos Struct*, vol. 294, Aug. 2022, doi: 10.1016/j.compstruct.2022.115788.
149. P.N.B. Reis, S. R. M. Coelho, and A. Bezazi, "Effect of Impact Position on Repaired Composite Laminates Subjected to Multi-Impacts," *MATERIALS*, vol. 15, no. 22, Nov. 2022, doi: 10.3390/ma15228039.
150. P.P. Senna, L. M. D. F. Ferreira, A. C. Barros, J. B. Roca, and V. Magalhaes, "Prioritizing barriers for the adoption of Industry 4.0 technologies," *Comput Ind Eng*, vol. 171, Sep. 2022, doi: 10.1016/j.cie.2022.108428.
151. P.Pereira, L. M. Vilhena, J. Sacramento, L. F. Senos A. M. R. and Malheiros, and A. Ramalho, "Tribological behaviour of different formulations of WC composites," *WEAR*, vol. 506, Oct. 2022, doi: 10.1016/j.wear.2022.204415.
152. P.Pereira, L. Vilhena, J. Sacramento, L. Senos Ana and Malheiros, and A. Ramalho, "Influence of Different Binders and Severe Environmental Conditions on the Tribological and Electrochemical Behaviour of WC-Based Composites," *Lubricants*, vol. 10, no. 7, Jul. 2022, doi: 10.3390/lubricants10070145.
153. P.Pereira-Silva et al., "Immobilization of Streptavidin on a Plasmonic Au-TiO₂ Thin Film towards an LSPR Biosensing Platform," *Nanomaterials*, vol. 12, no. 9, May 2022, doi: 10.3390/nano12091526.
154. P.Simao, M. Vieira, T. Pinto, and T. Pinto-Varela, "Design and Operation of Multipurpose Production Facilities Using Solar Energy Sources for Heat Integration Sustainable Strategies," *Mathematics*, vol. 10, no. 11, Jun. 2022, doi: 10.3390/math10111941.

155. R.Braga, P. F. Rodrigues, H. Cordeiro, P. Carreira, and M. T. Vieira, "The Study of New NiTi Actuators to Reinforce the Wing Movement of Aircraft Systems," *MATERIALS*, vol. 15, no. 14, Jul. 2022, doi: 10.3390/ma15144787.
156. R.Branco, J. D. Costa, L. P. Borrego, W. Macek, and F. Berto, "Notch fatigue analysis and life assessment using an energy field intensity approach in 7050-T6 aluminium alloy under bending-torsion loading," *Int J Fatigue*, vol. 162, Sep. 2022, doi: 10.1016/j.ijfatigue.2022.106947.
157. R.Branco, J. D. Costa, P. A. Prates, F. Berto, C. Pereira, and A. Mateus, "Load sequence effects and cyclic deformation behaviour of 7075-T651 aluminium alloy," *Int J Fatigue*, vol. 155, Feb. 2022, doi: 10.1016/j.ijfatigue.2021.106593.
158. R.Branco, P. Prates, J. D. Costa, A. Cruces, P. Lopez-Crespo, and F. Berto, "On the applicability of the cumulative strain energy density for notch fatigue analysis under multiaxial loading," *Theoretical and Applied Fracture Mechanics*, vol. 120, Aug. 2022, doi: 10.1016/j.tafmec.2022.103405.
159. R.Branco, R. F. Martins, J. A. F. O. Correia, W. Marciniak Z. and Macek, and J. Jesus, "On the use of the cumulative strain energy density for fatigue life assessment in advanced high-strength steels," *Int J Fatigue*, vol. 164, Nov. 2022, doi: 10.1016/j.ijfatigue.2022.107121.
160. R.C. Rebelo et al., "Increased degradation of PLA/PBAT blends with organic acids and derivatives in outdoor weathering and marine environment," *Polymer (Guildf)*, vol. 256, p. 125223, Sep. 2022, doi: 10.1016/j.polymer.2022.125223.
161. R.da S. Teixeira, R. V. de Oliveira, P. F. Rodrigues, J. Mascarenhas, F. C. Figueiredo Pereira Neves, and A. dos S. Paula, "Microwave versus Conventional Sintering of NiTi Alloys Processed by Mechanical Alloying," *Materials*, vol. 15, no. 16, Aug. 2022, doi: 10.3390/ma15165506.
162. R.F. Fernandes, J. de Jesus, L. Borrego, A. Vilhena Luis and Ramalho, and J. A. M. Ferreira, "Influence of Deposition Plane Angle and Saline Corrosion on Fatigue Crack Growth in Maraging Steel Components Produced by Laser Powder Bed Fusion," *Metals (Basel)*, vol. 12, no. 3, Mar. 2022, doi: 10.3390/met12030433.
163. R.F. Fernandes, J. S. Jesus, R. Branco, L. P. Borrego, J. D. Costa, and J. A. M. Ferreira, "Influence of post-processing heat treatment on the cyclic deformation behaviour of AlSi10Mg aluminium alloy subjected to laser powder bed fusion," *Int J Fatigue*, vol. 164, p. 107157, Nov. 2022, doi: 10.1016/j.ijfatigue.2022.107157.
164. R.Francisco et al., "Effects of a bionematicide 1,4-naphthoquinone solution on soil microbial community assessed by PLFA: Tracing toxicity indicators," *Applied Soil Ecology*, vol. 174, p. 104417, Jun. 2022, doi: 10.1016/j.apsoil.2022.104417.
165. R.G. Fonseca et al., "Photo-degradable, tough and highly stretchable hydrogels," *Mater Today Bio*, vol. 15, Jun. 2022, doi: 10.1016/j.mtbio.2022.100325.
166. R.J.B. Leote, M. E. Ghica, and C. M. A. Brett, "Pyruvate Oxidase Biosensors Based on Glassy Carbon Electrodes Modified with Carbon Nanotubes and Poly(Neutral Red) Synthesized in Ethaline Deep Eutectic Solvent," *Electroanalysis*, vol. 34, no. 4, SI, pp. 724–734, Apr. 2022, doi: 10.1002/elan.202100164.

167. R.Lordelo et al., "Evaluation of the Microbiological Effectiveness of Three Accessible Mask Decontamination Methods and Their Impact on Filtration, Air Permeability and Physicochemical Properties," *Int J Environ Res Public Health*, vol. 19, no. 11, Jun. 2022, doi: 10.3390/ijerph19116567.
168. R.M. Leal and I. Galvão, "Recent Developments in Non-Conventional Welding of Materials," *Materials*, vol. 15, no. 1, p. 171, Dec. 2021, doi: 10.3390/ma15010171.
169. R.M. Nejad, N. Sina, D. G. Moghadam, R. Branco, W. Macek, and F. Berto, "Artificial neural network based fatigue life assessment of friction stir welding AA2024-T351 aluminum alloy and multi-objective optimization of welding parameters," *Int J Fatigue*, vol. 160, Jul. 2022, doi: 10.1016/j.ijfatigue.2022.106840.
170. R.Malaguti, N. Lourenço, and C. Silva, "A supervised machine learning model for determining lubricant oil operating conditions," *Expert Syst*, Aug. 2022, doi: 10.1111/exsy.13116.
171. R.Serra, F. Ferreira, A. Cavaleiro, and J. C. Oliveira, "HiPIMS pulse shape influence on the deposition of diamond-like carbon films," *Surf Coat Technol*, vol. 432, Feb. 2022, doi: 10.1016/j.surfcoat.2021.128059.
172. S.A. Salehizadeh et al., "Quantitative determination of surface spins contribution of magnetization, anisotropy constant, and cation distribution of manganese ferrite-silica nanocomposite," *Materials Science and Engineering B-Advanced Functional Solid-State Materials*, vol. 284, Oct. 2022, doi: 10.1016/j.mseb.2022.115902.
173. S.A. Salehizadeh, B. F. O. Costa, V. H. Rodrigues, J.-M. Greneche, M. A. Valente, and M. P. F. Graca, "Structural, morphological, electrical, and magnetic characteristics of 20MnFe₂O₄-80SiO₂ nanocomposite synthesized by the one-pot auto-combustion route," *Applied Physics A-Materials Science & Processing*, vol. 128, no. 9, Sep. 2022, doi: 10.1007/s00339-022-05876-4.
174. S.Dias, A. Tadeu, A. Ramalho, and F. Brett Michael and Pedro, "Thermal and Mechanical Characterisation of Sandwich Core Materials for Climatic Chamber Shells Subjected to High Temperatures," *Energies (Basel)*, vol. 15, no. 6, Mar. 2022, doi: 10.3390/en15062089.
175. S.M. Marques, I. Carvalho, T. R. Leite, M. Henriques, and S. Carvalho, "Antimicrobial TiN-Ag Coatings in Leather Insole for Diabetic Foot," *Materials*, vol. 15, no. 6, Mar. 2022, doi: 10.3390/ma15062009.
176. S.Mendes, O. Kurapova, P. Faia, V. Pazheltsev, A. Zaripov, and V. Konakov, "Polyantimonic acid-based materials evaluated as moisture sensors at ambient temperature," *Journal of Solid State Electrochemistry*, Dec. 2022, doi: 10.1007/s10008-022-05352-2.
177. S.Miraldo, S. Lopes, A. v Lopes, and F. Pacheco-Torgal, "Design of Fly Ash-Based Alkali-Activated Mortars, Containing Waste Glass and Recycled CDW Aggregates, for Compressive Strength Optimization," *MATERIALS*, vol. 15, no. 3, Feb. 2022, doi: 10.3390/ma15031204.

178. S.Nolasco, C. M. Amaro, L. Roseiro, M. A. Castro, and A. M. Amaro, "Hand-arm vibration assessment in badminton athletes during three different movements using two rackets," *Int J Ind Ergon*, vol. 88, Mar. 2022, doi: 10.1016/j.ergon.2022.103270.
179. S.S. Rajput, S. Gangopadhyay, T. B. Yaqub, and F. Cavaleiro A. and Fernandes, "Room and high temperature tribological performance of CrAlN(Ag) coatings: The influence of Ag additions," *Surf Coat Technol*, vol. 450, Nov. 2022, doi: 10.1016/j.surfcoat.2022.129011.
180. S.Valvez, A. P. Silva, and P. N. B. Reis, "Compressive Behaviour of 3D-Printed PETG Composites," *Aerospace*, vol. 9, no. 3, p. 124, Feb. 2022, doi: 10.3390/aerospace9030124.
181. S.Valvez, A. P. Silva, and P. N. B. Reis, "Optimization of Printing Parameters to Maximize the Mechanical Properties of 3D-Printed PETG-Based Parts," *Polymers (Basel)*, vol. 14, no. 13, Jul. 2022, doi: 10.3390/polym14132564.
182. T.bin Yaqub et al., "Vacuum Tribological Properties of W-S-N Coatings Synthesized by Direct Current Magnetron Sputtering," *Coatings*, vol. 12, no. 11, Nov. 2022, doi: 10.3390/coatings12111646.
183. T.bin Yaqub, A. Al-Rjoub, A. Cavaleiro, and F. Fernandes, "Exploring the industrial implementation of W-S-N coatings: a detailed study of the synthesis, compositional, structural, mechanical and multi-environment lubrication properties," *Journal of Materials Research and Technology-JMR&T*, vol. 18, pp. 547–563, May 2022, doi: 10.1016/j.jmrt.2022.02.116.
184. T.bin Yaqub, A. Al-Rjoub, H. A. Khalid, K. Yaqoob, F. Fernandes, and A. Cavaleiro, "Effect of Annealing Heat Treatment on the Composition, Morphology, Structure and Mechanical Properties of the W-S-N Coatings," *Materials*, vol. 15, no. 12, Jun. 2022, doi: 10.3390/ma15124088.
185. T.bin Yaqub, F. Fernandes, A. Al-Rjoub, and A. Cavaleiro, "Mo-Se-N dry lubricant coatings as a universal solution for protecting surfaces of complex 3D parts," *Mater Lett*, vol. 316, Jun. 2022, doi: 10.1016/j.matlet.2022.131967.
186. T.bin Yaqub, T. Vuchkov, S. Bruyere, J.-F. Pierson, and A. Cavaleiro, "A revised interpretation of the mechanisms governing low friction tribolayer formation in alloyed-TMD self-lubricating coatings," *Appl Surf Sci*, vol. 571, Jan. 2022, doi: 10.1016/j.apsusc.2021.151302.
187. T.C. Rezende, J. C. M. Silvestre, P. v. Mendonça, J. Moniz, A. C. Serra, and J. F. J. Coelho, "Efficient dispersion of TiO₂ in water-based paint formulation using well-defined poly[oligo(ethylene oxide) methyl ether acrylate] synthesized by ICAR ATRP," *Prog Org Coat*, vol. 165, p. 106734, Apr. 2022, doi: 10.1016/j.porgcoat.2022.106734.
188. T.Lou, Z. Li, and M. Pang, "Behavior of externally prestressed continuous beams with FRP/steel rebars under symmetrical/unsymmetrical loading: Numerical study," *Case Studies in Construction Materials*, vol. 17, Dec. 2022, doi: 10.1016/j.cscm.2022.e01196.

189. T.M. Henriques, B. Rito, D. N. Proença, and P. v. Morais, "Application of an Ultrasonic Nebulizer Closet in the Disinfection of Textiles and Footwear," *Int J Environ Res Public Health*, vol. 19, no. 17, p. 10472, Aug. 2022, doi: 10.3390/ijerph191710472.
190. T.Tankova, D. Andrade, R. Branco, D. Zhu Carlos and Rodrigues, and L. S. da Silva, "Characterization of robotized CMT-WAAM carbon steel," *J Constr Steel Res*, vol. 199, Dec. 2022, doi: 10.1016/j.jcsr.2022.107624.
191. T.Vuchkov, M. Evaristo, A. Carvalho, and A. Cavaleiro, "On the tribological performance of laser-treated self-lubricating thin films in contact with rubber," *Tribol Int*, vol. 174, Oct. 2022, doi: 10.1016/j.triboint.2022.107758.
192. T.Vuchkov, V. Leviandhika, and A. Cavaleiro, "On the tribological performance of magnetron sputtered W-S-C coatings with conventional and graded composition," *Surf Coat Technol*, vol. 449, Nov. 2022, doi: 10.1016/j.surfcoat.2022.128929.
193. V.A. Pereira, P.V. Mendonca, J.F.J. Coelho and A.C. Serra, "L-menthol and thymol eutectic mixture as a bio-based solvent for the "one-pot" synthesis of well-defined amphiphilic block copolymers by ATRP," *Polymer (Guildf)*, vol. 242, Mar. 2022, doi: 10.1016/j.polymer.2022.124586.
194. V.S.M. Magalhaes, L. M. D. F. Ferreira, and C. Silva, "Prioritising food loss and waste mitigation strategies in the fruit and vegetable supply chain: A multi-criteria approach," *Sustain Prod Consum*, vol. 31, pp. 569–581, May 2022, doi: 10.1016/j.spc.2022.03.022.
195. W.Macek, G. Robak, K. Zak, and R. Branco, "Fracture surface topography investigation and fatigue life assessment of notched austenitic steel specimens," *Eng Fail Anal*, vol. 135, May 2022, doi: 10.1016/j.engfailanal.2022.106121.
196. W.Macek, L. Pejkowski, R. Branco, R. M. Nejad, and K. Zak, "Fatigue fracture surface metrology of thin-walled tubular austenitic steel specimens after asynchronous loadings," *Eng Fail Anal*, vol. 138, Aug. 2022, doi: 10.1016/j.engfailanal.2022.106354.
197. W.Macek, R. Branco, J. D. Costa, and J. Trembacz, "Fracture Surface Behavior of 34CrNiMo6 High-Strength Steel Bars with Blind Holes under Bending-Torsion Fatigue," *MATERIALS*, vol. 15, no. 1, Jan. 2022, doi: 10.3390/ma15010080.
198. W.Macek, R. F. Martins, R. Branco, Z. Marciniak, M. Szala, and S. Wronski, "Fatigue fracture morphology of AISI H13 steel obtained by additive manufacturing," *Int J Fract*, vol. 235, no. 1, SI, pp. 79–98, May 2022, doi: 10.1007/s10704-022-00615-5.
199. X.Liang, Y. Zhou, and C. M. A. Brett, "Electropolymerisation of brilliant cresyl blue and neutral red on carbon- nanotube modified electrodes in binary and ternary deep eutectic solvents," *Journal of Electroanalytical Chemistry*, vol. 919, Aug. 2022, doi: 10.1016/j.jelechem.2022.116557.
200. X.Wang et al., "Experimental and numerical study on the static and hysteretic behavior of a novel wood isolation device," *Journal of Building Engineering*, vol. 49, May 2022, doi: 10.1016/j.job.2022.104061.

Percentage of papers according to the Journal Impact Factor (JIF) or Journal Citation Indicator (JCI):

JIF/JCI QUARTILE	Q1	Q2	Q3
%	60	30	2

Papers in National Journals

1. M. F. Paulino, A. Messias, A. M. Amaro, L. Roseiro, M. A. Neto, I. Balacó, Avaliação da Deformação em Placas de Osteossíntese- Comparação Numérica e Experimental, Revista Mecânica Experimental, 2022, N°35, pg 59-68, APAET.

Conferences

Attendance to International Conference with Presentation

1. A.Aichouni, L. M. Ferreira, C. Silva, Total Quality Management philosophy within the fourth industrial revolution towards sustainability: A state-of-the-art literature review and a proposed protocol for further research, 5th International Conference on Quality Engineering and Management, ICQM 2022, Braga, Portugal, 14-15 July 2022.
2. A.Al-Rjoub, F. Fernandes, A. Cavaleiro, Self lubricant TiSiN/TiAgN coatings: room and high temperature tribological behavior, 48th International Conference on Metallurgical Coatings and Thin Films - ICMCTF, San Diego, USA, May 2022
3. A.Batista, C. Correia, S.Barbeiro, J. Cardoso, J. Domingues, R.Henriques, C.Loureiro, M.Santos, P.Serranho, R.Bernardes, and M. Morgado, (2022). Swept-source Phase-Stabilized Optical Coherence Tomography Setup for Elastography, 22-24 April 2022
4. A.C Pinho, A.P. Piedade, Additive manufactured polymeric sandwich structures for oral devices: a preliminary study, XI International Symposium on Materials (Materials 2022), Marinha Grande, Portugal, 11-13 April 2022
5. A.C. Pinho, A.P. Piedade, Conductive polymeric filaments for AM: Can we rely on their performance?, 4D Materials Design and Additive Manufacturing Conference 2022 (4DMDA2022), Online, 1-2 September 2022.
6. A.Camacho-Reyes, F.A. Diaz, J.M. Vasco-Olmo, F.V. Antunes, Influence of the fitting approach on the parameters characterizing crack tip fields, 5th Iberian Conference on Structural Integrity, Coimbra, Portugal, 30 March – 1 April, 2022
7. A.Cavaleiro, New insights in transition metal dichalcogenides coatings, International Conference on THIN-FILM Processing and Application (ICTFPA-2022), Online, March 2022.

8. A.Cavaleiro, The application of the self-adaption concept in coatings for solid lubrication at high temperatures, International Congress on Materials Degradation and Protection, Online, November 2022.
9. A.Cruces, P. Lopez Crespo, R. Branco, B. Moreno, L. Borrego, Propagación de grietas de fatiga desde concentrador en acero maraging bajo cargas de tipo biaxial. 5th Iberian Conference on Structural Integrity, Coimbra, Portugal, March 30 – April 1, 2022.
10. A.F. Sousa, A.J.D. Silvestre, In the pathway to a biobased and circular approach to (furanic) polyesters, ICGC2022, La Rochelle, France, 2022.
11. A.F. Sousa, In the pathway to sustainable (furanic) polymers!, MIPOL2022, Milan, Italy, 2022.
12. A.F. Sousa, The quest for circular approach to (furanic) polymers, 9th ICGC, Athens, Greece, 2022.
13. A.F.G. Pereira, Variance-Based Sensitivity Analysis of the Biaxial Test on a Cruciform Specimen, ESAFORM 2022, Braga, 2022.
14. A.Fróis, E. Cardoso, P.V. Morais, R. Francisco, and C.S. Louro, In Vitro Bacterial Adhesion on 316L Medical Grade Stainless Steel with Two Surface Finishes, XI International Symposium on Materials (Materiais 2022), Marinha Grande, Portugal, 10-13 April 2022.
15. A.Khalfallah, S.A. Zoueghi, J.V. Fernandes, New approach for the identification of anisotropy material parameters using hydraulic bulge tests, 41st IDDRG'2022, Lorient-France, 6-10 June 2022.
16. A.L. Ramalho, F. Antunes, J.A.M. Ferreira, Simulation of crack growth in residual stress fields of pre-fatigued T-welded joints repaired by tungsten inert gas: a 3D approach, MedFract2 - 2nd Mediterranean Conference on Fracture, Catania, Italy, online 14-16 February, 2022.
17. A.M. Oliveira-Brett, W.B.S. Machini, A.M. Chiorcea-Paquim, Amyloid- β peptides interaction with curcumin:AFM and voltammetric characterization, 8th EuChemS Chemistry Congress, Lisboa, 28 August a 1 September 2022.
18. A.M. Oliveira-Brett, W.B.S. Machini, Avaliação in situ do mecanismo de interação antiacne retinoide isotretinoína-dsDNA usando biossensores eletroquímicos com DNA, XXV Congresso da Sociedade Iberoamericana de Eletroquímica (SIBAE 2022), Zacatecas, México, 3-6 April 2022.
19. A.M. Sousa, A.M. Amaro, Impressão 3D de stents poliméricos bioabsorvíveis: Um estudo preliminar, utilizando MEF para análise de diferentes configurações de stents. Congresso de Biomateriais 2022 - BIOMAT 2022, Rio de Janeiro, Brazil, 23 November 2022
20. A.Marques , A.F.G. Pereira , B. Ribeiro, P.A. Prates, On the Identification of Material Constitutive Model Parameters Using Machine Learning Algorithms, ESAFORM 2022, 25th International Conference in Material Forming, Braga, Portugal 27-29 April, 2022.

21. A.Naaser, Talha Bin Yaqub, M. Evaristo, M. Kalin, S. Carvalho, A. Cavaleiro, Effect of Silicon and Oxygen Doping on Properties of Amorphous Carbon Coatings Developed by Magnetron Sputtering, XX Brazil MRS meeting, Iguassu Falls, Brazil, September 2022.
22. A.P. Chung, P.V. Morais, R. Branco. Genome mining to unravel potential metabolic pathways linked to gallium bioleaching ability of bacterial mine isolates, FEMS Conference on Microbiology, Belgrade, 30 June-2 July 2022
23. A.P. Piedade, Influence of carbine content on the mechanical performance of nanothick carbon coatings, 15th International Conference on Advanced Computational Engineering and Experiment (ACEX2022) Florance, Italy, 3-7 July 2022,
24. A.R. Rodrigues, M.S. Correia, A.J. Pontes, Friction and adhesion force measurements using different materials for the tool material. 2nd Polymer Process Innovation (PPI), Lavrion, Greece, 15-16 September 2022.
25. A.Ramalho, F. Antunes, J.Ferreira, Retrofitting of aged welded structures by TIG and plasma dressing, 5th Iberian Conference on Structural Integrity, Coimbra, Portugal, 30 March – 1 April, 2022.
26. B.Agostinho, A.J.D. Silvestre, A.F. Sousa, 'From PEF to rPEF: Disclosing the potential of DES in biobased polyesters continuous de-/re-polymerization recycling, ICGC2022, La Rochelle, France, 2022.
27. B.Alves, D. Gatões , G. Oliveira , C.M. Fernandes , D. Figueiredo , A. Senos , M.T. Vieira, Influence of wettability of tungsten carbide powder by organic binder/additives on the quality of filaments for Material Extrusion (MEX), 20th Plansee Seminar, Reutte, Austria, 30 May-3 June 2022.
28. B.M. Marques, D.M. Neto, J.L. Alves, Assessing the accuracy of different remapping methods in adaptive mesh refinement, ESAFORM 2022, 25th Conference on Material Forming, Braga, Portugal, 27-29 April 2022.
29. B.Martins, C. Patacas, A. Cavaleiro, P. Faia, A. Bondarchuk, F. Fernandes, "Adequate TiAlN thin films deposited by sputtering for thermistor sensors: the study of conduction mechanisms and the microstructure role on the electrical properties", SMS/NanoMed/Sensors/EGF 2022 Joint International Conferences, Athens, 26-28 October 2022.
30. C.A.V. Alves, L. M. D. F. Ferreira, V. S. M. Magalhães, The Impact of Servitization, Service Design and Digitalization on Performance: An Exploratory Approach, 29th EurOMA Conference, Berlin, Germany, 1-6 July 2022.
31. C.A.V. Alves, L.M.D.F. Ferreira, V.S.M. Magalhães, Analysis of the Impact of Servitization, Service Design and Digitalization in Industrial Companies: An Exploratory Approach, 10th MIM 2022, Nantes, France, 22-24 June 2022.
32. C.M. Andrade, D.M. Neto, M.C. Oliveira, J.M. César de Sá, Numerical analysis of the influence of solid-state phase transformations on the mechanical behavior of the Ti-6Al-4V alloy, EM 2022, 1st International Conference on Engineering Manufacture, Porto, Portugal, 5-6 May 2022.

33. C.M. Andrade, D.M. Neto, M.C. Oliveira, Prediction of Solid-State Phase Transformations for the Ti-6Al-4V Alloy, ESAFORM 2022, 25 th ESAFORM Conference on Material Forming, Braga, Portugal, 27-29 April 2022.
34. C.M.A. Brett, Applications of frontier research and technology in electroanalysis and corrosion to industry, GCA2022, 1st Gulf Chemistry Association International Conference and Exhibition, Manama, Bahrain, 15-17 November 2022.
35. C.M.A. Brett, B. Dalkiran, Eléctrodos modificados por nanopartículas de óxido de cobre / nanotubos de carbono e filmes de polímeros redox fenazínicos para sensores eletroquímicos, SIBAE 2022, XXV Congresso da Sociedade Iberoamericana de Eletroquímica, online, Mexico, 3-6 April 2022.
36. C.M.A. Brett, Electrochemical impedance spectroscopy: fundamentals and applications to sensors and biosensors, SAFEMILK International School Surface modification and application of electrochemical and acoustic techniques for detection of affinity interactions at surfaces, online Bratislava, 30 May – 2 June 2022.
37. C.M.A. Brett, Electrochemical sensor and biosensor platforms with nanomaterials and nanostructured polyphenazines, NANOicon 2022, Golden Jubilee International Conference, Online Kochi, India, 11-15 January 2022.
38. C.M.A. Brett, Nanostructured modified electrodes with nanomaterials and electroactive redox polymers for sensor and biosensor platforms, The Tenth International Workshop on Biosensors, Dakhla, Morocco, 13-15 October 2022.
39. C.M.A. Brett, Nanostructured modified electrodes with nanomaterials and electroactive redox polymers for sensor applications, First International Conference on General Chemistry. From fundamentals to applications, online COMSATS, Pakistan, 10-11 February 2022.
40. C.M.A. Brett, Recent developments in nanostructured electrochemical sensor and biosensor platforms and applications, 12th Ibero-American Congress on Sensors, Ibersensor 2022, Aveiro, Portugal, 5-8 September 2022.
41. C.M.A. Brett, Tailoring electrochemical sensor materials for novel sensor platform architectures, 8th EuChemS Chemistry Congress, Lisbon, Portugal, 28 August – 1 September 2022.
42. C.M.A. Brett, The fantastic world of the chemical elements, 4th Manohar Parrikar Vidnyan Mahotsav, Goa, India, 13 December 2022.
43. C.Rebelo, L. Fialho, C. F. Almeida Alves, J. D. Castro, P. Sampaio and S. Carvalho, Development of antimicrobial surfaces by deposition of Zinc nanoparticles by magnetron sputtering on Ta₂O₅ nanostructured surfaces, Materiais 2022, Marinha Grande, Portugal, 10-13 April 2022.
44. C.Rebelo, L. Fialho, C. F. Almeida Alves, J. D. Castro, P. Sampaio, S. Carvalho, Antimicrobial porous Ta₂O₅ surfaces with Zinc nanoparticles deposited by magnetron sputtering, Junior Euromat 2022, Coimbra, 22 July 2022.
45. C.T.B. Paula, P. Pereira, J.F.J. Coelho, A.C. Fonseca, A.C. Serra, ROS/Light Degradable Poly(urethane/urea) hydrogel films, European Polymer Federation Congress 2022, Prague, Czech Republic, 1 July 2022.

46. C.Viães, L. Marques, S. M. Marques, S. Carvalho, Development of multifunctional dental implants, RIVA 2022 - XII Iberian Vacuum and Applications Conference, Braga, 16-17 May 2022.
47. D. Taborda, R. M. Leal, T. Morgado, C. Leitão, and I. Galvão, "Copper/Stainless Steel Friction Stir Spot Welds—Feasibility and Microstructural Analysis," XI International Symposium on Materials (Materiais 2022), Marinha Grande, Portugal, 11-13 April 2022
48. D.Cavaleiro, A. AL-Rjoub, F. Fernandes, The influence of TiSiN thickness of TiSiN/VN multi-layered coatings on structure, morphology, thermal stability and oxidation resistance, 9th International Conference on Mechanics and Materials in Design (M2D 2022), Madeira, Portugal, 26-30 June 2022.
49. D.Cavaleiro, F. Fernandes, A. Cavaleiro, The effect of morphology in the diffusion of Ag inside hard coatings, Pacific Rim Symposium on Surfaces, Coatings & Interfaces (Pacsurf 2022), Waikoloa Beach, Hawaii, USA, 11-15 December 2022.
50. D.Cavaleiro, F. Fernandes, Machining performance of TiSiN(Ag) coatings on TiAl6V4 aerospace alloy, International Conference on Thin-Film Processing and Application (ICTFPA 2022), India (online), 4-5 March 2022.
51. D.Cavaleiro, S. Carvalho, F. Fernandes, Tribological and Machining Performance of TiSiN(Ag) Coatings Deposited by HiPIMS, 48th International Conference on Metallurgical Coatings & Thin Films (ICMCTF 2022), San Diego, CA, USA, 22-27 May 2022.
52. D.J. Cruz, A.F.G. Pereira, V.M. Simões, R. Amaral, A. Santos, M.C. Oliveira, Work Hardening of Metallic Sheets under Tension-Compression and Simple Shear Reverse Loading, 25th Conference on Material Forming, Braga, Portugal, 27-29 April 2022.
53. D.M. Neto, E.R. Sérgio, F.V. Antunes, Modelling the fatigue crack growth using the crack tip plastic deformation, IbCSI 2022, 5th Iberian Conference on Structural Integrity, Coimbra, Portugal, 30 March - 1 April 2022.
54. D.M. Neto, E.R. Sérgio, F.V. Antunes, Simulation of fatigue crack growth using the cumulative plastic strain at the crack tip, 6th IJFatigue and FFEMS Joint Workshop Characterisation of Crack/Notch Tip Fields, Dubrovnik, Croácia, 11-13 April 2022.
55. D.M. Neto, M.C. Oliveira, R.E. Dick, J.L. Alves, L.F. Menezes, Non-uniform effect of the contact conditions on the earing profile in cylindrical cups of anisotropic materials, ESAFORM 2022, The 25rd Conference on Material Forming, Braga, Portugal, 27-29 April 2022.
56. D.Taborda, C. Leitão, R. M. Leal, I. Galvão, Study of the bonding mechanisms in copper/stainless steel FSSW using pinless tools, ISFSWP 2022 - Joint International Symposium on Friction Stir Welding and Processing, Geesthacht, 28-30 September 2022.
57. D.Taborda, C. Leitão, R. M. Leal, R. Mendes I. Galvão, Production of hybrid structures by solid-state welding, RESIM Conference 2022, Marinha Grande, 2-3 June 2022.
58. E.Ferreira, C. Páris and L. Roseiro, Web API BLE Communication using .Net Core, 2022 17th Iberian Conference on Information Systems and Technologies (CISTI), Madrid, Spain, 22 - 25 June 2022.

59. E.R. Sérgio, D.M. Neto, F.V. Antunes, Fatigue crack growth prediction considering cyclic plastic strain and micro-void modelling, 6th IJFatigue and FFEMS Joint Workshop Characterisation of Crack/Notch Tip Fields, Dubrovnik, Croatia, 11-13 April 2022.
60. E.R. Sérgio, F.V. Antunes, D.M. Neto, Influence of porous damage on fatigue crack growth, IbCSI 2022, 5th Iberian Conference on Structural Integrity, Coimbra, Portugal, 30 March - 1 April 2022.
61. F.Cruz, M. Safeea, M. Babcsinchi, P. Neto, Design and 3D Printing Fabrication of a Low-Cost Lightweight Robot Manipulator, International Conference on Flexible Automation and Intelligent Manufacturing, FAIM2022, Detroit, USA, 19–23 June, 2022.
62. F.De Bon, I. M. Azevedo, D. C. M. Ribeiro, R. A. C. Rebelo, J. F. J. Coelho, A. C. Serra, Heterogeneous large-volume electrochemically mediated ATRP: Polymer grafting on cellulose, Bordeaux Polymer Conference, Bordeaux, France, 13-16 June 2022.
63. F.Fernandes, A. Al-Rjoub, S. Calderon, P. Ferreira, A. Cavaleiro, Nanocomposite TiSiN films deposited by HiPIMS in DOMS mode, grown in the absence of substrate heating and bias, 9th International Conference on Mechanics and Materials in Design (M2D 2022), Madeira, Portugal, 26-30 June 2022.
64. F.Fernandes, Self-lubricant coatings for efficient machine aerospace alloys, Sino-European Youth Forum on tribology 2022, Beijing, China, 30 July 2022.
65. F.Fernandes, Self-lubricant coatings for efficient machine aerospace alloys, XX MRS meeting Brasil, Foz do Iguaçu, Brazil, 25-29 September 2022.
66. F.Ferreira, R. Serra, A. Cavaleiro and J.C. Oliveira, Tribological properties of diamond-like carbon coatings deposited by deep oscillation magnetron sputtering in Ar-Ne discharges, ACT 2022, Dakar, 13-15 April 2022
67. F.R. Cruz, D. Gatões, T. Vieira, Additive Manufacturing as spring of new materials, PowderMet 2022 or AMPM 2022, Portland, USA, 12-15 June 2022 .
68. F.Salles, M.C. Oliveira, D.M. Neto, J.L. Alves, L.F. Menezes, J.V. Fernandes, Influence of the Anisotropic Behavior on Equibiaxial Paths, ESAFORM 2022, 25 th ESAFORM Conference on Material Forming, Braga, Portugal, 27-29 April 2022.
69. F.V. Antunes, A. Camacho-Reyes, E.R. Sérgio, J.M. Vasco-Olmo, F.A. Díaz, D.M. Neto, CCC specimen: A novel specimen for FCG studies under plane strain conditions, IbCSI 2022, 5th Iberian Conference on Structural Integrity, Coimbra, Portugal, 30 March – 1 April, 2022
70. G.Ferreira, A. Tereso, G. Fernandes, Project Management in Service Sector SMEs: A Comparative Study Between Portugal and Denmark, World Conference on Information Systems and Technologies – WorldCIST 2022, Online, 12-14 April 2022.
71. G.M. de Araújo, M.A. Cardoso, L. Codognoto, C.M.A. Brett, F.R. Simões, Conductive inks based on hybrids of polyaniline and reduced graphene oxide for progesterone detection XX B-MRS Meeting, Foz de Iguaçu, Brazil, 25-29 September 2022.
72. G.Oliveira, B.Alves, R.Mineiro, A.M. Rocha Senos, C. Fernandes, D. Figueiredo, M.T.Vieira, Indirect Additive Manufacturing (Material Extrusion) as a Solution to a New Concept of Cutting Tools, World PM 2022 Congress Lyon, France, 9-13 October 2022

73. H.Paulo, M. Vieira, B. S. Gonçalves, T. Pinto-Varela and A.P. Barbosa-Póvoa, Assessment of biomass supply chain design and planning using discrete-event simulation modeling, 32th European Symposium on Computer Aided Process Engineering, Toulouse, France, 12-15 June 2022.
74. H.Vidinha, R. Branco, M.A. Neto, A.M. Amaro, P. Reis, Numerical study of seawater effect on mechanical strength in fiber-reinforced polymer composites. 1st International Conference on Mechanics of Solids. Faculty of Engineering, Portugal, 3-4 November, 2022
75. H.Vidinha, R. Branco, M.A. Neto, A.M. Amaro, P. Reis. Effect of seawater exposure on structural integrity of glass fiber-reinforced polymer composites. 6th International Conference on Structural Integrity and Durability, Dubrovnik, Croatia, 20-23 September, 2022.
76. I.Alves, M. A. Castro, S. Tavares, O. J. Fernandes. Physical parameters associated to the ability to exercise in women with achondroplasia. A case control pilot study. EUCAPA 2022 – European Congress of Adapted Physical Activity Coimbra, Portugal, 9-11 June 2022.
77. I.Alves, O. Fernandes, S. Tavares, M.A. Castro. Postural control pilot study of traditional and non-linear variables in women with achondroplasia. 2022 Annual Meeting of the American Society for Bone and Mineral Research. September, 2022.
78. I.Costa. P.Farias, H. Ribeiro, J. Paixão, R. Branco, J. Pereira; “Extraction and purification of tellurium nanoparticles from bacterial biomass using biosolvents”, BPP 2022, Aveiro, Portugal, 27th September 2022.
79. I.Galvão, G. H. S. F. L.Carvalho, R. M. Leal, C. Leitão, R. Mendes, A. Loureiro, Strategies to improve the quality of aluminium-to-stainless steel explosion welds, M2D2022 - 9th International Conference on Mechanics and Materials in Design, Funchal, Portugal, 26-30 June 2022.
80. J.Caldeira, A.P.Chung, P.V. Morais, R. Branco. A new role of DedA family protein in Indium extrusion by a Rhodanobacter sp. Strain, FEMS Conference on Microbiology, Belgrade, Serbia, 30 June-2 July 2022.
81. J.D. Castro, A.M.B. Casanova, R.S. Teixeira, N.V.L. Sénéchal, T.H.F.D. Ferrão, P.F. Rodrigues, A.S. Paula, Annealing Effects In Highly Ni NiTi Alloy Ingots Melted Via VAR, 75° Congresso Anual da ABM, São Paulo, Brazil, 7-9 June, 2022.
82. J.D. Castro, M.J. Lima, I. Carvalho, M. Henriques and S. Carvalho, Multifunctional Coatings for Maritime Applications, 48th International conference on metallurgical coatings and thin films - ICMCTF 2022, San Diego, CA, USA, 22-27 May 2022.
83. J.F. Henriques, A.M. Amaro, A.P. Piedade, Impressão 3D para Mimetizar Vasos Sanguíneos Ateroscleróticos com Diferentes Graus de Oclusão: Estudo Preliminar. Congresso de Biomateriais 2022 - BIOMAT22, Rio de Janeiro, Brazil, 23 November 2022.

84. J.M. Antunes, A.F.G. Pereira, N.A. Sakharova, Numerical Simulation Study on Elastic Properties of Aluminium Nitride, Gallium Nitride, Indium Nitride Nanotubes and Nanosheets, the 15th International (Hybrid) Conference on Advanced Computational Engineering and Experimenting, ACEX 2022, in Florence, Italy, 3 – 7 of July 2022.
85. J.M. Vasco-Olmo, A. Camacho-Reyes, F. A. Diaz, F. V. Antunes, N. James, Experimental evaluation of plastic wake on growing fatigue cracks from the analysis of residual displacement fields, 5th Iberian Conference on Structural Integrity, Coimbra, Portugal, 30 March – 1 April, 2022.
86. J.Martins, M.S. Correia, H.A. Almeida, J.C. Vasco, Impact of Support Structures On The Mechanical Behaviour Of Components Produced By Extrusion-Based Additive Manufacturing, Casablanca International Conference On Additive Manufacturing (Casicam'22), Casablanca, Morocco, 23-24November, 2022.
87. J.R.C. Costa, D.C. Ribeiro, R.C. Rebelo, F. De Bon, J.F.J. Coelho and A.C. Serra, Process Development for Flexible Films of Industrial Cellulose Pulp Using Superbase Ionic Liquids, -Bordeaux Polymer Conference, 13-16 July 2022.
88. J.Sanches, F. Ferreira, R. Serra, Effects of peak power and substrate biasing on the mechanical and tribological properties of transition metal carbides/nitrides thin films produced by HiPIMS, ICTFPA 2022 - International Conference on THIN-FILM Processing and Application, Online, 4-5 March 2022.
89. L.A. Gil, C.M.A. Brett, Novel electrochemical sensor based on poly(methylene blue)/Au nanoparticle film formed by electropolymerisation in ternary deep eutectic solvent. Optimization and characterization, 73rd Annual Meeting of the International Society of Electrochemistry, online, 12-16 September 2022.
90. L.Cacho, B. Alves, A. Ramalho, A. Neto, T. Vieira, G. Rodrigues. Micromechanical Modeling of the Material Impact in the Feedstock Filament Properties for Indirect Additive Manufacturing (MEX), XI International Symposium on Materials (Materiais 2022), Marinha Grande, Portugal, 11-13 April 2022.
91. L.Fialho, C. Rebelo, C. F. Almeida Alves, J. D. Castro, P. Sampaio, S. Carvalho, Core-shell nanoparticles deposited by magnetron sputtering onto Ta₂O₅ surface developed by plasma electrolytic oxidation: antimicrobial activity and corrosion resistance studies, 18th International Conference on Plasma Surface Engineering, Erfurt, Germany, 12 – 15 September, 2022.
92. L.Fialho, C. Rebelo, C. F. Almeida Alves, J. D. Castro, P. Sampaio, S. Carvalho, Synergetic effect of porous Ta₂O₅ surface with Zn/ZnO core-shell nanoparticles on antimicrobial activity and corrosion resistance, 48th International conference on metallurgical coatings and thin films - ICMCTF 2022, San Diego, CA, USA, 22-27 May 2022.
93. L.Fialho, C. Rebelo, J. D. Castro, C. F. Almeida Alves, P. Sampaio, S. Carvalho, Development of an antimicrobial delivery system based on Zn/ZnO nanoparticles deposited by magnetron sputtering onto anodic tantalum oxide surface, MRS-Meeting, Brazil, 25-29 September, 2022.

94. L.M. Vilhena, A. Ramalho, Friction of soft contact lenses, IBERTRIB 2022-11th Iberian Conference on Tribology, Setubal, Portugal, 6 - 7 October 2022.
95. L.M. Vilhena, A. Ramalho, Skin friction: mechanical and tribological characterization of different papers used in everyday life, Tribology 2022, Tribology International Conference 2022, Barcelona, Spain, 27 - 29 April 2022.
96. L.M. Vilhena, A. Ramalho, Strain hardening behaviour of CoCrMo, IBERTRIB 2022-11th Iberian Conference on Tribology, Setubal, Portugal, 6 - 7 October 2022.
97. L.P. Borrego, R. Fernandes, J.S. Jesus, J.A.M. Ferreira, J.D. Costa, Effect of heat treatment on fatigue crack growth performance of AlSi10Mg aluminium alloy submitted to LPBF, 23rd European Conference on Fracture, ECF23, Madeira, Portugal, 27 June - 1 July 2022.
98. L.Roque, J. Rodrigues, J. Vieira, P.V. Morais, A.P. Chung, J. M. Almeida, M. Aniceto, A.A. Correia, F. Branco, M.Peixoto. Eco innovative limestone-based composites. Green Manufacturing Europe Show 2022. Cologne, Germany, 9-10 Nov 2022.
99. L.Roseiro, Applied Biomechanics and the Goals of Sustainability, IMASCONGRESS 2022, Kocaeli, Turkey, 9 - 10 December, 2022.
100. L.Roseiro, F. Moita, M. Silva, N. Cruz, D. Fernandes, N. Lavado, Project of a Ventilated Face Shield for Personal Protection Based on Additive Manufacturing, 5th Iberian Conference on Structural Integrity, Coimbra, Portugal, 30 March – 1 April, 2022.
101. L.Roseiro, F.Moita, M. Silva, N. Cruz, D. Fernandes, N. Lavado, Project of a Ventilated Fcae Shield for Personal Protection Based on Additive Manufacturing.BCI - 5th Iberian Conference on Structural Integrity, Coimbra, Portugal, 30 March - 1 April 2022.
102. L.Roseiro, Functional Prototypes in Applied Biomechanics, 16th World Congress on Physical and Rehabilitation Medicine (ISPRM 2022) & European Congress on Physical and Rehabilitation Medicine (ESPRM 2022) & National Congress on Physical and Rehabilitation Medicine (SPMFR 2022), Lisbon, Portugal, 3 - 7July 2022.
103. M.A. Cardoso, G.M. Araújo, J.A.B. Bosa, L. Codognoto, C.M.A. Brett, F.R. Simões, Screen-printed electrode modified with functionalized multiwalled carbon nanotubes for electroanalytical determination of diuron in samples of seawater and grape juice, XX B-MRS Meeting, Foz de Iguaçu, Brazil, 25-29 September 2022.
104. M.A. Rodrigues-Ferreira, A. Vences Brito, F. Romero, N. Loureiro, M.A. Castro Perceptions of Portuguese female soccer players on injury prevention strategies. 3rd World Scientific Congress Quality of Life in Interdisciplinary Approach, Kochcice, Poland, 2022.
105. M.A.R. Pereira, I. Galvão, J. D. Costa, A. M. Amaro and R. M. Leal, Improving friction stir welding of polyethylene by externally heating the stationary shoulder tool. Joint International Symposium on Friction Stir Welding and Processing - ISFSWP 2022, Lüneburg, Germany September 28 - 30, 2022.

106. M.Babcinski, F. Cruz, N. Duarte, S. Santos, S. Alves, P. Neto, Intuitive Robot Programming by Capturing Human Manufacturing Skills: A Framework for the Process of Glass Adhesive Application, International Conference on Flexible Automation and Intelligent Manufacturing, FAIM2022, Detroit, USA, 19-13 June 2022.
107. M.C. Cunha, R. Magini, J. Marques, Design of water distribution networks for multiple demand scenarios using a multi-objective simulated annealing algorithm, HIC 2022: 14th International Conference on Hydroinformatics, Bucharest, Romania, 4-8 July, 2022.
108. M.C. Cunha, R. Magini, J. Marques, Robust design of water distribution networks considering different demand conditions and multiple objectives, WDSA/CCWI 2022: 2nd International Joint Conference in Water Distribution Systems Analysis & Computing and Control in the Water Industry, Valencia, Spain, 18-22 July, 2022.
109. M.C. Oliveira, D.M. Neto, A.F.G. Pereira, J.L. Alves, L.F. Menezes, Evaluating the influence of the deformation of the forming tools in the thickness distribution along the wall of a cylindrical cup, IDDRG 2022, International Deep-Drawing Research Group, Lorient, França, 7-10 June 2022.
110. M.C. Oliveira, I. Prcela, V. Cvitanić, D.M. Neto, J.L. Alves, L.F. Menezes, On the Effect of the Tension-Compression Ratio on Forming of Isotropic Materials, ESAFORM 2022, 25 th ESAFORM Conference on Material Forming, Braga, Portugal, 27-29 April, 2022.
111. M.C. Oliveira, P.J. Gaspar, D.M. Neto, J.L. Alves, L.F. Menezes, Influence of the thickness variability on the assessed hardening behaviour using a meso-scale tensile/compression specimen, CMN 2022, Congress on Numerical Methods in Engineering, Las Palmas, Spain, 13 - 14 September 2022.
112. M.Cardoso, J.H. Carnaúba, G.M. de Araújo, L. Codognoto, C.M.A. Brett, F.R. Simões, Screen-printed electrodes based on hybrids of conducting polymers and reduced graphene oxide, 7th International Conference on Multifunctional, Hybrid and Nanomaterials HYMA 2022, Genoa, Italy, 19-22 October 2022.
113. M.E. Serra, R.C. Rebelo, L.P.C. Gonçalves, A.C. Fonseca, J. Fonseca, M. Rola, J.F.J. Coelho, F. Rola, A.C. Serra, Degradation Studies of PLA/PBAT Blends in Simulated Marine Environments, ICGC, Athens, Greece, 5-9 September 2022.
114. M.J. Lima, R. M. Silva, F. Ferreira, F. Oliveira, R. F. Silva, A. Cavaleiro, S. Carvalho, Decrease of the interfacial adhesion to polymers and pharmaceuticals through modification of steel surfaces by PVD and CVD techniques, 48th International conference on metallurgical coatings and thin films, ICMCTF 2022, San Diego, USA, 22-27 May 2022.
115. M.J. Lima, R. Silva, K.G. Gala, J.D. Castro, F.Oliveira, R. Silva, S. Carvalho, Modification of Steel Surfaces with Nanometer Films of Al₂O₃ and TiO₂ Decreases Interfacial Adhesion to Polymers: Implications for Demolding Shape-Engineered Polymer Products, 18th International Conference on Plasma Surface Engineering, Erfurt, Germany, 12 – 15 September, 2022.

116. M.Pinero, L.P.C. Gonçalves, R. Rebelo, A.C. Fonseca, J. Fonseca, M. Rola, J.F.J. Coelho, F. Rola, A.C. Serra, The effect of organic acids on the degradation of PLA/PBAT blends, ICGC, Athens 5-9 September 2022.
117. N.Demazel, A. Boyer, H. Laurent, M.C. Oliveira, Hot tensile and expansion tests of Ductibor®1000 steel, IDDRG 2022, International Deep-Drawing Research Group, Lorient, France, 7-10 June 2022.
118. N.Figueiredo, R. Serra, A. Cavaleiro, LSPR sensing using thermally embedded Au nanoparticles in glass, RIVA 2022 – XII Iberian Vacuum and Applications Conference, Braga, Portugal, May 2022.
119. N.M. Figueiredo, M.S. Rodrigues, J. Borges, F. Vaz, T. Kubart, R. Schierholz, A. Fernández, A. Cavaleiro, Optical and gas sensing properties of LSPR-exhibiting Au-TiO₂ nanocomposite coatings obtained by sputtering, RIVA 2022 – XII Iberian Vacuum and Applications Conference, Braga, 15-17 May 2022.
120. N.M. Figueiredo, R. Serra, A. Cavaleiro, Robust label-free LSPR sensing using thermally embedded Au nanoparticles in glass substrates, 95th IUVSTA Workshop, Plasmonic Thin Films: Theory, Synthesis and Applications, Guimarães, Portugal, 20-23 June, 2022.
121. N.V.L. Sénéchal, P.F. Rodrigues, et al., Estudo da influência da deformação a quente na microestrutura de uma liga de NiTi, 75° Congresso Anual da ABM, São Paulo, Brazil, 7-9 June, 2022.
122. O.Lima, A. Tereso, G. Fernandes, Innovation and Sustainability Practices in Project Management Within SMEs Context – A Systematic Literature Review, World Conference on Information Systems and Technologies – WorldCIST 2022, Online, 12-14 April 2022.
123. P.F. Rodrigues, F. Cruz, B. Alves, A.S. Ramos, M.T. Vieira, Integration of NiTi crack sensors in aluminum alloys by material extrusion (MEX), Junior Euromat 2022, Coimbra, Portugal, July 2022.
124. P.Faia, M.G. Rasteiro, F. Garcia, A contribution to visualization of industrial processes by Electrical Tomography, WCPT9, Madrid, Spain, 14-18 September 2022.
125. P.Farias, R. Francisco, P.V. Morais, “Bacteria from mining environments: potential of tellurite resistance and reduction”, Microbiologia 2022, online, October 2022.
126. P.Mendonça, D. Ribeiro, R. Rebelo, A. Serra, Industrial cellulose pulp-based flexible films with epoxidized soybean oil as plasticizer, Bordeaux Polymer Conference 2022, Bordéus, France, 13-16 June 2022.
127. P.Pereira, A.M. Ferro Rocha, A.C. Bastos, F.J. Oliveira, LM Vilhena, A Ramalho, J Sacramento, LF Malheiros, AMR Senos, Development of WC-NiCr hardmetals, PLANSEE seminar - International conference to present new insights in the field of Refractory Metals and Hard Materials, Reutte, Austria, 30 May 30–3 June 2022.

128. P.Serranho, S. Barbeiro, R. Henriques, A. Batista, M. Santos, C. Correia, J. Domingues, C. Loureiro, J. Cardoso, R. Bernardes, M. Morgado, On the Numerical Solution of the Inverse Elastography Problem for Time-harmonic Excitation, Online, 22 – 24 April 2022.
129. P.Sharma, N.M. Figueiredo, R. Serra, S. Carvalho, A. Cavaleiro, Surface Plasmon Resonance in Polymeric Surface Embedded with Silver (Ag) Nanoparticles, 95th IUVSTA Workshop, Plasmonic Thin Films: Theory, Synthesis and Applications, Guimarães, Portugal, 20-23 June, 2022.
130. P.Sharma, N.M. Figueiredo, R. Serra, S. Carvalho, A. Cavaleiro, Silver Nanoparticles (Ag NPs) Thermal Embedding in Polymer, 18th International Conference on Plasma Surface Engineering, Erfurt, Germany, 12 – 15 September, 2022.
131. P.Torres, A.Ramalho, L.Correia, Automatic Anomaly Detection in Vibration Analysis Based on Machine Learning Algorithms, International Conference Innovation in Engineering, Guimarães, Portugal, 28-30 June 2022.
132. P.V. Morais, “The project Biorecover”. REMOVAL Turning residues of the aluminium industry into resources. Session 2: Turning aluminium industry residues into resources: Outcome from EU collaborative projects Athens, Greece (online) 10 October 2022.
133. P.V. Morais. *A diversidade microbiológica como fonte de ferramentas na recuperação ambiental*, UDESC, Brazil (online), 21 October 2022.
134. R. Francisco and P.V. Morais. From diversity to biotools: when the target is not the aim, Biomining, a promising sustainable way to supply Critical Raw Materials in Europe, Online Seminar, 27 April 2022.
135. R. Garcia-Moreno, D. Camas, F.V. Antunes, B. Moreno, P. Lopez-Crespo, Bi-dimensional numerical analysis of the effect of non-uniform stress field on mixed-mode cracks, 5th Iberian Conference on Structural Integrity, Coimbra, Portugal, 30 March 30 – 1 April 1, 2022.
136. R.Branco, J.D. Costa, J. Jesus, L.P. Borrego, Analysis of fatigue crack initiation in notch bars subjected to combined bending-torsion. 5th Iberian Conference on Structural Integrity, Coimbra, Portugal, 30 March – 1 April, 2022.
137. R.Branco, On the use of uniaxial one-parameter damage laws for estimating fatigue life under multiaxial loading. 17th Asia-Pacific Conference on Fracture and Strength and the 13th Conference on Structural Integrity and Failure, Adelaide, Australia, 6-9 December 2022.
138. R.Branco, On the use of uniaxial one-parameter damage laws for estimating fatigue life under multiaxial loading. 2nd International Conference on Applied Research and Engineering, Cape Town, South Africa, 18-20 November, 2022.
139. R.Branco, P.V. Morais. Enhanced Gallium and Indium Tolerance and Accumulation by Engineered Escherichia coli Cells Expressing Metallothioneins, FEMS Conference on Microbiology, Belgrade, Serbia, 30 June-2 July 2022.

140. R.C. Rebelo, L.P.C. Gonçalves, A.C. Fonseca, J. Fonseca, M. Rola, J.F.J. Coelho, F. Rola, A.C. Serra, Increased Weathering Degradation of PLA/PBAT blends with Incorporation of Chloroacetic Acids and Esters, EPF, Prague, Czechia, 26 June-1 July 2022.
141. R.Carrilho and F. Ferreira, Bio-Filter for Carbon Dioxide Capture and Valorization: A Sustainable Approach towards Environment, Health and Circular Economy, APMAS 2022, Turkey, 13-19 November 2022
142. R.F. Fernandes, J. Jesus, R. Branco, L.P. Borrego, J.A.M. Ferreira, J.D. Costa, Influence of heat treatment in fatigue behaviour of AlSi10Mg aluminium alloy samples manufactured by laser powder bed fusion. 5th Iberian Conference on Structural Integrity, Coimbra, Portugal, March 30 – April 1, 2022.
143. R.F. Fernandes, J.S. Jesus, L. Borrego, J. M. Ferreira, J. D. M. Costa, Fatigue crack propagation of LPBF maraging steel with different deposition orientations, 5th Iberian Conference on Structural Integrity, IbCSI 2022, Coimbra, Portugal, March 30 – April 1, 2022.
144. R.Fernandes, J.S. Jesus, R. Branco, L.P. Borrego, J.D. Costa, J.A.M. Ferreira. Effect of post-processing heat treatment on cyclic plastic behavior of AlSi10Mg aluminium alloy processed by L-PBD, 23rd European Conference on Fracture, ECF23, Madeira, Portugal, July 2022.
145. R.Fernandes, L.P. Borrego, J.S. Jesus, R. Branco, J.A.M. Ferreira, J.D.M. Costa, Fatigue analysis of laser powder bed fusion AlSi10Mg aluminium alloy parts submitted to different heat treatments, 6th International Conference on Structural Integrity and Durability, ICSID 2023, Dubrovnik, Croatia, 20-23 September, 2022.
146. R.L. Mendes, J.R. Pimenta, I.G. Galvão, G.S. Carvalho, R.M. Leal, Soldadura por explosão de alumínio a aço inoxidável – efeito da placa intermédia, CIBIM 2022, XV Congreso Iberoamericano de Ingeniería Mecánica, Madrid, Spain, 22-24 November, 2022.
147. R.Moreira, R. Rebelo, J. Coelho, A. Serra, The effect of epoxidized compounds on the structure of Kraft pulp cellulose films, Iberoamerican Congress on Pulp and Paper Research (CIADICYP), Girona, Spain, 28 June - 1 July 2022
148. R.Serra, F. Ferreira, J. Oliveira, A. Cavaleiro, Effect of HiPIMS impulse shape on DLC films, HIPIMS 2022 - 12th International Conference on HiPIMS, Sheffield, UK, 15-16 July 2022.
149. S.A. Khan, N. Emami, A. Ramalho. A Crossed Cylinder Tribological Test against New Multi-material (CFRP-Ti) Stacks Configuration, IBERTRIB 2022-11th Iberian Conference on Tribology, Setubal, Portugal, 6 - 7 October 2022.
150. S.Carvalho, E. Carneiro, J. Castro, A. Cavaleiro, M. Andritschky, Desafío de la regulación REACH: Desarrollo de recubrimientos alternativos al cromo hexavalente, XVI Edición del Congreso Nacional de Materiales CNMAT22, Ciudad Real, Spain, 28 June - 1 July, 2022

151. S.Saraiva, P Pereira, C.T. Paula, RC Rebelo, JFJ Coelho, AC Serra, AC, Fonseca, Electrospinning of Hydroxypropyl Cellulose Esters with Long Aliphatic Chains. Bordeaux Polymer Conference-2022, Bordeaux, France, 13 -16 June 2022.
152. S.Saraiva, P Pereira, C.T.B. Paula, R.C. Rebelo, J.F.J. Coelho, A.C. Serra, A.C. Fonseca, Development of electrospun mats based on hydrophobic hydroxypropyl cellulose esters, European Polymer Federation Congress 2022, Prague, Czech Republic, 26 June – 1 July 2022.
153. S.Teixeira, M. Santos, A.P. Piedade, L. Gonçalves, A.M. Amaro, Fabrico Aditivo de um Apêndice Auricular Esquerdo: Planejamento do Préprocedimento de Oclusão. Congresso de Biomateriais 2022 - BIOMAT 2022, Rio de January, Brazil, 23 November 2022.
154. T. Tankova, C. Zhu, R. Branco, Material properties for wire-and-arc additively manufactured steel, Colloquium on Stability and Ductility of Steel Structures (SDSS 2022) Aveiro, Portugal, 14-16 September, 2022.
155. T. Vuchkov, V. Leviandhika, A. Cavaleiro, Tribological studies of sputtered WSC coatings with conventional and graded composition, 48th International Conference on Metallurgical Coatings and Thin Films, San Diego, USA, 22-27 May 2022.
156. T.B. Yaqub, A. Al-Rjoub, F. Fernandes, A. Cavaleiro, Recent progresses toward the development of TMDs based industrial dry lubricants for multi-environment sliding, Materiais 2022, Marinha Grande, Portugal, April 2022.
157. T.B. Yaqub, T. Vuchkov, J.F Pierson, S. Bruyère, A. Cavaleiro, Formation of the low friction tribolayer during sliding of TMD-based self-lubricant coatings, CNMAT 2022, Ciudad Real, Spain, June 2022.
158. T.B.A. Ribeiro, L. M. D. F. Ferreira, V. S. M. Magalhães, S. G. Azevedo, Analysing the impact of Lean and Green practices on manufacturing companies' performance, 29th EurOMA Conference, Berlin, Germany, 1-6 July 2022.
159. T.Omiya, M. Fontes, T. Vuchkov, S. Cruz, A. Cavaleiro, F. Mangolini, F. Ferreira, Tribological performance of Gd-DLC and Eu-DLC coatings in the presence of synthetic oils containing ionic liquid additives, PACSurf 2022, Kailua-Kona, 11-15 December 2022.
160. T.Omiya, M. Fontes, T. Vuchkov, S. Cruz, A. Cavaleiro, F. Mangolini, F. Ferreira, Tribological performance of Gd-DLC and Eu-DLC coatings in the presence of synthetic oils containing ionic liquid additives, SBPMat congress 2022, Foz do Iguaçu, Brazil, 25-29 October 2022.
161. T.Ribeiro, L. Ferreira, V. Magalhães, S. Azevedo, Analysis of the impact of Lean and Green Practices in manufacturing companies: An exploratory study, 10th MIM 2022, Nantes, France, 22-24 June 2022.
162. T.Vuchkov, K.H. Kannur, T.B. Yaqub, A. Cavaleiro, Are low friction coatings based on transition-metal dichalcogenides good solutions for sliding against polymers?, POLYTRIB 2022 - 4th International Conference on Polymer Tribology, Stockholm, Sweden, December 2022

163. T.Vuchkov, M. Evaristo, A. Correia, A. Cavaleiro, Tribological performance of laser-treated WSC sputtered coatings sliding against NBR rubber, IBERTRIB 2022, Setubal, Portugal, October 2022.
164. T.Vuchkov, T.B. Yaqub, A. Cavaleiro, Potential of self-adaptive low friction magnetron sputtered carbon-alloyed TMD-based coatings for space applications, 1st International Conference on Advanced Manufacturing for Air, Space and Land Transportation, Online, 7-10 March 2022.
165. T.Vuchkov, V. Leviandhika, A. Cavaleiro, Tribological studies of sputtered WSC coatings with conventional and graded composition, Ibertrib 2022, Setubal, 6-7 October, 2022.
166. V.Maranha, M.A. Neto, L. M. Roseiro, M. Paulino, A. M. Amaro, Stability of Two Internal Fixation Implants in the Treatment of Femur Fractures: Experimental and Finite Element Analysis, IX International Conference on Computational Bioengineering, Lisboa, Portugal, 11 - 13 April 2022.
167. W.Silva, B. Dalkiran, M.E. Ghica, C.M.A. Brett, Enhancing sensor performance: nanostructured modified electrodes with electroactive redox polymers prepared in deep eutectic solvents, ESEAC 2022, 18th International Conference on Electroanalysis, Vilnius, Lithuania, 5-9 June 2022.
168. Z.Xu, R. Branco, L.P. Borrego, F. Berto, S.M.J. Razavi. Quasi-static and fatigue properties of additively manufactured AlSi10Mg lattice of various scales. 3rd International Workshop on reliability and design of additively manufactured materials (RdAMM22). Faculty of Mechanical Engineering, Belgrade, Serbia, October 4-6, 2022.

Papers in International Proceedings

1. A.Aichouni, L. M. Ferreira, C. Silva, Total Quality Management philosophy within the fourth industrial revolution towards sustainability: A state-of-the-art literature review and a proposed protocol for further research, 5th International Conference on Quality Engineering and Management, ICQM 2022, 93-119, 2022.
2. A.Camacho-Reyes, F.A. Diaz, J.M. Vasco-Olmo, F.V. Antunes, Influence of the fitting approach on the parameters characterizing crack tip fields, Revista Española de Mecánica de la Fractura, Vol. 3, pp.71-76, 2022 ISSN: 2792-4246
3. A.F.G. Pereira, M.C. Oliveira, J.V. Fernandes, P.A. Prates, Variance-Based Sensitivity Analysis of the Biaxial Test on a Cruciform Specimen, Key Engineering Materials, 926, 1007-1020 <https://doi./10.4028/p-8med4s>
4. A.Khalfallah, S.A. Zoueghi, J.V. Fernandes, New approach for the identification of anisotropy material parameters using hydraulic bulge tests, IOP Conf. Ser.: Mater. Sci. Eng. 1238 012003, 2022, <https://doi./10.1088/1757-899X/1238/1/012003>

5. A.L. Ramalho, F. Antunes, J.A.M. Ferreira, Simulation of crack growth in residual stress fields of pre-fatigued T-welded joints repaired by tungsten inert gas: a 3D approach, MedFract2 - 2nd Mediterranean Conference on Fracture, Procedia Structural Integrity, Vol. 41, 412-420, 2022. <https://doi./10.1016/j.prostr.2022.05.047>
6. A.Marques , A.F.G. Pereira , B. Ribeiro, P.A. Prates, On the Identification of Material Constitutive Model Parameters Using Machine Learning Algorithms, ESAFORM 2022, 25th International Conference in Material Forming, Key Engineering Materials, Trans Tech Publications, Vol. 926, 2146–53, 2022.
7. A.Ramalho, F. Antunes, J.Ferreira, Retrofitting of aged welded structures by TIG and plasma dressing, Revista Española de Mecánica de la Fractura, Vol. 3 Junio 2022, Editado por la Sociedad Española de Integridad Estructural, ISSN: 2792-4246, pp. 237-242 <https://gef.es/images/revista/revista-espanola-mecanica-fractura-vol3-junio2022.pdf>
8. A.S. Cruces, A. Exposito, R. Branco, L.P. Borrego, F.V. Antunes, P. Lopez-Crespo, Propagation of notch fatigue cracks on maraging steel under biaxial conditions, Procedia Structural Integrity 39, 509-514, 2022, <https://doi./10.1016/j.prostr.2022.03.124>
9. A.S. Cruces, P. López Crespo, R. Branco, B. Moreno, L. Borrego, Propagación de grietas de fatiga desde concentrador en acero maraging bajo cargas de tipo biaxial. Revista Española de Mecánica de la Fractura 3, ISSN: 2792-4246, 2022.
10. B.Alves, D. Gatões , G. Oliveira , C.M. Fernandes , D. Figueiredo , A. Senos , M.T. Vieira, Influence of wettability of tungsten carbide powder by organic binder/additives on the quality of filaments for Material Extrusion (MEX), 20th Plansee Seminar HM 104/1, 2022
11. C.A.V. Alves, L. M. D. F. Ferreira, V. S. M. Magalhães, Analysis of the Impact of Servitization, Service Design and Digitalization in Industrial Companies: An Exploratory Approach, IFAC-PapersOnLine, Volume 55, Issue 10, pp. 1043-1049, 2022. <https://doi./10.1016/j.ifacol.2022.09.527>
12. D.J. Cruz, A.F.G. Pereira, V.M. Simões, R. Amaral, A. Santos, M.C. Oliveira, Work Hardening of Metallic Sheets under Tension-Compression and Simple Shear Reverse Loading, ESAFORM 2022, 25th International Conference in Material Forming, Key Engineering Materials, Trans Tech Publications. Vol. 926, 2012–2021, 2022. <https://doi./10.4028/p-73lq3w>
13. D.M. Neto, E.R. Sérgio, F.V. Antunes, Modelling the fatigue crack growth using the crack tip plastic deformation, IbCSI 2022, 5th Iberian Conference on Structural Integrity, L.F. Borrego, J.M. Ferreira (Eds.), Revista española de mecánica de la fractura, Vol. 3, 131-136, 2022. <https://dialnet.unirioja.es/servlet/articulo?codigo=8694906>
14. E.Ferreira, C. Páris and L. Roseiro, Web API BLE Communication using .Net Core, 2022 17th Iberian Conference on Information Systems and Technologies (CISTI), pp. 1-5, 2022 <https://doi./10.23919/CISTI54924.2022.9820449>

15. E.R. Sérgio, F.V. Antunes, D.M. Neto, Influence of porous damage on fatigue crack growth, IbCSI 2022, 5th Iberian Conference on Structural Integrity, L.F. Borrego, J.M. Ferreira (Eds.), Revista española de mecánica de la fractura, Vol. 4, 77-82, 2022. <https://dialnet.unirioja.es/servlet/articulo?codigo=8701286>
16. F.Cruz, M. Safeea, M. Babcsinchi, P. Neto, Design and 3D Printing Fabrication of a Low-Cost Lightweight Robot Manipulator, International Conference on Flexible Automation and Intelligent Manufacturing, FAIM2022, Detroit, USA, 2022.
17. F.R. Cruz, D. Gatões, T. Vieira, Additive Manufacturing as spring of new materials, PowderMet 2022 or AMPM 2022 Digital Proceedings, 2022.
18. F.V. Antunes, A. Camacho-Reyes, E.R. Sérgio, J.M. Vasco-Olmo, F.A. Díaz, D.M. Neto, CCC specimen: A novel specimen for FCG studies under plane strain conditions, IbCSI 2022, 5th Iberian Conference on Structural Integrity, L.F. Borrego, J.M. Ferreira (Eds.), Revista española de mecánica de la fractura, Vol. 3, 21-26, 2022 <https://dialnet.unirioja.es/servlet/articulo?codigo=8694888>
19. G.Fernandes, M. Capitão, A. Tereso, J. Oliveira, E.B. Pinto, Stakeholder Management in University-Industry Collaboration Programs: A Case Study. In: Machado J., Soares F., Trojanowska J., Ivanov V. (eds) Innovations in Industrial Engineering. icieng 2021. Lecture Notes in Mechanical Engineering. Springer, Cham., 2022, 134-147 https://doi./10.1007/978-3-030-78170-5_13
20. G.Ferreira, A. Tereso, G. Fernandes, Project Management in Service Sector SMEs: A Comparative Study Between Portugal and Denmark, World Conference on Information Systems and Technologies - WorldCIST 2022. Advances in Intelligent Systems and Computing, Springer, Cham.,60-69, 2022 https://doi./10.1007/978-3-031-04829-6_6
21. G.Oliveira, B.Alves, R.Mineiro, A.M. Rocha Senos, C. Fernandes, D. Figueiredo, M.T.Vieira, Indirect Additive Manufacturing (Material Extrusion) as a Solution to a New Concept of Cutting Tools, World PM 2022 Congress Proceedings, 2022.
22. H. Vidinha, R. Branco, M. A. Neto, A. M. Amaro, P. Reis, Numerical study of seawater effect on Mechanical Strength in fiber-reinforced polymer composites, 1st International Conference on Mechanics of Solids – MS2022, Porto, Portugal, 3-4 November 2022 <https://web.fe.up.pt/~ms2022/>
23. H.Paulo, M. Vieira, B. S. Gonçalves, T. Pinto-Varela and A.P. Barbosa-Póvoa, Assessment of biomass supply chain design and planning using discrete-event simulation modeling, In 32th European Symposium on Computer Aided Process Engineering, 51, 967-972, 2022, <https://doi./10.1016/B978-0-323-95879-0.50162-4>
24. H.Vidinha, R. Branco, M. A. Neto, A. M. Amaro, P. Reis, Effect of Seawater Exposure on Structural Integrity of Glass Fiber-Reinforced Polymers Composites, 6th International Conference on Structural Integrity and Durability – ICSID 2022, Dubrovnik, Croatia, 19-23 September 2022 <https://icsid2022.fsb.hr/program.html>

25. I.Maganha, A.L. Andersen, C. Silva, L.M.D.F. Ferreira, A Classification of the Barriers in the Implementation Process of Reconfigurability, in Towards Sustainable Customization: Bridging Smart Products and Manufacturing Systems, Springer Nature Switzerland, 88-95, 2022. https://doi./10.1007/978-3-030-90700-6_9
26. J.D. Castro, A.M.B. Casanova, R.S. Teixeira, N.V.L. Sénéchal, T.H.F.D. Ferrão, P.F. Rodrigues, A.S. Paula, Annealing Effects In Highly Ni NiTi Alloy Ingots Melted Via VAR , p. 496-506. In: 75° Congresso Anual da ABM, São Paulo, 2022. ISSN: 2594-5327 <https://doi./10.5151/2594-5327-34604>
27. J.M. Vasco-Olmo, A. Camacho-Reyes, F. A. Diaz, F. V. Antunes, N. James, Experimental evaluation of plastic wake on growing fatigue cracks from the analysis of residual displacement fields, Revista Española de Mecánica de la Fractura, Vol. 3 Junio 2022, Editado por la Sociedad Española de Integridad Estructural, ISSN: 2792-4246, pp.3-8. (5th Iberian Conference on Structural Integrity, Coimbra, Portugal, March 30 – April 1, 2022) <https://gef.es/images/revista/revista-espanola-mecanica-fractura-vol3-junio2022.pdf>
28. J.M.Parente, R. Simões, P.N.B. Reis, Effect of graphene nanoparticles on suspension viscosity and mechanical properties of epoxy-based nanocomposites, Procedia Structural Integrity, Vol. 37, pp. 820-825, 2022. <https://doi.org/10.1016/j.prostr.2022.02.014>.
29. J.Martins, M.S. Correia, H.A. Almeida, J.C. Vasco, Impact of Support Structures On The Mechanical Behaviour Of Components Produced By Extrusion-Based Additive Manufacturing, Casablanca International Conference On Additive Manufacturing (Casicam'22), November 23-24, 2022, Casablanca, Morocco.
30. L. Ferreira; C. Coelho; P. Reis, Impact Response of Semi-Cylindrical Composite Laminate Shells Under Repeated Low-Velocity Impacts, Advances in Science and Engineering Technology International Conferences (ASET), 2022 <https://ieeexplore.ieee.org/document/9735043>.
31. L.M. Vilhena, A. Ramalho, Friction of soft contact lenses, IBERTTRIB 2022-11th Iberian Conference on Tribology, Setubal, Portugal, 6 - 7 October 2022.
32. L.M. Vilhena, A. Ramalho, Skin friction: mechanical and tribological characterization of different papers used in everyday life, Tribology 2022, Tribology International Conference 2022, Barcelona, Spain 27 - 29 April 2022.
33. L.M. Vilhena, A. Ramalho, Strain hardening behaviour of CoCrMo; IBERTTRIB 2022-11th Iberian Conference on Tribology, Setubal, Portugal, 6 - 7 October 2022
34. L.P. Borrego, J.S. Jesus, J.A.M. Ferreira, J.D. Costa, C. Capela, Overloading effect on transient fatigue crack growth of Ti-6Al-4V parts produced by Laser Powder Bed Fusion, Procedia Structural Integrity Volume 37, 2022, Pages 330-335 <https://doi./10.1016/j.prostr.2022.01.092>
35. L.Roseiro, F. Moita, M. Silva, N. Cruz, D. Fernandes, N. Lavado, Project of a Ventilated Face Shield for Personal Protection Based on Additive Manufacturing, Proceeding of 5th Iberian Conference on Structural Integrity. Luis Borrego et al. (Eds), 2022. ISBN: 978-989-53599-0-5

36. L.Roseiro. Functional Prototypes in Applied Biomechanics. The Journal of International Society of Physical and Rehabilitation Medicine, Published by Wolters Kluwer, Vol. 5 n° 6. - Medknow, S412 (Proceeding of ISPRM 2022) <https://doi./10.4103/2349-7904.351321>
37. M.Ajmal, C. Lopez-Crespo, A. S. Cruces, F.V. Antunes, P. Lopez-Crespo, On the use of the plastic component of the CTOD for fatigue analysis in austenitic stainless steel, *Procedia Structural Integrity* 37 964-976, 2022. <https://doi./10.1016/j.prostr.2022.02.032>
38. M.Ajmal, C. Lopez-Crespo, A.S. Cruces, F.V. Antunes, P. Lopez-Crespo, Fatigue crack propagation studies based on the plastic component of the CTOD evaluated from Digital Image Correlation data, *Structural Integrity Procedia* 39, 347-363, 2022. <https://doi./10.1016/j.prostr.2022.03.104>
39. M.Babcinski, F. Cruz, N. Duarte, S. Santos, S. Alves, P. Neto, Intuitive Robot Programming by Capturing Human Manufacturing Skills: A Framework for the Process of Glass Adhesive Application, International Conference on Flexible Automation and Intelligent Manufacturing, FAIM2022, Detroit, USA, 2022.
40. M.C. Oliveira, D.M. Neto, A.F.G. Pereira, J.L. Alves, L.F. Menezes, Evaluating the influence of the deformation of the forming tools in the thickness distribution along the wall of a cylindrical cup, IDDRG 2022, 41st International Deep-Drawing Research Group Conference, IOP Conference Series: Materials Science and Engineering, Vol. 1238, 012079, 2022. <https://doi./10.1088/1757-899X/1238/1/012079>
41. M.Netto, M.F. Borges, J.M. Silva, F.V. Antunes, Effect of variable amplitude block loading on fatigue crack growth, *Structural Integrity Procedia* 39:403-408, 2022. <https://doi./10.1016/j.prostr.2022.03.109>
42. M.P. Silva, P. Santos, J.M. Parente, S. Valvez, P.N.B. Reis “Effect of different hostile solutions on mechanical properties of composite materials”, *Procedia Structural Integrity*, Vol. 37, pp. 841-846, 2022. <https://doi.org/10.1016/j.prostr.2022.02.017>.
43. M.Saraiva, J.P. Vilas-Boas, M.A. Castro, Postural control during motor dual-task in young adults with different levels of physical activity. *Sağlık Akademisi Kastamonu*, 7(1):121-122. 2022 <https://doi./10.25279/sak.1137973>
44. N.Demazel, A. Boyer, H. Laurent, M.C. Oliveira, Hot tensile and expansion tests of Ductibor®1000 steel, IOP Conf. Series: Materials Science and Engineering, 1238, 012054, 2022 <https://doi./10.1088/1757-899X/1238/1/012054>
45. N.Hannachi, A. Khalfallah, C. Leitão, D.M. Rodrigues. Comparison Between ALE and CEL Finite Element Formulations to Simulate Friction Stir Spot Welding, CoTuMe 2021, Advances in Mechanical Engineering and Mechanics II. Lecture Notes in Mechanical Engineering. Springer, Cham. T. Bouraoui et al. (Eds.). 277–284, 2022 https://doi./10.1007/978-3-030-86446-0_36
46. N.V.L. Sénéchal, P.F. Rodrigues, et al., Estudo da influência da deformação a quente na microestrutura de uma liga de NiTi, p. 169-181. In: 75° Congresso Anual da ABM, São Paulo, 2022. ISSN: 2594-5327, <https://doi./10.5151/2594-5327-34241>

47. O.Lima, A. Tereso, G. Fernandes, Innovation and Sustainability Practices in Project Management Within SMEs Context – A Systematic Literature Review, World Conference on Information Systems and Technologies - WorldCIST 2022. Advances in Intelligent Systems and Computing, Springer, Cham., 45–59, 2022 https://doi.org/10.1007/978-3-031-04829-6_5
48. P.N.B. Reis, S. Valvez, J.A.M. Ferreira, Creep and stress relaxation behaviour of 3D printed nanocomposites, Procedia Structural Integrity, Vol. 37, pp. 934-940, 2022. <https://doi.org/10.1016/j.prostr.2022.02.028>
49. P.Pereira, A.M. Ferro Rocha, A.C. Bastos, F.J. Oliveira, LM Vilhena, A Ramalho, J Sacramento, LF Malheiros, AMR Senos, Development of WC-NiCr hardmetals, PLANSEE seminar - International conference to present new insights in the field of Refractory Metals and Hard Materials, Reutte, Austria, 30 May 30–3 June 2022.
50. P.Santos, N. Bouhemame, P.N.B. Reis, A. Bezazi, Impact characterization of bio-based sandwich panels with cork core, Procedia Structural Integrity, Vol. 37, pp. 833-840, 2022. <https://doi.org/10.1016/j.prostr.2022.02.016>.
51. P.Serranho, S. Barbeiro, R. Henriques, A. Batista, M. Santos, C. Correia, J. Domingues, C. Loureiro, J. Cardoso, R. Bernardes, M. Morgado, On the Numerical Solution of the Inverse Elastography Problem for Time-harmonic Excitation. In Proceedings of the 2nd International Conference on Image Processing and Vision Engineering, ISBN 978-989-758-563-0, ISSN 2795-4943, pages 259-264, 2022.
52. P.Torres, A.Ramalho, L.Correia, Automatic Anomaly Detection in Vibration Analysis Based on Machine Learning Algorithms, Innovations in Mechatronics Engineering II. icieng 2022. Lecture Notes in Mechanical Engineering. Springer, Cham. 2022, https://doi.org/10.1007/978-3-031-09385-2_2
53. R. Garcia-Moreno, D. Camas, F.V. Antunes, B. Moreno, P. Lopez-Crespo, Bi-dimensional numerical analysis of the effect of non-uniform stress field on mixed-mode cracks, Revista Española de Mecánica de la Fractura, Vol. 3, pp. 149-154, 2022. <https://gef.es/images/revista/revista-espanola-mecanica-fractura-vol3-junio2022.pdf>
54. R.Branco, J.D. Costa, J. Jesus, F. Berto, J.A. Martins Ferreira, C. Capela, Prediction of multiaxial fatigue life of notched maraging steel components manufactured by selective laser melting. Procedia Structural Integrity 39, 273-280, 2022. <https://doi.org/10.1016/j.prostr.2022.03.097>
55. R.Branco, J.D.Costa, J.A.M Ferreira, C. Capela, F. Berto, W. Macek, Multiaxial Fatigue Behaviour of SLM 18Ni300 Steel. Structural Integrity 25, pp. 161-168., 2022. https://doi.org/10.1007/978-3-030-91847-7_16
56. R.F. Fernandes, J.S. Jesus, L. Borrego, J. M. Ferreira, J. D. M. Costa. Fatigue crack propagation of LPBF maraging steel with different deposition orientations. 5th Iberian Conference on Structural Integrity, IbCSI 2022. Coimbra, March 2022. In: Revista Epanhola de Mecánica de la Fractura, Vol. 4, p. 183-188. ISSN: 2792-4246. <https://gef.es/images/revista/revista-espanola-mecanica-fractura-vol4-julio2022.pdf>

57. R.F. Fernandes, J.S. Jesus, R. Branco, L. Borrego, J. A. M. Ferreira, J. D. M. Costa. Influence of heat treatment on fatigue behaviour of AlSi10Mg aluminium alloy submitted to laser powder bed fusion. 5th Iberian Conference on Structural Integrity, IbCSI 2022. Coimbra, March 2022. In: Revista Espanhola de Mecánica de la Fractura, Vol. 4, p. 201-204. ISSN: 2792-4246. <https://gef.es/images/revista/revista-espanola-mecanica-fractura-vol4-julio2022.pdf>
58. R.Fernandes, J. de Jesus, R. Branco, L.P. Borrego, J.A. Martins Ferreira, Cyclic deformation behaviour of AlSi10Mg aluminium alloy manufactured by laser-beam powder bed fusion. *Procedia Structural Integrity* 37, 462-468, 2022. <https://doi./10.1016/j.prostr.2022.01.110>
59. R.L. Mendes, J.R. Pimenta, I.G. Galvão, G.S. Carvalho, R.M. Leal, Soldadura por explosão de alumínio a aço inoxidável – efeito da placa intermédia, CIBIM 2022, XV Congreso Iberoamericano de Ingeniería Mecánica, 2022.
60. S.A. Khan, N. Emami, A. Ramalho. A Crossed Cylinder Tribological Test against New Multi-material (CFRP-Ti) Stacks Configuration. Book of Abstracts of 11th Iberian Conference on Tribology. Edited by: Ana Paula Serro, Ana Catarina Branco, Carla Carneiro, Diana Silva, Mafalda Guedes, Célio Figueiredo-Pina. ISBN: 978-989-53890-4-9
61. S.Valvez, A.P. Silva, P.N.B. Reis, F. Berto, Annealing effect on mechanical properties of 3D printed composites, *Procedia Structural Integrity*, Vol. 37, pp. 738-745, 2022. <https://doi.org/10.1016/j.prostr.2022.02.004>.
62. T. Tankova, C. Zhu, R. Branco, Material properties for wire-and-arc additively manufactured steel. *ce/papers* 5(4), 1092-1097, 2022 <https://doi./10.1002/cepa.1855>
63. T.B.A. Ribeiro, L. M. D. F. Ferreira, V. S. M. Magalhães, S. G. Azevedo, Analysis of the Impact of Lean and Green Practices in Manufacturing Companies: An Exploratory Study, *IFAC-PapersOnLine*, Volume 55, Issue 10, pp. 2419–2424, 2022. <https://doi./10.1016/j.ifacol.2022.10.071>
64. V.Maranha, M. A. Neto, L. M. Roseiro, M. Paulino, A. M. Amaro, “Stability of Two Internal Fixation Implants in the Treatment of Femur Fractures: Experimental and Finite Element Analysis.” *Proceeding of IX International Conference on Computational Bioengineering (ICCB 2022)*, Paulo Fernandes et al (Eds.), 70, 2022. ISBN: 978-989-53599-0-5
65. W.Macek, R. Branco, J.Trembacz, J.D. Costa, J.A.M Ferreira, C. Capela, Three-Dimensional Fractography for Conventional and Additive Manufactured Steels After Bending-Torsion Fatigue. *Structural Integrity* 25, pp. 127-135 https://doi./10.1007/978-3-030-91847-7_13
66. Z. Ktari, A. Khalfallah, C. Leitao, Development of Ring Hoop Shear Test for the Mechanical Characterization of Tubular Materials, *CoTuMe 2021, Advances in Mechanical Engineering and Mechanics II. Lecture Notes in Mechanical Engineering*. Springer, Cham. T. Bouraoui et al. (Eds.). 119–125, 2022 https://doi./10.1007/978-3-030-86446-0_16

67. Z. Marciniak, R. Branco, R.F. Martins, D. Rozumek, W. Macek (). Effect of elliptical defect orientation on the durability of specimens subjected to cyclic bending. *Procedia Structural Integrity* 37, 606-613, 2022. <https://doi./10.1016/j.prostr.2022.01.129>
68. Z.Ktari, A. Khalfallah, C. Leitao, Non-conventional Tensile Specimen for Mechanical Characterization of Tubular Materials, pp. 464 – 473, 2022, https://doi./10.1007/978-3-031-14615-2_52

Attendance to National Conference with Presentation

1. A.C.Pinho, A.P.Piedade, 3D to 4D printing: can bacterial cellulose make the bridge?, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
2. A.C.Pinho, M.C.Carrupt, A.P.Piedade, DigitalTouchAuto - Development of advanced and interactive solutions for car interior panels, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
3. A.Cavaleiro, A.S.Ramos, B.Trindade, F.Reis Cruz, J.D.Costa, J.V.Fernandes, M.O.Panão, M.T.Vieira, New solutions for injection molds with ultra-high brightness, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
4. A.F.G Pereira, M.C. Oliveira, J.V. Fernandes, A.E. Marques, N.A. Sakharova and P.A. Prates, Easy-to-Use Strategy for the Accurate Material Description in Sheet Metal Forming, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
5. A.Fróis, P. Faia, A.C. Santos, C. Santos Louro, Corrosion behavior in artificial saliva of medical grade ss316l sputter-coated with dlc films: the effect of adhesion layers, 8as Jornadas de Corrosão e Proteção de Materiais, Lisboa, 24 November 2022.
6. A.Gomes M. F. Paulino, A.M. Amaro, M. A. Neto, Modelação da Fase de Receção num Salto Vertical, 2ª Conferência Nacional de Dinâmica de Sistemas Multicorpo, Guimarães, Portugal, 5-6 December 2022.
7. A.Jesus, M.Pinto, C.Silva, M.Vieira, C.Marques, S. Moniz, Data-driven integration of production planning and flexible job-shop scheduling. IO2022 - XXII Congresso da Associação Portuguesa de Investigação Operacional, Évora, Portugal, 6 - 8 November 2022.
8. A.Kanaan, L.Cacho, D.Gatões, A.P.Piedade, M.T.Vieira, Add additive manufacturing to Portuguese industry, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
9. A.S.Ramos, M.T.Vieira, P.F.Rodrigues F.Antunes, F.Cruz, J.D.Costa, L.Borrego, CrackFree - Towards self-repairing metallic materials, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
10. A.Vahidi, R.Serra, F.Ferreira, A.Cavaleiro, and J.Oliveira, Quantitative Measurements of sp3 Content of Annealed DLC Films Produced by HiPIMS-DOMS in Ar-Ne Discharges, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
11. B.Alves, C.Batista, M.T.Vieira, Add.Powder - New filaments based on metallic chips for additive manufacturing, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.

12. B.Martins, Soft4Sense – Smart Surfaces for Reliable Tooling Integration, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
13. B.Trindade, Project: GreenTRIBOS, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
14. C.Bessa, C.Silva, T.Pinto-Varela, P.B.Póvoa, S Moniz, A capacity allocation model for fairer pharmaceutical supply chains. IO2022 - XXII Congresso da Associação Portuguesa de Investigação Operacional, Évora, Portugal, 6 - 8 November 2022.
15. C.Bessa, R.Duque, A.Jesus, C.Silva, S.Moniz, Capacity allocation considering fairness metrics: a pharmaceutical supply chain case study, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
16. C.Silva, Project: Factory Lab, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
17. C.T.B.Paula, P.Pereira, J.F.J.Coelho, A.C.Fonseca, A.C.Serra, Biocompatible hydrogels with controlled degradation by visible light, Encontro Ciência 2022, Lisbon, Portugal, 17 May 2022.
18. D.Cavaleiro, F.Fernandes, MCTool21 - Manufacturing of cutting tools for the 21st century, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
19. D.E.L.Vieira, A.N.Salak, J.M.Vieira, C.M.A.Brett, Continued corrosion protection of aluminium alloy 2024 through layered double hydroxide UV-degradation, 8as Jornadas de Corrosão e Protecção de Materiais, Lisboa, Portugal, 24 November 2022.
20. D.M.C.Salgueiro, S.Inocêncio, J.S.Barbosa, A.L.Costa, A.C. Pinto, A.Nunes, A.C. Serra, J.F.J.Coelho, S.Simões, A.C.Fonseca, Inject4Pain - New biomaterials and their applications in innovative injectable formulations for controlled drug release, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
21. D.M.Netto, F.I.Salgueiro, B.M.Marques, C.M.Andrade, M.C.Oliveira, J.L.Alves, L.F.Menezes, Numerical analysis of single-tracks produced by laser powder bed fusion, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
22. D.N.Proença, P.V.Morais, Sustainable Innovations for Regenerative Agriculture in the Mediterranean Area, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
23. D.N.Proença, T.M.Henriques, A.P.Chung, P.V.Morais. UCCCB as Biological Resource Center for a Sustainable Bioeconomy. MicroSummit22, Portugal, Porto, 25 November, 2022
24. E.Carneiro, P.Sharma, L.Fialho, A.Pontes, J.Ferreira, S.Ramos, A.Cavaleiro, S.Carvalho, i9LOGO – Innovation In The Development And Production Of Automotive Logos, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
25. F.De Bon, R.G. Fonseca, A.C. Serra and J.Coelho, Large volume, self-degassing, aqueous electrochemically mediated ATRP, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
26. I.Carvalho, M. J.Lima, D.Nobre, S. M.Marques, D.Castro, T.R.Leite, M.Henriques, F.Duarte, A.Ramalho, S.Carvalho, Science DiabetICC Footwear - Development of Innovative therapeutic footwear for diabetic feet, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.

27. I.Costa, P.Farias, H.Ribeiro, R.Branco, J.F.B.Pereira, SUSTe: Development of SUSTainable and integrative bioprocess for the recovery of Tellurim-based nanoparticles from photovoltaic wastes, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
28. I.Marcelino, R.Santos, T.Ferreira, N.Ferreira, L.Pereira, J.P.Dias, A.Cavaleiro, Advanced solution for the injection molding industry, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
29. I.Marques, M.Gonçalves, J.Corker, POWERSKIN+, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
30. J.Corker, POWERSKIN+, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
31. J.Costa, J.P.Dias, A.Cavaleiro, A new integrative mould concept to maximize the production of packaging glass – affirmation in the international market, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
32. J.Perdigoto, Tool Condition Monitoring of self-lubricant coatings to improve the lifetime of cutting tools, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
33. J.Santos, M.Caixinha, L.Petrella, M.Gomes, F.Perdigão, M.Santos, P.Fernandes, C.Pinto, S.Nunes, M.Morgado, Eye Scan Ultrasound System for Cataract Detection and Estimation of Optimal Phacoemulsification Energy, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
34. L.Fialho, C.F.Almeida Alves, S.M.Marques, P.Ferreira, L.F.Martins, L. Marques, P. Sampaio, S.Carvalho, Healthydent - Design of new antimicrobial osseointegrated dental implants, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
35. M. T. Vieira, A.Amaro, J.Domingos, J.N.Pires, H.Araújo, A. Cavaleiro, D.Netto, J.Noro, A.Amaro, P.Martinho, A.Mateus, A.P.Piedade, M.liveira, J.Costa, C.Batista, C.antos, D.Gatões, ARTTE - Advanced Robotics/Tool Technology and Eco efficiency, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
36. M.Babcinski, B.Freire, P.Netto, D.Netto, D.Fonseca, Laura Duarte, Afonso Silva, Intelligent data-driven pipeline for the manufacturing of certified metal parts through Direct Energy Deposition process, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
37. M.Babcinski, F.Cruz, P.Netto, R.Mendes, S.Marques, M.Vieira, S.Moniz, M.Neves, Closed-loop digital pipeline for a flexible and modular manufacturing of large components, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
38. M.C.Oliveira, J.L.Alves, R.L. Amaral, A.A.Campos, J.P.Brito, J.César-de-Sá, D.J.Cruz, J.V.Fernandes, L.F.Menezes, D.M.Netto, A.F.G.Pereira, P.A.Prates, F.F.Salles, A.D.Santos, V.M.Simões, Numerical simulation of damage in metallic sheets: Anisotropic behavior and tension-compression asymmetry coupled approach for formability prediction, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
39. M.Fontes, S.Cruz, A.Cavaleiro, F.Ferreira, Comparison of mechanical and tribological properties of diamond-like carbon coatings doped with Europium and Gadolinium produced by HiPIMS, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.

40. M.Nouira, M.C.Oliveira, A.Khalfallah, J.L.Alves, L.F.Menezes. Comparative Study Of 3D Fracture Loci of Two Uncoupled Models Using Tests Under Different Stress States, 2nd Conference on Innovative Materials, Manufacturing, and Advanced Technologies IMMAT'2022, Sousse, Tunisia, 2022.
41. M.Pinto, C.Silva, S.Moniz, Nesting and scheduling towards additive manufacturing: emerging avenues, IO2022 - XXII Congresso da Associação Portuguesa de Investigação Operacional, Évora, Portugal, 6 - 8 November 2022.
42. M.T.Vieira, A.P.Piedade, Gonçalo Oliveira, C.Carrupt, Lícínio Ferreira, Luisa Durães, Novel Solution to Retain and Inactivate the SARS CoV-2 virus, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
43. M.T.Vieira, B.Trindade, A.S.Ramos, G.Oliveira, M.Panão, WC-Co Filament for Material Extrusion (MEX), CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
44. P.F.Rodrigues, Ligas com memória de forma: características, aplicações e tendências, XV Simpósio de Tecnologia - FATEC São Paulo, Brazil 19 - November 2022
45. P.Farias, P.Morais, L.Marques, Ultrabot – “Robô para desinfecção por radiação ultravioleta”, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
46. P.M. Rodrigues, A.F. Kanaan, A.P. Piedade, SMART DISPLAY: Haptic touchscreen display “live front”, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
47. P.Nascimento, C.Henggeler, C.Silva, S. Mueller, S.Moniz, Nesting and scheduling problems in additive manufacturing: a decomposition approach. IO2022 – XXII Congresso da Associação Portuguesa de Investigação Operacional, Évora, Portugal 6 - 8 November 2022.
48. P.Netto, Integradde & Penelope, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
49. P.Pereira, NerveGen, Demo Day - ineoStart, Coimbra, Portugal, 26 October 2022.
50. P.V. Morais. “Estratégias bacterianas de interação com os metais: dos mecanismos às aplicações”. Encontro com a Ciência e a Tecnologia em Portugal, Indústria e Inovação ciência2022PT, Lisbon, Portugal, 16-18 May 2022
51. P.V.Morais, A.P.Chung, J.M.Almeida, A.A.Correia, F.G.Branco, DUST + -Innovative composites with powder incorporation resulting from limestone cutting sludge, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
52. P.V.Morais, D.N.Proença, A.P.Chung, T.M.Henriques, The importance of a biological resources center in the sustainable development of a low-density region, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
53. P.V.Morais, Project: Biorecover, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
54. P.V.Morais, R.Branco, J.Caldeira, REVIVING – revisiting mine tailings to innovate metals biorecovery, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
55. P.V.Morais, R.Francisco, R.Branco, A.P.Chung , J.B.Caldeira, B.Rito, BIORECOVER: Development of an innovative sustainable strategy for selective biorecover of critical raw materials from Primary and Secondary sources, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.

56. R.Braga, P.F.Rodrigues, H.Cordeiro and M.T.Vieira, 4DComposites - Intelligent molding of 4D components based on shape memory alloys, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
57. R.Branco, P.V. Morais, A.P.Chung, JB. Caldeira, A.P.Piedade, R.Francisco, MicroMineR - Microbiological technologies in mining and recycling of high-tech critical metals, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
58. R.Francisco. From biodiversity to biotools: what lies beyond the microscope. DCV Talks, 22 June. Department of Life Sciences, University of Coimbra.
59. S.A.Adebayo, R.Serra, J.C.Oliveira, CEMMPRE Meeting 2022: Project IoShad, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
60. S.Cruz, P.Pereira, L.Rodrigues, T.Gonçalves, I.Carvalho, A.Cavaleiro, S.Carvalho, Sustainable functionalisation of stents to prevent urinary tract infections, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
61. S.M.Marques, N.Bexiga, C.Viães, I.Sá-Nogueira, A.Cavaleiro, S.Carvalho, ORAiDEA – Development of multifunctional dental implants, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
62. T.Resendes, M.Neri, M.T.Vieira, Development of polymeric parts with metallic brightness, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
63. T.Vuchkov, A.Cavaleiro, ATRITO-0 The synergy between texturization and self-lubricating coatings for more energy-efficient and environmentally friendly mechanical contacts, CEMMPRE Meeting, Coimbra, Portugal, 8 July 2022.
64. T.Vuchkov, T.B. Yaqub, A.Cavaleiro, Upscaling of self lubricating W S C coatings deposited by magnetron sputtering, VACUO 2022, Aveiro, Portugal, December 2022,

Papers in National Proceedings

1. A.Gomes, M.F. Paulino, A.M. Amaro, M.A. Neto, Modelação da fase de receção num salto vertical.”, 2nd Portuguese Conference on Multibody System Dynamics, Guimarães, Portugal, 5-6 de December, 2022.
2. M.Antunes, A.S. Coelho, I. Amaro, L. Vilhena, A. Ramalho, E. Carrilho, Effect of cavity disinfectants on adhesion to dentin: an in vitro study 31^o Congress of the Portuguese order of Dentist OMD20201, Lisbon, 17-19, November 2022.
3. O. Lima, A.Tereso, G. Fernandes, F. Silva, Práticas e Benefícios da Inovação e Sustentabilidade na Gestão de Projetos nas PME: uma revisão sistemática da literatura, Proceedings do PM Summit, Lisbon,1-19, 2022.
4. M.Silva, F. Santos, L. Roseiro, A. André, R. Durães, W. Xavier, A. Cruz, C. Malça, Development, Construction, and Preliminary Applications of an Advanced System for Rehabilitation. Proceedings of 2^a Conferência Nacional de Dinâmica de Sistemas Multicorpo. F. Marques e C. Quental (Eds)., 2022, 47. ISBN: 978-989-33-4087-5.

Organization of Seminars and Conferences

1. 15th International Conference on Advanced Computational Engineering and Experimenting (ACEX 2022), Florence, Italy, 3-7 July 2022.
2. 22nd IEEE International Conference on Autonomous Robot Systems and Competitions, Santa Maria da Feira, Portugal, 29-30 April 2022.
3. 23rd European Conference on Fracture (ECF23), Funchal, Madeira, Portugal, 27 June - 01 July, 2022.
4. 4D Materials Design and Additive Manufacturing Conference 2022 (4DADM2022), 1-2 september 2022.
5. 5th Iberian Conference on Structural Integrity, Coimbra, Portugal, 30 March- 1 April, 2022 (Organizing Committee).
6. 5th International Conference on Biomedical Engineering and Science (BIOEN 2022), virtual conference, 12 - 13 March 2022.
7. 7th International Conference on Recent Trends in Mechanical Engineering (RTME 2022) Virtual Conference. 11 – 12 March, 2022.
8. 8^{as} Jornadas de Corrosão e Protecção de Materiais, Lisboa, Portugal, 24 November 2022.
9. 95th IUVSTA Workshop - Plasmonic Thin Films: Theory, Synthesis and Applications-, June 2022, Guimarães, Portugal (Member of the Scientific Committee)
10. CEMMPRE Meeting, Coimbra, Portugal, July 2022.
11. ESAFORM 2022, 25th International Conference on Material Forming, Braga, Portugal, 27-29 April 2022.
12. IBERTRIB 2022 - 11th Iberian Conference on Tribology, Setubal, Portugal (Member of the Scientific Committee), October 2022.
13. IDDRG 2022, International Deep-Drawing Research Group, Lorient, France, 7-10 June 2022.
14. Internacional Webinar From 3D-2-4D online, 25 March de 2022
15. International Conference on THIN-FILM Processing and Application (ICTFPA-2022), Aarang Raipur (Chhattisgarh), Índia, 5-6 March 2022
16. IO2022 - XXII Congresso da Associação Portuguesa de Investigação Operacional, Évora, Portugal, 6 - 8 November 2022
17. Junior Euromat, July 2022, Coimbra, Portugal (Chair, Co-chair, Scientific Committee, Organizing Committee)
18. MATERIAIS 2022 - XX Congresso da Sociedade Portuguesa de Materiais and XI International Symposium on Materials, Marinha Grande, Portugal, April 2022 (member of the Scientific Committee)
19. PSE 2022 – 18th International Conference on Plasma Surface Engineering, Erfurt, Germany, September 2022 (Member of the International Scientific Committee)

20. RIVA 2022 - XII Iberian Vacuum and Applications Conference, Braga, Portugal, May 2022 (Co-chair)
21. SIBAE 2022, XXV Congresso da Sociedade Iberoamericana de Eletroquímica, online, Mexico, 3-6 April 2022
22. CNM 2022, Congress on Numerical Methods in Engineering 2022 (ST04: Metal forming – formability characterization, damage and ductile fracture), Las Palmas de Gran Canarias, Spain, 12-14 September
23. The Tenth International Workshop on Biosensors, Dakhla, Morocco, 13-15 October 2022
24. XX SBPMAT – MRS – Symposium N - Coatings and Thin Films, Foz do Iguaçu, Brazil September 2022 (Organizer).

Theses

PhD theses

1. Beatriz Vasconcelos, Low friction, high wear resistance nickel-based coatings for sliding rubber contacts obtained by electroless plating, University of Coimbra, May 2022, Carlos Fonseca and João Carlos Oliveira <https://estudogeral.uc.pt/handle/10316/101698?locale=pt>
2. Behnam Zakavi, Crack Front Shape Evolution in Structural Components subjected to Fatigue Loading, University of Adelaide, 2022, Supervisors: Andrei Kotousov, Ricardo Branco, Aditya Khanna <https://hdl.handle.net/2440/134197>
3. Camilo Andrés Micán Ricón, Modeling the project portfolio risk considering interactions among risk factors and their impacts on project portfolio success dimensions, June 2022, Supervisors: Madalena Araújo and Gabriela Fernandes <https://hdl.handle.net/1822/78791>
4. Constâncio António Pinto, Dynamic modeling for reliability analysis of power supply systems in a large European hospital by petri nets, fuzzy inference system, stochastic or Markov chains. University of Coimbra, June 2022, Supervisors: Cristóvão Silva, José Torres Farinha, Humberto Manuel Matos Jorge. <https://estudogeral.uc.pt/handle/10316/99533>
5. Daniel Eduardo Loureiro Vieira, New approaches to synthesis and applications of layered double hydroxides containing functional cations, University of Aveiro, 19 July 2022, AdvaMTech Doctoral Program. Supervisors Joaquim Vieira (UA) and Christopher Brett (UC). <http://hdl.handle.net/10773/34618>

6. Íris Sofia Marques Carneiro, Mecanismos de Reforço e Deformação em Nanocompósitos de Matriz Metálica. University of Porto, November 2022, Supervisors: Sónia Simões e José Valdemar Fernandes <https://repositorio-aberto.up.pt/handle/10216/146438>
7. José da Assunção Moutinho, Ecosistema de um centro de pesquisa em projetos, Universidade Nove de July – UNINOVE, August 2022, Supervisors: Roque Rabechini Junior, Gabriela Fernandes
<https://bibliotecatede.uninove.br/bitstream/tede/3069/2/Jos%C3%A9%20da%20Assun%C3%A7%C3%A3o%20Moutinho.pdf>
8. Marcionilo Neri da Silva Júnior, Solid-state diffusion bonding between Ti6Al4V alloy and Al₂O₃ ceramic coated with monolithic and multilayer films, Faculdade de Engenharia da Universidade do Porto, July 2022, Supervisors: Sónia Luísa Simões and Ana Sofia Ramos
9. Nasra Hannachi, Numerical Simulation of Friction Stir Welding Process: analysis of the influence of base materials plastic properties on weldability, University of Sousse, Tunisia /University of Coimbra, June 2022, Supervisors: Ali Khalfallah and Dulce Rodrigues
10. Pedro Daniel Geadas Farias. New bacterial strategies for Tellurium bioleaching and high value nanoparticle production. University of Coimbra, 18 May 2022. Supervisors Paula V Morais, Romeu Francisco, Soren J. Sorensen. <https://estudogeral.sib.uc.pt/handle/10316/100334>
11. Pedro José da Silva Carreira, Processing NiTi Shape Memory Alloy Powder by Materials Extrusion (MEX), University of Coimbra, April de 2022, Supervisors Maria Teresa Vieira e Nuno Manuel Alves <https://renates2.dgeec.mec.pt/ppsqdet.asp>
12. Ronielton Rezende Oliveira, Engajamento das partes interessadas e governança nos projetos: Eficácia dos projetos em relação aos custos de agência e transação na perspectiva da governança pela confiança, June 2022, Supervisors: Daniel Jardim Pardini, Gabriela Fernandes <https://issuu.com/ronielton/docs/tesefumec2022>
13. Zied Ktari, Experimental and numerical study of modified Ring Hoop Tensile Test for mechanical characterization of anisotropic tubular materials, University of Sousse, Tunisia, January 2022, Supervisor: Ali Khalfallah.

MSc theses

1. Abir Anzum, Mechanical and tribological behaviour analysis of the poly(lactic acid) reinforced with Sn-Zn-Bi, short carbon fibers, and graphene produced by Casting, 3D printing, and laser texturing.. University of Coimbra, July 2022, Supervisor: Bruno Trindade <http://hdl.handle.net/10316/102887>
2. Adriana Filipa Loureiro Lourenço. Soldadura de materiais poliméricos por FSW com aquecimento de ferramenta. February 2022, Supervisors: Ana Amaro e Rui Leal

3. Afonso de Almeida Jorge Teixeira da Silva, Fabrication of soft mechanisms in a single processing step, Departamento de Engenharia Mecânica da Universidade de Coimbra, 2022, Supervisor: Pedro Neto <https://estudogeral.uc.pt/handle/10316/103173>
4. Afonso José Gata Costa. Resposta ao impacto de uma sanduíche à base de EVA e cortiça para aplicação em protetores bucais. September 2022. Supervisors: Ana Amaro e Paulo Reis
5. Alexandra Benevides Ramalho, Industrial Processes Digitalization in a Company in the Electric Mobility Sector, July 2022, Supervisor: Vanessa S. M. Magalhães <https://estudogeral.uc.pt/handle/10316/102961>
6. Alexandra Raquel Velosa Gonçalves, Activity-based costing system in a small food industry, University of Coimbra, July 2022, Supervisor: Gabriela Fernandes. <http://hdl.handle.net/10316/102891>
7. Alfredo Manuel Amaral Gomes, Modelação e Simulação de um Salto Vertical em uma Plataforma de Forças, University of Coimbra, setember 2022, Supervisor: Maria Fátima Paulino, Augusta Neto
8. Alice Pereira Figueiredo, Intention to use electric micromobility solutions – Insights from e-scooter sharing in Coimbra, September 2022, University of Coimbra. Supervisor: Luís Ferreira <https://estudogeral.sib.uc.pt/handle/10316/102921>
9. Ana Filipa de Oliveira Paulo, Desafios do regulamento REACH: O caso do Bórax Decahidratado no processo de neutralização durante a decapagem química, University of Coimbra, September 2022, Supervisor: Cristóvão Silva. <https://estudogeral.uc.pt/handle/10316/103108>
10. Ana Isabel Pimenta Faria Teixeira Bento, Impact of Social Sustainability Practices on Performance: The case of Portuguese Industries, September 2022 University of Coimbra. Supervisor: Luís Ferreira
11. André Carvalhais Domingues, Produção e aplicação de soluções robotizadas na indústria, Instituto Superior de Engenharia de Coimbra, 16 December 2022, Supervisor: Luis Filipe Borrego.
12. André Cordeiro Costa, Desenvolvimento de revestimentos (DLC) para a indústria automóvel com o objetivo de melhorar a performance dos motores de combustão interna, University of Coimbra, September 2022, supervisores: João Carlos Oliveira, Fábio Ferreira <https://estudogeral.sib.uc.pt/handle/10316/99419?locale=pt>
13. André Cordeiro Costa, Desenvolvimento de revestimentos de carbono tipo-diamante hidrogenados produzidos por pulverização catódica magnetron com impulsos de alta potência (HIPIMS), University of Coimbra, September 2022, Supervisor: João Oliveira, Fábio Ferreira https://eg.uc.pt/bitstream/10316/103046/1/Tese_Mestrado_André_Costa_2017253849_VFINAL_Corrigida.pdf
14. André Salvaterra Fernandes. Conceptualização e modelação estrutural de uma gateway para comunicação satélite. September 2022, Supervisor: Ana Amaro

15. André Seabra Duarte, Projeto e Desenvolvimento de Equipamentos Mecânicos na Empresa Matechnics, Instituto Superior de Engenharia de Coimbra 15 December 2022, Supervisor: Luis Filipe Borrego.
16. Andrea de Amorim Marinho, Electric Properties versus Mechanical Stress of Components Processed by Additive Manufacturing, University of Coimbra, July 2022, Supervisor: Ana Paula Piedade <https://estudogeral.uc.pt/handle/10316/103106>
17. António Carlos Araujo da Cunha, The effect of different heat treatments on the fatigue behaviour of als10mg aluminium alloy samples produced by additive manufacturing, University of Coimbra, July 2022, Supervisors: Joel de Jesus, Ricardo Branco <https://estudogeral.sib.uc.pt/handle/10316/103110>
18. António Carlos Araujo da Cunha, The effect of different heat treatments on the fatigue behaviour of AlSi10Mg alluminium alloy samples produced by additive manufacturing, University of Coimbra, July 2022. Supervisor: Joel Jesus, Ricardo Branco, <https://estudogeral.sib.uc.pt/handle/10316/103110>
19. Bárbara Oliveira Carvalho, Development of new compatibilizers for poly(ethylene terephthalate)/poly(lactic acid) blends, University of Coimbra, October 2022, Supervisors: Ana Clotilde Fonseca and Arménio Coimbra Serra
20. Beatriz da Costa Lopes Pinto, Development of multifunctional coatings for the naval industry, University of Coimbra, July 2022. Supervisor: José Castro, Sandra Carvalho. <https://estudogeral.uc.pt/handle/10316/103146>
21. Beatriz Gomes Metzger de Nazaré, Project Management Practices in a Portuguese footwear company, University of Coimbra, September 2022, Supervisor: Gabriela Fernandes.
22. Beatriz Menezes de Sousa, Digitalization of Work Instructions on a Mass Customization Industry of High and Medium Voltage Switchgear, University of Coimbra, September 2022, Supervisor: Vanessa S. M. Magalhães <https://estudogeral.uc.pt/handle/10316/102939>
23. Benefits of University-Industry Collaborations: systematic literature review, University of Minho, December 2022, Supervisor: Anabela Tereso and Gabriela Fernandes.
24. Bruno Fernando Carvalho Serrano, Antecedents and Benefits of Preferred Customer Status: A Case Study of Portuguese Companies During Crisis, September 2022, University of Coimbra. Supervisor: Luís Ferreira <https://estudogeral.sib.uc.pt/handle/10316/103147>
25. Bruno Filipe Teixeira Azevedo, Simulação de sistemas automatizados de transporte interno de materiais: estudo de caso na indústria de semicondutores, University of Coimbra, July, 2022. Supervisor: Samuel Moniz <http://hdl.handle.net/10316/103170>
26. Carlos Leandro Ribeiro Marques, Development of a wire bending machine, University of Coimbra, September 2022, Supervisors: Diogo Neto and José Domingos.
27. Carlos Rodrigo Silva Teixeira, Motorcycle Chassis and Swingarm Evaluation, University of Coimbra, July, 2022, Supervisors: Maria Augusta Neto and Miguel Oliveira <https://eg.uc.pt/handle/10316/102977>

28. Cassandra Raquel Vieira Braz, Planeamento da manutenção e manutenção preventiva numa empresa de produção de papel de alta gramagem. University of Coimbra, September 2022. Supervisor: Amílcar Ramalho
29. Cristina Diez Bort, Análise da implementação da metodologia Design for Manufacturing no contexto da Indústria 4.0, July 2022, University of Coimbra. Supervisor: Luís Ferreira
30. Dalila Teixeira Gomes, Fabricação aditiva por TIG de componentes em aço inoxidável, University of Coimbra, September 2022. Supervisor: Rui Leal
31. Daniel Filipe Mendes Ribeiro, Soldadura heterogénea alumínio-magnésio em junta T por friction stir welding, Universidade de Coimbra, October 2022, Supervisors: José Domingos Costa, Ivan Galvão.
32. Daniel Paiva Santos, Definição de equipamentos de medição de vibração para motores de indução de alta potência. University of Coimbra, September 2022. Supervisor: Amílcar Ramalho
33. David Alejandro Diaz Yanez, Enhanced nanostructured Cr based thick coatings by HIPIMS, University of Coimbra, July 2022, Supervisor: Ricardo Gil Henriques Serra e João Carlos Barbas de Oliveira <http://hdl.handle.net/10316/103153>
34. David Luís Madanelo Manaia, Modelo de planeamento e controlo da produção numa indústria alimentar, University of Coimbra, September 2022, Supervisor: Cristóvão Silva. <https://estudogeral.uc.pt/handle/10316/103131>
35. Diogo António Jarró Margato, Production, characterization and immobilization of bacterial metallophores for the recovery of rare earth metals. University of Coimbra, September 2022. Supervisors: Ana Paula Chung and Paula V. Morais.
36. Diogo Manuel Freitas Taborda, Soldadura de cobre a aço inoxidável em junta sobreposta, Instituto Superior de Engenharia de Lisboa, December 2022, Supervisors: Ivan Galvão, Carlos Leitão, Teresa Morgado.
37. Diogo Margato. Produção, caracterização e imobilização de metalóforos para recuperação de metais. University of Coimbra, September 2022. Supervisors Paula V Morais, Ana Paula Chung
38. Diogo Vicente Rodrigues. Exploring Biodiversity for Natural Micro (Bio)-Based Polymers Biodegradable. University of Coimbra, September 2022. Supervisor: Paula V Morais
39. Douglas Alves de Lima, Desenvolvimento de um molde de 3 placas com movimentos laterais para injeção de termoplástico, Instituto Politécnico Coimbra, October 2022, Supervisor: Fernando Simões
40. Elsa Reis Carneiro, Comparative study of ceramic etching protocols for adhesive restorations, University of Porto, November 2022. Supervisor: Luís Vilhena
41. Filipa Matos, Metalização ecológica de polímeros para a indústria automóvel, University of Coimbra, September 2022, supervisor: Sandra Carvalho

42. Francisca Dias Pereira- Studies on the Synthesis of 5-Chloromethylfurfural derivatives, University of Coimbra, September 2022. Supervisor: Arménio Serra, Maria Serra <http://hdl.handle.net/10316/103067>
43. Francisca Isabel Teixeira Salgueiro, Numerical and experimental analysis of the L-PBF additive manufacturing process of aluminium alloys, University of Coimbra, July 2022, Supervisors: Diogo Neto and Rodolfo Batalha. <https://eg.uc.pt/handle/10316/103032>
44. Francisco Alexandre Pereira Jesus, Effect of Christmas Tree Loading Pattern on Fatigue Crack Growth, University of Coimbra, July 2022, Supervisors: Diogo Neto and Edmundo Sérgio. <https://estudogeral.uc.pt/handle/10316/103116>
45. Francisco Dinis Cardoso, Análise morfológica, microestrutural e mecânica de soldaduras de componentes de PMD's, Instituto Superior de Engenharia de Lisboa, December 2022, Supervisors: Carlos Leitão, Ivan Galvão, Rui Leal.
46. Francisco Mateus do Carmo, Sequenciamento e loteamento através de simulação: estudo de caso de uma fábrica metalúrgica, University of Coimbra, July 2022 Supervisor: Samuel Moniz <http://hdl.handle.net/10316/102919>
47. Francisco Sérgio Morais da Rocha, Gestão de Risco em Projetos de Energia Fotovoltaica – O Caso do Parque Solar da Zona Industrial de Monção, Politécnico do Porto, September 2022, Supervisor: Teresa Barros and Gabriela Fernandes.
48. Gonçalo Oliveira Marques, Melhoria de fluxo na indústria metalomecânica, University of Coimbra, September 2022, Supervisor: Cristóvão Silva. <https://estudogeral.uc.pt/handle/10316/102908>
49. Hugo Emanuel Costa Vidinha, Numerical evaluation of the effects of seawater on the strength of glass fiber reinforced polymers, University of Coimbra, July 2022, Supervisors: Maria Augusta Neto, Ricardo Branco <https://eg.uc.pt/handle/10316/102916>
50. Hugo Miguel Batista Gonçalves, Análise das barreiras à sustentabilidade nas cadeias de abastecimento: Uma abordagem multicritério, February 2022, University of Coimbra. Supervisor: Luís Ferreira <https://estudogeral.sib.uc.pt/handle/10316/100083>
51. Hugo Miguel Batista Gonçalves, Analysing the barriers to sustainability in supply chains: A multi-criteria approach, University of Coimbra, February 2022, Supervisors: Luís Miguel D. F. Ferreira and Vanessa S. M. Magalhães <https://estudogeral.uc.pt/handle/10316/100083>
52. Hugo Samuel Jesus Silva, Resistência à fadiga de compósitos impressos em 3D para aplicação aeronáutica. University of Coimbra, July 2022. Supervisors: José Domingos, Paulo Reis <http://hdl.handle.net/10316/103112>
53. Inês Alexandra Cardoso Pereira, Productivity improvement on a production line: an automotive industry case study, University of Coimbra, February 2022, Supervisor: Gabriela Fernandes. <http://hdl.handle.net/10316/99411>
54. Inês Diogo. Excesso de Divergência, Ortoqueratologia, Suspeita de Retinopatia Pigmentar. University of Beira Interior. 2022. Supervisor: Miguel Caixinha

55. Inês Leite de Oliveira, Impacto da análise dos desvios de inventário no desempenho financeiro de uma empresa nos setores da Energia, Mobilidade e Ambiente, University of Coimbra, September 2022. Supervisor: Samuel Moniz. <http://hdl.handle.net/10316/102853>
56. Inês Milheiro da Conceição, Model of an ultrasound-based system for cataract detection and classification, University of Coimbra, September 2022, Supervisors: Lorena Petrella, Mário Santos <https://estudogeral.uc.pt/handle/10316/102983>
57. Inês Monteiro Jácome da Costa Azevedo, Preparation and valorization of cellulosic materials by scaling-up aqueous self-degassing electrochemically mediated ATRP, University of Coimbra, October 2022, Supervisor: Francesco De Bon
58. Joana Maria Baptista Proença de Almeida, Developing a Guidebook for managing relocation projects – A Car Industry Case Study, University of Minho, February 2022, Supervisor: Madalena Araújo, Gabriela Fernandes. <https://hdl.handle.net/1822/77570>
59. João Carlos Miranda Rosendo, Desenvolvimento e Otimização de Sistema de Separação Magnética de Metais Ferrosos, Instituto Superior de Engenharia de Coimbra, 03 June 2022, Supervisor: Luis Filipe Borrego.
60. João Gabriel Gomes Gonçalves, Standardization of Process Parameters of a Melamine Panel production line, University of Coimbra, July 2022, Supervisor: Gabriela Fernandes. <http://hdl.handle.net/10316/102867>
61. Joao Miguel Varandas Mendes, Production and characterization of coatings for advanced haptic solutions, University of Coimbra, July 2022, Supervisor: Ana Paula Piedade <https://estudogeral.uc.pt/handle/10316/102927>
62. João Pedro Gomes Godinho, Aplicação da Metodologia SMED em Prensas Convencionais de Soldadura, University of Coimbra, July 2022. Supervisor: Samuel Moniz <http://hdl.handle.net/10316/102915>
63. João Vasco Ramos Marouvo, Estudo Experimental da Furação de Aços Inoxidáveis Austeníticos e Duplex com Brocas de 2 e 3 Gumes, Instituto Politécnico Coimbra, March 2022, Supervisor: Fernando Simões
64. José Carlos Junqueira Martins, Connections between innovation management and project management practices: a systematic literature review, University of Coimbra, July 2022, Supervisor: Gabriela Fernandes. <http://hdl.handle.net/10316/103167>
65. José Pedro da Fonseca Sanches, Produção e caracterização tribológica de revestimentos duros para aplicações de alta performance, University of Coimbra, September 2022, supervisor: Fábio Emanuel de Sousa Ferreira e Ricardo Gil Henriques Serra <http://hdl.handle.net/10316/102849>
66. Júlio Henriques Ferreira, Melhoria de fluxos num bloco operatório, University of Coimbra, September 2022, Supervisor: Cristóvão Silva. <https://estudogeral.uc.pt/handle/10316/103072>
67. Kévin Laurent de Oliveira, Análise e Propostas de Melhoria na Área da Manutenção da SRAMPOR, University of Coimbra, 22 de July de 2022, Supervisor: Fernando Antunes, Marco Almeida. <https://estudogeral.sib.uc.pt/handle/10316/102894>

68. Laura Carvalho, Superfícies nanoestruturadas bioativas com propriedades antimicrobianas para implantes dentários, University of Coimbra, September 2022, supervisor: Sandra Carvalho. <http://hdl.handle.net/10316/103168>
69. Leonor Rato Azevedo de Matos. Optimization of Phosphate Accumulating Bacterial Strains for Phosphorous Obtainment in Residual Water. University of Coimbra, July 2022. Supervisor Paula V Morais
70. Luís Filipe Alves Teixeira, Desenvolvimento de projeto de nova linha de montagem automática de interruptores da série 21, University of Coimbra, 22 July 2022, Supervisores: Fernando Antunes, Luís Nunes. <https://eg.uc.pt/handle/10316/102988>
71. Luís Pedro Rodrigues Duarte, Análise e propostas de melhoria dos processos nas lojas do turismo da Universidade de Coimbra, University of Coimbra, September 2022, Supervisor: Cristóvão Silva. <https://estudogeral.uc.pt/handle/10316/103061>
72. Luís Rafael Matos Ribafeita, Design e Construção de uma Máquina Industrial para Lubrificação e Introdução de Mola, Instituto Superior de Engenharia de Coimbra, 22 February 2022, Supervisor: Luis Filipe Borrego.
73. Manoj Rajankunte Mahadeshwara, Study of the Tribological Behavior of the Textured Steel Coated with TMD Films, University of Coimbra, July 2022, Supervisor: Albano Cavaleiro, Pooja Sharma
74. Maria Beatriz Rafael Romão, Production and Characterization of Coatings for Automotive Displays, University of Coimbra, July 2022, Supervisors: Ana Paula Piedade, Ana Catarina Pinho <https://estudogeral.uc.pt/handle/10316/103039>
75. Maria Carolina Moreira Baptista Neves, Transport Systems for Satellite Flight Grade Systems Development, University of Coimbra, September 2022. Supervisors: Marta Oliveira, Bruno Barroqueiro.
76. Maria Gabriela Torcato Gomes, Country-Level Sustainability Risk Analysis for Supplier Network Reassessment and Relocation, Supervisor: Luís Ferreira
77. Mariana Fonseca Pereira das Neves, Influence of reinforcement on the bioactivity of polymer-based nanocomposites processed by 3D printing, University of Coimbra, September 2022, Supervisor: Ana Paula Piedade <https://estudogeral.uc.pt/handle/10316/102873>
78. Mariana Fonseca Pinheiro, Analysis of Barriers to the Implementation of Circular Economy Principles in the Plastics Industry: A Best-Worst Method Approach, September 2022, University of Coimbra. Supervisor: Luís Ferreira <https://estudogeral.sib.uc.pt/handle/10316/103140>
79. Mariana Isabel Fernandes de Oliveira, Redução dos Níveis de Desperdício: Estudo de Caso da Indústria Alimentar, University of Coimbra, September 2022 Supervisor: Samuel Moniz <http://hdl.handle.net/10316/103066>
80. Marta Alexandra Covas Aposta, Implementação de standard work e manutenção autónoma numa indústria metalomecânica, September 2022, University of Coimbra. Supervisor: Luís Ferreira

81. Marta de Almeida Lucas, Analysis and improvement proposals for process digitalization in an industrial context - a case study, September 2022, University of Coimbra. Supervisor: Luís Ferreira
<https://estudogeral.sib.uc.pt/handle/10316/103159>
82. Marta Oliveira Cruz, Productivity Improvement of the Packaging Process in a Sewing Line Production Company, University of Coimbra, July 2022, Supervisor: Gabriela Fernandes. <http://hdl.handle.net/10316/103017>
83. Martín Díaz Enríquez, Obstáculos à implementação da economia circular na indústria transformadora do pescado, February 2022, Universidade de Coimbra. Supervisor: Luís Ferreira
84. Miguel Afonso dos Santos Pires, Effect of different geometric discontinuities and heat treatments on the fatigue strength of AlSi10Mg aluminum alloy samples produced by SLM, University of Coimbra, October 2022, Supervisors: Joel de Jesus, Ricardo Branco
<https://eg.uc.pt/handle/10316/102918>
85. Miguel Afonso dos Santos Pires, Effect of different geometric discontinuities and heat treatments on the fatigue strength of AlSi10Mg aluminum alloy samples produced by SLM, University of Coimbra, October 2022, Supervisors: Joel de Jesus, Ricardo Branco
<https://eg.uc.pt/handle/10316/102918>
86. Miguel Ângelo Teixeira da Silva, Numerical prediction of fatigue life in mechanical components made of 7050-T6 aluminum alloy under bending-torsion loading histories, University of Coimbra, July 2022, Supervisors: Ricardo Branco, Pedro Prates
<https://eg.uc.pt/handle/10316/102909>
87. Miguel António Mendes Pinto Monteiro Poço, Numerical Evaluation of the Mechanical Strength of Bonded Joints of Dissimilar Materials, University of Coimbra, September, 2022, Supervisors: Maria Augusta Neto, Ricardo Branco.
88. Miguel Caridade Gaspar, Optimal installation and use of sensor systems on autonomous vehicles for rough terrain, University of Coimbra, 2022 Supervisor: Carlos Viegas, Pedro Neto. <https://eg.uc.pt/handle/10316/103041?locale=pt>
89. Miguel Fernandes Ferraz. Study and Characterization of Composite Materials: Biomedical Applications. Polytechnic Institute of Leiria, July 2022. Supervisor: Armando Ramalho <https://iiconline.ipleiria.pt/handle/10400.8/5622>
90. Muhammad Ans, Development of corrosion and wear resistant coatings for maritime applications deposited via HIPIMS, September 2022. Supervisor: José Castro, Sandra Carvalho. <https://estudogeral.uc.pt/handle/10316/103175>
91. Nicole de Oliveira Nascimento, Improving Quality Control Practices in the Extrusion Industry: Case Study, University of Coimbra, September 2022, Supervisor: Gabriela Fernandes. <http://hdl.handle.net/10316/102895>
92. Nuno Gonçalo Torres Cavaleiro, Effect of crack flank holes on fatigue crack growth, University of Coimbra, July 2022, Supervisors: Diogo Neto, Edmundo Sérgio. <https://estudogeral.uc.pt/handle/10316/102910>

93. Paulo Jorge Sebastião Gaspar, Análise de sensibilidade à precisão dimensional de um provete de tração/compressão à escala meso, University of Coimbra, September 2022. Supervisor: Marta Oliveira. <http://hdl.handle.net/10316/99405>
94. Paulo Ricardo da Silva Guedes, Análise da soldabilidade por explosão de cobre a aço inoxidável e magnésio a titânio e alumínio, University of Coimbra, July 2022. Supervisor: Ricardo Mendes, Rui Leal. <http://hdl.handle.net/10316/103006>
95. Pedro Eduardo Pires Simões Gomes. Avaliação das propriedades mecânicas sistemas adesivos utilizados nas restaurações dentárias. University of Coimbra, September 2022. Supervisor: Ana Amaro
96. Pedro Jaime Luís Soares, Mechanical and tribological behavior of 3D parts manufactured by additive processes, University of Coimbra, September 2022, Supervisors: Maria Teresa Vieira, Ana Sofia Ramos <https://estudogeral.sib.uc.pt/handle/10316/102982>
97. Pedro Mateus, Inovação no desenvolvimento e produção de Logotipos para a indústria do automóvel, University of Coimbra, September 2022, supervisor: Sandra Carvalho
98. Pedro Miguel Gonçalves Rodrigues, DfAM optimized components: fabrication and characterization, University of Coimbra, July 2022, Supervisor: Ana Paula Piedade <https://estudogeral.uc.pt/handle/10316/102958>
99. Pedro Miguel Moutinho da Silva, In vitro study of the biocompatibility of materials processed by Additive Manufacturing, University of Coimbra, July 2022, Supervisor: Ana Paula Piedade <https://estudogeral.uc.pt/handle/10316/102874>
100. Pedro Miguel Pinto Ferreira. Development and optimization of a structure for the Aerogel experiment. University of Coimbra, July 2022, Supervisor: Ana Amaro
101. Pial Das, Tribological performance of carbon alloyed transition metal dichalcogenide coatings in nitrile butadiene rubber contacts, University of Coimbra, July 2022, Supervisors: Albano Cavaleiro, Todor Vuchkov <https://estudogeral.uc.pt/handle/10316/103087>
102. Rafaela Antunes Dionísio, Estratégia de Implementação de Standard Work numa empresa do setor Corticeiro, February 2022, Universidade de Coimbra. Supervisor: Luís Ferreira <https://estudogeral.sib.uc.pt/handle/10316/99381>
103. Raquel Simões Duque, Logística Hospitalar – Redefinição do processo de abastecimento interno de materiais, University of Coimbra, Supervisor: Samuel Moniz
104. Ricardo Filipe Baptista Pinho, Production of aerogels from post-consumer residues, University of Coimbra, October 2022, Supervisors: Ana Clotilde Fonseca, Luísa Durães.
105. Rita Campos Toscano de Melo, Desenvolvimento de superfícies antiaderentes para a indústria farmacêutica, University of Coimbra, September 2022, Supervisor: Sandra Carvalho, Fábio Ferreira
https://eg.uc.pt/bitstream/10316/103142/1/Dissertação_Rita%20Melo_MEMAT%2CVf.pdf

106. Rodrigo Bernardo de Lopes Mendes, Effect of hostile environments on the impact strength of carbon steel produced by Wire-Arc Additive Manufacturing (WAAM), University of Coimbra, September 2022, Supervisors: Ana Paula Amaro, Ricardo Branco <https://eg.uc.pt/handle/10316/102943>
107. Rodrigo José Lopes Ribeiro, Propagation of fatigue cracks in aluminum specimens produced by additive manufacturing: effect of heat treatment, University of Coimbra, 2022, Supervisors: Joel Alexandre da Silva de Jesus, José António Martins Ferreira
108. Rui Daniel Correia Parente, Caracterização de Tornos CNC Multi-eixos e Fabrico de Peças Complexas na Empresa RRMP, Instituto Politécnico Coimbra, February 2022, Supervisor: Fernando Simões
109. Rui José Miranda Silva, Análise do processo de separação de encomendas em ambiente de loja, University of Coimbra, September 2022. Supervisor: Samuel Moniz https://estudogeral.sib.uc.pt/bitstream/10316/103169/1/Disserta%C3%A7%C3%A3o_Rui%20Silva.pdf
110. Rui Miguel Duarte Nunes Serra da Silva, Estudo de Desgaste em Correntes de Bicicleta, Instituto Superior de Engenharia de Coimbra. 04 January 2022, Supervisor: Luis Filipe Borrego.
111. Rui Moreira Lopes, Comportamento Mecânico de soldadura por Ultrassons em tecido polimérico, University of Coimbra, July 2022, Supervisor: José Domingos <http://hdl.handle.net/10316/103082>
112. Saniat Jahan Sunny, Tribological studies of carbon-alloyed transition metal dichalcogenide coatings sliding against aluminum at elevated temperatures, University of Coimbra, July 2022, Supervisors: Albano Cavaleiro, Todor Vuchkov <https://estudogeral.uc.pt/handle/10316/102865>
113. Sara Andrade Oliveira. Desenvolvimento de técnicas e ferramentas para otimização do Projeto Mecânico de equipamentos Industriais. University of Coimbra, July 2022, Supervisor: Ana Amaro
114. Sara Felismina Barroca, Uma abordagem DMAIC para a redução de defeitos na fabricação de luvas: Caso de estudo, University of Coimbra, July 2022, Supervisor: Cristóvão Silva. <https://estudogeral.uc.pt/handle/10316/102875>
115. Septian Sigit Setiawan, The effect of using self-lubricating coatings containing transition metal dichalcogenides in lubricated contacts, University of Coimbra, July 2022, Supervisors: Albano Cavaleiro, Todor Vuchkov <https://estudogeral.uc.pt/handle/10316/103081>
116. Soraia Sofia Costa Simões, Barriers to a Circular Economy Transition for the Use of Recycled Plastics in the Textile Industry, September 2022 University of Coimbra, Supervisor: Luís Ferreira <https://estudogeral.sib.uc.pt/handle/10316/103117>
117. Soumia Hajli, Fatigue crack growth in bi-materials, University of Coimbra, July 2022, Supervisors: Diogo Neto, Fernando Antunes. <https://estudogeral.uc.pt/handle/10316/102969>

118. Sylvie Pereira Marques, Otimização do processo de abastecimento à linha de montagem de veículos pesados, 2022, University of Coimbra, Supervisor: Pedro Neto. <https://estudogeral.uc.pt/handle/10316/103073>
119. Tiago Emanuel Malta Gomes Vaz Carreto, Strategy formulation and business model development- case study, University of Coimbra, July 2022, Supervisor: Gabriela Fernandes. <http://hdl.handle.net/10316/103043>
120. Tiago Miguel Pestana Silva, Aplicação de um algoritmo de escalonamento em máquinas paralelas com tempos de setup dependentes da sequência, University of Coimbra, October 2022, Supervisor: Samuel Moniz <http://hdl.handle.net/10316/103062>
121. Tomás Duarte da Cruz Ribeiro, Implementation of finite element simulation in virtual reference bodywork, University of Coimbra, September 2022, Supervisors: Maria Augusta Neto, Pedro Jorge Alves <https://estudogeral.sib.uc.pt/handle/10316/103210>
122. Tomaz Alexandre Calcerano, O bem-estar dos trabalhadores em ambientes de trabalho com lean manufacturing, February 2022, University of Coimbra. Supervisor: Luís Ferreira <https://estudogeral.sib.uc.pt/handle/10316/99382>
123. Wu Seong Lai, Análise e melhoria da atividade de picking para o abastecimento da produção, University of Coimbra, September 2022, Supervisor: Cristóvão Silva. <https://estudogeral.uc.pt/handle/10316/102896>

(Includes stage reports)

Software/algorithmic

1. DD3IMP continuous development:
 1. Damage prediction of metallic materials: (i) Implementation of pre-processing and post-processing routines to perform full three-dimensional finite-element computations of spherical unit cells containing spherical voids, to compare and validate strain rate potential of dense materials exhibiting both anisotropy behaviour and tension-compression asymmetry; (ii) Implementation of an orthotropic elastoplastic constitutive model for porous solids based on a strain-rate-based formulation. Damage (i.e., porosity) is implicitly coupled with the matrix plasticity behaviour and also affects the elastic moduli.
 2. Thermomechanical analysis: Implementation of a hierarchical adaptive remeshing procedure.
 3. Additive manufacturing processes: (i) Implementation of active/inactive element method for multi-layer modelling; (ii) Implementation of the inherent strain method for analysis at the part-scale."
2. Optimization-based mid-term planning using data-driven analyses

Laboratory prototypes

1. Design and Fabrication of New Apparatus for Uniaxial Tensile Tests for Tubular Materials (2022)
2. Design and Fabrication of New D-blocks for Frictionless RHTTs (2022)
3. Design and Fabrication of Ring Hoop Tensile Test (RHTT) Fixture (2022)
4. Design and Fabrication of Ring Shear Sample and Test Fixture (2022)
5. User-friendly interface (UI) for the configuration, control, visualization and record of A-scan ophthalmologic signals

Patents

1. National Patent Application n° 116098 (*Oficial Boletim* n° 192/2022, 30/09/2022), INPI, *Processo e Sistema de Pré-tratamento de Efluentes da Indústria Rolheira* - Polytechnic of Coimbra, Luis Roseiro, Luis Castro, Pedro Beirão, Luis Amaral, Nazaré Pinheiro, Paulo, Costa. (*patente concedida*).
2. National Patent Application Registered n° 117260 (*Oficial Boletim* n° 231/2022, 28/11/2022), INPI, *Dispositivo de Suporte Biomecânico para Auxílio na Autocateterização de Pacientes Espásticos* - Polytechnic of Coimbra, Luis Roseiro, Inês Cruz, Jorge Lains, Filipe Carvalho, Vitor Maranhã, Nuno Cruz, Fernando Moita.
3. National: Patent Application Registered n° 117291 (*Oficial Boletim* n° 244/2022, 19/12/2022), INPI, *Viseira de Proteção Individual Ventilada* - Polytechnic of Coimbra - Luis Roseiro, Fernando Moita, Marco Silva, Nuno Cruz, Nuno Lavado, Diogo Fernandes, João Sobral, Bruno Martins.
4. Provisional Patent Application n.º 117852, Data de prioridade: 2022.03.11, PROCESS FOR SCALE-UP OF ELECTROCHEMICALLY MEDIATED ATOM TRANSFER RADICAL POLYMERIZATION WITHOUT DEOXYGENATION - Universidade de Coimbra - Francesco De Bon, Rita Fonseca, Armenio C. Serra, Jorge F. J. Coelho (2022)
5. Provisional Patent Application n° (20222004259785, 30/11/2022), INPI, *Sistema Modular de Reabilitação Física, seus Métodos e Usos* - Polytechnic of Coimbra, Orthos XXI, Wiseware, Escola Superior de Enfermagem de Coimbra, Luis Roseiro, Cândida Malça, et al.
6. Provisional Patent Application n° 117319 (20221000000354, 20/01/2022), INPI, *Dispositivo Dinâmico Auxiliar de Abertura de Portas sem Mãos* - (Instituto Politécnico de Coimbra, Shapetek, CENTIMFE, Sandredy), Luis Roseiro, Vitor Maranhã, Pedro Bandeira, Luis Margalho.

7. Provisional Patent Application nº 118215: INPI, Aerogels from post-consumer packaging waste- University of Coimbra- Luísa Durães, Ana Clotilde Fonseca, Ricardo Pinho (2022)
8. Provisional Patent Application nº 118278 (20222004115053, 24/10/2022), INPI, *Dispositivo de Aacionamento de Semáforo com Recurso ao Pé ou a Auxiliares de Locomoção*, INPI, Luis Roseiro, Vitor Maranhã, João Coelho, Diogo Simões.
9. Provisional Patent Application nº20220112: INPI Application number: PCT/PT2022/050005, Porous Filter Membranes Comprising a Metallic Based Coating With Anti-Viral Properties - CTCV, Universidade de Coimbra, Smart Separations, TEandM - Francisco Silva, Hélio Jorge, Luc Henrietier, Ana Paula Piedade, Licínio Ferreira, Luisa Durães, Teresa Vieira, Hugo Macedo, António Gonçalves, Ricardo Alexandre, Marta Sousa (2022).