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Indice

Indice.....	2
Books and Chapters.....	3
International Book Chapters.....	3
Edition of International Book.....	3
Papers in Journals	4
Papers in International Journals.....	4
Papers in National Journals	19
Conferences	20
Attendance to International Conference with Presentation	20
Papers in International Proceedings	30
Attendance to National Conference with Presentation	34
Papers in National Proceedings	42
Organization of Seminars and Conferences	44
Theses.....	45
PhD theses.....	45
MSc theses.....	46
Software algorithmic	56
Laboratory prototypes	57
Pilot Plan	57
Patents	57
Projects.....	58

Books and Chapters

International Book Chapters

1. A. Loureiro, G. H. S. F. L. Carvalho, I. Galvão, R. M. Leal, and R. Mendes, “Explosive welding,” in *Advanced Joining Processes*, Elsevier, 2021, pp. 207–237. doi: 10.1016/b978-0-12-820787-1.00006-1.
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3. G. Fernandes, L. Dooley, D. O’Sullivan, and A. Rolstadås, “Managing Collaborative R&D Projects,” in *Contributions to Management Science*, Springer International Publishing, 2021, pp. 1–15. doi: 10.1007/978-3-030-61605-2_1.
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3. I. Galvão, A. Loureiro, R. Mendes (Eds.), *Impact Welding of Materials*. MDPI, 2021. doi: 10.3390/books978-3-0365-0697-5.
4. R. Branco and F. Berto (Eds.), *High-Strength Low-Alloy Steels*. MDPI, 2021. doi: 10.3390/books978-3-0365-2039-1.
5. R. Branco, Fi. Berto and A. Kotousov (Eds.), *Recent Trends in Advanced High-Strength Steels*. MDPI, 2021. doi: 10.3390/books978-3-0365-2012-4.

Papers in Journals

Papers in International Journals

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3. A. Al-Rjoub, A. Cavaleiro, S. S. Rajput, and F. Fernandes, "High Si multilayered TiSiN/TiN(Ag) films with superior oxidation resistance," *JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T*, vol. 12, pp. 2340–2347, May 2021, doi: 10.1016/j.jmrt.2021.04.040.
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Conferences

Attendance to International Conference with Presentation

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2. A. Cruces, P. Lopez-Crespo, R. Branco, L.P. Borrego. *Propagation of notch fatigue crack on maraging steel under biaxial conditions*. 2nd International Symposium on Notch Mechanics, Madrid, Spain, 2-3 September, 2021
3. A. E. Marques, P. A. Prates, A. F. G. Pereira, J. V. Fernandes, M. C. Oliveira, B. M. Ribeiro, *Machine learning for predicting defects in sheet metal forming under uncertainty*, WCCM 2020, 14th World Congress in Computational Mechanics, Paris, França, 11-16 January 2021

4. A. F. G. Pereira, M. Ruivo, M. C. Oliveira, J. V. Fernandes, P. A. Prates, Numerical study of the square cup stamping process: a stochastic analysis, ESAFORM 2021, Liège, 2021
5. A. F. Sousa, Development of biobased polyesters from 2,5-furandicarboxylic acid, 5th EuGSC, on-line, 26-29 September 2021
6. A. F. Sousa, The quest for sustainable polymers - contributions from furan-based polyesters, PM14', Graz, Austria, August 2021
7. A. M. Amaro, R. Branco, M. A. Neto, P. N. B. Reis, Effect of pre-loads on the fatigue life of composites with open holes immersed in seawater, Proc. of 7th International Conference on Mechanics of Composites, MECHCOMP7, Porto-Portugal, 1 - 3 September 2021.
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9. A. M. Sousa, A. C. Pinho, A. P. Piedade. 3D printing of mouthguards: a preliminary study. 17th International Conference on Advanced Materials 2021 (ANM 2021), Aveiro, 22-24 July 2021.
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Attendance to National Conference with Presentation

1. A. Al-Rjoub, A. Cavaleiro, F. Fernandes, Influence of Ag on the morphology, structure, mechanical properties, thermal stability and oxidation resistance of multilayered TiSiN/Ti(Ag)N films, UT Austin Portugal 2021 Annual Conference, Porto, Portugal, 21-21 October 2021
2. A. B. Martins, I. Fonseca, J. T. Farinha, João Antunes Rodrigues, *Classificação do estado de saúde dos equipamentos através de Cadeias de Markov Ocultas*, 16.º Congresso Nacional de Manutenção, Aveiro, 23 -24 November 2021.
3. A. Cavaleiro, A. M. Amaro, C. M. Amaro, L. Roseiro, M. A. Castro, *Atividade Muscular do Bicípite e Tricípite na Prática de Basquetebol*, 9º Congresso Nacional de Biomecânica, Porto, Portugal, 19-20 February 2021.
4. A. Cavaleiro, L. Roseiro, M. A. Neto, M. A. Castro, A. M. Amaro, *Vibrações do Sistema Mão-Braço no Passe e Recepção no Basquetebol*, 9º Congresso Nacional de Biomecânica, Porto, Portugal, 19-20 February 2021.
5. A. Fróis, Ana C. Santos, C. Santos Louro, Functionalization of Orthodontic Alloys by Sputter-deposited a-C:H-based coatings: Mechanical behavior and Biocompatibility, CEMMPRE Meeting, 15 July 2021, Coimbra, Portugal
6. A. Ramalho, M. Ferraz, M. Gaspar, C. Capela, *Efeito do atrito no membro residual numa amputação transfemoral - influência do modelo constitutivo dos materiais*, 12º Congresso Nacional de Mecânica Experimental - CNME2020, Monte Real - Leiria, 29 September - 1 October 2021.

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8. A. S. Ramos, A.J. Cavaleiro, J. Morgiel, S. Simões, M.F. Vieira, M.T. Vieira, Production, Characterization and Application of Reactive Multilayer Films, Workshop Vácuo 2021, Coimbra, Portugal, 9 November 2021.
9. Afonso Correia Ana Luísa Correia Maria António Castro, *Qual o efeito de um plano de treino proprioceptivo na melhoria do controlo postural em jovens atletas de competição de ginástica rítmica? XI Congresso Nacional de Fisioterapeutas 2021*
10. Akel F. Kanaan and Ana P. Piedade, Add.Additive Manufacturing to Portuguese Industry – Polymeric Materials, CEMMPRE Meeting, 15 July 2021, Coimbra, Portugal
11. Ali Salehizadeh, Ag-Au/DLC nanocomposite coatings: Corrosion resistant stent coatings & optoelectronic sensors, CEMMPRE Meeting, 15 July 2021, Coimbra, Portugal
12. Alireza Vahidi, Fábio Ferreira, João Oliveira, Evaluation of Thermal Stability of DLC Coatings Produced by HiPIMS-DOMS in Ar-Ne Discharges, CEMMPRE Meeting, 15 July 2021, Coimbra, Portugal
13. Altino Loureiro, Welding of hybrid structures, CNME2020, 12º Congresso Nacional de Mecânica Experimental - CNME2020, Monte Real, Leiria, 29 September - 1 October 2021.
14. Ana Catarina Pinho and Ana Paula Piedade, 4D to 3D printing: can bacterial cellulose make the bridge?, CEMMPRE Meeting, 15 July 2021, Coimbra, Portugal
15. Ana Malta, Mateus Mendes, José Torres Farinha, Sistema de realidade aumentada sem marcadores usando YOLOv5, 16.º Congresso Nacional de Manutenção, Aveiro, 23 -24 November 2021.
16. Ana Paula Chung, Romeu Francisco, Paula V. Morais and Rita Branco, Gallium Mobilization by Autochthonous Bacteria from Different Portuguese Mines, CEMMPRE Meeting, 15 July 2021, Coimbra, Portugal
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18. Andreia S. R. Oliveira, Patrícia V. Mendonça, Ana C. Fonseca, Sérgio Simões, Arménio C. Serra and Jorge F. J. Coelho, Synthesis of star block copolymers by combination of ROP and ATRP, CEMMPRE Meeting, 15 July 2021, Coimbra, Portugal
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1. 14th International (Hybrid) Conference on Advanced Computational Engineering and Experimenting (ACEX 2021), Malta, 4-8 July 2021.
2. 21st IEEE International Conference on Autonomous Robot Systems and Competitions, Santa Maria da Feira, Portugal, 28-29 April 2021.
3. 2nd Global Conference & Expo on Materials Science and Nanoscience, Prague, Czech Republic, 25-26 March, 2021.
4. 2nd International Conference on Advanced Joining Processes – AJP2021, Sintra, 21-22 October 2021.
5. 48th IUPAC World Chemistry Congress, Montreal-virtual, 13-20 August 2021.
6. 4th International Conference on Mechanical Engineering (MECH 2021), Chennai, India, 11 – 12 December 2021.
7. 4th International Conference on Bioscience & Engineering (BIO 2021), Chennai, India, 11 – 12 December 2021.
8. 4th International Conference on Medical Sciences (MEDS 2021 Chennai, India, 11 – 12 December 2021.
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11. Additive-Manufacturing Webinar, Coimbra, Portugal, 23 November, 2021
12. CAS International Workshop - Computational and Applied Statistics 2021, Cagliari, Italy, 13 – 16 September, 2021.
13. CNME2020, Monte Real – Leiria, 29 September – 01 October 2021.
14. Euromat 2021, Symposium Coatings and Surface Modification Technologies, Graz, Austria, September 2021.
15. Global Conference on Materials Science & Engineering, Paris, France, 26-28 August 2021.

16. ICCSA2021 -21st International Conference on Computational Science and its Applications, Cagliari, Italy, Sept 13 - 16, 2021.
17. ICiE 2021 - International Conference Innovation in Engineering, Guimarães, Portugal, 28-30 June 2021.
18. International conference on Intelligent Mechanical systems for Industry 4.0, ICIMSI 26-27 Feb 2021, Department of Mechanical engineering and management, Wagholi Pune-412207, India.
19. International Conference on Materials, Energy and Mechanical Engineering 2021, ICME2 – 2021, 17-18 December 2021, Department of mechanical engineering Madanapalle Institute of Thecnology and Science, Madanapalle - 517325 Andhra Pradesh, India.
20. International Conference on Mechanical Engineering and Equipment Manufacturing, Kunming, China, June 18-20, 2021.
21. International Conference on THIN-FILM Processing and Application(ICTFPA-2022), On-line, 4-5 March 2022.
22. IO 2021 - XXI Congresso da Associação Portuguesa de Investigação Operacional, Figueira da Foz, 7-8 November 2021.
23. Virtual 4th International Conference on Structural Integrity, ICSI 2021, de 30 de August a 02 de September de 2021.
24. Workshop “Raw materials, a key factor on the support of European Green deal”, event held online. Organized by University of Coimbra and ACPMR-Associação Cluster Portugal mineral Resources, project Reviving, 25 January 2021.

Theses

PhD theses

1. David Gomes Andrade, Analysis of the Thermo-Mechanical Conditions in Friction Stir Based Technologies, University of Coimbra, April 2021, Supervisors: Dulce Rodrigues and Carlos Leitão
2. Diogo Albano Cavaleiro Ventura de Carvalho, The importance of Ag content for optimizing the machining performance of Ti-Si-(Ag)-N coatings, University of Minho, May 2021, Supervisors: Sandra Carvalho and Filipe Fernandes
3. Filipa Almeida Martins de Matos Gonçalves, Development of biocompatible polyester sbased formulations for microstereo-thermal-litography, University of Coimbra, 2021, Supervisors: Jorge Coelho and Paulo Bártolo.

4. Joel Duarte Marouvo, What are the differences between subjects with and without flatfoot condition, with the aid of ultrasonography, kinematics and kinetics in posture and gait?, University of Porto, December 2021, Supervisors: Maria António Castro and Filipa Sousa
5. Kaushik Hebbar Kannur, Optimization of nitrogen-alloyed MoSx coatings for low friction applications, University of Coimbra, March 2021, Supervisors: Albano Cavaleiro and Christophe Heau
6. Lalmi Abdallah, Quality management towards the hybridization of waterfall methods and agile methods, University of Constantine 3, July 2021, Supervisors: Souad Sassi Boudemagh and Gabriela Fernandes
7. Luísa Isabel Serra da Glória Fialho, Design of new biocompatible osseointegrated and antimicrobial dental implant, University of Minho, June 2021, Supervisors: Sandra Carvalho and Maria Helena Fernandes
8. Patricio Gustavo Riofrío Villena, Fatigue Performance of Laser Butt Welded Joints in High Strength Steels, University of Coimbra, September 2021, Supervisors: José A M Ferreira and Carlos Capela
9. Vanessa Sofia Melo Magalhães, Framework development for the prevention of food loss and waste: an analysis along the fresh food supply chain, University of Coimbra, October 2021. Supervisors: Luis Miguel D. f. Ferreira and Cristóvão Silva

MSc theses

1. Adrian Alamo Gutierrez, Thermo-mechanical analysis of powder bed fusion processes, University of Mondragon, July 2021, Supervisors: Diogo Neto and Joseba Mendiguren
2. Adriana Braz de Sousa, *Projeto de linha de montagem usando métodos Lean na indústria*, University of Coimbra, July 2021. Supervisor: Telmo Pinto
3. Alexandre Faveiro Jesus, Assessment of production planning strategies through simulation: A tissue paper mill case study, University of Coimbra, July 2021, Supervisor: Samuel Moniz.
4. Ana Beatriz Silveira Madeira, Development of light-degradable hydrogels for wound dressing applications, September 2021, Supervisor: Arménio Serra
5. Ana Filipa dos Santos Pastilha, *Comparação experimental de dispositivos para avaliação da pressão plantar*, University of Coimbra, November 2021, Orientadoras Ana Amaro e Maria António Castro
6. Ana Jorge Antão Seabra, Production Scheduling of parallel machines: a real case study of a sanitary components industry, University of Coimbra, December 2021, Supervisor: Samuel Moniz.
7. Ana Margarida Pinto Alves, *Análise de um processo de knitting*, University of Coimbra, February 2021, Supervisor: Cristóvão Silva

8. Ana Rita Casanova Malta, *Sistema de realidade aumentada para reconhecimento automático das peças constituintes de equipamentos*, Supervisor: J. Torres Farinha & M. Mendes
9. Ana Rita Ferreira Pinto, Proposal of a process for the systematization of the analysis and selection of the backhaul cargo on a route between Germany and Portugal, University of Coimbra, February 2021, Supervisor: Luis Miguel D. F. Ferreira.
10. Ana Rita Leitão Gonçalves, Análise e implementação de ações de melhoria num armazém: Caso de estudo na indústria de eletrodomésticos, University of Coimbra, July 2021, Supervisor: Cristóvão Silva
11. Ana Rita Miranda Gonçalves de Brito Martins, *Aplicação de ferramentas da qualidade para redução de defeitos na indústria automóvel*, University of Coimbra, July 2021, Supervisor: Cristóvão Silva
12. Ana Sofia Santos Pimentel, *Análise e Melhoria do Processo Produtivo de Expedição na Indústria da Pasta de Papel*, University of Coimbra, February 2021, Supervisor: Telmo Pinto, Miguel Vieira.
13. Anaís Veloso Silva, *Algoritmos heurísticos para problemas de escalonamento integrado de pessoal e tarefas*, University of Minho, October 2021, Supervisor: Telmo Pinto, Cláudio Alves.
14. Arianne May Matas Jabonero, *Deposição de revestimentos à base de Cr nanoestruturados espessos por HiPIMS*, University of Coimbra, July 2021, Supervisor: Ricardo Serra
15. Bárbara dos Santos Correia Alves de Araújo, Antimicrobial activity of nanocomposites processed by 3D printing, University of Coimbra, November 2021. Supervisor: Ana Paula Piedade
16. Bárbara Sofia Afonso Curralo, Numerical analysis of sheet metal forming processes using non conforming finite element meshes, University of Coimbra, July 2021, Supervisors: Marta Oliveira and Diogo Neto
17. Beatriz Maria das Neves Barros, *Avaliação de técnicas de intervenção percutânea em modelos de impressão 3D*, University of Coimbra, July 2021, Orientadores Ana Amaro e Manuel Santos.
18. Bernardo Monteiro dos Santos de Aguiar da Câmara, Sensitivity analysis of the biaxial test on a cruciform specimen, University of Coimbra, February 2021, Supervisors: André Pereira, Pedro Prates.
19. Bernardo Rosmaninho Torres, Application of lean principles and tools in the process improvement of a ceramic industry, November 2021, Supervisor: Gabriela Fernandes.
20. Bernardo Tremoceiro Cordeiro, Implementação da Filosofia Lean numa Indústria de Equipamentos Industriais) - Estágio, Polytechnic Institute of Coimbra, March 2021, Supervisor: J. Torres Farinha
21. Carlos Eduardo Nunes da Costa, Robust analysis of tube hydroforming in a square cross, University of Coimbra, July 2021. Supervisores: A. Khalfallah e J.V. Fernandes

22. Carlos Fernando Barreira da Silva. Study of cyclic elastic-plastic behaviour of high strength alloy 18Mn3Si2CrMo. University of Coimbra, February 2021, Supervisor: Ricardo Branco, Ana Paula Amaro.
23. Carlos Ferreira dos Santos. Study of crack shape evolution in circular cross-section components using an analytical model. University of Coimbra, October 2021, Supervisor: Ricardo Branco.
24. Carolina Perdigão Carvalho, Definition of Production Strategy Through Items Classification in Ceramics Sector, University of Coimbra, July 2021, Supervisor: Luis Miguel D. F. Ferreira.
25. Cátia Alexandra Veloso Alves, Servitization, Service Design and Digitalization in industrial companies – impacts on performance – an exploratory approach, University of Coimbra, October 2021, Supervisor: Luis Miguel D. F. Ferreira.
26. Cátia Gomes Carvalheiro, Numerical analysis of twist springback in components with complex geometry, University of Coimbra, July 2021, Supervisor: Diogo Neto
27. Cristiano Seiji Watanabe, Project management for business development: a comparison of Portugal and Denmark industry sector, University of Minho, April 2021, Supervisor: Anabela Tereso, Gabriela Fernandes.
28. Crystal Kayaro Emonde, Designing and tribological characterization of reinforced self-lubricating surfaces on textured PEEK, University of Coimbra, July 2021, Supervisor: Bruno Trindade, Emilio Frutos
29. David Manuel de Campos Aguiar. Effect of immersion time in a saline environment in response to the fatigue of glass/epoxide laminates. University of Coimbra, October 2021, Supervisor: Ricardo Branco, Ana Paula Amaro.
30. David Oliveira, *Gestão da qualidade em sistemas de areia verde na indústria de fundição*, July 2021, Supervisor: Telmo Pinto
31. Diogo Alves Rodrigues, Improving usage efficiency of substitution vehicle fleets: Sodicientro's case study, University of Coimbra, February 2021, Supervisor: Gabriela Fernandes.
32. Diogo Castanhas Rodrigues, *Técnicas de Análise de Sensibilidade Aplicadas ao Processo de Estampagem de uma Taça Quadrada*, University of Coimbra, September 2021, Supervisor: André Pereira e Valdemar Fernandes
33. Diogo Manuel Correia Salgueiro, Development of poly(ester amide) based microparticles for prolonged drug delivery purposes, November 2021, Supervisor: Ana Clotilde Fonseca, Arménio Serra
34. Diogo Miguel Marques Fonseca, Advanced tribological characterization of coatings (DLC) for the automotive industry, with the aim of improving the performance of internal combustion engines, University of Coimbra. December, 2021. Supervisors: Fábio Ferreira and Amílcar Ramalho.
35. Diogo Vicente Rodrigues. Exploring Biodiversity for Natural Micro (Bio)-Based Polymers Biodegradable. University of Coimbra. December 2021. Supervisors: Diogo Neves Proença, Paula V. Morais

36. Edmundo Rafael de Andrade Sérgio, Fatigue crack propagation analysis using the GTN damage model, University of Coimbra, July 2021, Supervisors: Diogo Neto, Micael Borges
37. Eduardo Filipe Soares Carvalheiro, Constitutive parameter identification strategies for metallic sheets, July 2021. Supervisors: A. Khalfallah e J.V. Fernandes
38. Emanuel Tavares Bento, Analysis of the printing process by wire-arc additive manufacturing: design and production of a proof of concept part, University of Coimbra, September 2021, Supervisor: Norberto Pires, Ricardo Branco.
39. Epifanio Lucas Mula, *Balanceamento de linhas de montagem de modelos mistos*, University of Coimbra, July 2021, Supervisor: Cristóvão Silva
40. Eva Daniela Miranda Gomes, Analyzing and Improving the Production Process in a Ceramic Industry, University of Coimbra, July 2021, Supervisor: Gabriela Fernandes.
41. Felipe Ferreira Salles, Prediction of strain localization in nonlinear strain paths, University of Coimbra, October 2021, Supervisors: Marta Oliveira, Diogo Neto
42. Fernando Gentil Mota Ferreira Pinto, *Modelos eletromecânicos para simulação cardíaca*, University of Trás-os-Montes e Alto Douro, April 2021, Supervisor: Marco Duarte Naia
43. Filipa Garcia Domingos Figueiredo Varandas, *Implementação de metodologias Kaizen Lean na indústria farmacêutica*, University of Coimbra, July 2021, Supervisor: Cristóvão Silva
44. Filipe Emanuel Senra e Sá, Additive Manufacturing of AA7050 Alloy Fatigue Tests by FFF, University of Coimbra, June 2021, Supervisors: Ana Sofia Figueira Ramos, Francisco Rafael dos Reis Cruz
45. Filipe José Prazeres da Silva, Estudo da condição dos veículos de combate a incêndios florestais, Polytechnic Institute of Coimbra, September 2021, Supervisor: J. Torres Farinha, Rafael Raposo
46. Francisco André dos Santos Cruz, Design of the structure of a lightweight robotic manipulator, University of Coimbra, 2021, Supervisor: Pedro Neto.
47. Francisco José Ferreira Manana Penas - How to reduce the Quality Wall inspections and Standard Work and Line Design workshop at Megatech Industries Marinha Grande – estágio, Polytechnic Institute of Coimbra, April 2021, Supervisor: J. Torres Farinha
48. Gilda Alfredo Miambo, Implementação de uma fábrica de aprendizagem no laboratório de Engenharia e Gestão Industrial, February 2021, Supervisor: Cristóvão Silva
49. Giselle Mendes Ferreira, How SMEs Effectively Use Project Management for Business Development: a comparison of Portugal and Denmark service sector, University of Minho, October 2021, Supervisor: Anabela Tereso, Gabriela Fernandes.
50. Gonçalo Fernando Silva Lopes, Melhoria da disponibilidade de uma unidade de tratamento de madeiras recicladas, University of Coimbra, July de 2021, Supervisor: Fernando Antunes e José Bernardo Lobo

51. Gonalo Filipe Loureno Delgado, 3D Printing of Cartilaginous Connective Tissue, University of Coimbra, July 2021. Supervisor: Ana Paula Piedade, Ana Catarina Pinho.
52. Gonalo Manuel Abrunhosa Coutinho. Study of the Tribocorrosion and strain hardening behaviour of CoCrMo alloys used in several biomedical applications, master's in mechanical engineering, University of Coimbra, Portugal.
53. Guilherme Costa Gomes Rodrigues Catela, Influence of Artificial Saliva on the Mechanical Properties of Sandwich Structures Processed Through Additive Manufacturing, University of Coimbra, February 2021. Supervisor: Ana Paula Piedade
54. Hafiza Ayesha Khalid, Influence of N additions on the structure, morphology, thermal stability and tribological properties of W-S-N coatings deposited by sputtering, University of Coimbra, July 2021, Supervisor: Filipe Fernandes, Talha Yaqub
55. Hlder Martinho Gonalves Figueira da Silva, Study and characterization of mechanical and tribological behavior of doped DLC coatings for application in polymer injection molds, University of Coimbra, November 2021, Supervisors: Manuel Antnio Peralta Evaristo, Carlos Wagner Moura, Silva
56. Hugo Oliveira Macedo Teixeira, *Conceo de equipamento experimental para avaliar a resistncia ao impacto de protetores bucais para o uso desportivo*, University of Coimbra, December 2021, Supervisors: Ana Amaro, Ana Messias
57. Ins Azevedo Fontes Amaral, Value stream mapping in the renewable energy sector, University of Coimbra, July 2021, Supervisor: Gabriela Fernandes.
58. Ins Diogo, *Excesso de Divergncia, Adaptao de Lente de contacto hidrfila protsica, Retinopatia pigmentar*, University of Beira Interior, September 2021, Supervisor: Miguel Caixinha.
59. Ins Filipa Alves Barreto. Study of cyclic elastic-plastic behavior of new martensitic alloy with medium carbon content. University of Coimbra, October 2021, Supervisor: Ricardo Branco, Jos Antnio Correia.
60. Ins Pimenta dos Santos Amaral, Application of Lean Tools in a Productive Context in the Renewable Energy Industry, November 2021, Supervisor: Gabriela Fernandes.
61. Ins Silva Ribeiro, Database-supported strategy for the material parameter identification of metal sheets, University of Coimbra, March 2021, Supervisors: Pedro Prates, Nataliya Sakharova
62. Ins Sofia Martins Lopes, Dimensioning and analysis of the Kanban system: a case study in a metal-mechanical company, University of Coimbra, July 2021, Supervisor: Lus Miguel D. F. Ferreira.
63. Isadora Nunes de Almeida, *Impresso 3D e a sua Aplicao na Engenharia Civil*, University of Coimbra, July, 2021, Supervisor: Sergio Lopes
64. Ivan Prcela, Analysis of the influence of the yielding asymmetry on the mechanical behaviour of isotropic materials, September 2021. Supervisors: Marta Oliveira, Vedrana Cvitanić.

65. Jéssica Batista Marques, Use of reactive multilayers in the development of actuators for repairing cracks, University of Coimbra, October 2021, Supervisor: Ana Sofia Figueira Ramos, Patrícia Freitas Rodrigues
66. Jéssica Lúcia Ferraz Carvalho, *Desenvolvimento mecânico de robô móvel autónomo para aplicações médicas*, Universty of Coimbra, October 2021, Supervisor: Ana Amaro
67. Joana Almeida Silva, Development and 3D Printing of polymeric structures with unity Poisson ratio, Universty of Coimbra, July 2021, Supervisors: Ana Amaro, Augusta Neto
68. Joana Beatriz Bessa Ribeiro, Improvement of the production efficiency by scheduling parallel machines with changeovers, University of Coimbra, December 2021, Supervisor: Samuel Moniz.
69. Joana Carina Lopes Freire, Cancro da mama e extratos naturais: uma abordagem teranóstica apoiada por imagens micropet, University of Coimbra, December 2021. Supervisor: Ana Cristina Santos.
70. Joana Pires Martins, Planeamento das operações de manutenção numa empresa de transporte rodoviário, University of Coimbra, November 2021, Supervisor: Telmo Pinto, Miguel Vieira.
71. Joana Rita Bandeira Coelho Geitoeira Eloy, Procedimentos de Manutenção de Dispositivos de Eletromedicina: ATM e Althea - Estágio (MIB), Polytechnic Institute of Coimbra, March 2021 Supervisor: J. Torres Farinha, Fernanda Madureira Coutinho
72. Joana Zanguinetti Soares, Creation and Redefiniton of Work Instructions according to the Training within Industry Program, University of Coimbra, July 2021, Supervisor: Gabriela Fernandes.
73. João Alexandre Godinho da Silva, ETARI Optimization, University of Coimbra, July 2021, Supervisor: Ana Paula Piedade
74. João André Dias Pereira, Análise do Ciclo de Vida dos Ativos, da Fábrica Pastelaria São Silvestre, Lda - Estágio (MEGI), Polytechnic Institute of Coimbra, January 2021 Supervisor: J. Torres Farinha, Hugo Nogueira Raposo
75. João Branco Maranhã Tiago, Scheduling of Polymer Additive Manufacturing Processes – a Systematic Literature Review and Theoretical Framework, University of Coimbra, November 2021, Supervisor: Samuel Moniz.
76. João Carlos Terêncio, Orthodontic arcwires of NiTi: mechanical behaviour, University of Coimbra, Dezembro 2021, Supervisor: Cristina Santos
77. João Dias Antunes, FSW de materiais poliméricos, University of Coimbra, July 2021, Supervisors: Altino Loureiro, Rui Leal
78. João Diogo David Lourenço, Optimization of shipping packaging in order to reduce logistical and material costs, University of Coimbra, July 2021, Supervisor: Luis Miguel D. F. Ferreira.
79. João Miguel Garcia Monteiro Baeta, *Análise da implementação DDMRP em meio industrial através da simulação*, University of Coimbra, December 2021, Supervisor: Cristóvão Silva

80. João Pedro Abreu Sousa, *Otimização e parametrização do Software Enterprise Asset Management numa Indústria Farmacêutica, Estágio*, Polytechnic Institute of Coimbra, March 2021 Supervisor: J. Torres Farinha
81. João Pedro Fernandes Pais, Fatigue crack growth: comparison between numerical and experimental results, University of Coimbra, October 2021, Supervisors: Diogo Neto and Micael Borges
82. João Pedro Laires Fraga Simões Bispo, *Técnicas lean e de otimização na produção de pás de turbinas eólicas*, University of Coimbra, November 2021, Supervisor: Telmo Pinto
83. Jorge Miguel Santos Silva, Effect of variable amplitude loading on fatigue crack propagation, University of Coimbra, October 2021, Supervisors: Diogo Neto and Micael Borges
84. José Daniel Ferreira Alves. Analysis of potential root causes of damage to wind turbine main bearings and analysis of preventive, corrective and predictive applicable maintenance. University of Coimbra. December, 2021. Supervisor: Amílcar Ramalho.
85. José Miguel Duque Rebola, *Manutenção Lean: Otimização de Planos e Procedimentos de Manutenção*, September 2021, Supervisors: André Pereira, David Matos
86. José Miguel Lopes Antunes, Fabrication of nanomaterial composite based liquid repellent facemasks, University of Coimbra, October 2021, Supervisor: Fábio Ferreira and Sandra Cruz
87. José Pedro Laranjeiro Gouveia Santos, Valorization of Poultry Litter: A comparative analysis of valorization strategies, University of Coimbra, July 2021, Supervisor: Luis Miguel D. F. Ferreira and Vanessa Magalhães.
88. Kapil Kumar Shrestha, Relationship between the friction coefficient and the microstructural changes occurring in sliding contact with crossed cylinders, University of Coimbra, July 2021, Supervisor: Albano Cavaleiro, Carlos Wagner.
89. Leandro Filipe de Jesus Nogueira, *Rotura diferida em soldadura laser de materiais dissimilares*, University of Coimbra, December 2021, Supervisors: Dulce Rodrigues, Ivan Galvão.
90. Leandro Jorge Barros Guimarães, Implementação de um sistema de gestão de manutenção, University of Coimbra, November 2021, Supervisor: Altino Loureiro
91. Leonor Rato Azevedo de Matos, Optimization of phosphate accumulating bacterial strains for phosphorus obtainment in residual water, University of Coimbra. September 2021, Supervisor Havard Weigand, Paula V. Morais.
92. Luís António Pinto Ascensão, *EGCG & DIBOA: o impacto de compostos naturais na terapia do cancro colorretal - uma abordagem imagiológica in vitro e in vivo*, University of Coimbra, December 2021. Supervisor: Ana Cristina Santos
93. Luísa Figueiredo Lopes Alves, Standardization of Project Management Practices: Case Study, University of Coimbra, July 2021, Supervisor: Gabriela Fernandes.

94. Madalena de Sande Ribeiro de Magalhães Cardoso, Economic, Social and Environmental Impact of SMED Methodology Implementation on a Casting and Machining Industry, University of Coimbra, October 2021, Supervisor: Luis Miguel D. F. Ferreira.
95. Magalie Morais Oliveira, *Projeto de Melhoria e Organização dos Processos de Setups*, Universty of Coimbra, July de 2021, Supervisors: Fernando Antunes, Luís Pedro
96. Maria Beatriz Cavaca Santos, *Estudo da dinâmica de receções em pares/grupos de ginástica acrobática*, Universty of Coimbra, November 2021, Supervisors: Ana Amaro, Maria Paulino
97. Maria Eduarda Delfim Oliveira, Preparation of composite materials for additive manufacturing and assessment of their 4D printing capability, University of Coimbra, November 2021. Supervisor: Ana Paula Piedade, Ana Catarina Pinho
98. Maria Inês da Pena de Oliveira Pereira da Silva, Micromovements and Strains in Immediate Loaded Implants: An Ex Vivo Pilot Study, University of Coimbra - Dentistry, July 2021, Supervisors: Ana Messias, Pedro Nicolau
99. Maria José Mateus Maia Rosa, Planeamento e Melhoria da Produção na INI (Ferramenta de apoio ao planeamento- Estágio Polytechnic Institute of Coimbra, November 2021, Supervisor: J. Torres Farinha, Hugo Raposo.
100. Mariana Félix Moreira, Influence of Geometry and Topography of Natural-Based Hydrogels on Sorption/Release of Molecules, University of Coimbra, July 2021. Supervisor: Ana Paula Piedade, Akel Ferreira Kanaan
101. Mariana Inês Teixeira da Silva Salgado, Value stream mapping and lean toolbox implementation in the ceramics sector, University of Coimbra, November 2021, Supervisor: Samuel Moniz.
102. Mariana Lopes Martins, *Estudo da Implementação do Processo de Aprovação de Peças para Produção*, July 2021, Supervisor: André Pereira e Eugénia Carvalho
103. Marina Oliva, 3D printed structures with tunable wettabilities, University of Coimbra, November 2021. Supervisor: Ana Paula Piedade, Co-supervisor: Akel Ferreira Kanaan
104. Marlene Cachada Capitão, Stakeholder Management in R&D Programs and Projects in University-Industry Collaborations, University of Minho, July 2021, Supervisor: Anabela Tereso, Gabriela Fernandes.
105. Melissa Viveiros Moniz, Development of Fuel Markers based on Furfural, July 2021, Supervisor: Arménio Serra
106. Miguel Malhadas Sauzedo, Automação de processos de produção no mercado dos brindes publicitários processo de gravação a laser, University of Coimbra, October 2021, Supervisor: Luis Filipe Menezes
107. Miguel Marques Pires da Rosa, Analysis and Optimization of the Supply Process of an Automobile Assembly Line, University of Coimbra, November 2021, Supervisor: Samuel Moniz.

108. Nuno Matos Costa, Expedited assessment of friction and load-bearing capacity in thin coatings. University of Coimbra. March, 2021. Supervisors: Amílcar Ramalho and Luis Vilhena.
109. Nuno Miguel Gonçalves Almeida. Effect of pre-loads in the viscoelastic behavior of a GFRP composite, University of Coimbra, October 2021, Supervisor: Paulo Reis, Ricardo Branco.
110. Nuno Miguel Pinão Santos, Balanceamento de uma linha de montagem na indústria do mobiliário de conforto, University of Coimbra, July 2021, Supervisor: Cristóvão Silva
111. Oday Ali Hasan Allan, The Influence of Low Friction TMD coatings on The Tribological Performance of Surface Textured Steels, University of Coimbra, July 2021, Supervisor: Albano Cavaleiro, Fátima Rosa
112. Orlando de Sousa Lima Júnior, Practices and Benefits of Innovation and Sustainability in Project Management within SMEs Context, University of Minho, November 2021, Supervisor: Anabela Tereso, Gabriela Fernandes.
113. Paula Isabel Oliveira Silva. Fatigue behaviour of notched components in AA 7050-T6 alloy subjected to multiaxial loading. University of Coimbra, October 2021, Supervisor: Ricardo Branco, José Domingos Costa
114. Paulo Marques Almeida, Smart materials in orthodontic applications: Nitinol, University of Coimbra, March 2021, Supervisor: Cristina Santos
115. Pedro António Gouveia Narciso, Revisão do plano de manutenção de uma máquina de papel tissue, Polytechnic Institute of Coimbra, December de 2021, Supervisor: Luis Filipe Borrego.
116. Pedro Diogo Jesus, Tool assisted friction welding of mild steel, University of Coimbra, July 2021, Supervisor: Dulce Rodrigues, Sree Sabari Shunmugam
117. Pedro João Vinagre Costa, Expander parametric study and optimization of tpocr parametric study about expander geometry of three-piece oil control ring in internal combustion spark ignition engines, University of Coimbra, Supervisor: Luis Filipe Menezes
118. Pedro Miguel Pereira da Rocha, Sustainable Packaging: Factors Influencing Consumers Purchase Intention, University of Coimbra, December 2021, Supervisor: Luis Miguel D. F. Ferreira.
119. Pedro Mota Gil Agostinho, *Desenvolvimento de implantes dentários*; University of Coimbra, September 2021, Supervisor: Sandra Carvalho
120. Princess Stephanie Llanos, Tribological and machining performance of TiAlN, TiAlCN and TiAlN/TiAlCN coatings for machining of Ti6Al4V aerospace alloy, University of Coimbra, July 2021, Supervisorby Filipe Fernandes, Abbas Rjoub
121. Rafael dos Santos Jorge, Deformation analysis of immersed in a saltwater environment glass/epoxy laminates subject to cyclic loads. University of Coimbra, October 2021, Supervisor: Ricardo Branco, Maria Augusta Neto

122. Rafael dos Santos Sousa, Development of a Cyber-Physical System for Car Parking Management, Tese de Mestrado, Universty of Coimbra, December 2021, Supervisors: Fernando Antunes, Bogdan Abaza
123. Rafael Marques Patrício, Design of sustainable polymers based on 2,5-furanodicarboxylic acid and evaluation of their (bio)degradability, October 2021, Supervisors: Andreia F. Sousa and Teresa Rocha
124. Rafael Ramos Marques, *Estudos biomecânicos no contexto da avaliação do atleta na prática do ténis*, Universty of Coimbra, February 2021, Orientadores Ana Amaro, Luis Roseiro
125. Rafaela Lourenço Graça Antunes, Application of additive manufactured polymers in frameworks of full-arch implant-supported fixed prostheses, University of Coimbra - Biomedical Engineering, December 2021, Supervisors: Ana Messias, Maria Augusta Neto
126. Ricardo Jorge Lisboa Lopes. Sustainable management of contaminated land - Examples of Portugal and Australia, University of Coimbra, November 2021, Supervisor: Isabel Pinto
127. Ricardo José Cordeiro Venâncio, Preparação de Trabalhos de Manutenção Mecânica de uma Máquina de Papel na The Navigator Company, Polytechnic Institute of Coimbra, November de 2021, Supervisor: Luis Filipe Borrego.
128. Rithiel do Amaral, Manutenção Preditiva Baseada em Cadeias de Markov, Polytechnic Institute of Coimbra, April 2021, Supervisor: J. Torres Farinha
129. Ruben Figueiredo do Nascimento. Structural analysis of different attachment systems for implant-supported mandibular prostheses, University of Coimbra, July 2021, Supervisors: José Domingos, Ana Lúcia de Pereira Neves Messias
130. Rui Gonçalo dos Santos Curado, Estudo e avaliação da implementação de Lean numa empresa de climatização, University of Coimbra, Novembre 2021, Supervisor: Cristóvão Silva
131. Samuel Vaz Pinheiro, Definition of component repackaging process in the automotive industry, University of Coimbra, November 2021, Supervisor: Samuel Moniz.
132. Sara Alexandra Sousa Santos, Reduction of waiting time in the expedition warehouse: paper pulp sector, University of Coimbra, July 2021, Supervisor: Gabriela Fernandes.
133. Sara Iolanda Pereira Gonçalves, *Implementação da manutenção produtiva total no setor de estiragem de uma empresa de produção de perfis de aço inoxidável*, University of Coimbra, July 2021, Supervisors: Dulce Rodrigues, Ivan Galvão.
134. Sergiu Budchin, *Estratégia de Identificação do Comportamento Plástico de Chapas Metálicas*, January 2021, Supervisors: André Pereira e Valdemar Fernandes.
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