

José Xavier
Associate Professor
DEMI - Departamento de Engenharia Mecânica e Industrial
UNIDEMI - Unidade de Investigação e Desenvolvimento em Engenharia
Mecânica e Industrial

Type of address: Visiting address.

NOVA FCT
Campus Caparica
Edifício VIII, Gab 4.29,
2829-516 Caparica
Portugal
Portugal

Email: jmc.xavier@fct.unl.pt

Web address: https://www.researchgate.net/profile/Jose_Xavier3,
https://scholar.google.pt/citations?user=QTO_uccAAAAJ,
<http://www.researcherid.com/rid/A-4348-2013>,
<https://www.mendeley.com/profiles/jose-xavier3/>,
<https://publons.com/author/471769/jose-xavier#profile>



Employment

Associate Professor

DEMI - Departamento de Engenharia Mecânica e Industrial
Universidade NOVA de Lisboa
Portugal
10 Sept 2018 → present

Associate Professor

UNIDEMI - Unidade de Investigação e Desenvolvimento em Engenharia Mecânica e Industrial
Universidade NOVA de Lisboa
10 Sept 2018 → present

Research outputs

On the experimental investigation of silicone-based soft composites under mode I loading using Digital Image Correlation
Filho, J. C. A. D., Xavier, J. & Nunes, L. C. S., Oct 2023, In: *Theoretical and Applied Fracture Mechanics*. 127, 10 p., 104049.

Direct and inverse cohesive law identification of hardwood bonded joints with 1C-PUR adhesive using DCB test
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On the inverse identification of wood elastic properties using a DIC-based FEMU approach
Henriques, J., Xavier, J. & Andrade-Campos, A., 8 Feb 2023, In: *INTERNATIONAL JOURNAL OF STRUCTURAL INTEGRITY*. 14, 1

An Open-Source 2D Digital Image Correlation Software: Case Study on the Hyperelastic Behaviour of Silicone-Based Material
Filho, J. C. A. D., Nunes, L. C. S. & Xavier, J., 2023, *Testing and Experimentation in Civil Engineering: From Current to Smart Technologies*. Chastre, C., Neves, J., Ribeiro, D., Pinho, F. F. S., Biscaia, H. & Neves, M. G. (eds.). Cham: Springer, p. 397-407 11 p. (RILEM Bookseries; vol. 41).

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Henriques, J., Andrade-Campos, A. & Xavier, J., 2023, *Material Forming: The 26th International ESAFORM Conference on Material Forming – ESAFORM 2023 - held in Kraków, Poland, April 19-21, 2023*. Madej, L., Sitko, M. & Perzynsk, K. (eds.). Millersville: Association of American Publishers, p. 1131-1142 12 p. (Materials Research Proceedings; vol. 28).

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Shear traction-separation laws of European beech under mode II loading by 3D digital image correlation

Gómez-Royuela, J. L., Majano-Majano, A., Lara-Bocanegra, A. J., Xavier, J. & de Moura, M. F. S. F., 21 Nov 2022, In: Wood Science And Technology. 56, p. 1631–1655 25 p.

A Miniaturized Device Coupled with Digital Image Correlation for Mechanical Testing

Cruz, D. J., Xavier, J., Amaral, R. L. & Santos, A. D., 19 Nov 2022, In: Micromachines. 13, 11, 16 p., 2027.

iCorrVision-2D: An integrated python-based open-source Digital Image Correlation software for in-plane measurements (Part 1)

de Deus Filho, J. C. A., da Silva Nunes, L. C. & Xavier, J. M. C., 19 Sept 2022, In: SoftwareX. 19, 7 p., 101131.

Computational Modelling and Simulation of Fluid Structure Interaction in Aortic Aneurysms: A Systematic Review and Discussion of the Clinical Potential

Mourato, A., Valente, R., Xavier, J., Brito, M., Avril, S., de Sá, J. C., Tomás, A. & Fragata, J., 11 Aug 2022, In: Applied Sciences. 12, 16, 38 p., 8049.

Experimental Stress Analysis of Cross-Laminated Timber Elements under Cyclic Moisture

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Splitting capacity of Eucalyptus globulus beams loaded perpendicular to the grain by connections

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Fluid–Structure Interaction Modeling of Ascending Thoracic Aortic Aneurysms in SimVascular

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Evaluation of R-curves and cohesive law in mode I of European beech

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Identification of Orthotropic Elastic Properties of Wood by a Synthetic Image Approach Based on Digital Image Correlation

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EFFECTS OF HYBRIDIZATION AND PLY THICKNESS ON CARBON/CARBON COMPOSITE LAMINATES STRENGTH AND TOUGHNESS

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Identification of Swift Law Parameters Using FEMU by a Synthetic Image DIC-Based Approach

Henriques, J., Conde, M., Andrade-Campos, A. & Xavier, J., 2022, *Achievements and Trends in Material Forming: Peer-reviewed extended papers selected from the 25th International Conference on Material Forming, ESAFORM 2022*. Vincze, G. & Barlat, F. (eds.). Switzerland: Trans Tech Publications Ltd, p. 2211-2221 11 p. (Key Engineering Materials; vol. 926).

In situ monitoring of wire and arc additive manufacturing by digital image correlation: A case study

Cunha, F. G., Santos, T. G. & Xavier, J., 2022, In: *Procedia Structural Integrity*. 37, C, p. 33-40 8 p.

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New methodology to assess in-vivo quality of motion in cervical spine

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Direct evaluation of mixed mode I+II cohesive laws of wood by coupling mmb test with dic

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On the experimental determination of the J-curve of quasi-brittle composite materials

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Experimental characterisation of fused filament fabrication printed parts under tension, shear, and combined shear-tension loads via Arcan test

Ferreira, I., Jesus, A., Machado, M., Pereira, J., Alves, J. L. & Xavier, J., 1 Jun 2020, In: *Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications*. 234, 6, p. 835-850 16 p.

High strain rate characterisation of intralaminar fracture toughness of GFRPs for longitudinal tension and compression failure

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Experimental evaluation of mode II fracture properties of Eucalyptus globulus L.

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Determination of mode I dynamic fracture toughness of IM7-8552 composites by digital image correlation and machine learning

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Prizes

Prize Eng. Cruz Azevedo attributed by the Portuguese Association for Experimental Stress Analysis

Xavier, José (Recipient), 2007

Prize Fundação Engenheiro António de Almeida

Xavier, José (Recipient), 1999

