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S. Kaba, **C. EL Kihal**, O. Askour, A. Hamdaoui, M. Arfaoui, **A. Boukamel**, **N. Damil**, Numerical modeling of electrical activity in cardiac tissue using implicit high-order algorithms combined with meshless methods, *Biomedical Signal Processing and Control*, **Q1(2025)**.

S. Khalil, O. Elmhaia, A. Hamdaoui, B. Braikat, H. Hu, **A. Boukamel**, **N. Damil**, A dimensionless study of Functionally Graded Material membranes wrinkling using the Asymptotic Numerical Method, *International Journal of Solids and Structures*, **Q1(2025)**.

A. Ouardi, A. Hamdaoui, M. Arfaoui, **A. Boukamel**, **N. Damil**, A 3D micromechanical model for hyperelastic rubber-like materials and its numerical resolution by the Asymptotic Numerical Method (ANM), *European Journal of Mechanics / A Solids*, **Q1(2025)**.

2024

Z. Kuang, Y. Xu, Q. Huang, J. Yang, **C. El Kihal**, H. Hu, Quantum computing with error mitigation for data-driven computational homogenization, *Composite Structures*, **Q1(2024)**.

S. Khalil, O. Elmhaia, B. Braikat, A. Hamdaoui, H. Hu, **A. Boukamel**, **N. Damil**, Investigation of FGM membrane wrinkling using reduced models based on a multi-scale method, *Thin-Walled Structures*, Volume 199, 111834, **Q1 (2024)**.

M. Rammane, O. Elmhaia, S. Mesmoudi, O. Askourd, A. Tri, B. Braikat, **N. Damil**, A Hermite-type collocation mesh-free approach for simulating incompressible viscous fluid flows, *Mathematics and Computers in Simulation* Available online **Q1 (2024)**.

Z. Bakhach, A.E. Kaimbillah, A. Hamdaoui, B. Braikat, F. Mohri, **N. Damil**, A dimensionless analytical analysis for buckling and lateral buckling interaction of thin-walled beams with open cross sections, *Thin-Walled Structures*, 195, 111396. **Q1 (2024)**.

S. Kaba, L. Salhi, **N. Damil**, N.El Moçayd, **A. Boukamel**, A High-Order Implicit Algorithm Using an RBF-Type Meshless Method for the Simulation of Cardiac Electrical Activity, *Lecture Notes in Mechanical Engineering*, pp. 120–129. **Q4 (2024)**.

A. Ouardi, **A. Boukamel**, **N. Damil**, A Microstructurally Motivated Hyperelastic Model for Elastomer Materials, *Lecture Notes in Mechanical Engineering*, pp. 92–98. **Q4 (2024)**.

C. El Kihal, A. Hamdaoui, A., B. Braikat, **N. Damil**, Potier-Ferry, M. Modeling Elastoplastic Structures in Finite Transformation by a High-Order Algorithm, *Lecture Notes in Mechanical Engineering*, pp. 46–54. **Q4 (2024)**.

M. Rammane, S. Mesmoudi, O. Askour, A. Tri, B. Braikat, **N. Damil**, Bifurcation Analysis of Incompressible Fluid Flow by a High Order Mesh-Free Indicator with Padé Approximants, *Lecture Notes in Mechanical Engineering*, pp. 101–110. **Q4 (2024)**.

Z. Kuang, Y. Xu, Q. Huang, J. Yang, C. El Kihal, H. Hu, Quantum computing with error mitigation for data-driven computational mechanics, *Computer Methods in Applied Mechanics and Engineering*. **Q1 Soumis**.

2023

Y. Xu, J. Yang, X. Bai, Q. Huang, N. Damil, H. Hu, Material database construction for data-driven computing via a continuous path-following method, *Composite Structures*, 319, 117187 **Q1 (2023)**.

J. Yang, P. Li, Y. Zhang, Y. Hui, L. Xu, N. Damil, H. Hu, Unified functional based data-model-coupling computing for composite materials and structures, *Composite Structures*, 312, 116840. **Q1 (2023)**.

M. Rammane, O. Elmhaia, S. Mesmoudi, O. Askour, B. Braikat, A. Tri, N. Damil, On the use of Hermit-type WLS approximation in a high order continuation method for buckling and wrinkling analysis of von-Kàrmàn plates, *Engineering Structures* 278, 115498 **Q1 (2023)**.

O. Elmhaia, Y. Belaasilia, O. Askour, B. Braikat, N. Damil, Numerical analysis of frictional contact between crack lips in the framework of Linear Elastic Fracture Mechanics by a mesh-free approach, *Theoretical and Applied Fracture Mechanics*, 103749. **Q1 (2023)**.

A. Ouardi, A. Boukamel, N. Damil, A model for hyperelastic rubber-like materials based on micro-mechanical elements. *European Journal of Mechanics - A/Solids. Volume 101*, 105036. **Q1 (2023)**.

M. Rammane, O. Elmhaia, S. Mesmoudi, O. Askour, B. Braikat, A. Tri, N. Damil, On the use of Hermit-type WLS approximation in a high order continuation method for buckling and wrinkling analysis of von-Kàrmàn plates, *Engineering Structures* 278, 115498. **Q1 (2023)**.

O. Elmhaia, Y. Belaasilia, O. Askour, B. Braikat, N. Damil. Numerical analysis of frictional contact between crack lips in the framework of Linear Elastic Fracture Mechanics by a mesh-free approach, *Theoretical and Applied Fracture Mechanics*, 103749. **Q1 (2023)**.

Y. Jie, L. Ping, Z. Yi, H. Yanchuan, X. Lihua, N. Damil, H. Heng May, Unified functional based data-model-coupling computing for composite materials and structures, *Composite Structures. Volume 312* 15, 116840. **Q1 (2023)**.

Y. Xu, J. Yang, X. Bai, Q. Huang, N. Damil, H. Hu, Material database construction for data-driven computing via a continuous path-following method, *Composite Structures. Volume 319*, 1 , 117187. **Q1 (2023)**.