

Publikationsliste Dr. M. May

Buchkapitel

2014

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Georg C. Ganzenmüller, Stefan Hiermaier, **Michael May**; Improvements to the Prototype Micro-brittle Model of Peridynamics in: Meshfree Methods for Partial Differential Equations VII. Lecture Notes in Computational Science and Engineering. Editors: Michael Griebel, Marc Alexander Schweitzer. Volume 100, 2015, pp 163-183, 5 November 2014.

Peer-Review Zeitschriften

2025

Heilig, G.A., **May, M.**; The Hydrodynamic RAM effect: Review of historic experiments, model developments and simulation, Defence Technology, accepted for publication, 2024.

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Pereira, I.M., Hahn, P., Jung, M., Imbert, M., **May, M.**; Quasi-static and high-rate in-plane shear tests on aramid and carbon fiber woven composites featuring a nanoparticle-enriched high-density polyethylene matrix, Polymer Composites, 45(8), S. 6985-6997, 2024.

Bruneau, A., Imbert, M., **May, M.**; Controlled interlaminar crack initiation in thin notched laminated thermoplastic composites under impact loading: A first step towards unitary layer recovery, Composites Part B: Engineering, 275, Paper ID 111322.

May, M., Schneider, N., Schaufelberger, B., Jung, M., Pfaff, J., Altes, A., Haase, T., Imbert, M., Matura, P., Schopferer, S., Blacha, M.; Collisions between Drones and Rotorcraft: Modeling of the Crash Response of Battery Packs, Journal of the American Helicopter Society, 69(1), Paper ID 012004, 2024.

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Oliveira, P.R., Virgen Gonzalez, G.P., Imbert, M., Beisel, S., **May, M.**, Panzera, T.H., Hiermaier, S., Balle, F.; Ultrasonically welded eco-friendly sandwich panels based on upcycled thermoplastic core: An eco-mechanical characterization, Resources, Conservation and Recycling Advances, 20, Paper ID 200187, 2023.

Medina, S.A., Gonzalez, E.V., Blanco, N., Maimi, P., Pernas-Sanchez, J., Artero-Guerrero, J.A., Hahn, P., **May, M.**, de Blanpre, E., Jacques, V.; Rate-dependency analysis of mode I delamination by means of different data reduction strategies for the GDCB test method, Engineering Fracture Mechanics, 288, Paper ID 109352, 2023.

Imbert, M., Kilchert, S., Maurer, M., **May, M.**; Experimental investigation of hail impacts over a wide range of velocities, International Journal of Impact Engineering, 178, Paper ID 104627, 2023.

May, M., Schopferer, S.; On the Relationship between Lightning Strike Parameters and Measured Free Surface Velocities in Artificial Lightning Strike Tests on Composite Panels, *Journal of Composite Science*, 7(7), paper ID 268, 2023.

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Rüthnick, P., Ledford, N., Imbert, M., **May, M.**; Mechanical Behavior of Multi-Material Single-Lap Joints under High Rates of Loading Using a Split Hopkinson Tension Bar, *Metals*, 12(7), Paper ID 1082, 2022.

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Hahn, P.; Channammagari, H., Imbert, M., **May, M.**; High-rate mode II fracture toughness testing of polymer matrix composites using the Transverse Crack Tension (TCT) test, *Composites Part B: Engineering*, 233, Paper ID 109636, 2022.

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P.R. Oliveira, **M. May**, S. Kilchert, L. Avila de Oliveira, L., T.H. Panzera, V. Placet, F. Scarpa, S. Hiermaier, Eco-friendly panels made of autoclaved flax composites and upcycled bottle caps core: experimental and numerical analysis, *Composites Part C: Open Access*, 4, Paper ID 100114, 2021.

M. May, S. Arnold-Keifer, V. Landersheim, F. Laveuve, C. Contell Asins, M. Imbert, Bird strike resistance of a CFRP morphing leading edge, *Composites Part C: Open Access*, 4, Paper ID 100115, 2021.

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Noah Ledford, **Michael May**, Modeling of multimaterial hybrid joints under high-rate loading, Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 234(5), S. 446–453, 2020.

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Kilchert, S. Hoschke, K., Pfaff, A., Kappe, K., **May, M.**; Towards more sustainable aviation: Life cycle analysis of a topology optimized cargo door latch fitting, AIAA AVIATION Forum and Exposition , Las Vegas, USA, 29 Juli – 2 August 2024.

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Grenier, R., Imbert, M., Hohe, J., Balle, F., **May, M.**; Thermally Assisted Peeling as a High-Quality Disassembly Process For Thermoplastic Tape Wound Composites, 23rd International Conference on Composite Materials, ICCM 2023, Belfast, Nordirland, 30 Juli – 4 August 2023.

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Sebastian Kilchert, Matthias Nossek, **Michael May**; Challenges and Limitations in measuring the Mechanical Properties of Braided Composites; , 5th ECCOMAS Thematic Conference on Mechanical Response of Composites, 7-9 September 2015, Bristol, UK.

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M. May; Crash Simulation of Adhesively Bonded Structures, NAFEMS World Congress 2015, 21-24 Juni 2015, San Diego, CA, USA

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M. Brede, O. Hesebeck, S. Marzi, **M. May**, H. Voß; Berechnung des Crashverhaltens von Klebverbindungen mit dem Kohäsivzonenmodell; FTK-Tagung 2013, Stuttgart, 17 April 2013.

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Sebastian Kilchert, **Michael May**, Stefan Hiermaier; Modellierung des Einflusses von Unregelmäßigkeiten in der Mikrostruktur auf das Versagen von UD-Composites; NAFEMS deutschsprachige Konferenz 2012, 8.-9. Mai 2012, Bamberg.

Michael May, Stefan Hiermaier; Concurrent multi-scale modeling of composites under high rates of loading; Proceedings of the 10th World Congress on Computational Mechanics (WCCM 2012) pp. 1245-1257, 8-13 July 2012, Sao Paulo.

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