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### **Selected Publications:**

H.-R. Meyer-Piening, B. Geier and K. Rohwer, "Remarks on the effective-width concept for orthotropic thin shells", in *Buckling of shell structures on land, in the sea and in the air*, edited by J. F. Jullien, Elsevier Applied Science Publishing Co., Inc., New York, 1991

R. Degenhardt, K. Rohwer, W. Wagner, J.P. Delsemme. "Postbuckling and collapse analysis of CFRP stringers stiffened panels – a GARTEUR activity." *Procs. Forth Int. Conf. Thin- Walled Str.*, Loughborough, UK, 2004.

Degenhardt R., Rolfes R., Zimmermann R., Rohwer K., "COCOMAT - Improved MATerial Exploitation at Safe Design of COMposite Airframe Structures by Accurate Simulation of COLLapse", *Proceedings of the International Conference on Buckling and Postbuckling Behaviour of Composite Laminated Shell Structures*, Eilat, Israel, March 1-2, 2004

Degenhardt, R., Rolfes, R., Zimmermann, R. and Rohwer, K., *COCOMAT: Improved Material Exploitation of Composite Airframe Structures by Accurate Simulation of Postbuckling and Collapse*, *Composite Structures*, 2006, vol. 73, no. 2, pp.175-178

Degenhardt R., Kling A., Rohwer K., "Design and analysis of composite panels", *III European Conference on Computational Mechanics*, Lisbon, 5-8 June, 2006.

R. Degenhardt, A. Kling, H. Klein, W. Hillger, H. C. Goetting, R. Zimmermann, and K. Rohwer, "Experiments on buckling and postbuckling of thin-walled CFRP structures using advanced measurement systems," *International Journal of Structural Stability and Dynamics*, vol. 7, no. 2, pp. 337–358, 2007

Rohwer, Klaus and Degenhardt, Richard (2007) *Simulating Postbuckling Behaviour and Collapse of Stiffened CFRP Panels*. NAFEMS World Congress 2007, 2007-05-22 - 2007-05-25, Vancouver, Canada

Degenhardt, Richard and Bethge, Arne and Kling, Alexander and Zimmermann, Rolf and Rohwer, Klaus and Teßmer, Jan and Calvi, Adriano (2007), "Probabilistic approach for improved buckling knock-down factors of CFRP cylindrical shells", *First CEAS European Air and Space Conference*, 2007-09-10 - 2007-09-13, Berlin, Deutschland.

Wilckens, Dirk and Degenhardt, Richard and Kepke, Markus and Hildebrandt, Bernd and Rohwer, Klaus and Teßmer, Jan and Gleiter, Andreas (2008) *Experiments to detect the damage progress of axially compressed CFRP panels under cyclic loading*. 48th Israel Annual Conference on Aerospace Sciences, 2008-02-27 - 2008-02-28, Tel Aviv, Israel. (Unpublished)

Wilckens, Dirk and Degenhardt, Richard and Rohwer, Klaus (2008) *IBUCK - A fast simulation tool for the design of CFRP aerospace structures*. In: *Proceedings of the 2nd International Conference on Buckling and Postbuckling Behaviour of Composite Laminated Shell Structures*. 2nd International Conference on Buckling and Postbuckling Behaviour of Composite Laminated Shell Structures, 2008-09-03 - 2008-09-05, Braunschweig, Deutschland.

Degenhardt, Richard and Rohwer, Klaus and Wilckens, Dirk and Teßmer, Jan (2008) *Improved Material Exploitation of Composite Airframe Structures by Accurate Simulation of Collapse – The COCOMAT project*. 48th Israel Annual Conference on Aerospace Sciences, 2008-02-27 - 2008-02-28, Tel Aviv, Israel. (Unpublished)

Degenhardt, Richard and Wilckens, Dirk and Rohwer, Klaus and Zimmermann, Rolf and Teßmer, Jan (2008) *Improved Material Exploitation of Composite Airframe Structures by Accurate Simulation of Collapse - The COCOMAT project*. In: *Proceedings of the 2nd International Conference on Buckling and Postbuckling Behaviour of Composite Laminated Shell Structures*. 2nd International Conference on Buckling and Postbuckling Behaviour of Composite Laminated Shell Structures, 2008-09-03 - 2008-09-05, Braunschweig, Deutschland.

Degenhardt, Richard and Wilckens, Dirk and Rohwer, Klaus (2008) *Buckling and collapse tests using advanced measurement systems*. In: *Proceedings of the 2nd International Conference on Buckling and Postbuckling Behaviour of Composite Laminated Shell Structures*. 2nd International Conference on Buckling and Postbuckling Behaviour of Composite Laminated Shell Structures, 2008-09-03 - 2008-09-05, Braunschweig, Deutschland.

A. C. Orifici, R. S. Thomson, R. Degenhardt, A. Kling, K. Rohwer, and J. Bayandor, "Degradation investigation in a postbuckling composite stiffened fuselage panel," *Composite Structures*, vol. 82, pp. 217–224, Jan. 2008.

Steinmüller, Patrick and Degenhardt, Richard and Rohwer, Klaus (2008) Investigations of axially loaded unstiffened CFRP cylindrical shells subject to single perturbation loads. In: Proceedings of the 2nd International Conference on Buckling and Postbuckling Behaviour of Composite Laminated Shell Structures. 2nd International Conference on Buckling and Postbuckling Behaviour of Composite Laminated Shell Structures, 2008-09-03 - 2008-09-05, Braunschweig, Deutschland.

R. Degenhardt, A. Bethge, A. Kling, R. Zimmermann, K. Rohwer, H. Klein, J. Tessmer, and A. Calvi, "Probabilistic approach for improved buckling knock-down factors of CFRP cylindrical shells," 2008

H. Wang, A. P. Bueschel, R. Degenhardt, K. Rohwer, X. Sun, and W. Wagner, "An empirical formula for the critical perturbation load," 2008.

Degenhardt, Richard and Wilckens, Dirk and Rohwer, Klaus and Kepke, Markus and Hildebrandt, Bernd and Zipfel, Ary (2009) Experiments on buckling and postbuckling of thin-walled CFRP structures. 3rd European Conference for Aero-Space Sciences, 06.-09. Juli 2009, Paris, France.

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Wilckens, Dirk and Degenhardt, Richard and Rohwer, Klaus and Zimmermann, Rolf and Kepke, Markus and Hildebrandt, Bernd and Zipfel, Ary (2010) Cyclic buckling tests of pre-damaged CFRP stringer stiffened panels. *International Journal of Structural Stability and Dynamics*, 10 (4), pp. 827-853. Imperial College Press. ISSN 0219-4554.

Rohwer, Klaus (2012) Simulation of Fiber Composites: An Assessment. In: Adaptive, Tolerant and Efficient Composite Structures Research Topics in Aerospace. Springer Heidelberg New York Dordrecht London. pp. 131-152. ISBN 978-3-642-29189-0

Rohwer, Klaus (2013) Remarks on "A simple first-order shear deformation theory for laminated composite plates". *Composite Structures*. DOI: <http://dx.doi.org/10.1016/j.compstruct.2013.09.066>. ISSN 0263-8223. (In Press)