

Peer-Reviewed Journal Publications

- [16] M. Aßmus, V. A. Eremeyev, and A. Öchsner. "Foreword". In: *Continuum Mechanics and Thermodynamics* 33.4 (2021), pp. xxx–xxx. DOI: 10.1007/s00161-021-00975-8.
- [15] R. Glüge and M. Aßmus. "A systematic approach to reduce the independent tensor components by symmetry transformations - A commented translation of "Tensors and Crystal Symmetry" by Carl Hermann". In: *Continuum Mechanics and Thermodynamics* 33.4 (2021), pp. xxx–xxx. DOI: 10.1007/s00161-021-00978-5.
- [14] S. Bergmann, F. Hassani, Z. Javanbakht, and M. Aßmus. "On a Fast Analytical Approximation of Natural Frequencies for Photovoltaic Modules". In: *Technische Mechanik* 40.2 (2020), pp. 191–203. DOI: 10.24352/ub.ovgu-2020-025.
- [13] J. Nordmann, M. Aßmus, R. Glüge, and H. Altenbach. "On the Derivation of Hooke's Law for Plane State Conditions". In: *Technische Mechanik* 40.2 (2020), pp. 160–174. DOI: 10.24352/ub.ovgu-2020-023.
- [12] M. Aßmus, R. Glüge, and H. Altenbach. "On the Analytical Estimation for Isotropic Approximation of Elastic Properties applied to Polycrystalline Cubic Silicon used at Solar Cells". In: *Technische Mechanik* 40.2 (2020), pp. 120–133. DOI: 10.24352/ub.ovgu-2020-020.
- [11] Z. Javanbakht, M. Aßmus, K. Naumenko, A. Öchsner, and H. Altenbach. "On Thermal Strains and Residual Stresses in the Linear Theory of Anti-Sandwiches". In: *Zeitschrift für Angewandte Mathematik und Mechanik* 99.8 (2019), e201900062. DOI: 10.1002/zamm.201900062.
- [10] M. Aßmus, K. Naumenko, A. Öchsner, V. A. Eremeyev, and H. Altenbach. "A generalized framework towards structural mechanics of three-layered composite structures". In: *Technische Mechanik* 39.2 (2019), pp. 202–219. DOI: 10.24352/ub.ovgu-2019-019.
- [9] M. Haghi, M. Aßmus, K. Naumenko, and H. Altenbach. "Mechanical Models and Finite-Element Approaches for the Structural Analysis of Photovoltaic Composite Structures: A Comparative Study". In: *Mechanics of Composite Materials* 54.4 (2018), pp. 415–430. DOI: 10.1007/s11029-018-9752-6.
- [8] J. Nordmann, M. Aßmus, and H. Altenbach. "Visualising Elastic Anisotropy: Theoretical Background and Computational Implementation". In: *Continuum Mechanics and Thermodynamics* 30.4 (2018), pp. 689–708. DOI: 10.1007/s00161-018-0635-9.
- [7] M. Aßmus, K. Naumenko, and H. Altenbach. "Mechanical Behaviour of Photovoltaic Composite Structures: Influence of Geometric Dimensions and Material Properties on the Eigenfrequencies of Mechanical Vibrations". In: *Composites Communications* 6.- (2017), pp. 59–62. DOI: 10.1016/j.coco.2017.10.003.
- [6] M. Aßmus, J. Eisenträger, and H. Altenbach. "Projector Representation of Isotropic Linear Elastic Material Laws for Directed Surfaces". In: *Zeitschrift für Angewandte Mathematik und Mechanik* 97.12 (2017), pp. 1625–1634. DOI: 10.1002/zamm.201700122.
- [5] M. Aßmus, S. Bergmann, K. Naumenko, and H. Altenbach. "Mechanical Behaviour of Photovoltaic Composite Structures: A Parameter Study on the Influence of Geometric Dimensions and Material Properties under Static Loading". In: *Composites Communications* 5.- (2017), pp. 23–26. DOI: 10.1016/j.coco.2017.06.003.
- [4] M. Aßmus, J. Nordmann, K. Naumenko, and H. Altenbach. "A homogeneous substitute material for the core layer of photovoltaic composite structures". In: *Composites Part B: Engineering* 112.- (2017), pp. 353–372. DOI: 10.1016/j.compositesb.2016.12.042.
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- [2] M. Aßmus and M. Köhl. "Experimental investigation of the mechanical behavior of photovoltaic modules at defined inflow conditions". In: *Journal of Photonics for Energy* 2.1 (2012), pp. 1–11. DOI: 10.1117/1.JPE.2.022002.

- [1] M. Aßmus, S. Jack, K.-A. Weiß, and M. Köhl. “Measurement and simulation of vibrations of PV-modules induced by dynamic mechanical loads”. In: *Progress in Photovoltaics: Research and Applications* 19.6 (2011), pp. 688–694. DOI: 10.1002/pip.1087.

Reviewed Conference Contributions

- [4] M. Aßmus, J. Eisenträger, and H. Altenbach. “On isotropic linear elastic material laws for directed planes”. In: *Proceedings of the 11th International Conference on Shell Structures: Theory and Applications (SSTA 2017)*. Gdańsk, Poland, 2017, pp. 57–60. ISBN: 978-1138050457. DOI: 10.1201/9781315166605-7.
- [3] W. Herrmann, N. Bogdanski, F. Reil, M. Köhl, K.-A. Weiß, M. Aßmus, and M. Heck. “PV module degradation caused by thermomechanical stress: real impacts of outdoor weathering versus accelerated testing in the laboratory”. In: *Proceedings of the International Society for Optical Engineering (Reliability of Photovoltaic Cells, Modules, Components, and Systems III)*. Vol. 7773. San Diego, USA, 2010, p. 0I. DOI: 10.1117/12.859809.
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Contributions in Edited Volumes

- [6] M. Aßmus and H. Altenbach. “On Dynamic Optimality of Anti-Sandwiches”. In: *Dynamics and Control of Advanced Structures and Machines*. Ed. by H. Irschik, M. Krommer, V. P. Matveenko, and A. K. Belyaev. Vol. 156. Advanced Structured Materials. Singapore: Springer, 2021, pp. xx–xx. DOI: 10.1007/978-3-030-79325-8.
- [5] M. Aßmus and H. Altenbach. “On the Principles to Derive Plate Theories”. In: *Modern Trends in Structural and Solid Mechanics 2*. Ed. by N. Challamel, J. Kaplunov, and I. Takewaki. Mechanical Engineering and Solid Mechanics. London · Hoboken: ISTE - WILEY, 2021, pp. 29–42. DOI: 10.1002/9781119831860.ch2.
- [4] M. Aßmus and H. Altenbach. “A mathematically consistent vector-matrix representation of generalized Hooke’s law for shear-rigid plates”. In: *Nonlinear Wave Dynamics of Materials and Structures*. Ed. by H. Altenbach, V. A. Eremeyev, I. Pavlov, and A. Porubov. Vol. 122. Advanced Structured Materials. Singapore: Springer, 2020, pp. 57–67. DOI: 10.1007/978-3-030-38708-2_3.
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Edited Special Issues

- [1] M. Aßmus, V. A. Eremeyev, and A. Öchsner , eds. “A Life devoted to Advances in Continuum Mechanics of Material and Structural Behavior”. In: *Continuum Mechanics and Thermodynamics* 33.4 (2021), pp. 1–xxx. DOI: 10.1007/s00161-021-00978.

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- [1] K. Naumenko and M. Aßmus, eds. *Advanced Methods of Continuum Mechanics for Materials and Structures*. Vol. 60. Advanced Structured Materials. Singapore: Springer, 2016. DOI: 10.1007/978-981-10-0959-4.

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- [1] M. Aßmus. *Structural Mechanics of Anti-Sandwiches. An Introduction*. SpringerBriefs in Continuum Mechanics. Cham: Springer, 2019. DOI: 10.1007/978-3-030-04354-4.