

Prof. Dr. Klaus Richter

Publications (reviewed, book chapters, proceedings, etc.) since year 2000 in chronological order:

1. Peer reviewed journals (SCI/SCIE)

- Ringman R, Pilgård A., Koelle M., Brischke. C., Richter K. 2016. Effects of thermal modification on Postia placenta wood degradation dynamics: measurements of mass loss, structural integrity and gene expression. *Wood Sci Technol.* 50,
- Richter, K. 2015. Wood adhesion: status and trends for future development. *Pro Ligno* 11, 4, 3-9.
- Kain G., Barbu M., Richter K., Plank B., Tondi G., Petutschnigg A. 2015. Use of tree bark as insulation material. In: *Proceedings of PTF BPI International Conference 2014. Forest Products Journal* 65, ¾, 16 – 25
- Kain G., Güttler V., Lienbacher B., Barbu M., Petutschnigg A., Richter K., Tondi G. 2015. Effects of different flavonoid extracts in the optimization of tannin-glued bark insulation boards. *Wood and Fiber Science*, 47,3,1-12.
- Wilnhammer M., Lubenau C., Wittkopf S., Richter K., Weber-Blaschke G. 2015. Effects of increased wood energy consumption on global warming potential, primary energy demand and particulate matter emissions on regional level based on the case study area Bavaria (Southeast Germany). *Biomass and Bioenergy*, 81, 190 -201, DOI:10.1016/j.biombioe.2015.06.025
- Detter A., Richter K., Rust C., Rust S. 2015. Aktuelle Untersuchungen zum Primärversagen von grünem Holz. *Holzanatomische Voraussetzungen und mechanische Auswirkungen. Jahrbuch der Baumpflege*, 156 – 167.
- Kain G., Charwat-Pessler J., Barbu M., Plank B., Richter K., Petutschnigg A. 2015. Analyzing wood bark insulation board structure using X-ray computed tomography and modelling its thermal conductivity by means of finite difference method. *Journal of Composite Materials*; DOI: 10.1177/0021998315581511
- Wolf C, Klein D, Weber-Blaschke G, Richter K 2015. Systematic Review and Meta-Analysis of Life Cycle Assessments for Wood Energy Services. *Journal of Industrial Ecology*, accept. Feb. 2015
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- Höglmeier K., Streubing B., Weber-Blaschke G., Richter K. 2015. LCA-based optimization of wood utilization under special consideration of a cascading use of wood. *Journal of Environmental Management* 152, 158 -170.
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- Höglmeier K, Weber-Blaschke G, Richter K. 2014. Utilization of recovered wood in cascades versus utilization of primary wood—a comparison with life cycle assessment using system expansion. *Int J Life Cycle Assess* 19, 10, 1755-1766.
- Kain G, Güttler V, Barbu M, Petutschnigg A, Richter K, Tondi G. 2014. Density related properties of bark insulation boards bonded with tannin hexamine resin. *Eur. J. Wood Prod.* 72: 417-427
- Ringman R, Pilgård A., Brischke. C., Richter K. 2014. Mode of action of brown rot decay resistance in modified wood: a review. *Holzforschung* 68 (2): 239–246.
- Živković V., Arnold M., Radmanovic K., Richter K., Turkulin H. 2014. Spectral sensitivity in the photodegradation of fir wood (*Abies alba* Mill.) surfaces: colour changes in natural weathering. *Wood Sci Technol* 48:239–252
- Ringman R, Pilgård A., Richter K. 2014. Effect of wood modification on gene expression during incipient *Postia placenta* decay. *International Biodeterioration & Biodegradation* 86, 86-91
- Hoeglmeier K, Weber-Blaschke G, Richter K. 2013. Potentials for cascading of recovered wood from building deconstruction - A case study for south-east Germany. *Resources, Conservation and Recycling* 78, 81– 91.
- Kain G., Barbu M., Hinterreiter S., Richter K., Petutschnigg A. 2013. Using Bark as Heat Insulation Material. *Bioresources* 8, 3, 3718 – 3731.
- Soode E., Weber-Blaschke G., Richter K. 2013. Comparison of product carbon footprint standards with a case study on poinsettia (*Euphorbia pulcherrima*). *Int J Life Cycle Assess* 18, 7, 1280-1290
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- Steiger R., Gehri E., Richter K. 2010. Quality control of glulam: shear testing of bondlines. *Eur. J. Wood Prod.* 68; 246 -256
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- Bordeanu N., Eyholzer, C., Zimmermann T., Richter K. 2008. Chemical routes for functional redispersible cellulose nanofibrils. *Abstracts of Papers of the American Chemical Society*, 235: -222-Cell.
- Werner F., Richter K. 2007. Wooden Building Products in Comparative LCA. A Literature Review *Int J LCA* 12, 470-479.
- Werner F., Althaus H-J., Richter K., Scholz R.W. 2007. Post-Consumer Waste Wood in Attributive Product LCA. Context specific evaluation of allocation procedures in a functionalistic conception of LCA. *Int J LCA* 12, 160 -172.
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- Turkulin H., Richter K., Sell J. 2000. Adhesion of waterborne acrylic and hybrid paint on wood treated with primers. *Drvna Industrija* 51,4,171-184
- Werner F., Richter K. 2000. Economic Allocation and Value-Corrected Substitution. *Int. J.LCA* 5, 4, 189-190
- Werner F., Richter K. 2000. Economic Allocation in LCA. A Case Study About Aluminium Window Frames. *Int. J.LCA* 5, 2, 79-83

2. Book chapter (reviewed)

- Höglmeier K.; Weber-Blaschke G.; Richter K. 2015. Evaluation of wood cascading. In: Dewulf et al. (eds) *Sustainability Assessment of Renewables-Based Products: Methods and Case Studies*, Wiley Publ. 335 – 345.
- Richter K. 2009. Perspektiven der stofflichen Verwendung von Holz. In: Thees O., Lemm R. (Hrsg.) *Management zukunftsfähige Waldnutzung. Grundlagen, Methoden und Instrumente*. Zürich, vdf Hochschulverlag. 697-714
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3. Research reports (published)

- Weber-Blaschke G., Lubenau C., Wilnhammer M., Härtl F., Friedrich S., Hammerl R., Helm S., Helm D., Borchert H., Wittkopf S., Knoke T., Richter K 2015. Konkurrenz um Holz: Ökologische, soziale und ökonomische Effekte der stofflichen und energetischen Verwertung von Holz. Abschlussbericht der Technischen Universität München, Hochschule Weihenstephan-Triesdorf und Bayerischen Landesanstalt für Wald und Forstwirtschaft, Freising. Langfassung, 266 S.
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- Kellenberger D., Richter K., Althaus H.-J. 2005. Ökologische und ökonomische Untersuchung und Bewertung der Wohngebäude München-Friedenspromenade und Messestadt Riem. GEWOFAG München, 71 S.
- Werner F., Althaus H.-J., Künniger T., Richter K. and Jungbluth N. 2003. Life Cycle Inventories of Wood as Fuel and Construction Material. Final report ecoinvent 2000 No. 9. Swiss Centre for Life Cycle Inventories, Dübendorf, CH, retrieved from: www.ecoinvent.ch.
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4. Professional Journals

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5. Conference proceedings

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- Widmann R., Beilkircher W., Richter K. 2007. Bending and tension strength of finger-jointed boards made of thermally treated beech. Proceedings of the 5th COST E23 International Workshop 'Bonding of Modified Wood' Bled, Slovenia, p. 39 – 45.
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- Richter K. 2002. Ökologische Beurteilung der Holzverwendung: Von Ökobilanzen zur Modellierung von Kohlenstoff-Flüssen. Proceedings, Waldumbau im globalen Wandel. Forstwissenschaftliche Tagung Göttingen 9.-11.Oktober 2002, S. 51 – 52.
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