

Peer-reviewed publications

- Sophie Debaenst, Tamara Jarayseh, Hanna De Saffel, Jan Willem Bek, Matthieu Boone, Ivan Josipovic, **Pierre Kibleur**, Ronald Y. Kwon, Paul Coucke, and Andy Willaert. Crispant analysis in zebrafish as a tool for rapid functional screening of disease-causing genes for bone fragility, *eLife*, 2024.
- Caori Organista, Ruizhi Tang, Zhitian Shi, Konstantins Jefimovs, Daniel Josell, Lucia Romano, Simon Spindler, **Pierre Kibleur**, Benjamin Blykers, Marco Stampanoni, and Matthieu N. Boone. Implementation of a dual-phase grating interferometer for multi-scale characterization of building materials by tunable dark-field imaging, *Scientific Reports*, 2024.
- Sofie Dierickx, Siska Genbrugge, Hans Beeckman, Wannes Hubau, **Pierre Kibleur**, and Jan Van den Bulcke. Non-destructive wood identification using X-ray μ CT scanning: which resolution do we need?, *Plant Methods*, 2024.
- Zaira Manigrasso, Wannes Goethals, **Pierre Kibleur**, Matthieu N. Boone, Wilfried Philips, and Jan Aelterman. Image-Based Crack Detection Using Total Variation Strain DVC Regularization, *Applied Sciences*, 2023.
- **Pierre Kibleur**, Benjamin Blykers, Matthieu N. Boone, Luc Van Hoorebeke, Joris Van Acker, and Jan Van den Bulcke. Detecting thin adhesive coatings in wood fiber materials with laboratory-based Dual-Energy Computed Tomography (DECT), *Scientific Reports*, 2022.
- **Pierre Kibleur**, Zaira Manigrasso, Wannes Goethals, Jan Aelterman, Matthieu N. Boone, Joris Van Acker, and Jan Van den Bulcke. Microscopic deformations in MDF swelling: a unique 4D-CT characterization, *Materials and Structures*, 2022.
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- Yuriy Sinchuk, **Pierre Kibleur**, Jan Aelterman, Matthieu N. Boone, and Wim Van Paepegem. Geometrical and deep learning approaches for instance segmentation of CFRP fiber bundles in textile composites, *Composite Structures*, 2021.
- Jure Žigon, Matjaž Pavlič, **Pierre Kibleur**, Jan Van den Bulcke, Marko Petrič, Joris Van Acker, and Sebastian Dahle. Treatment of wood with atmospheric plasma discharge: study of the treatment process, dynamic wettability and interactions with a waterborne coating, *Holzforschung*, 2021.
- **Pierre Kibleur**, Shravan R. Tata, Nathan Greiner, Sara Conti, Beatrice Barra, Katie Zhuang, Melanie Kaeser, Auke Ijspeert, and Marco Capogrosso. Spatiotemporal maps of proprioceptive inputs to the cervical spinal cord during three-dimensional reaching and grasping, *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, 2020.
- Yuriy Sinchuk, **Pierre Kibleur**, Jan Aelterman, Matthieu N. Boone, and Wim Van Paepegem. Variational and deep learning segmentation of very-low-contrast X-ray computed tomography images of carbon/epoxy woven composites, *Materials*, 2020.
- Wanzhao Li, Zheng Zhang, Guoqiang Zhou, **Pierre Kibleur**, Changtong Mei, Jiangtao Shi, Joris Van Acker, and Jan Van den Bulcke. The effect of structural changes on the compressive strength of LVL, *Wood Science and Technology*, 2020.
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