

A transparent three-layered laminate composed of poly(methyl methacrylate) and thermoplastic polyurethane subjected to low-velocity impact

## Journal Pre-proof

A transparent three-layered laminate composed of poly(methyl methacrylate) and thermoplastic polyurethane subjected to low-velocity impact

Andreas Rühl, Stefan Kolling, Jens Schneider

PII: S0734-743X(19)30743-2  
DOI: <https://doi.org/10.1016/j.ijimpeng.2019.103419>  
Reference: IE 103419



To appear in: *International Journal of Impact Engineering*

Received date: 2 July 2019  
Revised date: 21 September 2019  
Accepted date: 22 October 2019

Please cite this article as: Andreas Rühl, Stefan Kolling, Jens Schneider, A transparent three-layered laminate composed of poly(methyl methacrylate) and thermoplastic polyurethane subjected to low-velocity impact, *International Journal of Impact Engineering* (2019), doi: <https://doi.org/10.1016/j.ijimpeng.2019.103419>

This is a PDF file of an article that has undergone enhancements after acceptance, such as the addition of a cover page and metadata, and formatting for readability, but it is not yet the definitive version of record. This version will undergo additional copyediting, typesetting and review before it is published in its final form, but we are providing this version to give early visibility of the article. Please note that, during the production process, errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

© 2019 Published by Elsevier Ltd.

**Highlights**

- Presents experimental results of a novel transparent polymeric laminate as an alternative to conventional safety glass laminates
- Shows time and temperature dependent simulations of a polymeric laminate that are validated by experiments
- Outlines a novel investigation of interlayer heating within a polymeric laminate
- Presents Finite Element and material models for the application in mechanical and thermomechanically coupled simulations

Download English Version:

<https://daneshyari.com/en/article/13450933>

Download Persian Version:

<https://daneshyari.com/article/13450933>

[Daneshyari.com](https://daneshyari.com)