Bernhard Plank

List of Publications by Year
in descending order

33 papers	549 citations	687220 13 h-index	642610 23 g-index
34 all docs	34 docs citations	34 times ranked	618 citing authors

#	Article	IF	Citations
1	Laminate fibre structure characterisation of carbon fibre-reinforced polymers by X-ray scatter dark field imaging with a grating interferometer. NDT and E International, 2013, 58, 64-71.	1.7	74
2	Active thermography as a quantitative method for non-destructive evaluation of porous carbon fiber reinforced polymers. NDT and E International, 2011, 44, 537-543.	1.7	68
3	Computation of permeability of a non-crimp carbon textile reinforcement based on X-ray computed tomography images. Composites Part A: Applied Science and Manufacturing, 2016, 81, 289-295.	3.8	50
4	Influence of fiber orientation and length distribution on the rheological characterization of glass-fiber-filled polypropylene. Polymer Testing, 2013, 32, 535-544.	2.3	47
5	Microcrack characterization in loaded CFRP laminates using quantitative two- and three-dimensional X-ray dark-field imaging. Composites Part A: Applied Science and Manufacturing, 2018, 115, 206-214.	3.8	39
6	Fibre structure characterisation of injection moulded short fibre-reinforced polymers by X-ray scatter dark field tomography. Case Studies in Nondestructive Testing and Evaluation, 2015, 3, 34-41.	1.7	36
7	Porosity Determination of Carbon and Glass Fibre Reinforced Polymers Using Phase-Contrast Imaging. Journal of Nondestructive Evaluation, 2019, 38, 1.	1.1	27
8	Non-destructive characterisation of polymers and Al-alloys by polychromatic cone-beam phase contrast tomography. Materials Characterization, 2012, 64, 79-87.	1.9	25
9	Full-field optical coherence microscopy with a sub-nanosecond supercontinuum light source for material research. Optical Fiber Technology, 2012, 18, 403-410.	1.4	24
10	Microstructure of viscoelastic thermal compressed (VTC) wood using computed microtomography. Wood Science and Technology, 2013, 47, 121-139.	1.4	24
11	Radial shrinkage and ultrasound acoustic emissions of fresh versus pre-dried Norway spruce sapwood. Trees - Structure and Function, 2010, 24, 931-940.	0.9	21
12	Evaluation of relationships between particle orientation and thermal conductivity in bark insulation board by means of CT and discrete modeling. Case Studies in Nondestructive Testing and Evaluation, 2016, 6, 21-29.	1.7	16
13	Beech wood shrinkage observed at the micro-scale by a time series of X-ray computed tomographs (Î¼XCT). Holzforschung, 2013, 67, 201-205.	0.9	15
14	Non-Destructive Evaluation of Defects in Polymer Matrix Composites for Aerospace Applications Using X-ray Talbot-Lau Interferometry and Micro CT. , 2017, , .		14
15	Analyzing wood bark insulation board structure using X-ray computed tomography and modeling its thermal conductivity by means of finite difference method. Journal of Composite Materials, 2016, 50, 795-806.	1.2	11
16	Quantitative evaluation of the effective thermal diffusivity for model-based porosity prediction in CFRP. Quantitative InfraRed Thermography Journal, 2016, 13, 70-82.	2.1	6
17	Influence of consolidating process on the properties of composites from thermosetting carbon fiber reinforced tapes. Polymer Composites, 2022, 43, 4268-4279.	2.3	6
18	Characterisation of Anisotropic Fibre Orientation in Composites by Means of X-Ray Grating Interferometry Computed Tomography. Materials Science Forum, 2015, 825-826, 868-875.	0.3	5

#	Article	IF	Citations
19	Stress analysis of nano porous material using computed tomography images. Materialwissenschaft Und Werkstofftechnik, 2019, 50, 234-239.	0.5	4
20	Fiber Orientation Distribution Predictions for an Injection Molded Venturi-Shaped Part Validated Against Experimental Micro-Computed Tomography Characterization. Frontiers in Materials, 2020, 7, .	1.2	4
21	Influence of thermal deconsolidation on the anisotropic thermal conductivity of glass fiber reinforced, preâ€consolidated polypropylene sheets used for thermoforming applications. Polymer Composites, 2022, 43, 2264-2275.	2.3	4
22	Influence of Rapid Consolidation on Co-Extruded Additively Manufactured Composites. Polymers, 2022, 14, 1838.	2.0	4
23	Assessment of Mechanical Properties of Wood-Leather Panels and the Differences in the Panel Structure by Means of X-Ray Computed Tomography. BioResources, 2012, 8, .	0.5	3
24	A Bone Sample Containing a Bone Graft Substitute Analyzed by Correlating Density Information Obtained by X-ray Micro Tomography with Compositional Information Obtained by Raman Microscopy. Materials, 2015, 8, 3831-3853.	1.3	3
25	Visual classification of braided and woven fiber bundles in X-ray computed tomography scanned carbon fiber reinforced polymer specimens. Case Studies in Nondestructive Testing and Evaluation, 2016, 6, 39-46.	1.7	3
26	Finite element modeling of nano porous sintered silver material using computed tomography images. Materialwissenschaft Und Werkstofftechnik, 2019, 50, 533-538.	0.5	3
27	Optimized Segmentation of the 3D Microstructure in Cast Al-Si Piston Alloys. Praktische Metallographie/Practical Metallography, 2018, 55, 223-243.	0.1	3
28	Improving CT Image Analysis of Augmented Bone with Raman Spectroscopy. Journal of Applied Mathematics, 2013, 2013, 1-10.	0.4	2
29	Challenges for Grating Interferometer X-ray Computed Tomography for Practical Applications In Industry. Insight: Non-Destructive Testing and Condition Monitoring, 2019, 61, 149-152.	0.3	2
30	Process-induced failure mode transition of compression molded discontinuous carbon fiber composites: From coupon to component level. Composites Part B: Engineering, 2022, , 110021.	5.9	2
31	Dauerhaftigkeit und mechanische StabilitÃt von Terrassendielen bei erhÃ¶hter Temperatur â€“ Ein Werkstoffvergleich: WPC, thermisch modifiziertes Holz und Massivholz. European Journal of Wood and Wood Products, 2014, 72, 815-823.	1.3	1
32	Kirkendall Effect in Twin-Roll Cast AA 3003 Aluminum Alloy. Crystals, 2022, 12, 607.	1.0	1
33	High-resolution X-ray computed tomography simulations of synthetically-generated volume porosity in continuous carbon fibre-reinforced polymer samples. Nondestructive Testing and Evaluation, 2022, 37, 645-665.	1.1	1