

David Mannes

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9109968/publications.pdf>

Version: 2024-02-01

66
papers

1,294
citations

304602

22
h-index

395590

33
g-index

71
all docs

71
docs citations

71
times ranked

1519
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Neutron Imaging of Cultural Heritage Objects. , 2022, , 211-237. | | 3 |
| 2 | Particle tracking velocimetry in liquid gallium flow around a cylindrical obstacle. Experiments in Fluids, 2022, 63, . | 1.1 | 2 |
| 3 | Frequency dependent mechanical properties of violin varnishes and their impact on vibro-mechanical tonewood properties. Results in Materials, 2021, 9, 100137. | 0.9 | 6 |
| 4 | Neutron and X-ray tomography in cultural heritage studies. , 2021, , 133-159. | | 1 |
| 5 | The XTRA Option at the NEUTRA Facilityâ€”More Than 10 Years of Bi-Modal Neutron and X-ray Imaging at PSI. Applied Sciences (Switzerland), 2021, 11, 3825. | 1.3 | 9 |
| 6 | Highly Concentrated, Zwitterionic Ligand-Capped Mn ²⁺ :CsPb(Br _x Cl _{1-x}) ₃ Nanocrystals as Bright Scintillators for Fast Neutron Imaging. ACS Energy Letters, 2021, 6, 4365-4373. | 8.8 | 30 |
| 7 | Effect of coating systems as a barrier to humidity for lutherie woods studied by neutron radiography. Journal of Cultural Heritage, 2020, 43, 255-260. | 1.5 | 0 |
| 8 | Freeze-Drying with Structured Sublimation Frontsâ€”Visualization with Neutron Imaging. Processes, 2020, 8, 1091. | 1.3 | 12 |
| 9 | Fast Neutron Imaging with Semiconductor Nanocrystal Scintillators. ACS Nano, 2020, 14, 14686-14697. | 7.3 | 34 |
| 10 | Bragg-edge attenuation spectra at voxel level from 4D wavelength-resolved neutron tomography. Journal of Applied Crystallography, 2020, 53, 188-196. | 1.9 | 15 |
| 11 | Violin varnish induced changes in the vibro-mechanical properties of spruce and maple wood. Holzforschung, 2020, 74, 765-776. | 0.9 | 8 |
| 12 | Influence of varnishing on the vibro-mechanical properties of wood used for violins. Journal of Materials Science, 2019, 54, 8063-8095. | 1.7 | 13 |
| 13 | The influence of multi-layered varnishes on moisture protection and vibrational properties of violin wood. Scientific Reports, 2019, 9, 18611. | 1.6 | 12 |
| 14 | Implementation and assessment of the black body bias correction in quantitative neutron imaging. PLoS ONE, 2019, 14, e0210300. | 1.1 | 51 |
| 15 | Saline Water Evaporation and Crystallization-Induced Deformations in Building Stone: Insights from High-Resolution Neutron Radiography. Transport in Porous Media, 2019, 128, 895-913. | 1.2 | 14 |
| 16 | Clogging in stacked-in needle pre-filled syringes (SIN-PFS): Influence of water vapor transmission through the needle shield. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 127, 104-111. | 2.0 | 10 |
| 17 | A Monte Carlo approach for scattering correction towards quantitative neutron imaging of polycrystals. Journal of Applied Crystallography, 2018, 51, 386-394. | 1.9 | 8 |
| 18 | Space-resolved study of binder burnout process in dry pressed ZnO ceramics by neutron imaging. Journal of the European Ceramic Society, 2018, 38, 5448-5453. | 2.8 | 2 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Neutron imaging as tool for investigations on historical musical instruments. Journal of Archaeological Science: Reports, 2018, 20, 239-243. | 0.2 | 2 |
| 20 | Chasing quantitative biases in neutron imaging with scintillator-camera detectors: a practical method with black body grids. Optics Express, 2018, 26, 15769. | 1.7 | 60 |
| 21 | On the needle clogging of staked-in-needle pre-filled syringes: Mechanism of liquid entering the needle and solidification process. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 128, 272-281. | 2.0 | 11 |
| 22 | Neutron Radiography and Tomography: A New Approach to Visualize the Internal Structures of Pearls. Journal of Gemmology, 2018, 36, 54-63. | 0.1 | 2 |
| 23 | Distribution of moisture in reconstructed oil paintings on canvas during absorption and drying: A neutron radiography and NMR study. Studies in Conservation, 2017, 62, 393-409. | 0.6 | 15 |
| 24 | Gemmological Investigations on Pearls and Emeralds using Neutron Imaging. Physics Procedia, 2017, 88, 134-139. | 1.2 | 3 |
| 25 | Design and Applications of a Climatic Chamber for in-situ Neutron Imaging Experiments. Physics Procedia, 2017, 88, 200-207. | 1.2 | 10 |
| 26 | Neutron Imaging: A Non-Destructive Testing Method to Investigate Canned Exhaust After-Treatment System Components for the Three Dimensional Soot, Ash, Urea and Coating Distributions. , 2016, , . | | 2 |
| 27 | Investigating plywood behaviour in outdoor conditions. International Wood Products Journal, 2016, 7, 220-224. | 0.6 | 2 |
| 28 | Probing inside fruit slices during convective drying by quantitative neutron imaging. Journal of Food Engineering, 2016, 178, 198-202. | 2.7 | 30 |
| 29 | Electrical conductivity sensors for water penetration monitoring in building masonry materials. Materials and Structures/Materiaux Et Constructions, 2016, 49, 2535-2547. | 1.3 | 20 |
| 30 | Combined Neutron and X-ray Imaging for Non-invasive Investigations of Cultural Heritage Objects. Physics Procedia, 2015, 69, 653-660. | 1.2 | 57 |
| 31 | Gas Evolution in Operating Lithium-Ion Batteries Studied In Situ by Neutron Imaging. Scientific Reports, 2015, 5, 15627. | 1.6 | 104 |
| 32 | On-the-fly Neutron Tomography of Water Transport into Lupine Roots. Physics Procedia, 2015, 69, 292-298. | 1.2 | 23 |
| 33 | Non-destructive Investigation of "The Violinist" a Lead Sculpture by Pablo Gargallo, Using the Neutron Imaging Facility NEUTRA in the Paul Scherrer Institute. Physics Procedia, 2015, 69, 636-645. | 1.2 | 8 |
| 34 | Untersuchungen zur Wasserdampfdurchlässigkeit von Beschichtungen auf Holz für den Außenbereich. Bauphysik, 2015, 37, 186-195. | 1.2 | 1 |
| 35 | Neutron imaging methods for the investigation of energy related materials. EPJ Web of Conferences, 2015, 104, 01007. | 0.1 | 2 |
| 36 | On-line monitoring of hygroscopicity and dimensional changes of wood during thermal modification by means of neutron imaging methods. Holzforschung, 2015, 69, 87-95. | 0.9 | 19 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Adaptive Neutron Radiography Correlation for Simultaneous Imaging of Moisture Transport and Deformation in Hygroscopic Materials. <i>Experimental Mechanics</i> , 2015, 55, 403-415. | 1.1 | 10 |
| 38 | Investigations into the influence of two different wood coatings on water diffusion determined by means of neutron imaging. <i>European Journal of Wood and Wood Products</i> , 2015, 73, 793-799. | 1.3 | 12 |
| 39 | The cork viewed from the inside. <i>Journal of Food Engineering</i> , 2015, 149, 214-221. | 2.7 | 30 |
| 40 | Beyond the Visible: Combined Neutron and X-ray Imaging of an Altar Stone from the Former Augustinian Church in Fribourg, Switzerland. <i>Archaeometry</i> , 2014, 56, 717-727. | 0.6 | 6 |
| 41 | The olive-branch dating of the Santorini eruption. <i>Antiquity</i> , 2014, 88, 267-273. | 0.5 | 25 |
| 42 | Combination of neutron imaging (NI) and digital image correlation (DIC) to determine intra-ring moisture variation in Norway spruce. <i>Holzforschung</i> , 2014, 68, 113-122. | 0.9 | 15 |
| 43 | Impact of internal structure on water-resistance of plywood studied using neutron radiography and X-ray tomography. <i>Construction and Building Materials</i> , 2014, 73, 171-179. | 3.2 | 28 |
| 44 | Water vapour diffusion through historically relevant gluten-based wood adhesives with sorption measurements and neutron radiography. <i>Wood Science and Technology</i> , 2014, 48, 591-609. | 1.4 | 14 |
| 45 | Untersuchungen zum Einfluss der Feuchtigkeit auf die Haftfestigkeit von Oberflächenbeschichtungen auf Holz. <i>Bauphysik</i> , 2014, 36, 337-342. | 1.2 | 1 |
| 46 | Progress in Industrial Applications using Modern Neutron Imaging Techniques. <i>Physics Procedia</i> , 2013, 43, 231-242. | 1.2 | 28 |
| 47 | Characterizing saline uptake and salt distributions in porous limestone with neutron radiography and X-ray micro-tomography. <i>Journal of Building Physics</i> , 2013, 36, 353-374. | 1.2 | 34 |
| 48 | Olive Tree-Ring Problematic Dating: A Comparative Analysis on Santorini (Greece). <i>PLoS ONE</i> , 2013, 8, e54730. | 1.1 | 60 |
| 49 | Within-ring movement of free water in dehydrating Norway spruce sapwood visualized by neutron radiography. <i>Holzforschung</i> , 2012, 66, 751-756. | 0.9 | 13 |
| 50 | Visualising the Soot and Ash Distribution in Diesel Particulate Filters Using Neutron Imaging. <i>MTZ Worldwide</i> , 2012, 73, 56-61. | 0.1 | 3 |
| 51 | Visualization and quantification of liquid water transport in softwood by means of neutron radiography. <i>International Journal of Heat and Mass Transfer</i> , 2012, 55, 6211-6221. | 2.5 | 87 |
| 52 | Wood investigations by means of radiation transmission techniques. <i>Journal of Cultural Heritage</i> , 2012, 13, S35-S43. | 1.5 | 18 |
| 53 | Non-destructive testing of wood and wood-based materials. <i>Journal of Cultural Heritage</i> , 2012, 13, S26-S34. | 1.5 | 56 |
| 54 | Untersuchungen zum Einfluss der Klebstoffart auf den kapillaren Wassertransport in Holz parallel zur Faserrichtung. <i>Bauphysik</i> , 2012, 34, 61-65. | 1.2 | 5 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | Combination of X-ray and digital image correlation for the analysis of moisture-induced strain in wood: opportunities and challenges. <i>European Journal of Wood and Wood Products</i> , 2012, 70, 407-413. | 1.3 | 27 |
| 56 | High-resolution proxies for wood density variations in <i>Terminalia superba</i> . <i>Annals of Botany</i> , 2011, 107, 293-302. | 1.4 | 44 |
| 57 | Quantitative determination of bound water diffusion in multilayer boards by means of neutron imaging. <i>European Journal of Wood and Wood Products</i> , 2010, 68, 341-350. | 1.3 | 24 |
| 58 | Application areas of synchrotron radiation tomographic microscopy for wood research. <i>Wood Science and Technology</i> , 2010, 44, 67-84. | 1.4 | 37 |
| 59 | Untersuchungen zum Wasseraufnahmekoeffizienten von Holz bei Variation von Holzart und Feuchtigkeitsgehalt. <i>Bauphysik</i> , 2010, 32, 149-153. | 1.2 | 9 |
| 60 | Untersuchungen zum Verhalten von mit Nanopartikeln imprägniertem Holz bei Freibewitterung. <i>Bauphysik</i> , 2010, 32, 226-232. | 1.2 | 2 |
| 61 | Non-destructive determination and quantification of diffusion processes in wood by means of neutron imaging. <i>Holzforschung</i> , 2009, 63, 589-596. | 0.9 | 34 |
| 62 | Neutron attenuation coefficients for non-invasive quantification of wood properties. <i>Holzforschung</i> , 2009, 63, 472-478. | 0.9 | 19 |
| 63 | Neutron imaging versus standard X-ray densitometry as method to measure tree-ring wood density. <i>Trees - Structure and Function</i> , 2007, 21, 605-612. | 0.9 | 36 |
| 64 | Vergleichende Untersuchungen zu ausgewählten mechanischen Eigenschaften von Eibe und Fichte Comparative studies on selected mechanical properties of yew and spruce (reviewed paper). <i>Schweizerische Zeitschrift Für Forstwesen</i> , 2005, 156, 85-91. | 0.5 | 7 |
| 65 | Untersuchungen zu ausgewählten mechanischen Eigenschaften von Eschenholz Investigation into certain mechanical properties of ash. <i>Schweizerische Zeitschrift Für Forstwesen</i> , 2005, 156, 432-437. | 0.5 | 0 |
| 66 | Ideengeber Holz – ein Überblick Wood: a provider of ideas – an overview. <i>Schweizerische Zeitschrift Für Forstwesen</i> , 2003, 154, 494-497. | 0.5 | 0 |