

# Steven Delrue

## List of Publications by Year in descending order

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Version: 2024-02-01

31  
papers

534  
citations

687363

13  
h-index

642732

23  
g-index

35  
all docs

35  
docs citations

35  
times ranked

446  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Qualitative analysis of a 3D multiphysics model for nonlinear ultrasonics and vibration induced heating at closed defects. <i>Research in Nondestructive Evaluation</i> , 2022, 33, 17-32.                              | 1.1 | 1         |
| 2  | On the potential of demand-controlled ventilation system to enhance indoor air quality and thermal condition in Australian school classrooms. <i>Energy and Buildings</i> , 2021, 238, 110838.                          | 6.7 | 42        |
| 3  | Optimal Design Parameters for a Phased-Array-Based Ultrasonic Polar Scan. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2021, 68, 2781-2793.   | 3.0 | 0         |
| 4  | A damped forward EMI model for a horizontally stratified earth. <i>Exploration Geophysics</i> , 2020, 51, 422-433.  | 1.1 | 1         |
| 5  | 3D modeling for acoustic waves and vibrations in solid structures with frictional cracks. <i>Proceedings of Meetings on Acoustics</i> , 2019, , .   | 0.3 | 0         |
| 6  | Theoretical calculation of the instantaneous friction-induced energy losses in arbitrarily excited axisymmetric mechanical contact systems. <i>International Journal of Solids and Structures</i> , 2019, 158, 268-276. | 2.7 | 13        |
| 7  | Simulation of a circular phased array for a portable ultrasonic polar scan. <i>AIP Conference Proceedings</i> , 2018, , .   | 0.4 | 3         |
| 8  | Two dimensional modeling of elastic wave propagation in solids containing cracks with rough surfaces and friction " Part II: Numerical implementation. <i>Ultrasonics</i> , 2018, 82, 19-30.                            | 3.9 | 39        |
| 9  | Two dimensional modeling of elastic wave propagation in solids containing cracks with rough surfaces and friction " Part I: Theoretical background. <i>Ultrasonics</i> , 2018, 82, 11-18.                               | 3.9 | 32        |
| 10 | Matching Spectroscopy with the Ultrasonic Polar Scan for Advanced NDT of Composites. <i>Proceedings (mdpi)</i> , 2018, 2, .   | 0.2 | 2         |
| 11 | Towards a Phased Array Based Ultrasonic Polar Scan: Simulation Study and Comparison with Plane Wave Results. <i>Proceedings (mdpi)</i> , 2018, 2, .   | 0.2 | 0         |
| 12 | Detection and Characterization of Local Defect Resonances Arising from Delaminations and Flat Bottom Holes. <i>Journal of Nondestructive Evaluation</i> , 2017, 36, 1.  | 2.4 | 46        |
| 13 | Pulse-Inversion Chirp-Coded Weld Harmonic Imaging (PI-CWHI) of Friction Stir Welded Butt-Joint. <i>Journal of Nondestructive Evaluation</i> , 2017, 36, 1.  | 2.4 | 1         |
| 14 | Numerical study of the Time-of-Flight Pulsed Ultrasonic Polar Scan for the determination of the full elasticity tensor of orthotropic plates. <i>Composite Structures</i> , 2017, 180, 29-40.                           | 5.8 | 16        |
| 15 | Simulation Study of the Localization of a Near-Surface Crack Using an Air-Coupled Ultrasonic Sensor Array. <i>Sensors</i> , 2017, 17, 930.  | 3.8 | 7         |
| 16 | Visualization of Delaminations in Composite Structures Using a Baseline-Free, Sparse Array Imaging Technique Based on Nonlinear Lamb Wave Propagation. <i>Acta Acustica United With Acustica</i> , 2017, 103, 987-997.  | 0.8 | 15        |
| 17 | The Ultrasonic Polar Scan for Composite Characterization and Damage Assessment: Past, Present and Future. <i>Applied Sciences (Switzerland)</i> , 2016, 6, 58.  | 2.5 | 22        |
| 18 | Linear and Nonlinear Guided Wave Imaging of Impact Damage in CFRP Using a Probabilistic Approach. <i>Materials</i> , 2016, 9, 901.  | 2.9 | 44        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Applying a nonlinear, pitch-catch, ultrasonic technique for the detection of kissing bonds in friction stir welds. <i>Ultrasonics</i> , 2016, 68, 71-79.                   | 3.9 | 32        |
| 20 | Non-destructive ultrasonic examination of root defects in friction stir welded butt-joints. <i>NDT and E International</i> , 2016, 80, 23-34.                              | 3.7 | 51        |
| 21 | Simulation study of a chaotic cavity transducer based virtual phased array used for focusing in the bulk of a solid material. <i>Ultrasonics</i> , 2016, 67, 151-159.      | 3.9 | 13        |
| 22 | Non-Destructive Evaluation of Kissing Bonds using Local Defect Resonance (LDR) Spectroscopy: A Simulation Study. <i>Physics Procedia</i> , 2015, 70, 648-651.              | 1.2 | 16        |
| 23 | Modular Air-Coupled Ultrasonic Multichannel System for Inline NDT. <i>Physics Procedia</i> , 2015, 70, 519-522.  | 1.2 | 2         |
| 24 | Application of a Probabilistic Algorithm for Ultrasonic Guided Wave Imaging of Carbon Composites. <i>Physics Procedia</i> , 2015, 70, 664-667.                             | 1.2 | 10        |
| 25 | Detection of defect parameters using nonlinear air-coupled emission by ultrasonic guided waves at contact acoustic nonlinearities. <i>Ultrasonics</i> , 2015, 63, 147-154. | 3.9 | 14        |
| 26 | Nondestructive Ultrasonic Inspection of Friction Stir Welds. <i>Physics Procedia</i> , 2015, 70, 660-663.  | 1.2 | 8         |
| 27 | Nonlinear spectroscopy of closed delaminations and surface breaking cracks: Finite element simulations of clapping and nonlinear air-coupled emission. , 2012, , .         |     | 0         |
| 28 | Modeling nonlinear response from distributed damage and kissing bonds. <i>Proceedings of Meetings on Acoustics</i> , 2012, , .   | 0.3 | 3         |
| 29 | First simulations of the candy can concept for high amplitude non-contact excitation. <i>Proceedings of Meetings on Acoustics</i> , 2012, , .                              | 0.3 | 3         |
| 30 | Three-dimensional finite element simulation of closed delaminations in composite materials. <i>Ultrasonics</i> , 2012, 52, 315-324.  | 3.9 | 66        |
| 31 | Two-dimensional simulation of the single-sided air-coupled ultrasonic pitch-catch technique for non-destructive testing. <i>Ultrasonics</i> , 2010, 50, 188-196.           | 3.9 | 28        |