

Acoustic forward model for guided wave propagation and scattering in a pipe bend

Rasgado Moreno, Carlos Omar; Rist, Marek; Land, Raul; Ratassepp, Madis Sensors 2022 / art. 486

<https://doi.org/10.3390/s22020486> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Application of Mindlin Theory to Describe the Scattering of Guided Waves From Notches in a Plate

Rasheed, Usman; Lints, Martin; Ratassepp, Madis ASME 2022 49th Annual Review of Progress in Quantitative Nondestructive Evaluation (QNDE2022) 2022 <https://event.asme.org/Events/media/library/resources/qnde/QNDE-2022-Final-Program.pdf> <https://qnde.secure-platform.com/a/solicitations/178/sessiongallery/11537/application/98050>

Application of multidimensional laser measurement for Lamb wave testing

Ratassepp, Madis Measuring by light 2014, a topical workshop on "Quality Control, Condition Monitoring and Predictive Maintenance Using Optical Measurement Techniques" 2014

Application of orthogonality-relation for the separation of Lamb modes at a plate edge : numerical and experimental predictions

Ratassepp, Madis; Klauson, Aleksander; Chati, Farid Ultrasonics 2015 / p. 90-95 : ill <http://dx.doi.org/10.1016/j.ultras.2014.10.022>

Applying guided waves for the characterization of defects in isotropic plates

Ratassepp, Madis; Rihma, Joonas; Klauson, Aleksander OAS 2011 : International Conference on Optimization and Analysis of Structures, August 25-27, 2011, Tartu, Estonia : abstracts 2011 / p. 38

Automatic detection of real and imaginary parts of electrical impedance with single synchronous demodulation channel

Annus, Paul; Priidel, Eiko; Land, Raul; Metshein, Margus; Krivošei, Andrei; Min, Mart; Ratassepp, Madis; Märten, Olev 8th European Medical and Biological Engineering Conference : Proceedings of the EMBEC 2020, November 29 - December 3, 2020 Portorož, Slovenia 2021 / p. 151-157 https://doi.org/10.1007/978-3-030-64610-3_18 [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Axial defect imaging in a pipe using synthetically focused guided waves

Ratassepp, Madis; Fletcher, Sam; Klauson, Aleksander Estonian journal of engineering 2011 / 1, p. 66-75 : ill

Curvature effects on wave propagation in an infinite pipe

Ratassepp, Madis; Klauson, Aleksander Ultragarsas = Ultrasound 2006 / 2(59), Proceedings of the International Conference "Non-Destructive Testing and Diagnostics - 2006" : 26-27 May 2006, Vilnius, p. 19-25 : ill https://www.ndt.net/article/ultragarsas/59-2006-vol.2_04-m.ratassepp.pdf

Damage detection in quasi-isotropic composite bends using ultrasonic feature guided waves

Yu, Xudong; Ratassepp, Madis; Fan, Zheng Composites Science and Technology 2017 / p. 120-129 : ill <https://doi.org/10.1016/j.compscitech.2017.01.011>

Detection of axial cracks in pipes using focused guided waves

Fletcher, Sam; Lowe, Michael John Stewart; Ratassepp, Madis; Brett, Colin Journal of nondestructive evaluation 2012 / p. 56-64 : ill

Edge resonance in semi-infinite thick pipe : theoretical predictions and measurements

Ratassepp, Madis; Klauson, Aleksander; Chati, F.; Leon, Fernand; Maze, Gerard Journal of Acoustical Society of America 2008 / 2, p. 875-885

Edge resonances in semi-infinite thick pipe : theoretical predictions and measurements [Electronic resource]

Ratassepp, Madis; Klauson, Aleksander; Chati, Farid; Leon, Fernand; Maze, Gerard Special issue of the Revista de Acustica : 19th international Congress on Acoustics, Madrid (Spain), 2-7 September 2007 2007 / [6] p. [CD-ROM] <https://pubs.aip.org/asa/jasa/article/124/2/875/841531/Edge-resonance-in-semi-infinite-thick-pipe>

Evaluation of elastic constants in composite laminates with guided wave tomography [Online resource]

Ratassepp, Madis; Rao, Jing; Yu, X.; Fan, Zheng 12th European Conference on Non-destructive Testing : proceedings 2018 / 7 p. : ill <http://cdn.ecndt2018.com/wp-content/uploads/2018/05/ecndt-0597-2018-File001.pdf> <http://www.ecndt2018.com/programme/list-of-authors/>

Geodesic equations for guided wave helical path separation for a pipe bend

Rasgado Moreno, Carlos Omar; Ratassepp, Madis Mechanical systems and signal processing 2023 / art. 110820 <https://doi.org/10.1016/j.ymssp.2023.110820>

Implementation of focused guided waves to locate axial defects in pipes

Fletcher, Sam; Ratassepp, Madis; Brett, C.; Lowe, Michael John Stewart The 48th Annual British Conference on NDT : Blackpool, UK, 14-17 September, 2009 2009 / ? p

Implementation of focused guided waves to locate axial defects in pipes

Fletcher, Sam; Lowe, Michael John Stewart; Ratassepp, Madis; Brett, C. Review of progress in quantitative nondestructive evaluation. Volume 29 2010 / p. 223-230 <https://doi.org/10.1063/1.3362398>

Investigation of signal separation for ultrasonic nondestructive evaluation

Peng, Chengxiang; Ratassepp, Madis; Annus, Paul 2022 18th Biennial Baltic Electronics Conference (BEC) 2022 / 6 l.
<https://doi.org/10.1109/BEC56180.2022.9935612>

Investigation of the reconstruction accuracy of guided wave tomography using full waveform inversion

Rao, Jing; **Ratassepp, Madis**; Fan, Zheng Journal of sound and vibration 2017 / p. 317-328 : ill <https://doi.org/10.1016/j.jsv.2017.04.017>

Lamb mode separation at the plate edge by applying the orthogonality relation

Ratassepp, Madis; Klauson, Aleksander 11th European Conference on Non-Destructive Testing (ECNDT 2014), October 6-10, 2014, Prague, Czech Republic 2014 / [8] p. : ill

Model of the plugging detection in metallic pipes using ultrasonic guided waves [Electronic resource]

Ratassepp, Madis; **Metsaveer, Jaan; Klauson, Aleksander** Eleventh International Congress on Sound and Vibration : St.Petersburg, Russia, 5-8 July 2004 2004 / p. 1937-1942 [CD-ROM]

Modeling the effect of anisotropy in ultrasonic-guided wave tomography

Ratassepp, Madis; Rao, Jing; Yu, Xudong; Fan, Zheng IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control 2022 / p. 330-339 : ill <https://doi.org/10.1109/TUFFC.2021.3114432> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Multi-parameter reconstruction of velocity and density using ultrasonic tomography based on full waveform inversion

Rao, Jing; Yang, Jizhong; **Ratassepp, Madis**; Fan, Zheng Ultrasonics 2020 / art. 106004, 10 p. : ill
<https://doi.org/10.1016/j.ultras.2019.106004> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Numerical Application of Guided Wave Tomography Based on Full Waveform Inversion for a Pipe Bend

Rasgado Moreno, Carlos Omar; Ratassepp, Madis ASME 2022 49th Annual Review of Progress in Quantitative Nondestructive Evaluation (QNDE2022) 2022 <https://event.asme.org/Events/media/library/resources/qnde/QNDE-2022-Final-Program.pdf> <https://qnde.secure-platform.com/a/solicitations/178/sessiongallery/11537/application/97567>

Numerical assessment of guided wave tomography in a pipe bend based on full waveform inversion

Rasgado Moreno, Carlos Omar; Ratassepp, Madis e-Journal of Nondestructive Testing (eJNDT) 2023 <https://www.ndt.net/?id=28371>

On-line corrosion monitoring of plate structures based on guided wave tomography using piezoelectric sensors

Rao, Jing; **Ratassepp, Madis**; Lisevych, Danylo; Caffoor, Mahadhir Hamzah; Fan, Zheng Sensors 2017 / art. 2882, p. 1-14 : ill
<http://dx.doi.org/10.3390/s17122882>

Passenger ship source level determination in shallow water environment

Mustonen, Mirko; Klauson, Aleksander; Laanearu, Janek; Ratassepp, Madis; Folegot, Thomas; Clorennec, Dominique Proceedings of Meetings on Acoustics 2016 / art. 070015, p. 1-9 : ill <http://dx.doi.org/10.1121/2.0000323>

Quantification of thickness loss in a liquid-loaded plate using ultrasonic guided wave tomography

Rao, Jing; **Ratassepp, Madis**; Fan, Zheng Smart materials and structures 2017 / art. 125017, 10 p : ill <http://dx.doi.org/10.1088/1361-665X/aa95e9>

Quantification of thickness loss in liquid-loaded pipes based on guided wave tomography

Rao, Jing; **Ratassepp, Madis**; Fan, Zheng The 7th Asia-Pacific Workshop on Structural Health Monitoring, 2018 Nov, Hong Kong, China (APWSHM 2018) 2019 / 9 p. : ill <https://www.ndt.net/search/docs.php3?id=24103>

Quantitative imaging of elongated thickness defects in pipelines using ultrasonic guided wave tomography

Rasgado Moreno, Carlos Omar; Ratassepp, Madis ASME 2023 International Mechanical Engineering Congress and Exposition 2023 / art. 112228

Quantitative imaging of Young's modulus in plates using guided wave tomography

Ratassepp, Madis; Rao, Jing; Fan, Zheng NDT&E international 2018 / p. 22-30 : ill <https://doi.org/10.1016/j.ndteint.2017.09.016>

Reflection of the fundamental torsional guided wave mode from axially aligned defects in pipes

Fletcher, Sam; **Ratassepp, Madis**; Lowe, Michael John Stewart; Brett, C.; Trelawny, J. Anglo-French Physical Acoustics Conference abstracts : Arcachon, France, 8-10 December 2008 2008 / p. 8

Scattering of the fundamental shear horizontal mode in a plate when incident at a through-crack aligned in the propagation direction of the mode

Ratassepp, Madis; Lowe, Michael John Stewart; Cawley, P.; **Klauson, Aleksander** Journal of Acoustical Society of America 2008 / 5, p. 2873-2882

Scattering of the fundamental torsional mode at an axial crack in a pipe

Ratassepp, Madis; Fletcher, Sam; Lowe, Michael John Stewart The journal of the Acoustical Society of America 2010 / 2, p. 730-740 : ill

Separation of Lamb modes at a plate edge by using orthogonality relation

Ratassepp, Madis; Klauson, Aleksander; Chati, Farid; Leon, Fernand; Maze, Gerard Estonian journal of engineering 2013 / p. 283-291 : ill https://artiklid.elnet.ee/record=b2654277*est

SH0 mode interaction with the propagation directional crack in a plate

Ratassepp, Madis; Lowe, Michael John Stewart Review of Progress in Quantitative Nondestructive Evaluation. Vols. 28A and 28B 2009 / p. 161-168 : ill

Synthesis of the echo-signal from a cylindrical shell

Ratassepp, Madis; Metsaveer, Jaan; Klauson, Aleksander; Decultot, Dominique; Maze, Gerard Tenth International Congress on Sound and Vibration : 7-10 July 2003, Stockholm, Sweden 2003 / p. 2483-2490 : ill

Ultraheli reedab materjalide nähtamatud vigastused

Ratassepp, Madis; Lints, Martin Horisont 2022 / lk. 48-52 : fot https://www.ester.ee/record=b1072243*est

Ultrasonic imaging of irregularly shaped notches based on elastic reverse time migration

Rao, Jing; Saini, Abhishek; Yang, Jizhong; **Ratassepp, Madis;** Fan, Zheng NDT&E international 2019 / art. 102135, 5 p. : ill
<https://doi.org/10.1016/j.ndteint.2019.102135> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Unsupervised fouling reconstruction in the pipe bend

lablonskyi, Denys; **Rasgado Moreno, Carlos Omar; Ratassepp, Madis;** Klami, Arto; Hæggström, Edward; Salmi, Ari 2023 IEEE International Ultrasonics Symposium (IUS) 2023 / 3 p <https://doi.org/10.1109/IUS51837.2023.10306373>

Using orthogonality-relation for the separation of Lamb modes at a plate edge

Ratassepp, Madis; Chati, Farid; **Klauson, Aleksander** Proceedings of the 2nd International Conference Optimization and Analysis of Structures : Tartu, Estonia, August 25-27, 2013 2013 / p. 129-134 : ill

Wave scattering at discontinuities in plates and pipes = Lainete interaktsioon defektidega plaatides ja torudes

Ratassepp, Madis; Klauson, Aleksander; Lowe, Michael John Stewart 2010 https://www.ester.ee/record=b2561121*est