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Tidligere ansættelser

Direktør, Axiom EduTech AB, Sweden, 1996 - 2008

Bøger

Publikationer

Berardengo, M, Høgsberg, J, Manzoni, S, Vanali, M, Brandt, A & Godi, T 2020, 'LRLC-shunted piezoelectric vibration absorber', *Journal of Sound and Vibration*, bind 474, 115268. <https://doi.org/10.1016/j.jsv.2020.115268>

Ong, ZC, Lim, HC, Brandt, A, Ismail, Z & Khoo, SY 2019, 'An inconsistent phase selection assessment for harmonic peaks elimination in operational modal testing', *Archive of Applied Mechanics*, bind 89, nr. 12, s. 2415-2430. <https://doi.org/10.1007/s00419-019-01584-3>

Brandt, A, Berardengo, M, Manzoni, S, Vanali, M & Cigada, A 2019, 'Global scaling of operational modal analysis modes with the OMAH method', *Mechanical Systems and Signal Processing*, bind 117, s. 52-64. <https://doi.org/10.1016/j.ymssp.2018.07.017>

Brandt, A 2019, 'A signal processing framework for operational modal analysis in time and frequency domain', *Mechanical Systems and Signal Processing*, bind 115, s. 380-393. <https://doi.org/10.1016/j.ymssp.2018.06.009>

Andersen, MS & Brandt, A 2018, 'Aerodynamic Instability Investigations of a Novel, Flexible and Lightweight Triple-Box Girder Design for Long-Span Bridges', *Journal of Bridge Engineering*, bind 23, nr. 12. [https://doi.org/10.1061/\(ASCE\)BE.1943-5592.0001317](https://doi.org/10.1061/(ASCE)BE.1943-5592.0001317)

Ong, ZC, Lim, HC & Brandt, A 2018, 'Automated impact device with non-synchronous impacts: a practical solution for modal testing during operation', *Journal of Zhejiang University-SCIENCE A*, bind 19, nr. 6, s. 452-460. <https://doi.org/10.1631/jzus.A1700431>

Brandt, A, Berardengo, M, Manzoni, S, Vanali, M & Cigada, A 2018, 'Overview of the New OMAH Technique for Scaling OMA Mode Shapes', *Sound & Vibration*, bind 52, nr. 3, s. 18-22.

Andersen, MS, Øiseth, O, Johansson, J & Brandt, A 2018, 'Flutter derivatives from free decay tests of a rectangular B/D=10 section estimated by optimized system identification methods', *Engineering Structures*, bind 156, s. 284-293. <https://doi.org/10.1016/j.engstruct.2017.11.059>

Lim, HC, Ong, ZC & Brandt, A 2018, 'Implementation of phase controlled impact device for enhancement of frequency response function in operational modal testing', *Journal of The Franklin Institute*, bind 355, nr. 1, s. 291-313. <https://doi.org/10.1016/j.jfranklin.2017.11.031>

Brandt, A & Orlovitz, E 2017, 'Comparison of experimental and operational modal analysis on a laboratory test plate', *Measurement*, bind 102, s. 121-130. <https://doi.org/10.1016/j.measurement.2017.02.001>

- Brandt, A, Berardengo, M, Manzoni, S & Cigada, A 2017, 'Scaling of mode shapes from operational modal analysis using harmonic forces', *Journal of Sound and Vibration*, bind 407, s. 128-143. <https://doi.org/10.1016/j.jsv.2017.06.033>
- Andersen, MS, Johansson, J, Brandt, A & Hansen, SO 2016, 'Aerodynamic stability of long span suspension bridges with low torsional natural frequencies', *Engineering Structures*, bind 120, s. 82-91. <https://doi.org/10.1016/j.engstruct.2016.04.025>
- Brandt, A 2016, 'Some educational vibration measurement exercises', *Sound & Vibration*, bind 50, nr. 1, s. 12-14.
- Jarnerö, K, Brandt, A & Olsson, A 2015, 'Vibration properties of a timber floor assessed in laboratory and during construction', *Engineering Structures*, bind 82, s. 44-54. <https://doi.org/10.1016/j.engstruct.2014.10.019>
- Bolmsvik, Å, Linderholt, A, Brandt, A & Ekevid, T 2014, 'FE modelling of light weight wooden assemblies - Parameter study and comparison between analyses and experiments', *Engineering Structures*, bind 73, s. 125-142. <https://doi.org/10.1016/j.engstruct.2014.04.028>
- Brandt, A, Stuesson, P-O & Ristinmaa, M 2014, 'Test Analysis Verification Using Open Software', *Sound & Vibration*, bind 2014, nr. Juni, s. 13-16.
- Brandt, A & Brincker, R 2014, 'Integrating time signals in frequency domain - comparison with time domain integration', *Measurement*, bind 58, s. 511-519. <https://doi.org/10.1016/j.measurement.2014.09.004>
- Orlowitz, E & Brandt, A 2014, 'Operational Modal Analysis for Dynamic Characterization of a Ro-Lo Ship', *Journal of Ship Research*, bind 58, nr. 4, s. 216-224.
- Brandt, A 2013, 'ABRAVIBE – A Toolbox for Teaching and Learning Vibration Analysis', *Sound & Vibration*, s. 12-17.
- Bolmsvik, Å & Brandt, A 2013, 'Damping assessment of light wooden assembly with and without damping material', *Engineering Structures*, bind 49, s. 434-447. <https://doi.org/10.1016/j.engstruct.2012.11.026>
- Brandt, A & Ahlin, K 2010, 'Sampling and Time-Domain Analysis', *Sound & Vibration*, bind 44, nr. 5, s. 13-16.
- Brandt, A, Ahlin, K & Lagö, T 2006, 'Noise and vibration measurement system basics', *Sound & Vibration*, bind 40, nr. 4, s. 9-11.
- Brandt, A, Lagö, T, Ahlin, K & Tuma, J 2005, 'Main principles and limitations of current order tracking methods', *Sound & Vibration*, bind 39, nr. 3, s. 19-22.
- Andren, L, Håkansson, L, Brandt, A & Claesson, I 2004, 'Identification of dynamic properties of boring bar vibrations in a continuous boring operation', *Mechanical Systems and Signal Processing*, bind 18, nr. 4, s. 869-901.
- Andren, L, Håkansson, L, Brandt, A & Claesson, I 2004, 'Identification of motion of cutting tool vibration in a continuous boring operation - correlation to structural properties', *Mechanical Systems and Signal Processing*, bind 18, nr. 4, s. 903-927. <https://doi.org/10.1016/j.ymsp.2003.09.009>
- Ahlin, K & Brandt, A 2003, 'A Smart Way to Analyze Dynamic Data', *Sound & Vibration*, bind 37, nr. 2, s. 20-22.
- Håkansson, B, Carlsson, P, Brandt, A & Stenfelt, S 1996, 'Linearity of sound transmission through the human skull bone', *Journal of the Acoustical Society of America*, bind 99, nr. 4, s. 2239-2243.

Håkansson, B, Brandt, A, Carlsson, P & Tjellström, A 1994, 'Resonance frequencies of the human skull *in vivo*', *Journal of the Acoustical Society of America*, bind 95, nr. 3, s. 1474-1481.

Konferensbidrag

Andersen, MS & Brandt, A 2016, 'An alternative to the flutter derivatives', Paper fremlagt ved 8th International Colloquium on Bluff Body Aerodynamics and Applications, Boston, USA, 07/05/2016 - 11/05/2016.

Brandt, A 2015, 'Comparison and assessment of Methods to treat harmonics in Operational Modal Analysis', Paper fremlagt ved International conference on structural engineering dynamics 2015, Lagos, Portugal, 22/06/2015 - 25/06/2015.

Chao, OZ, Kor, MAMA & Brandt, A 2015, 'Experimental Validation of Phase synchronisation effects in optimising impact-synchronous time averaging', Paper fremlagt ved 6th International Operational Modal Analysis Conference, Gijón, Spanien, 12/05/2015 - 14/05/2015.

Linderholt, A, Chen, Y, Orlowitz, E & Brandt, A 2014, 'A Study of the Coupling between Test Data Accuracy and Life Prediction', Paper fremlagt ved Leuven Conference on Noise and Vibration Engineering, Leuven, Belgien, 15/09/2014 - 17/09/2014.

Orlowitz, E & Brandt, A 2014, 'Effects of simultaneous versus roving sensors measurement in operational modal analysis', Paper fremlagt ved Leuven Conference on Noise and Vibration Engineering, Leuven, Belgien, 15/09/2014 - 17/09/2014.

Orlowitz, E & Brandt, A 2013, 'Influence of Correlation Estimation Methods on Damping Estimates', Paper fremlagt ved 5th International Operational Modal Analysis Conference, Guimarães, Portugal, 13/05/2013 - 15/05/2013.

Stureson, P-O, Brandt, A & Ristinmaa, M 2013, 'Structural Dynamics Teaching Example - A Linear Test Analysis Case Using Open Software', Paper fremlagt ved 31st International Modal Analysis Conference, Garden Grove, CA, USA, 11/02/2013 - 14/02/2013.

Brandt, A 2013, 'The ABRAVIBE Toolbox for Teaching Vibration Analysis and Structural Dynamics', Paper fremlagt ved 31st International Modal Analysis Conference, Garden Grove, CA, USA, 11/02/2013 - 14/02/2013.

Brandt, A 2013, 'Some Aspects of Time Domain Parameter Extraction Approaches For Operational Modal Analysis', Paper fremlagt ved International Conference on Structural Engineering Dynamics, Sesimbra, Portugal, 17/06/2013 - 19/06/2013.

Brandt, A & Linderholt, A 2012, 'A periodogram-based method for removing harmonics in operational modal analysis', Paper fremlagt ved International Conference on Noise and Vibration Engineering, Leuven, Belgien, 17/09/2012 - 19/09/2012.

Jarnerö, K, Bolmsvik, Å, Brandt, A & Olsson, A 2012, 'Effect of flexible supports on vibration performance of timber floors', Paper fremlagt ved Ninth European Conference on Noise Control, Prague, Tjekkiet, 10/06/2012 - 13/06/2012.

Brandt, A & Vaarning, C 2012, 'A comparison of non-parametric techniques for FRF estimation using pure random excitation', Paper fremlagt ved 30th International Modal Analysis Conference, Jacksonville, USA, 30/01/2012 - 02/02/2012 . https://doi.org/10.1007/978-1-4614-2425-3_49

Hu, M, Johansson, M, Olsson, A, Bengtsson, C & Brandt, A 2011, 'Grading of sawn timber using the vibration technique: Locating imperfections based on flexural mode shapes', Paper fremlagt ved 17th International Nondestructive Testing and Evaluation of Wood Symposium, Sopron, Ungarn, 14/09/2011 - 16/09/2011.

Brincker, R & Brandt, A 2011, 'Time Synchronization by Modal Correlation', Paper fremlagt ved 4th International Operational Modal Analysis Conference, Istanbul, Tyrkiet, 09/05/2011 - 11/05/2011.

Brincker, R & Brandt, A 2011, 'Estimating Low-Bias Frequency Response Using Random Decrement', Paper fremlagt ved 29th International Modal Analysis Conference, Jacksonville, FL, USA, 31/01/2011 - 03/02/2011.

Brincker, R, Brandt, A, Georgakis, C, Roldsgaard, JH & Schiltz, D 2011, 'Estimation of Damping for one of the New European Court Towers in Luxembourg', Paper fremlagt ved 29th International Modal Analysis Conference, Jacksonville, FL, USA, 31/01/2011 - 03/02/2011.

Brandt, A 2011, 'Unbiased Estimation of Frequency Response in the Presence of Input and Output Noise', Paper fremlagt ved 29th International Modal Analysis Conference, Jacksonville, FL, USA, 31/01/2011 - 03/02/2011.
https://doi.org/10.1007/978-1-4419-9299-4_26

Brincker, R, Brandt, A & Bolton, RRW 2010, 'Calibration and Processing of Geophone Signals for Structural Vibration Measurements', Paper fremlagt ved International Modal Analysis Conference, nr. XXVIII, Jacksonville, FL, USA, 1. februar 2010 - 4. februar 2010., 24/08/2010.

Brincker, R & Brandt, A 2010, 'FFT Integration of Time Series using an Overlap-Add Technique', Paper fremlagt ved International Modal Analysis Conference, nr. XXVIII, Jacksonville, FL, USA, 1. februar 2010 - 4. februar 2010., 24/08/2010

Brandt, A & Brincker, R 2010, 'Impact Excitation Processing for Improved Frequency Response Quality', Paper fremlagt ved International Modal Analysis Conference, Jacksonville, FL, USA, 01/02/2010 - 04/02/2010.

Jarnerö, K, Brandt, A & Olsson, A 2010, 'In situ testing of timber floor vibration properties', Paper fremlagt ved 11th World Conference on Timber Engineering, Trentino, Italien, 20/06/2010 - 24/06/2010.

Brincker, R & Brandt, A 2010, 'Random Decrement Signal Processing of Modal Impact Test Data', Paper fremlagt ved International Modal Analysis Conference, nr. XXVIII, Jacksonville, FL, USA, 1. februar 2010 - 4. februar 2010., 24/08/2010

Jarnerö, K, Brandt, A & Olsson, A 2010, 'Vibration properties of a timber floor assessed in laboratory and during building construction', Paper fremlagt ved 39th International Congress and Exposition on Noise Control Engineering (Internoise), Lisbon, Portugal, 13/06/2010 - 16/06/2010.

Granlund, J & Brandt, A 2008, 'Bus Drivers Exposure To Mechanical Shocks Due To Speed Bumps', Paper fremlagt ved 26th International Modal Analysis Conference, Orlando, Florida, Orlando, Florida, USA, 24/08/2010.

Ahlin, K, Brandt, A & Lagö, T 2007, 'A New MATLAB Toolbox for Simulation and Parameter Identification of Nonlinear Mechanical Systems', Paper fremlagt ved 25th International Modal Analysis Conference, Orlando, Florida, USA, 19/02/2007 - 22/02/2007.

Brandt, A, Håkansson, B & Stenfelt, S 2006, 'Properties of Bone Conduction Hearing', Paper fremlagt ved 24th International Modal Analysis Conference, St. Louis, Missouri, USA, 30/01/2006 - 02/02/2006.

Brandt, A & Lagö, T 2005, 'Actual Accuracy in Flight Data Collection and Analysis', *SAE Transactions - Section 1 - Journal of Aerospace*.

Brandt, A, Lagö, T, Ahlin, K & Tuma, J 2005, 'Main Principles and Limitations of Current Order Tracking Methods', Paper fremlagt ved 23rd International Modal Analysis Conference, Orlando, Florida, USA, 31/01/2005 - 03/02/2005.

Åkesson, H, Brandt, A, Lagö, T & Claesson, I 2005, 'Operational Modal Analysis of a Boring Bar During Cutting', Paper fremlagt ved 1st International Operational Modal Analysis Conference, København, Danmark, 26/04/2005 - 27/04/2005.

Brandt, A, Håkansson, L & Claesson, I 2004, 'Cyclostationary Analysis of Boring Bar Vibrations', Paper fremlagt ved 22nd International Modal Analysis Conference, Dearborn, Michigan, USA, 26/01/2004 - 29/01/2004.

Brandt, A, Lagö, T & Ahlin, K 2004, 'Summary of Spectrum Estimators for Vibration Signals and Their Errors', Paper fremlagt ved 22nd International Modal Analysis Conference, Dearborn, Michigan, USA, 26/01/2004 - 29/01/2004.

Brandt, A, lagö, T & Ahlin, K 2004, 'Using MATLAB for Advanced Noise \& Vibration Analysis', *SAE Transactions - Section 1 - Journal of Aerospace*.

Brandt, A & Ahlin, K 2003, 'A digital filter method for forced response computation', Paper fremlagt ved 21st International Modal Analysis Conference, USA, 03/02/2003 - 06/02/2003.

Håkansson, L, Brandt, A, Lagö, T & Claesson, I 2003, 'Modal analysis and operating deflection shapes of a boring bar', Paper fremlagt ved 21st International Modal Analysis Conference, Kissimmee, Florida, Kissimmee, USA, 03/02/2003 - 06/02/2003.

Brandt, A & Ahlin, K 2002, 'A MATLAB Toolbox for Experimental Structural Dynamics', Paper fremlagt ved GRACM Congress on Computational Mechanics, Patras, Grækenland, 27/06/2002 - 29/06/2002.

Brandt, A & Ahlin, K 2002, 'A novel approach for computing time domain forced response', Paper fremlagt ved GRACM Congress on Computational Mechanics, Patras, Grækenland, 24/08/2010.