Łukasz Ambroziński

Lista publikacji
z dnia 31 października 2014

Książki i monografie

1. Ambroziński Ł. , ***Beamforming of guided waves, [w:] Advanced structural damage detection: from theory to engineering applications,*** Stepinski T., Uhl T., Staszewski W., John Wiley & Sons, Chichester 2013, s. 177–211.

2. Galina A., Paćko P., Ambroziński Ł., ***Model assisted probability of detection in structural health monitoring [w:] Advanced structural damage detection: from theory to engineering applications,*** Stepinski T., Uhl T., Staszewski W., John Wiley & Sons, Chichester 2013, s. 57–72.

3. Ochoński J., Ambroziński Ł., Klepka A., Uhl T., ***Influence of array parameters on beamforming in SHM application [w:] Selected problems of modal analysis of mechanical systems*** Uhl T., Department of Robotics and Mechatronics, University of Science and Technology AGH, cop. 2011. s. 73–80.

4. Klepka A., Ambroziński Ł., ***An application of guided waves for detection and localization of damages in plates [w:] Wybrane zagadnienia analizy modalnej konstrukcji mechanicznych,*** Uhl T., Wydawnictwo Naukowe Instytutu Technologii Eksploatacji – Państwowego Instytutu Badawczego, Kraków 2010, s. 175–180

Publikacje w czasopismach

1. Ambrozinski L., Stepinski T., Uhl T**.**, 2014, ***Efficient Tool for Designing 2D Phased Arrays in Lamb Waves Imaging of Isotropic Structures*** Journal of Intelligent Material Systems and Structures, in press, doi: 10.1177/1045389X14545389

2. Ambrozinski L., Piwakowski B., Stepinski T., Uhl T., 2014, ***Evaluation of Dispersion Characteristics of Multimodal Guided Waves Using Slant Stack Transform*** , *NDT&E International Journal*, 68: s. 88-97.

3. Dworakowski Z., Ambrozinski L., Packo P., Dragan, K., Stepinski T., 2015, ***Application of artificial neural networks for compounding multiple damage indices in Lamb-wave-based damage detection*** *Structural Control and Health Monitoring*, 22(1): s. 50-61.

4. Młyniec A., Ambroziński Ł., Paćko P., Bednarz J., Staszewski W., Uhl T., 2014, ***Adaptive de-icing system – numerical simulations and laboratory experimental validation*** *International Journal of Applied Electromagnetics and Mechanics*, 46(4): s.997-1008.

5. Dworakowski Z., Ambrozinski Ł., Packo P., Dragan K., Stepinski T., Uhl T., 2014, ***Application of artificial neural networks for damage indices classification with the use of Lamb waves for the aerospace structures.,*** *Key Engineering Materials,* 588: s. 12-21

6. Mańka M., Ambroziński Ł., Uhl T., 2013, ***Computer-aided prototyping of interdigital transducers for the structural health monitoring of planar structures,*** *Mechanics and Control* 32(2): s. 69–76

7. Lesiak P., Ambroziński Ł., Tchórz A., 2013, ***Ultrasonic immersion method for testing welding joints in railway rails*** *TTS. Technika Transportu Szynowego,* 20(10)

8. Ambroziński Ł., Stepinski T., Paćko P., Uhl T., 2012***, Self-focusing Lamb waves based on the decomposition of the time-reversal operator using time-frequency representation,*** *Mechanical Systems and Signal Processing,* 27: s. 337–349

9. Ambroziński Ł., Stepinski T., Uhl T., Ochoński J., Klepka A., 2012, ***Development of Lamb waves-based SHM systems*** *Key Engineering Materials*, 518: s. 87–94

10. Klepka A., Ambroziński Ł., 2010, ***Selection of piezoceramic sensor parameters for damage detection and localization system*****,** Diagnostyka Polskie Towarzystwo Diagnostyki Technicznej, 2010 nr 4 s. 17–22.

Prace pokonferencyjne i doniesienia zjazdowe.

1. Ambroziński Ł., Piwakowski B., Stepinski T., Pieczonka Ł., Uhl T., 2014, **Pitch-catch air-coupled ultrasonic technique for detection of barely visible impact damages in composite laminates** *EWSHM 2014: 7th European Workshop on Structural Health Monitoring:* July 8–11, Nantes, France

2. Dworakowski Z., Ambroziński Ł., Dragan K., Stepinski T., Uhl T., 2014 **Voting neural network classifier for detection of fatigue damage in aircrafts** *EWSHM 2014: 7th European Workshop on Structural Health Monitoring:* July 8–11, 2014 – Nantes, France

3. Ambroziński Ł., Magda P., Stepinski T., Uhl T., Dragan K., 2013, **A method for compensation of the temperature effect disturbing Lamb waves propagation** *40th Annual review of progress in quantitative nondestructive evaluation* Baltimore, USA, 21–26 July 2013, Vol. 33A

4. Ambroziński Ł., Stepinski T., Uhl T. 2014, **2D aperture synthesis for Lamb wave imaging using co-arrays** *Health monitoring of structural and biological systems* 2014: 10–13 March 2014, San Diego, California, USA / ed. Tribikram Kundu. SPIE, cop. 2014. — S. 90642A-1–90642A-14

5. Ambroziński Ł., Magda P., Dragan K., Stepinski T., Uhl T., 20013, **Temperature compensation based on Hilbert transform and instantaneous phase for Lamb waves-based SHM systems of aircraft structures***, Proceedings of the 9th International workshop on Structural Health Monitoring:* Stanford, September 10–12, 2013, Vol. 1 ed. Fu-Kuo Chang. — Lancaster: DEStech Publications, cop. 2013. S. 1259–1266

6. Paćko P., Pieczonka Ł., Ambroziński Ł., Uhl T., Staszewski W.J., 2013, **Elastic constants identification for laminated composites based on Lamb waves propagation** *Proceedings of the 9th International workshop on Structural Health Monitoring*: Stanford, September 10–12, 2013, Vol. 1 ed. Fu-Kuo Chang. Lancaster: DEStech Publications, cop. 2013. S. 1144–1151

7. Stepinski T., Ambroziński Ł., Uhl T., 2013, **Beamforming of Lamb waves using 2D arrays: a comparative study**, *Proceedings of the 9th International workshop on Structural Health Monitoring*: Stanford, September 10–12, 2013, Vol. 2 / ed. Fu-Kuo Chang. —Lancaster: DEStech Publications, cop. 2013 + CD. S. 2210–2217

8. Mańka M., Rosiek M., Martowicz A., Ambrozinski Ł., Uhl T., Stepinski T., 2013, **Novel method for simulation of Lamb wave propagation generated by an interdigital transducer,** *Proceedings of the 9th International workshop on Structural Health Monitoring*: Stanford, September 10–12, 2013, Vol. 2 ed. Fu-Kuo Chang. — Lancaster: DEStech Publications, cop. 2013 — ISBN: 978-1-60595-115-7. — S. 2488–2495

9. Stepinski T., Ambrozinski Ł., Uhl T., 2013, **Designing 2D arrays for SHM of planar structures: a review,** *Nondestructive characterization for composite materials, aerospace engineering, civil infrastructure, and homeland security* 2013: 11–14 March 2013, San Diego, SPIE, cop. 2013. — (Proceedings of SPIE ; ISSN 0277-786X ; vol. 8694). S. 86941R-1–86941R-12.

10. Ambroziński Ł., Piwakowski B., Stepinski T., Uhl T., 2012, **Application of air-coupled ultrasonic transducers for damage assessment of composite panels,** *Proceedings of the sixth European workshop:* Dresden, Germany, July 3–6, 2012 ed. Christian Boller. — Berlin: DGZfP S. 122–129.

11. Dragan K., Dziendzikowski M., Uhl T., Ambroziński Ł., 2012, **Damage detection in the aircrafts structure with the use of integrated sensors – SYMOST project**, *Proceedings of the sixth European workshop:* Dresden, Germany, July 3–6, 2012 ed. Christian Boller. Berlin: DGZfP, s. 974–980.

12. Ambroziński Ł., Stepinski T., Uhl T., 2012, **Design of 2D phased array for monitoring isotropic plate-like structures using Lamb waves**, *Proceedings of the sixth European workshop:* Dresden, Germany, July 3–6, 2012 ed. Christian Boller. — Berlin: DGZfP, S. 1343–1350.

13. Ambrozinski Ł., Paćko P., Stepinski T., Uhl T., 2012, **Experimental comparison of 2D arrays topologies for SHM of planar structures**, *Smart structures and materials & nondestructive evaluation and health monitoring,* 11–15 March 2012, San Diego, California, USA SPIE, cop. 2012. vol. 8347

14. Uhl T., Paćko P., Ambroziński Ł., Staszewski W., 2012, **On line material parameters assessment for SHM application**, *CIMTEC 2012: smart materials, structures, systems: 4th international conference:* Montecatini Terme, Tuscany, Italy, June 10–14, 2012

15. Galina, A., Paćko P., Ambrozinski Ł., Uhl T., Staszewski W. J., 2011, **Model assisted probability of detection evaluation of a health monitoring system by using CUDA technology** *Structural health monitoring 2011. Vol. 2, Condition-based maintenance and intelligent structures: proceedings of the 8th international workshop on Structural health monitoring:* Stanford, September 13–15, 2011 ed. Fu-Kuo Chang. — Lancaster: DEStech Publications, Inc., cop. 2011 + CD-ROM, S. 2437–2443.

16. Ambrozinski Ł., Stepinski T., Uhl T., 2011, **Self focusing of 2D arrays for SHM of plate-like structures using time reversal operator** *Proceedings of the 8th international workshop on Structural health monitoring:* Stanford, September 13–15, 2011 ed. Fu-Kuo Chang. — Lancaster: DEStech Publications, Inc., cop. 2011, S. 1119–1127.

17. Paćko P., Ambrozinski Ł., Uhl T., 2011, **Structure damage modelling for guided waves-based SHM systems testing** W: ICMSAO'11 : *Fourth international conference on Modeling, simulation and applied optimization:* 19–21 April 2011, Kuala Lumpur, Malaysia s. 1061–1066.

18. Ambroziński Ł., Paćko P., Stepinski T., Uhl T., 2010, **Ultrasonic guided waves based method for SHM – simulations and an experimental test**, 5WCSCM : fifth world conference on Structural control and monitoring: 12–14 July 2010: Tokyo s. 1–9.

19. Ochoński J., Ambrozinski Ł., Klepka A., Uhl T., Stepinski T., 2010, **Choosing an appopriate sensor for the designed SHM system based on Lamb waves propagation,** *11th IMEKO TC 10 workshop on Smart diagnostics of structures*: Krakow, October 18–20, 2010.

20. Klepka A., Uhl T., Stepinski T., Ambroziński Ł., Ochoński J., 2010, **Comparison of two baseline-free damage detection techniques based on lamb waves propagation phenomena**, *Proceedings of the fifth European workshop Structural Health Monitoring 2010:* June 28–July 4, 2010 eds. Fabio Casciati, Michele Giordano. — Pennsylvania: DEStech Publications, Inc., cop. 2010, S. 937–942.