

**WYKAZ DOROBKU NAUKOWEGO PRACOWNIKÓW KATEDRY INŻYNIERII MIKROFALOWEJ I
ANTENOWEJ W 2012r.**

**LIST OF SCIENTIFIC RESEARCH OF MICROCAL AND ANTENNA ENGINEERING DEPARTMENT
EMPLOYEES IN 2012**

Artykuły opublikowane w czasopismach z listy filadelfijskiej (Publications In Journals from Institute of Scientific Information Master Journal List):

1. Stefański T., Krzyżanowska K.: Implementation of FDTD-Compatible Green's Function on Graphics Processing Unit// IEEE Antennas and Wireless Propagation Letters. -Vol. 11., nr. iss. 1 (2012), s.1422-1425, JCR 96596
2. Bras L., Borges Carvalho N., Pinho P., Kulas Ł., Nyka K.: A Review of Antennas for Indoor Positioning Systems// International Journal of Antennas and Propagation. -, nr. ID 953269 (2012), s.1-14, JCR 96515
3. Kusiek A., Marynowski W., Mazur J.: Investigations of four-port circulator utilizing cylindrical ferrite coupled line junction// Progress in Electromagnetics Research-PIER. -Vol. 134., (2012), s.379-395, JCR 94675
4. Dziekoński A., Sypek P., Lamęcki A., Mrozowski M.: Accuracy, Memory and Speed Strategies in GPU-based Finite-Element Matrix-Generation// IEEE Antennas and Wireless Propagation Letters. -Vol. 11., (2012), s.1346-1349, JCR 94655
5. Szydłowski Ł., Lamęcki A., Mrozowski M.: Coupled-Resonator Waveguide Filter in Quadruplet Topology With Frequency-Dependent Coupling - A Design Based on Coupling Matrix// IEEE MICROWAVE AND WIRELESS COMPONENTS LETTERS. -Vol. 22., nr. iss. 11 (2012), s.553-555, JCR 94512
6. Szydłowski Ł., Leszczyńska N., Lamęcki A., Mrozowski M.: A Substrate Integrated Waveguide (SIW) Bandpass Filter in A Box Configuration With Frequency-Dependent Coupling// IEEE MICROWAVE AND WIRELESS COMPONENTS LETTERS. -Vol. 22., nr. iss. 11 (2012), s.556-558, JCR 94511
7. Jędrzejewski A., Leszczyńska N., Szydłowski Ł., Mrozowski M.: Zero-pole approach to computer aided design of in-line siw filters with transmission zeros// Progress in Electromagnetics Research-PIER. -Vol. 131., (2012), s.517-533, JCR 93968
8. Bekasiewicz A., Kurgan P., Kitliński M.: A new approach to a fast and accurate design of microwave circuits with complex topologies // IET Microwaves Antennas & Propagation. -Vol. 6., nr. Iss. 14 (2012), s.1616-1622, JCR 93803
9. Kurgan P., Filipcewicz J., Kitliński M.: Development of a compact microstrip resonant cell aimed at efficient microwave component size reduction// IET Microwaves Antennas & Propagation. -Vol. 6., iss. 12 (2012), s.1291-1298, JCR 93801
10. Kurgan P., Bekasiewicz A., Pietras M., Kitliński M.: Novel topology of compact coplanar waveguide resonant cell low-pass filter// MICROWAVE AND OPTICAL TECHNOLOGY LETTERS. -Vol. 54., nr. Iss. 3 (2012), s.732-735, JCR 93800
11. Sorokosz Ł., Zieniutycz W.: Artificial Neural Networks in Microwave Components and Circuits Modeling// Przegląd Elektrotechniczny. -, nr. nr 6 (2012), s.211-215, JCR 93255

12. Kurgan P., Filipcewicz J., Kitliński M.: Design considerations for compact microstrip resonant cells dedicated to efficient branch-line miniaturization// MICROWAVE AND OPTICAL TECHNOLOGY LETTERS. -Vol. 54., nr. iss. 8 (2012), s.1949-1954, JCR 92995
13. Szydłowski Ł., Lamęcki A., Mrozowski M.: Coupled-resonator filters with frequency-dependent couplings: coupling matrix synthesis// IEEE MICROWAVE AND WIRELESS COMPONENTS LETTERS. -Vol. 22., nr. iss. 6 (2012), s.312-314, JCR 92994
14. Dziekoński A., Sypek P., Lamęcki A., Mrozowski M.: Finite element matrix generation on a GPU// Progress in Electromagnetics Research-PIER. -Vol. 128., (2012), s.249-265, JCR 92986
15. Stefański T.: Fast implementation of FDTD-compatible green's function on multicore processor// IEEE Antennas and Wireless Propagation Letters. -Vol. 11., (2012), s.81-84, JCR 92980
16. Sorokosz Ł., Zieniutycz W.: On the approximation of the UWB dipole elliptical arms with stepped-edge polygon// IEEE Antennas and Wireless Propagation Letters. -Vol. 11., (2012), s.1-4, JCR 92977
17. Fotyga G., Nyka K., Mrozowski M.: Efficient model order reduction for FEM analysis of waveguide structures and resonators// Progress in Electromagnetics Research-PIER. -Vol. 127., (2012), s.277-295, JCR 92973
18. Pergoł M., Marynowski W., Mazur J.: Simulation and experiment of radiating slot in a ground-plane of microstrip junction// MICROWAVE AND OPTICAL TECHNOLOGY LETTERS. -Vol. 54., nr. iss. 2 (2012), s.525-529, JCR 92967
19. Kusiek A., Lech R., Mazur J.: Analysis of electromagnetic plane wave scattering from 2-d periodic arrangements of posts// Progress in Electromagnetics Research-PIER. -Vol. 129., (2012), s.69-90, JCR 92965
20. Kusiek A., Marynowski W., Mazur J.: Investigations of nonreciprocal devices employing cylindrical ferrite coupled line junction// JOURNAL OF ELECTROMAGNETIC WAVES AND APPLICATIONS. -Vol. 26., nr. iss. 13 (2012), s.1685-1693, JCR 92964
21. Marynowski W., Mazur J.: Investigation of multilayer magic-t configurations using novel microstrip-slotline transitions// Progress in Electromagnetics Research-PIER. -Vol. 129., (2012), s.91-108, JCR 92963
22. Podwalski J., Kowalczyk P., Mrozowski M.: Efficient Multiscale Finite Difference Frequency Domain Analysis Using Multiple Macromodels with Compressed Boundaries// Progress in Electromagnetics Research-PIER. -Vol. 126., (2012), s.463-479, JCR 92829
23. Sorn M., Lech R., Mazur J.: Simulation and Experiment of a Compact Wideband 90° Differential Phase Shifter// IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES. -Vol. 60., nr. iss. 3 (2012), s.494-501, JCR 92789

Artykuły w pozostałych czasopismach (Other publications):

1. Leszczynska N., Szydłowski Ł., Podwalski J.: An Automated Design of Substrate Integrated Waveguide Filters Based on Implicit Space Mapping Optimization// Elektronika : konstrukcje, technologie, zastosowania. -, nr. nr 7 (2012), s.16-18, AR 93559

Doniesienia konferencyjne (Conference papers):

1. Wojciech Marynowski, Adam Kusiek, Rafał Lech, Jerzy Mazur, Novel Structures of Circulator and Isolator Employing Ferrite Coupled Line Section, The 31st Progress In Electromagnetics Research Symposium: PIERS2012, 27-30 marzec, 2012 Kuala Lumpur, Malezja, KE 93000
2. Adam Kusiek, Wojciech Marynowski, Rafał Lech, Jerzy Mazur, Application of Cylindrical Ferrite Coupled Line Junction to Nonreciprocal Devices, The 31st Progress In Electromagnetics Research Symposium: PIERS2012, 27-30 marzec, 2012 Kuala Lumpur, Malezja, KE 92999
3. Jerzy Mazur, Rafał Lech, Adam Kusiek, Multilayered Periodic Structures - Tunneling and Electromagnetic Curtain Effects, The 31st Progress In Electromagnetics Research Symposium: PIERS2012, 27-30 marzec, 2012 Kuala Lumpur, Malezja, KE 92998
4. Stefański T.: Accuracy of the discrete Green's function computations// 19th International Conference on Microwaves, Radar and Wireless Communications : MIKON 2012 : conference proceedings, Warsaw, 21-23. May 2012. - Vol. 1/ ed. Military University of Technology. : , 2012, s.133-136, ZR 93019
5. Podwalski J., Mrozowski M.: Fast frequency sweep based on the model order reduction technique for calculating scattering parameters// 19th International Conference on Microwaves, Radar and Wireless Communications : MIKON 2012 : conference proceedings, Warsaw, 21-23. May 2012. - Vol. 1/ ed. Military University of Technology. Warszawa: , 2012, s.141-144, ZR 93018
6. Fotyga G., Nyka K., Kulas Ł.: Macro-elements and Model Order Reduction for Efficient Three-Dimensional FEM Analysis// 19th International Conference on Microwaves, Radar and Wireless Communications : MIKON 2012 : conference proceedings, Warsaw, 21-23. May 2012. - Vol. 1/ ed. Military University of Technology. Warszawa: , 2012, s.137-140, ZR 93017
7. Woźnica P., Kulas Ł., Nyka K.: Reliable testbed for indoor positioning systems// 19th International Conference on Microwaves, Radar and Wireless Communications : MIKON 2012 : conference proceedings, Warsaw, 21-23. May 2012. - Vol. 1/ ed. Military University of Technology. Warszawa: , 2012, s.54-59, ZR 93016
8. Rzymowski M., Nyka K., Kulas Ł.: Enhancing Performance of Switched Parasitic Antenna for Localization in Wireless Sensor Networks// 19th International Conference on Microwaves, Radar and Wireless Communications : MIKON 2012 : conference proceedings, Warsaw, 21-23. May 2012. - Vol. 2/ ed. Military University of Technology. Warszawa: , 2012, s.799-803, ZR 93015
9. Bizewski K., Kulas Ł., Nyka K.: Low Power Baseband Processor for M2M Reconfigurable Radio Test Platform// 19th International Conference on Microwaves, Radar and Wireless Communications : MIKON 2012 : conference proceedings, Warsaw, 21-23. May 2012. - Vol. 1/ ed. Military University of Technology. Warszawa: , 2012, s.50-53, ZR 93014
10. Leszczynska N., Szydłowski Ł., Podwalski J.: Design of Substrate Integrated Waveguide Filters Using Implicit Space Mapping Technique// 19th International Conference on Microwaves, Radar and Wireless Communications : MIKON 2012 : conference proceedings, Warsaw, 21-23. May 2012. - Vol. 1/ ed. Military University of Technology. Warszawa: , 2012, s.315-318, ZR 93013
11. Lech R., Kusiek A.: Multimodal coupling matrix for an array of rectangular slots on conducting cylinder// 19th International Conference on Microwaves, Radar and Wireless Communications : MIKON 2012 : conference proceedings, Warsaw, 21-23. May 2012. - Vol. 1/ ed. Military University of Technology. Warszawa: , 2012, s.396-401, ZR 93012

12. Jędrzejewski A., Szydłowski Ł., Lamęcki A.: Comparison of Optimization Techniques for Coupling Matrix Synthesis Using Eigenvalue Based Approach// 19th International Conference on Microwaves, Radar and Wireless Communications : MIKON 2012 : conference proceedings, Warsaw, 21-23. May 2012. - Vol. 2/ ed. Military University of Technology. Warszawa: , 2012, s.471-475, ZR 93011
13. Lech R., Kowalczyk P.: Very High Frequency Technique Laboratory - First Step to the World of Microwaves// 19th International Conference on Microwaves, Radar and Wireless Communications : MIKON 2012 : conference proceedings, Warsaw, 21-23. May 2012. - Vol. 2/ ed. Military University of Technology. Warszawa: , 2012, s.563-566, ZR 93010
14. Mamza J., Makyła P., Dziekoński A., Lamęcki A., Mrozowski M.: Multi-core and Multiprocessor Implementation of Numerical Integration in Finite Element Method// 19th International Conference on Microwaves, Radar and Wireless Communications : MIKON 2012 : conference proceedings, Warsaw, 21-23. May 2012. - Vol. 2/ ed. Military University of Technology. Warszawa: , 2012, s.457-461, ZR 93009
15. Kurgan P., Bekasiewicz A., Kitliński M.: Slow-wave resonant structures in branch-line coupler miniaturization: a case study// 19th International Conference on Microwaves, Radar and Wireless Communications : MIKON 2012 : conference proceedings, Warsaw, 21-23. May 2012. - Vol. 2/ ed. Military University of Technology. Warszawa: , 2012, s.0-0, ZR 93008
16. Sorokosz Ł., Rydlewska A., Zieniutycz W.: Elliptical slot UWB monopole antenna// 19th International Conference on Microwaves, Radar and Wireless Communications : MIKON 2012 : conference proceedings, Warsaw, 21-23. May 2012. - Vol. 2/ ed. Military University of Technology. Warszawa: , 2012, s.718-721, ZR 93006
17. Kusiek A., Marynowski W., Mazur J.: Cylindrical ferrite coupled slotline junction for Faraday nonreciprocal devices// 19th International Conference on Microwaves, Radar and Wireless Communications : MIKON 2012 : conference proceedings, Warsaw, 21-23. May 2012. - Vol. 2/ ed. Military University of Technology. Warszawa: , 2012, s.699-702, ZR 93002
18. Wojciech Marynowski, Rafał Lech, Jerzy Mazur, Compact Wide-band 90deg Differential Phase Shifters, Progress In Electromagnetics Research Symposium : PIERS 2012, Moscow, Russia, 19-23 August 2012, KE 937712
19. Sorokosz Ł., Zieniutycz W., Dutkiewicz M.: Szyk planarny anten mikropaskowych z przeznaczeniem do radaru dopplerowskiego// Konferencja Naukowo-Techniczna : Urządzenia i Systemy Radioelektroniczne : Dni Radiolokacji 2012, Sobienie Szlacheckie, 6-7 grudnia 2012/ Warszawa: Wojskowa Akademia Techniczna, 2012, s.1-12 ZR 100300
20. Grzegorz Fotyga, Krzysztof Nyka, Łukasz Kulas, Multilevel Model Order Reduction for Finite Element Analysis of Microwave Structures, 2012 IEEE International Symposium on Antennas and Propagation and USNC-URSI National Radio Science Meeting, Chicago, Illinois USA, 8-14 July 2012 K 100171
21. Fotyga G., Nyka K., Kulas Ł., Mrozowski M.: Efficient Model Order Reduction for FEM Analysis of Waveguide Structures and Resonators//W:11th International Workshop on Finite Elements for Microwave Engineering - FEM2012/.Estes Park, Colorado, USA:,2012,s.51-51, K 100130

22. Zieniutycz W.: Mutual coupling of elliptical microstrip resonators// Antennas and Propagation (EUCAP), 2012 6th European Conference on/ : , 2012, s.977-979, ZR 100105
23. Stefański T.: Acceleration of the discrete Green's function computations, W: W : Antennas and Propagation Society International Symposium (APSURSI), 2012 IEEE, Chicago, 8-12 July 2012, 2012, IEEE,. IND 100046
24. Fotyga G., Kowalczyk P., Kulas Ł., Nyka K., Podwalski J., Mrozowski M.: Reduced order models in computational electromagnetics (in memory of Ruediger Vahldieck)// Electromagnetic Compatibility (APEMC), 2012 Asia-Pacific Symposium on, Singapore, 21-24 May 2012/ Singapore: , 2012, s.705-708, ZR 94160
25. Bizewski K., Rzymowski M., Woźnica P.: Integrated controller for ultra high frequency technique laboratory// ICT Young 2012: II konferencja Studentów i Doktorantów Elektroniki, Telekomunikacji, Informatyki, Automatyki i Robotyki : materiały konferencyjne, Gdańsk, 26-27.05.2012/ ed. Wydział Elektroniki, Telekomunikacji i Informatyki, PG. Gdańsk: ICT Young, 2012, s.243-248, ZR 93994
26. Rzymowski M., Bizewski K., Woźnica P.: Simple and low-cost wireless voting system// ICT Young 2012: II konferencja Studentów i Doktorantów Elektroniki, Telekomunikacji, Informatyki, Automatyki i Robotyki : materiały konferencyjne, Gdańsk, 26-27.05.2012/ ed. Wydział Elektroniki, Telekomunikacji i Informatyki, PG. Gdańsk: ICT Young, 2012, s.479-484, ZR 93993
27. Woźnica P., Kulas Ł., Rzymowski M., Bizewski K.: Influence of realistic antenna radiation pattern on rf fingerprinting accuracy// ICT Young 2012: II konferencja Studentów i Doktorantów Elektroniki, Telekomunikacji, Informatyki, Automatyki i Robotyki : materiały konferencyjne, Gdańsk, 26-27.05.2012/ ed. Wydział Elektroniki, Telekomunikacji i Informatyki, PG. Gdańsk: ICT Yung, 2012, s.237-242, ZR 93992
28. Kurgan P., Bekasiewicz A., Kitliński M.: Filtering EBG Structures Implemented in Coplanar Waveguide Feedline of Planar Slot Antenna// 6th European Conference on Antennas and Propagation (EUCAP), Praga, Czechy, 26-30 Marca 2012/ : , 2012, s.2845-2848, ZR 93804
29. Bekasiewicz A., Kurgan P., Kitliński M.: Space-mapping-based design flow of miniaturized broadband matching transformer with perforated metallization// The 7th German Microwave Conference (GeMiC), 2012, Ilmenau, Niemcy, 12-14 March 2012/ : Ilmenau University of Technology, 2012, s.1-4, ZR 93802
30. Adam Kusiek, Wojciech Marynowski, Jerzy Mazur, Hybrid method for analysis of conformal ferrite guides, Progress in Electromagnetics Research Symposium : PIERS 2012, Moscow, Russia, 19-23 August 2012, KE 93718
31. Wojciech Marynowski, Jerzy Mazur, Compact and broadband integrated magic-T configuration, Progress in Electromagnetics Research Symposium : PIERS 2012, Moscow, Russia, 19-23 August 2012, KE 93717
32. Adam Kusiek, Wojciech Marynowski, Jerzy Mazur, Four-port circulator utilizing longitudinally magnetized cylindrical ferrite coupled line junction, Progress in Electromagnetics Research Symposium : PIERS 2012, Moscow, Russia, 19-23 August 2012, KE 93716

33. Piotr Kowalczyk, Efficient Root Tracing Method Employing Simplex Chain Vertices Searching Procedure, Progress in Electromagnetics Research Symposium : PIERS 2012, Moscow, Russia, 19-23 August 2012, KE 93715
34. Rafał Lech, Adam Kusiek, Jerzy Mazur, Analysis of Periodically Loaded Rectangular Waveguide, Progress in Electromagnetics Research Symposium : PIERS 2012, Moscow, Russia, 19-23 August 2012, KE 93714
35. Rafał Lech, Adam Kusiek, Jerzy Mazur, Analysis of Electromagnetic Wave Scattering from the Surface of Double Periodic Arrangements of Metal-dielectric Cylinders, Progress in Electromagnetics Research Symposium : PIERS 2012, Moscow, Russia, 19-23 August 2012, KE 93713
36. Rafał Lech, Adam Kusiek, Jerzy Mazur, Radiation and Mutual Coupling between Apertures on a Conducting Cylinder, Progress in Electromagnetics Research Symposium : PIERS 2012, Moscow, Russia, 19-23 August 2012, KE 93711
37. Wojciech Marynowski, Rafał Lech, Jerzy Mazur, UWB Antennas Fed with Coplanar Three-strip Line, Progress in Electromagnetics Research Symposium : PIERS 2012, Moscow, Russia, 19-23 August 2012, KE 93710
38. Adam Kusiek, Wojciech Marynowski, Mateusz Mazur Phase retrieval algorithm combining iterative and optimization technique for near field antenna measurements, Progress in Electromagnetics Research Symposium : PIERS 2012, Moscow, Russia, 19-23 August 2012 KE 93709
39. Wojciech Marynowski, Piotr Kowalczyk, Analysis of Displacement Current in Coplanar and Microstrip Lines, Progress in Electromagnetics Research Symposium : PIERS 2012, Moscow, Russia, 19-23 August 2012, KE 93707

Rozdziały w książkach (Chapters in monographs):

1. Lech R., Kusiek A.: Analiza efektów sprzężeń pomiędzy promiennikami konforemnymi zrealizowanymi na powierzchni bocznej walca// W : Anteny o sterowanej wiązce w technice radarowej/ ed. Włodzimierz Zieniutycz Warszawa: WKŁ, 2012, s.96-132, MCK 123817
2. Zieniutycz W., Pergoł M.: Mikropaskowy promiennik prostokątny o zredukowanych wymiarach poprzecznych// W : Anteny o sterowanej wiązce w technice radarowej/ ed. Włodzimierz Zieniutycz Warszawa: Wydawnictwa Komunikacji i Łączności, 2012, s.54-63, MCK 123529
3. Pergoł M., Zieniutycz W.: Mikropaskowy promiennik prostokątny o zredukowanych wymiarach poprzecznych// W : Anteny o sterowanej wiązce w technice radarowej/ ed. W. Zieniutycz Warszawa: Wydawnictwa Komunikacji i Łączności, 2012, s.74-77, MCK 123528
4. Sorokosz Ł., Marynowski W., Mazur J.: Dipol pętlowy dla technologii UWB// Anteny o sterowanej wiązce w technice radarowej/ Warszawa: WKŁ, 2012, s.91-95, MCK 93851