

Volodymyr Kudriashov, Ph.D.

Fields of Interest

Imaging with passive systems. Beamforming and signal processing in bistatic radiometers based on aperture synthesis principle. Generation and fusion of radiometric and radar images.



Contact information

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Key Skills

English	Fluent
Ukrainian	Native Speaker
Russian	
Imaging, Beamforming and Signal Processing in both continuous waveform active radars and radiometers including bistatic systems based on aperture synthesis principle	Professional Experience
Matlab; Algorithms; Research; Science; Simulation; Programming IBM PC; Microsoft Windows ver. 98 – 8; Microsoft Office ver. 97-2007	Experience
Experimental researches using equipment produced by GaGe, National Instruments and Agilent	
Wolfram Mathematica	

Work Experience

August 2014 – up to present	Current position	Postdoctoral Fellow
	Research field	Acoustic Imaging
	Name of Project	AcomIn: Advanced Computing for Innovation
	Name of Organization	Department of Mathematical Methods for Sensor Information Processing, Institute of Information and Communication Technologies at the Bulgarian Academy of Sciences
June 2009 – July 2014	Latest position	Research Fellow
	Research field	Imaging and Signal Processing in both bistatic radiometer and noise waveform radar based on antennas with beam synthesizing.
	Name of Organization	Department for Nonlinear Dynamics of Electronic Systems, O. Ya. Usikov Institute for Radiophysics and Electronics of the National Academy of Sciences of Ukraine

Main Publications

1	Tomographic imaging using noise radar and 2D aperture synthesis / K.A. Lukin, P.L. Vyplavin, V.V. Kudriashov, V.P. Palamarchuk, O.V. Zemlyaniy, S.K. Lukin, Jong-Min Lee, Jong-Soo Ha, Sun-Gu Sun, Youn-Sik Kang, Kyu-Gong Cho, Byung-Lae Cho // Applied Radio Electronics. – 2013. – Vol. 12, No. 1. – p. 152-156.
2	Experimental evaluation of the accuracy of object shifts measurements using the method of synthetic aperture radar differential interferometry (<i>translated from Russian</i>) / K.A. Lukin, K. Kulpa, V.P. Palamarchuk, P.L. Vyplavin, V.V. Kudriashov, J. Kulpa, L.V. Yurchenko // Applied Radio Electronics. – 2012. – Vol. 11, No. 3. – p. 366-372.
3	Range-azimuth coherent radiometric imaging based on Ka-band antenna with beam synthesis / Kudriashov V.V., Lukin K.A., Palamarchuk V.P., Vyplavin P.L. // Applied Radio Electronics. – 2012. – Vol. 11, No. 3. – p. 328-334.
4	Coherent radiometric imaging with a Ka-band ground-based synthetic aperture noise radar / V.V. Kudryashov, K.A. Lukin, V.P. Palamarchuk, P.L. Vyplavin // Telecommunications and Radio Engineering, Vol. 72, No. 8, pp. 699-710. <i>Originally published as</i> Formation of coherent radiometric images in Ka-band using ground-based noise radar with antenna pattern synthesizing (<i>translated from Russian</i>) / V.V. Kudriashov, K.A. Lukin, V.P. Palamarchuk, P.L. Vyplavin // Journal of O. Ya. Usikov Institute for Radiophysics and Electronics of the National Academy of Sciences of Ukraine "Radiophysics and Electronics", 2012, Vol.3 (17), № 3, pp. 41-47.
5	Experimental evaluation of hardware stability of ground-based noise waveform synthetic aperture radar equipment used for differential interferometric measurements (<i>translated from Russian</i>) / Vyplavin P., Kudriashov V., Palamarchuk V., Lukin K. // Applied Radio Electronics. – 2012. – Vol. 11, No. 1. – p. 48-53.
6	Experimental investigation of factors affecting stability of interferometric measurements with ground based noise waveform SAR / K.A. Lukin, V.P. Palamarchuk, P.L. Vyplavin, V.V. Kudriashov // International Journal of Electronics and Telecommunications. – 2011. – Vol. 5, No. 3. – P. 389–393.

Awards

1. Student paper award for The Best Oral Presentation (1st prize) at conference «Signal Processing Symposium, SPS-2013».
2. Diploma for second place at session «Radioengineering systems and radio communication facilities» at conference «Modern Problems of Radioengineering» within the framework of the 17th International Youth Forum "Radioelectronics and Youth in XXI century".
3. Next to the Best Presentation Award at session «Passive Radars» at conference «12th Kharkiv Young Scientists Conference on Radiophysics, Electronics, Photonics and Biophysics» for «Range-Azimuth Radiometric Imaging Using Ka-Band Antenna With Synthesized Beam» (07, December 2012), Ukraine, Kharkiv.

Education

Oct. 2009 – Nov. 2013	Degree	Ph.D.
	Specialty	Radiophysics
	Thesis name	Formation of coherent radiometric images with bistatic radiometer based on antennas with beam synthesis
	Name of Organization	Department for Nonlinear Dynamics of Electronic Systems, O. Ya. Usikov Institute for Radiophysics and Electronics of the National Academy of Sciences of Ukraine

June, 2011	Activity title	Experience exchange
	Research field	Beamforming and Signal Processing in Passive Radar.
	Name of Organization	Digital Signal Processing Laboratory, Faculty of Electronics and Information Technology, Warsaw University of Technology.
Sept. 2004– June 2009	Degree	Master
	Specialty	Research Engineer in Electronics and Telecommunications
	Faculty	Radio Engineering
	University	Kharkiv National University of Radioelectronics
	Adv. Training	Programming in MS Visual C++ 2008 course (4 Nov., 2011)

Submitted scholarships proposal

The National Academy of Sciences of Ukraine scholarships for young scientists	March 2012	Successful
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Personal info

Surname	Kudriashov
Name and patronymic	Volodymyr Viktorovych
Date of birth	04, July 1987
Nationality	Ukrainian