Curriculum Vitae

Maciej Tomasz Szkulmowski, PhD

PERSONAL DETAILS

Date of birth: October 21, 1979
Citizenship: Polish

EDUCATION

2008	Ph.D. in Physics, Nicolaus Copernicus University, Toruń, Poland.
2004	M.Sc. in Computer Physics, Nicolaus Copernicus University, Toruń, Poland.
2003	M.Sc. in Experimental Physics, Nicolaus Copernicus University, Toruń, Poland.

EMPLOYMENT

since 2008	Assistant Professor in Medical Physics Group, Institute of Physics. Nicolaus Copernicus University, Toruń, Poland.

LANGUAGES

Polish	Fluent, mother tongue
English	Excellent command
French	Excellent command
Spanish	Communicative
German	Basic

ESTEEM MEASURES

2003	SPIE travel grant for SPIE Annual Meeting in San Diego, USA
2004	SPIE travel grant for Photonics West in San Jose, USA
2004	The City Office of Toruń travel grant for Photonics West in San Jose, USA
2005	Conference grant of the Foundation for Polish Science for Photonics West in San Jose, USA
2006	Economic Award of Kujawsko-pomorskie voivodeship as a member of Medical Physics Group
2006	INNOREG – scholarship for Ph.D. students founded by European Social Fund
2009	Team 1st grade award of Rector of the Nicolaus Copernicus University, as a member of Medical Physics Group
2009	Fellowship START 2009 for Young Researchers, Foundation of Polish Science
2010	Fellowship START 2010 for Young Researchers, Foundation of Polish Science
2011	Scholarship for outstanding young scientists supported by the Ministry of Science and Higher Education
2013	Individual 1st grade award of Rector of the Nicolaus Copernicus University
2013	Team 1st grade award of Rector of the Nicolaus Copernicus University, as a member of Medical Physics Group

RESEARCH GRANTS

1. 2005-2008, Investigator, grant UMK 504-F by Rector of the Nicolaus Copernicus University.
2. 2005-2008, Investigator, grant MNiI 2 P05B 207 29 by Polish Ministry of Science and Informatization.
3. 2006-2008, Investigator, grant MNiI 1 P03B 003 30 by Polish Ministry of Science and Informatization.
4. 2006-2008, Investigator, grant MNiI 1 P03B 068 30 by Polish Ministry of Science and Informatization.
5. 2008-2013, Investigator, grant EuroHORCs European Young Investigator, EURYI 01/2008-PL.
6. 2011-2012, Investigator, grant 415-F by Rector of the Nicolaus Copernicus University.
7. 2012-2013, Investigator, grant FNP TEAM/2011-8/8 by Foundation for Polish Science.
8. 2011, Head of the project, grant MNiSW IP2010 0412 70 „Iuventus Plus" by Polish Ministry of Science and Higher Education.
9. 2013-2015, Head of the project, grant NCBiR PBS1/A9/20/2013 by National Centre for Research and Development.

PARTICIPATION IN CONFERENCES

1. 2004, SPIE Photonics West, San Jose, USA, poster.
2. 2005, SPIE Photonics West, San Jose, USA, poster.
3. 2007, ARVO Annual Meeting, Fort Lauderdale, USA, poster.
4. 2008, SPIE Photonics West, San Jose, USA, oral presentation.
5. 2008 ARVO Annual Meeting, Fort Lauderdale, USA, poster.
6. 2009, SPIE Photonics West, San Jose, USA, oral presentation.
7. 2010, ARVO Annual Meeting, Fort Lauderdale, USA, poster.
8. 2010, SPIE Photonics West, San Francisco, USA, oral presentation.
9. 2011, II Konferencja Badań Podstawowych w Okulistyce, 2011, Kraków, Poland, oral presentation.
10. 2011, SPIE Photonics West, San Francisco, USA, oral presentation.
11. 2012, SPIE Photonics West, San Francisco, USA, oral presentation.
12. 2012, Advanced Infrared and Raman Spectroscopy (AIRS), Łochów, Poland, oral presentation.

SUPERVISION OF STUDENTS

1. 2011-2012, supervisor in one engineer project.
2. 2011-2013, auxiliary dissertation supervisor in one PhD project.

PATENTS

1. M. Wojtkowski, M. Szkulmowski, T. Bajraszewski, „Spectral optical coherence tomography (SOCT)", EP Patent No. 2 144 050 B1, granted 15.09.2010.
2. T. Bajraszewski, M. Szkulmowski, P. Dalasiński, M. Wojtkowski, "Apparatus for optical coherence tomography and non-interferometric imaging", EP Patent No. 2 159 535 B1, granted 08.18.2010

PATENT APPLICATIONS

1. M. Wojtkowski, P. Wojdas, M. Szkulmowski, „Optical set for examining of objects and method for examining of objects", date of filing: 15.02.2008, EP Application No. 08465003.5, EP2090223A1; WO2009101520A1; US20110063620A1.
2. T. Bajraszewski, P. Targowski, P. Dalasiński, M. Szkulmowski, P. Wojdas, "Method and apparatus for spectral optical coherence tomography", date of filing: 28.02.2008, EP Application No. 08003662.7; EP2112499A1; WO2009106358A1.
3. M. Szkulmowski, M. Wojtkowski, A. Szkulmowska, T. Bajraszewski, „Simultaneous complex ambiguity removal and velocity estimation", date of filing: 05.09.2008, EP Application No. 08015674.8; EP2161564A1; WO2010025882A1; US20110164791A1.
4. T. Bajraszewski, M. Szkulmowski, "Optical coherence tomography apparatus and method", date of filing: 28.04.2009, EP Application No. 09158892.1; EP2246659A1; WO2010124786A1.
5. T. Bajraszewski, P. Targowski, P. Dalasiński, M. Szkulmowski, P. Wojdas, "Method and apparatus for optical coherence tomography", date of filing: 19.08.2009; WO2011020482A1.

6. B. J. Kałużny, K. Karnowski, M. Wojtkowski, M. Szkulmowski, "Sposób i urządzenie do pomiaru ciśnienia wewnątrzgałkowego i właściwości biomechanicznych rogówki", Zgłoszenie numer P.394188 z dnia 11 marca 2011 r.
7. M. Szkulmowski, I. Gorczyńska, D. Szlag, M. Wojtkowski, A. Kowalczyk, "Optical coherence tomography apparatus and method with speckle suppression", date of filing: 25.01.2011, WO2012100816A1.
8. T. Bajraszewski, M. Szkulmowski, M. Różański, Takushi Yoshida, "Numerical and hardware phase correction", date of filing: 30.08.2012, JP 2012-190642.

PUBLICATIONS IN PEER REVIEVED JOURNALS

1. P. Targowski, M. Wojtkowski, A. Kowalczyk, T. Bajraszewski, M. Szkulmowski, I. Gorczyńska, „Complex spectral OCT in human eye imaging in vivo", Optics Communications 229 (2004) 79-84.
2. M. Szkulmowski, M. Wojtkowski, T. Bajraszewski, I. Gorczyńska, P. Targowski, W. Wasilewski, A. Kowalczyk, C. Radzewicz "Quality improvement for high resolution in vivo images by Spectral domain Optical Coherence Tomography with supercontinuum source" Optics Communications, 246 (2005) 569-578.
3. P. Targowski, I. Gorczyńska, M. Szkulmowski, M. Wojtkowski, A. Kowalczyk, "Improved Complex Spectral domain OCT for in vivo eye imaging", Optics Communications, 249 (2005) 357-362.
4. A. Szkulmowska, M. Wojtkowski, I. Gorczynska, T. Bajraszewski, M. Szkulmowski, P. Targowski, A. Kowalczyk, J.J. Kaluzny, „Coherent noise free ophthalmic imaging by Spectral Optical Coherence Tomography", J. Phys. D: Appl.Phys 38, (2005) 2606-2611.
5. P. Targowski, M. Góra, T. Bajraszewski, M. Szkulmowski, B. Rouba, T. Łękawa-Wysłouch, L. Tymińska-Widmer „Optical Coherence Tomography for Tracking Canvas Deformation", Laser Chemistry, 2006, Article ID 93658.
6. M. Szkulmowski, T. Bajraszewski, A. Szkulmowska, P. Targowski, A. Kowalczyk, "Efficient residual error reduction in Complex Spectral Optical Coherence Tomography with arbitrary or unknown phase", Optica Applicata 36 (2006) 147-155.
7. B. J. Kaluzny, A. Szkulmowska, J. J. Kaluzny, T. Bajraszewski, M. Szkulmowski, A. Kowalczyk, M. Wojtkowski, „In vivo imaging of posterior capsule opacification and the results of laser capsulotomy using the novel technique of spectral optical coherence tomography", Journal of Cataract & Refractive Surgery 32 (2006) 1892-1895.
8. B. J. Kaluzny, J. J. Kaluzny, A. Szkulmowska, I. Gorczynska, M. Szkulmowski, T. Bajraszewski, P. Targowski and A. Kowalczyk, "Spectral optical coherence tomography: a new imaging technique in contact lens practice," Ophthalmic Physiol Opt 26 (2006) 127-132.
9. B. J. Kałużny, J. J. Kałużny, A. Szkulmowska, I. Gorczyńska, M. Szkulmowski, T. Bajraszewski, M. Wojtkowski, P. Targowski, „Spectral optical coherence tomography: a novel technique for cornea imaging", Cornea 25 (2006) 960-965.
10. P. Targowski, T. Bajraszewski, I. Gorczyńska, M. Góra, A. Szkulmowska, M. Szkulmowski, M. Wojtkowski, J.J. Kaluzny, B.J. Kaluzny, A. Kowalczyk "Spectral Optical Coherence Tomography for Nondestructive Examinations", Optica Applicata, 36 (2006) 609-619.
11. M. Szkulmowski, M. Wojtkowski, B. Sikorski, T. Bajraszewski, V. J. Srinivasan, A. Szkulmowska, J. J. Kałużny, J. G. Fujimoto, A. Kowalczyk „Analysis of posterior retinal layers in sOCT images of the normal retina and retinal pathologies", Journal of Biomedical Optics 12 (2007) 041207.
12. J. J. Kaluzny, A. Szkulmowska, T. Bajraszewski, M. Szkulmowski, B. J. Kaluzny, I. Gorczynska, P. Targowski, and M. Wojtkowski, "Retinal imaging by spectral optical coherence tomography," European journal of ophthalmology 17 (2007) 238-245.
13. T. Bajraszewski, M. Wojtkowski, M. Szkulmowski, A. Szkulmowska, R. Huber, A. Kowalczyk, "Improved spectral optical coherence tomography using optical frequency comb", Optics Express, 16 (2008) 4163-4176.
14. M. Szkulmowski, A. Szkulmowska, T. Bajraszewski, A. Kowalczyk, M. Wojtkowski, "Flow velocity estimation using joint Spectral and Time domain Optical Coherence Tomography", Optics Express 16 (2008) 6008-6025.
15. A. Szkulmowska, M. Szkulmowski, M. Wojtkowski, A. Kowalczyk, "Phase-resolved Doppler Optical Coherence Tomography - limitations and improvements", Optics Letters 33 (2008) 1425-1427.

16. B. L. Sikorski, M. Wojtkowski, J. J. Kaluzny, M. Szkulmowski, A. Kowalczyk, "Correlation of Spectral Optical Coherence Tomography with Fluorescein and Indocyanine Green Angiography in Multiple Evanescent White Dot Syndrome", British Journal of Ophthalmology 92 (2008) 1552-1557.
17. B. J. Kałużny, A. Szkulmowska, M. Szkulmowski, T. Bajraszewski, A. Wawrocka, M. R. Krawczynski, A. Kowalczyk, M. Wojtkowski, "Granular Corneal Dystrophy in 830-nm Spectral Optical Coherence Tomography", Cornea 27 (7), 830-832 (2008).
18. J. J. Kałużny, M. Wojtkowski, B. L. Sikorski, M. Szkulmowski, A. Szkulmowska, T. Bajraszewski, J. G. Fujimoto, J. S. Duker, J. S. Schuman, A. Kowalczyk, "Analysis of outer retina reconstructed by high resolution, three-dimensional Spectral Domain Optical Coherence Tomography", Ophthalmic Surg Lasers Imaging 40 (2) (2009) 102-108.
19. B. J. Kałużny, A. Szkulmowska, M. Szkulmowski, T. Bajraszewski, A. Kowalczyk, M. Wojtkowski, „Fuchs' Endothelial Dystrophy in 830-nm Spectral Domain Optical Coherence Tomography", Ophthalmic Surg Lasers Imaging 40 (2) (2009) 198-200.
20. M. Wojtkowski, B. L. Sikorski, I. Gorczynska, M. Gora, M. Szkulmowski, D. Bukowska, J. Kałuzny, J. G. Fujimoto, A. Kowalczyk "Comparison of reflectivity maps and outer retinal topography in retinal disease by 3-D Fourier domain optical coherence tomography", Optics Express, 17(5) (2009) 4189 – 4207.
21. I. Grulkowski, M. Gora, M. Szkulmowski, I. Gorczynska, D. Szlag, S. Marcos, A. Kowalczyk, M. Wojtkowski "Anterior segment imaging with Spectral OCT system using a high-speed CMOS camera" Optics Express, 17(6) (2009) 4842–4858.
22. A. Szkulmowska, M. Szkulmowski, D. Szlag, A. Kowalczyk, M. Wojtkowski, "Three-dimensional quantitative imaging of retinal and choroidal blood flow velocity using joint Spectral and Time domain Optical Coherence Tomography", Optics Express 17(13) (2009) 10584-10598.
23. M. Szkulmowski, I. Grulkowski, D. Szlag, A. Szkulmowska, A. Kowalczyk, M. Wojtkowski, "Flow velocity estimation by complex ambiguity free joint Spectral and Time domain Optical Coherence Tomography", Optics Express 17(16) (2009) 14281-14297.
24. M. Gora, K. Karnowski, M. Szkulmowski, B. J. Kaluzny, R. Huber, A. Kowalczyk, M. Wojtkowski, "Ultra high-speed swept source OCT imaging of the anterior segment of human eye at 200 kHz with adjustable imaging range" Optics Express 17(17) (2009) 14880- 14894.
25. I. Grulkowski, I. Gorczynska, M. Szkulmowski, D. Szlag, A. Szkulmowska, R. A. Leitgeb, A. Kowalczyk, and M. Wojtkowski, "Scanning protocols dedicated to smart velocity ranging in Spectral OCT", Optics Express 17(26) (2009) 23736–23754.
26. S. Tamborski, D. Bukowska, M. Szkulmowski, A. Szkulmowska, A. Kowalczyk, M. Wojtkowski, "Simultaneous analysis of flow velocity and spectroscopic properties of scattering media with the use of joint Spectral and Time domain OCT", Photonics Letters of Poland 1(2) (2009) 49-51.
27. M. Sylwestrzak, M. Szkulmowski, D. Szlag, P. Targowski "Real-time imaging for Spectral Optical Coherence Tomography with massively parallel data processing", Photonics Letters of Poland 2(3) (2010) 137-139.
28. B. Sikorski, D. Bukowska, J. J. Kaluzny, M. Szkulmowski, A. Kowalczyk, M. Wojtkowski, "Drusen with Accompanying Fluid underneath the Sensory Retina", Ophthalmology 118(1) (2011) 82-92.
29. K. Karnowski, B. J. Kałużny, M. Szkulmowski, M. Gora, and M. Wojtkowski, "Corneal topography with high-speed swept source OCT in clinical examination", Biomedical Optics Express 2(9) (2011) 2709-2720.
30. S. Ortiz, D. Siedlecki, P. Pérez-Merino, N. Chia, A. de Castro, M. Szkulmowski, M. Wojtkowski, and S. Marcos, "Corneal topography from spectral optical coherence tomography (sOCT)", Biomedical Optics Express, 2(12) (2011) 3232-3247.
31. M. Szkulmowski, I. Gorczynska, D. Szlag, M. Sylwestrzak, A. Kowalczyk, and M. Wojtkowski, "Efficient reduction of speckle noise in Optical Coherence Tomography", Optics Express 20(2) (2012) 1337-1359.
32. B. F. Kennedy, M. Wojtkowski, M. Szkulmowski, K. M. Kennedy, K. Karnowski, and D. D. Sampson, "Improved measurement of vibration amplitude in dynamic optical coherence elastography", Biomedical Optics Express 3(12) (2012) 3138-3152.
33. D. Bukowska, D. Rumiński, D. Szlag, I. Grulkowski, J. Włodarczyk, M. Szkulmowski, G. Wilczyński, I. Gorczyńska, M. Wojtkowski, "Multi-parametric imaging of murine brain using spectral and time domain optical coherence tomography" Journal of Biomedical Optics 17(10) (2012) 101515.
34. M. Sylwestrzak, D. Szlag, M. Szkulmowski, I. Gorczynska, D. Bukowska, M. Wojtkowski, P. Targowski, "Four-dimensional structural and Doppler optical coherence tomography imaging on graphics processing units", Journal of Biomedical Optics 17(10) (2012) 100502.

35. M. Szkulmowski and M. Wojtkowski, “Averaging techniques for OCT imaging”, Optics Express 21(8) (2013) 9757-9773.
36. A. Bouwens, D. Szlag, M. Szkulmowski, T. Bolmont, M. Wojtkowski, and T. Lasser, “Quantitative lateral and axial flow imaging with optical coherence microscopy,” Optics Express 21(15) (2013) 17711-17729
37. D. M. Bukowska, L. Derzsi, S. Tamborski, M. Szkulmowski, P. Garstecki, M. Wojtkowski, “Assessment of the flow velocity of blood cells in a microfluidic device using joint spectral and time domain optical coherence tomography,” Optics Express 21(20) (2013) 24025-24038.
38. K. Komar, P. Stremplewski, M. Motoczyńska, M. Szkulmowski, M. Wojtkowski, “Multimodal instrument for high-sensitivity autofluorescence and spectral optical coherence tomography of the human eye fundus”, Biomedical Optics Express 4(11) (2013) 2683-2695.
39. B. J. Kaluzny, M. Szkulmowski, D. M. Bukowska, and M. Wojtkowski, “Spectral OCT with speckle contrast reduction for evaluation of the healing process after PRK and transepithelial PRK”, Biomedical Optics Express 5(4) (2014) 1089-1098.

OTHER PUBLICATIONS

1. P. Targowski, M. Wojtkowski, A. Kowalczyk, T. Bajraszewski, M. Szkulmowski, I. Gorczyńska, „Complex spectral OCT in human eye imaging in vivo”, Proc. SPIE 5140 (2003) 28-32.
2. T. Bajraszewski, M. Wojtkowski, P. Targowski, M. Szkulmowski, A. Kowalczyk, Three-dimensional in vivo imaging by spectral OCT, Proc. SPIE 5316 (2004) 226-232.
3. M. Szkulmowski, M. Wojtkowski, P. Targowski, A. Kowalczyk “Spectral shaping and least square iterative deconvolution in spectral OCT”, Proc. SPIE 5316 (2004) 424-431.
4. K. Stefański, K. Tomczyk, M. Szkulmowski, T. Bajraszewski, P. Targowski, A. Kowalczyk, The spectral domain optical coherence tomography image extracting without phase measurement, Proc. SPIE 5690 (2005) 143-150.
5. M. Szkulmowski, T. Bajraszewski, A. Szkulmowska, P. Targowski, A. Kowalczyk, “Full range complex spectral domain optical coherence tomography with arbitrary or unknown phase”, Proc. SPIE 5690 (2005) 426-429.
6. A. Szkulmowska, I. Gorczyńska, M. Szkulmowski, P. Targowski, A. Kowalczyk, B. J. Kałużny, “High resolution Spectral Optical Coherence Tomography for clinical imaging of the anterior segment of the eye”, Proc. SPIE 5861 (2005) 1-6.
7. I. Gorczyńska, A. Szkulmowska, M. Szkulmowski, P. Targowski, Jakub J. Kałużny, M. Wojtkowski, J. G. Fujimoto and A. Kowalczyk, „Standard versus high resolution Spectral Optical Coherence Tomography in imaging of retinal pathologies”, Proc. SPIE 5861 (2005) 25-30.
8. T. Bajraszewski, I. Gorczyńska, A. Szkulmowska, M. Szkulmowski, P. Targowski, A. Kowalczyk, “Spectral Optical Coherence Tomography in ophthalmology”, Proc. SPIE 5959 (2005) 65-69.
9. P. Targowski, T. Bajraszewski, I. Gorczyńska, A. Szkulmowska, M. Szkulmowski, M. Wojtkowski, A. Kowalczyk, J.J. Kaluzny, B.J. Kaluzny „Spectral Optical Coherence Tomography for Ophthalmologic Applications”, Proc. SPIE 6047, (2005) 6047M1.
10. M. Szkulmowski, M. Góra, M. Targowska, B. Rouba, D. Stifter, E. Breuer, P. Targowski, „Zastosowanie tomografii optycznej do badania stratygrafii obrazów olejnych”, "Techniki analityczne w konserwacji zabytków", Wydawnictwo Instytutu Maszyn Przepływowych, Gdańsk 2006, s. 79-83.
11. I. Gorczyńska, M. Wojtkowski, M. Szkulmowski, T. Bajraszewski, B. Rouba, A. Kowalczyk, P. Targowski, "Varnish Thickness Determination by Spectral Optical Coherence Tomography", LACONA VI Proceedings (2007), 493-497.
12. M. Wojtkowski, B. Kaluzny, A. Szkulmowska, T. Bajraszewski, M. Szkulmowski, P. Targowski, and A. Kowalczyk “Three-dimensional imaging of eye surface pathologies and contact lens fit with high-resolution spectral optical coherence tomography”, Proc. SPIE 6426 (2007) 64260S.
13. T. Bajraszewski, M. Wojtkowski, A. Szkulmowska, W. Fojt, M. Szkulmowski, and A. Kowalczyk “Fourier domain optical coherence tomography using optical frequency comb”, Proc. SPIE 6429 (2007) 64291F.
14. M. Wojtkowski, A. Szkulmowska, M. Szkulmowski, T. Bajraszewski, W. Fojt, and A. Kowalczyk “ Doppler Spectral Optical Coherence Tomography with optical frequency shift”, Proc. SPIE 6627 (2007) 662716.
15. P. Targowski, M. Góra, T. Bajraszewski, M. Szkulmowski, M. Wojtkowski, A. Kowalczyk, B. Rouba, L. Tymińska-Widmer, M. Iwanicka, Optical coherence tomography for structural imaging of artworks, Lasers in the Conservation of Artworks, LACONA VII Proceedings (2008) 61-65.

16. A. Szkulmowska, M. Szkulmowski, T. Bajraszewski, A. Kowalczyk, M. Wojtkowski, “Retinal blood flow analysis using joint Spectral and Time domain Optical Coherence Tomography”, Proc. SPIE 6844 (2008) 68440K.
17. B. Sikorski, M. Szkulmowski, J.J. Kałużny, T. Bajraszewski, A. Kowalczyk, M. Wojtkowski, “Mapping of photoreceptor dysfunction using high resolution, three-dimensional Spectral Optical Coherence Tomography”, Proc. SPIE 6844 (2008) 68440J.
18. M. Wojtkowski, M. Szkulmowski, T. Bajraszewski, A. Szkulmowska, A. Kowalczyk, “Simultaneous analysis of extinction and flow velocities with joint Spectral and Time domain OCT”, Proc. SPIE 6847 (2008) 662716.
19. M. Szkulmowski, M. Wojtkowski, A. Szkulmowska, A.Kowalczyk, “Flow velocity analysis with joint Spectral and Time domain OCT”, Proc. SPIE 6847 (2008) 68471K.
20. K. Karnowski, M. Gora, B. Kaluzny, R. Huber, M. Szkulmowski, A. Kowalczyk, M. Wojtkowski, “Swept source OCT imaging of human anterior segment at 200 kHz”, Proc. SPIE 7163 (2009) 716308.
21. M. Szkulmowski, I. Grulkowski, D. Szlag, A. Szkulmowska, A. Kowalczyk, M. Wojtkowski, “Simultaneous complex ambiguity removal and quantitative flow velocity estimation with joint spectral and time domain OCT”, Proc. SPIE 7168 (2009) 71681K.
22. A. Szkulmowska, M. Szkulmowski, D. Szlag, D. Bukowska, S. Tamborski, A. Kowalczyk, M. Wojtkowski, “Three-dimensional retinal blood flow analysis using joint spectral and time domain optical coherence tomography”, Proc. SPIE 7163 (2009) 71630Q.
23. I. Grulkowski, A. Szkulmowska, M. Szkulmowski, M. Gora, D. Szlag, A. Kowalczyk, M. Wojtkowski, “Segmentation of flowing particles using joint spectral and time domain optical coherence tomography”, Proc. SPIE 7168 (2009) 71680C.
24. I. Gorczynska, M. Szkulmowski, I. Grulkowski, A. Szkulmowska, D. Szlag, J. G. Fujimoto, A. Kowalczyk, M. Wojtkowski, “Blood flow measurement and slow flow detection in retinal vessels with joint spectral and time domain method in ultrahigh-speed OCT”, Proc. SPIE 7550 (2010) 75501Y.
25. D. Bukowska, A. Szkulmowska, I. Grulkowski, S. Tamborski, M. Szkulmowski, Reiner Leitgeb, A. Kowalczyk, M. Wojtkowski, “Observation of blood optical inhomogeneity using joint spectral and time domain OCT”, Proc. SPIE 7554 (2010) 755412.
26. I. Grulkowski, M. Szkulmowski, D. Bukowska, S. Tamborski, I. Gorczynska, A. Kowalczyk, M. Wojtkowski, „True velocity mapping using joint spectral and time domain optical coherence tomography”, Proc. SPIE 7550 (2010) 75500G.
27. M. Szkulmowski, A. Szkulmowska, D. Szlag, I. Grulkowski, A. Kowalczyk, M. Wojtkowski, “Real-time bulk motion insensitive flow segmentation algorithm for Doppler spectral optical coherence tomography”, Proc. SPIE 7554 (2010) 755414.
28. M. Wojtkowski, I. Grulkowski, A. Szkulmowska, M. Szkulmowski, A. Kowalczyk, “High-speed optical coherence imaging: towards the structure and the physiology of living tissue”, Proc. SPIE 7790 (2010) 77900T.
29. M. Szkulmowski, I. Gorczyńska, D. Szlag, I. Grulkowski, A. Kowalczyk, M. Wojtkowski, “Segmented scanning protocols for speckle contrast reduction in Spectral OCT images”, Proc. SPIE 7889 (2011) 78891W.
30. I. Grulkowski, G. Wilczynski, D. Bukowska, M. Szkulmowski, J. Wlodarczyk, K. Karnowski, D. Ruminski, A. Kowalczyk, M. Wojtkowski, „Cortical blood flow imaging of mouse stroke model by high-speed Spectral OCT”, Proc. SPIE 7883 (2011) 788342.
31. D. Bukowska, I. Grulkowski, G. Wilczynski, S. Tamborski, D. Ruminski, J. Wlodarczyk, D. Szlag, M. Szkulmowski, A. Kowalczyk, M. Wojtkowski, „Volumetric Doppler imaging of small animal brain using spectral and time domain optical coherence tomography”, Proc. SPIE 7889 (2011) 788913.
32. D. Rumiński, M. Szkulmowski, I. Gorczyńska, D. Szlag, M. Wojtkowski, „Metody analizy danych w tomografii OCT w celu uzyskania informacji o przepływach w naczyniach krwionośnych - materiały konferencyjne” str. 89, PKO, Międzyzdroje, 2011r.
33. M. Sylwestrzak, D. Szlag, M. Szkulmowski, P. Targowski, “Real-time massively paralel processing of Spectral Optical Coherence Tomography data on Graphics Processing Units”, Proc. SPIE 8091 (2011) 80910V.
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