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B.Sc.|M.Sc., Bucharest University in Romania, Romania, 1992

Fellowships Max-Born-Institute for Nonlinear Optics and Ultrafast Spectroscopy, Berlin, 1997

Professional Memberships American Chemical Society

American Physical Society

Biophysical Society

Select Recent Publications

Chu K, Smith ZJ, Wachsmann-Hogiu S, Lane S. Super-resolved spatial light interference microscopy. *J Opt Soc Am A Opt Image Sci Vis.* 2012 Mar 1;29(3):344-51. doi: 10.1364/JOSAA.29.000344.

Knorr F, Yankelevich DR, Liu J, Wachsmann-Hogiu S, Marcu L. Two-photon excited fluorescence lifetime measurements through a double-clad photonic crystal fiber for tissue micro-endoscopy. *J Biophotonics.* 2012 Jan;5(1):14-9. doi: 10.1002/jbio.201100070. Epub 2011 Nov 2.

Smith ZJ, Huser TR, Wachsmann-Hogiu S. Raman scattering in pathology. *Anal Cell Pathol (Amst).* 2012;35(3):145-63.

Smith ZJ, Knorr F, Pagba CV, Wachsmann-Hogiu S. Rejection of fluorescence background in resonance and spontaneous Raman microspectroscopy. *J Vis Exp.* 2011 May 18;(51). pii: 2592. doi: 10.3791/2592.

Smith ZJ, Strombom S, Wachsmann-Hogiu S. Multivariate optical computing using a digital micromirror device for fluorescence and Raman spectroscopy. *Opt Express.* 2011 Aug 29;19(18):16950-62. doi: 10.1364/OE.19.016950.

Smith ZJ, Chu K, Espenson AR, Rahimzadeh M, Gryshuk A, Molinaro M, Dwyre DM, Lane S, Matthews D, Wachsmann-Hogiu S. Cell-phone-based platform for biomedical device development



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and education applications. *PLoS One*. 2011 Mar 2;6(3):e17150.

Pagba CV, Lane SM, Cho H, Wachsmann-Hogiu S. Direct detection of aptamer-thrombin binding via surface-enhanced Raman spectroscopy. *J Biomed Opt*. 2010 Jul-Aug;15(4):047006.

Pagba CV, Lane SM, Wachsmann-Hogiu S. Conformational changes in quadruplex oligonucleotide structures probed by Raman spectroscopy. *Biomed Opt Express*. 2010 Dec 23;2(2):207-17.

Knorr F, Smith ZJ, Wachsmann-Hogiu S. Development of a time-gated system for Raman spectroscopy of biological samples. *Opt Express*. 2010 Sep 13;18(19):20049-58. doi: 10.1364/OE.18.020049.

T. Weeks, S. Wachsmann-Hogiu, T. Huser, Doubly-Resonant four-wave mixing (DR-FWM) microscopy with two Raman resonances, *Opt. Express*, Vol. 17, Issue 19, 2009, pp. 17044-17051.

Thompson DL, Pearson F, Thomas C, Rao R, Matthews D, Albala JS, Wachsmann-Hogiu S, Coleman MA. An adaptable, portable microarray reader for biodetection. *Sensors (Basel)*. 2009;9(4):2524-37. Epub 2009 Apr 14.

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