

Academic publications and presentations

Journals:

- Sheinfeld A., Bergman E., Gilead S., and Eyal A.; “*The use of pulse synthesis for optimization of photoacoustic measurements*”, *Optics Express* 17 (9), pp. 7328-7338 (2009).
Paper was also published in *Virtual Journal of Biomedical Optics* 4(6).
<http://www.opticsinfobase.org/oe/abstract.cfm?uri=oe-17-9-7328>
- Sheinfeld A., Gilead S. and Eyal A., “*Photoacoustic Doppler measurement of flow using tone burst excitation*”, *Optics Express* 18 (5), pp. 4212-4221 (2010).
The paper was chosen for “Research Highlights” at “Nature Photonics 4, pp. 264 (2010).
<http://www.opticsinfobase.org/oe/abstract.cfm?uri=oe-18-5-4212>
- Sheinfeld A. , Gilead S., Eyal A., “*Simultaneous spatial and spectral mapping of flow using photoacoustic Doppler measurement*”, *Journal of Biomedical Optics* 15(6), pp. 066010 (2010)
http://spiedigitallibrary.org/jbo/resource/1/jbopfo/v15/i6/p066010_s1?bypassSSO=1
- Sheinfeld A. , Eyal A. “*Photoacoustic thermal diffusion flowmetry*”, *Biomedical Optics Express* 3(4), pp. 800-813 (2012)
<http://www.opticsinfobase.org/boe/abstract.cfm?uri=boe-3-4-800>

Conferences and conference proceedings:

- Sheinfeld A., Bergman E., Gilead S., and Eyal A.; “*Photoacoustic spectroscopy as a non-invasive method for in-vivo protein detection and identification*”, IEEE 25th Israel convention, Dec. 2008, pp: 589-593.
- Bergman E., Sheinfeld A., Gilead S., and Eyal A: “*The use of optical waveform synthesis in photoacoustic measurements*”, IEEE 25th Israel convention, Dec. 2008, pp: 585-588.
- Sheinfeld A., Gilead S., Eyal A., “*A highly flexible pulsed photoacoustic setup based on a tunable laser source and external modulation*”, *Journal of Physics: Conference Series* 214, 012120 (2010). Given as oral presentation at *ICPPP 15*, International conference on Photoacoustic and Photothermal phenomena, Leuven, Belgium, July 2009.

- Sheinfeld A., Gilead S., Eyal A., “*Time-resolved photoacoustic Doppler characterization of flow using pulsed excitation*”, SPIE Proc. 7564, 75643N (2010). Poster presentation at *Photonics West: BIOS* conference, SF USA, Jan. 2010.
- Sheinfeld A., Gilead S., Solomon A., Eyal A., “*Ophthalmic Photoacoustic spectroscopy in the aqueous humor*”, OSA Technical Digest JMA53, OSA Biomed Conference 2010.
- Sheinfeld A., Gilead S., Eyal A., “*Simultaneous spatial and spectral characterization of flow using photoacoustic Doppler in a turbid media*”, oral presentation at IEEE 26th Israel convention, Nov. 2010.
- Sheinfeld A., Gilead S., Eyal A., “*Coded Photoacoustic Doppler excitation with near-optimal utilization of the time and frequency domains*”, SPIE Proc. 7899, 789928 (2011). Oral presentation at *Photonics West: BIOS* conference, SF USA, Jan. 2011.
- Sheinfeld A., Eyal A., “*Flow-Dependant photothermal modulation of the photoacoustic response*”, SPIE Proc. 8223, 82231D (2012). Oral presentation at *Photonics West: BIOS* conference, SF USA, Jan. 2012.
- Sheinfeld A., Eyal A., “*Laser-diode based 10MHz Photoacoustic Doppler flowmetry at 830nm*”, SPIE Proc. 8223, 82233G (2012). Poster presentation at *Photonics West: BIOS* conference, SF USA, Jan. 2012.
- Sheinfeld A., Eyal A., “*Doppler photoacoustic and Doppler ultrasound in blood with optical contrast*”, SPIE Proc. 8581, 85810S (2013). Oral presentation at *Photonics West: BIOS* conference, SF USA, Feb. 2013
- Sheinfeld A., Eyal A., “*Photoacoustic thermal diffusion flowmetry in tissue-mimicking phantoms*”, SPIE Proc. 8581, 85811O (2013). Oral presentation at *Photonics West: BIOS* conference, SF USA, Feb. 2013