

Szabó Gábor összes közleményeinek jegyzéke

2013

1. N. Utry, T. Ajtai, Á. Filep, M. Pintér, A. Hoffer, Z. Bozóki, **G. Szabó** (2013):
„Mass specific optical absorption coefficient of HULIS aerosol measured by a four-wavelength photoacoustic spectrometer at NIR, VIS and UV wavelengths”
Atmospheric Environment, publikálásra elfogadva

2012

2. Á. Filep, T. Ajtai, N. Utry, M. D. Pintér, T. Nyilas, Sz. Takács, Zs. Máté, A. Gelencsér, A. Hoffer, M. Schnaiter, Z. Bozóki, **G. Szabó**:
Absorption spectrum of ambient aerosol and its correlation with size distribution in specific atmospheric condition after the red mud accident.
Aerosol and Air Quality Research. DOI: 10.4209/aaqr.2012.04.0078 (2012)
3. Kis, B. J., Sarnyai, Z, Kákonyi, R, Erdélyi, M, **Szabó G**:
Single-energy material decomposition using X-ray path length estimation
Journal of Computer Assisted Tomography, November issue, Vol. 36, No. 6 (Nov-Dec 2012) 768-777
4. M. Csete, Á. Sipos, A. Szalai, **G. Szabó**:
Optimized illumination directions of single-photon detectors integrated with different plasmonic structures
in proceeding, talk, COMSOL Conference, 2012
5. Dudas, L, Sinko, J, Erdelyi, M, **Szabo, G**:
Confocal line-scanning microscope with modified illumination
Optics Letters 37 (20) 4293-4295 (Oct 15, 2012)
6. M. Csete, Á. Sipos, A. Szalai, **G. Szabó**:
Theoretical study on interferometric illumination of gold colloid sphere monolayers to produce complex structures for spectral engineering
IEEE Photonics Journal, 4/5 (Oct 2012); DOI: 10.1109/JPHOT.2012.2218587
7. V Hanyecz, Á. Mohácsi, N. Utry, S. Puskás, Á. Vágó, **G. Szabó**
A csapvíztől a glikolig, a környezeti levegőtől a földgázig; benzol és toluol koncentráció meghatározás széles dinamikus tartományban
In: Z Galbács (szerk.): Proceedings of the 17th International Symposium on Analytical and Environmental Problems, 19 Sep 2011 Szeged
Szeged: JATE Press, 2012. pp. 120-124. (ISBN:978-963-315-066-5)
8. Dudas, L; Gajdatsy, G; Sinko, J; Erdelyi, M; **Szabo, G**:
Correction of error motion in a line-scanning tomographic optical microscope
Applied Optics 51 (26) 6319-6324 (Sep 10 2012)
9. Kecskemeti, G; Hopp, B; Smausz, T; Toth, Z; **Szabo, G**;
Production of porous PTFE-Ag composite thin films by pulsed laser deposition
Applied Surface Science 258 (20) 7982-7988 (Aug 2012)
10. Z. Kőkuti, K. van Gruijthuijsen, M. Jenei, A. Czirják, J. Kokavecz, A. Danyi, P. Ailer, L. Palkovics, A. C. Völker, **G. Szabó**:
„High-frequency rheology of nonlinear silicone fluids”
poster előadás a XVth International Congress on Rheology konferencián, August 5-10, 2012, Lisszabon

11. M. Csete, A. Szalai, Á. Sipos, **G. Szabó**:
Impact of polar-azimuthal illumination angles on efficiency of nano-cavity-array integrated single-photon detectors
Optics Express, 20/15 (Jul 16, 2012) 17065-17081
12. Tuboly Eszter, Szabó Andrea, Garab Dénes, Bartha Gábor, Janovszki Ágnes, Mohácsi Árpád, Szabó Anna, Kaszaki József, **Szabó Gábor**, Boros Mihály:
A mitokondrium diszfunkció által okozott metánképződés és gyulladáisos reakció mérsékelése L-A-glicerilfoszfátidilkolin kezeléssel.
A Magyar Élettani Társaság, a Magyar Anatómusok Társasága, a Magyar Biofizikai Társaság és a Magyar Mikrocirkulációs és Vaszkuláris Biológiai Társaság Kongresszusa, 2012. június 10-13., Absztraktfüzet, p. 200.
13. T. Csizmadia, B. Hopp, T. Smausz, I. Hanyecz, J. Kopniczky, and **G. Szabó**:
Application possibility of laser-induced backside dry etching technique for fabrication of SERS active surfaces
Conference poster, P2-34, E-MRS 2012 Spring Meeting May 14-18 2012, Strasbourg, France
14. B. Hopp, G. Kecskeméti, T. Smausz, T. Ajtai, A. Filep, N. Utry, A. Kohut, Z. Bozóki, **G. Szabó**:
Characterization of excimer laser ablation generated pepsin particles using multi-wavelength photoacoustic instrument
Appl. Phys. A 107 (2) (May 2012) 429-435
15. Pogany, A; Weidinger, T; Bozoki, Z; Mohacsi, A; Bienkowski, J; Jozefczyk, D; Eredics, A; Bordas, A; Gyongyosi, AZ; Horvath, L; **Szabo, G**;
Application of a novel photoacoustic instrument for ammonia concentration and flux monitoring above agricultural landscape – results of a field measurement campaign in Choryn, Poland
Idojaras 116 (2) 93-107 (Apr-Jun 2012)
16. Tuboly E, Szabo A, Garab D, Bartha G, Janovszky A, Eros G, Szabo A, Mohacsi A, **Szabo G**, Kaszaki J, Ghyczy M, Boros M:
Methane biogenesis during sodium azide-induced chemical hypoxia in rats
American Journal of Physiology-Cell Physiology Epub ahead of print: Paper 10.1152/ajpcell.00300.2012. (2012)
17. Szabó A, Mohácsi A, Novák P, Aladzic D, Turzó K, Rakonczay Z, Erös G, Boros M, Nagy K, **Szabó G**:
Diode laser based photoacoustic gas measuring instruments intended for medical research
In: Biophotonics: Photonic Solutions for Better Health Care III.
Konferencia helye, ideje: Brussels, Belgium, 2012.04.16-2012.04.19.
Paper 84272J. (Progress in Biomedical Optics and Imaging - Proceedings of SPIE) 8427 (ISBN:9780819491190)
18. Anna Szabó, Árpád Mohácsi, Péter Novák, Daniela Aladzic, Kinga Turzó, Zoltán Rakonczay, Gábor Erös, Mihály Boros, Katalin Nagy and **Gábor Szabó**:
Diode laser based photoacoustic gas measuring instruments intended for medical research
Proc. SPIE 8427, 84272J (April 2012)
19. B. Hopp, T. Smausz, **G. Szabó**, L. Kolozsvári, D. Kafetzopoulos, C. Fotakis, A. Nógrádi:
Femtosecond laser printing of living cells using absorbing film assisted laser induced forward transfer
Optical Engineering (January 2012), Vol. 51 (1) Art. N.:014302

20. Z. Bozoki; A. Pogany; **G. Szabo**:
Photoacoustic instruments for practical applications: present, potentials, and future challenges
 Applied Spectroscopy Review 46 (1) 1-37 (2011)
21. Ajtai, T; Filep, A; Utry, N; Schnaiter, M; Linke, C; Bozoki, Z; **Szabo, G**; Leisner, T:
Inter-comparison of optical absorption coefficients of atmospheric aerosols determined by a multi-wavelength photoacoustic spectrometer and an Aethalometer under sub-urban wintry conditions
 Journal of Aerosol Science, Vol. 42, Issue: 12 pp. 859-866 (DEC 2011)
22. Z. Kőkuti, J. Kokavecz, A. Czirják, I. Holczer, A. Danyi, Z. Gábor, **G. Szabó**, N. Pézsa, P. Ailer, L. Palkovics:
 „Nonlinear viscoelasticity and thixotropy of a silicone fluid”, Annals of Faculty Engineering Hunedoara – International Journal of Engineering, **9** (2) 177-180 (2011)
23. Veronika Hanyecz, Árpád Mohácsi, Sándor Puskás, Árpád Vágó and **Gábor Szabó**:
Photoacoustic spectroscopy-based detector for measuring benzene and toluene concentration in gas and liquid samples
 Meas. Sci. Technol. **22** (2011) 125602 (7pp)
24. József Sinkó, László Dudás, Gábor Gajdátsy, Miklós Erdélyi and **Gábor Szabó**:
Map free line-scanning tomographic optical microscope
 Optics Letters Vol. 36, No. 20 (15 OCT 2011)
25. V Hanyecz, Á. Mohácsi, S. Puskás, Á. Vágó, **G. Szabó**:
Terepi műszer gázok és folyadékok benzol és toluol tartalmának meghatározására (Field-usable detector for determining benzene and toluene in gas and liquid samples)
 In: - (szerk.): X. Környezetvédelmi analitikai és technológiai konferencia: A környezetvédelem és az élelmiszerminőség aktuális kérdései
 Konferencia helye, ideje: Sümeg, Magyarország, 2011.10.05-2011.10.07.
 Budapest: Magyar Kémikusok Egyesülete, 2011. p. 54.
 (ISBN:978-963-9970-17-5)
26. **Szabo, G** :
Towards attosecond biophysics: what can ELI-ALPS offer?
 European Biophysics Journal with Biophysics Letters Volume: 40 Supplement: 1 pp. 193-193 (AUG 2011)
27. Ajtai, T ; Filep, A ; Kecskemeti, G ; Hopp, B ; Bozoki, Z ; **Szabo, G** :
Wavelength dependent mass-specific optical absorption coefficients of laser generated coal aerosols determined from multi-wavelength photoacoustic measurements
 Applied Physics A-Materials Science & Processing Volume: 103 Issue: 4 pp. 1165-1172 (JUN 2011)
28. P Novák, M Móra, D Aladzic, A Szabó, Á Mohácsi, Z Rakonczay, K Turzo, **G Szabó**, K Nagy:
Assessment of halitosis in a student population in Hungary
 Journal of Dental Research 90:(Spec Iss B,) Paper 507. (2011)
29. Czirják, A., Bara, L., Danyi, A., **Szabó, G.**, Ailer, P., Pézsa, N., Lukács, P.:
Simulation of rod-climbing of viscoelastic and thixotropic fluids
 16th International Conference on Finite Elements in Flow Problems (FEF 2011) W. A. Wall and V. Gravemeier (Eds), Munich, Germany, March 23-25 (2011)

30. Kőkuti, Z., Kokavecz, J., Holczer, I., Danyi, A., Gábor, Z., **Szabó, G.**, Ailer, P., Palkovics, L., Pézsa, N., Czirják, A.:
Nonlinear viscoelasticity and thixotropy of a silicone fluid
A jövő járműve, 2011/1-2, 134-136 oldal, X-meditor Lapkiadó Oktatás-és Rendezvényszervező Kft., HU ISSN 1788-2699 (2011)

2010

31. Kákonyi R., Erdélyi M., **Szabó G.**:
Monte Carlo simulation of the effects of anode surface roughness on x-ray spectra.
Medical Physics 37 (11) pp.5737-5745 (NOV 2010)
32. Ajtai T., Filep Á., Schnaiter M., Linke C., Vragel M., Bozóki Z., **Szabó G.**, Leisner T.:
A novel multi-wavelength photoacoustic spectrometer for the measurement of the UV-vis NIR spectral absorption coefficient of atmospheric aerosols.
Journal of Aerosol Science 41 (11) pp.1020-1029 (NOV 2010)
33. Ajtai T., Filep Á., Varga A., Motika G., Bozóki Z., **Szabó G.**:
Ozone concentration-monitoring photoacoustic system based on a frequency-quadrupled Nd:YAG laser.
Applied Physics B-Lasers and Optics 101 (1-2) pp.403-409 (OCT 2010)
34. V Hanyecz, Á. Mohácsi, A. Pogány, A. Varga, Z. Bozóki, I. Kovács, **G. Szabó**:
Fotoakusztikus gázelemző fejlesztése a MOL Nyrt. kísérleti laboratóriumába
In: Janaky Cs, Nemeth Z (szerk.): XXXII. Kémiai Előadói Napok (Chemistry Lectures):
Program és előadásösszefoglalók (Program and Proceedings).
Konferencia helye, ideje: Szeged, Magyarország, 2010.10.26-2010.10.28.
Magyar Kémikusok Egyesülete, pp. 215-216.(ISBN:978-96-3315-020-7)
35. V Hanyecz, Á. Mohácsi, S. Puskás, Á. Vágó, **G. Szabó**:
Fotoakusztikus műszer fejlesztése gázok és folyadékok BTX-tartalmának automatikus meghatározására
In: Janaky Cs, Nemeth Z (szerk.): XXXIII. Kémiai Előadói Napok (Chemistry Lectures):
Program és előadásösszefoglalók (Program and Proceedings)
Konferencia helye, ideje: Szeged, Magyarország, 2010.10.24-2010.10.27.
Szeged: Magyar Kémikusok Egyesülete, 2010. pp. 173-174.
(ISBN:978-96-3315-020-7)
36. Z. Kőkuti, J. Kokavecz, A. Czirják, I. Holczer, A. Danyi, Z. Gábor, **G. Szabó**, N. Pézsa, P. Ailer, L. Palkovics:
„Nonlinear viscoelasticity and thixotropy of a silicone fluid”,
előadás a „TEAM 2010 / AGTEDU 2010” konferencián, Kecskemét, 2010. november 4–5.
37. G Gajdátsy, L Dudás, M Erdélyi, **G Szabó**:
Line-scanning tomographic optical microscope with isotropic transfer function.
Journal of Optics 12 (11) art.no.115505 (NOV 2010)
38. Z Bozóki, A Szabó, Á Mohácsi, **G Szabó**:
A fully opened photoacoustic resonator based system for fast response gas concentration measurements.
Sensors and Actuators B: Chemical-B, 147 (1) 206-212 (MAY 18 2010)
39. Andrea Pogány, Tamás Weidinger, Jerzy Bienkowski, Árpád Bordás, Zoltán Bozóki, Attila Eredics, Arjan Hensen, Krzysztof Janku, Győző Kiss, Aline Kraai, Zoltán Istenes, Árpád Mohácsi, **Gábor Szabó**, Kirsten Schelde, Mark Theobald:
Energy budget components, ammonia concentration and flux measurements on an agricultural landscape near Bjerringbro, Denmark
EGU Assembly 2010 Vienna, Geophysical Research Abstracts 12: Paper 14742. (2010)

40. Z. Kőkuti, J. Kokavecz, A. Czirják, I. Holczer, Cs. Vass, A. Danyi, Z. Gábor, **G. Szabó**, N. Pézsa, P. Ailer, H. Németh, L. Palkovics:
 „*Nonlinear viscoelasticity and thixotropy of silicone fluids*”, poster az „European Seminar on Coupled Problems 2010, Pilsen” konferencián
41. Z. Kőkuti, J. Kokavecz, A. Czirják, I. Holczer, A. Danyi, Z. Gábor, **G. Szabó**, N. Pézsa, P. Ailer, H. Németh, L. Palkovics:
 „*Nonlinear viscoelasticity of silicone fluids*”, poster az „Annual European Rheology Conference 2010, Göteborg” konferencián
42. Andrea Pogány, Árpád Mohácsi, Stephanie K. Jones, Eiko Nemitz, Attila Varga, Zoltán Bozóki, Zoltán Galbács, Tamás Weidinger, László Horváth, **Gábor Szabó**:
Evaluation of a diode laser based photoacoustic instrument combined with preconcentration sampling for measuring surface–atmosphere exchange of ammonia with the aerodynamic gradient method.
 Atmospheric Environment 44 (12) 1490-1496 (APR 2010)
43. Zoltán Györi, Dávid Tátrai, Ferenc Sarlós, **Gábor Szabó**, Ákos Kukovecz, Zoltán Kónya, Imre Kiricsi:
Laser-induced fluorescence measurements on CdSe quantum dots.
 Processing and Application of Ceramics 4 (1), 33-37 (MARCH 2010)
44. Hopp B, Smausz T, Csizmadia T, Vass C, Csako T, **Szabo G**:
Comparative study of different indirect laser-based methods developed for microprocessing of transparent materials.
 Journal of Laser Micro Nanoengineering 5 (1) 80-85 (FEB 2010)
45. Veronika Hanyecz, Árpád Mohácsi, Andrea Pogány, Attila Varga, Zoltán Bozóki, Imre Kovács, **Gábor Szabó**:
Multi-component photoacoustic gas analyzer for industrial applications.
 Vibrational Spectroscopy 52 (1) (JAN 22, 2010) 63–68

2009

46. B Hopp, T Smausz, T Csizmadia, Cs Vass, T Csákó, **G Szabó**:
 „*Comparative Study of Different Indirect Laser-Based Methods Developed for Microprocessing of Transparent Materials*”, invited lecture
 Proceedings of LAMP2009 - the 5th International Congress on Laser Advanced Materials Processing, Kobe, Japan. 2009
47. B. Hopp, T. Smausz, B. Zsibrita and **G. Szabó**:
 „*Deposition of pepsin thin layer using IR-MAPLE procedure*”,
 CM.P.3 CL.P.15 CLEO®/Europe–EQEC 2009, International Congress Centre Munich, Germany, 14 - 19 June 2009
48. T. Ajtai, Á. Filep, Z. Bozóki, M. Schnaiter, C. Linke, M. Vragel, L. Fodi and **G. Szabó**:
 „*Demonstration of the Applicability of Novel Photoacoustic Aerosol Monitor for Optical Absorption Coefficient Determination, Laboratory Tests,*”
 Eurochamp
49. T. Ajtai, M. Schnaiter, C. Linke, M. Vragel, Á. Filep, L. Fodi, G., Motika, Z. Bozóki, **G.Szabó**:
 „*Novel Photoacoustic Aerosol Monitor for Optical Absorption Coefficient Determination. Laboratory and Field Test.*”,
 EAC 2009. Karlsruhe (Németország), 2009. 09. 07. - 11.

50. Ajtai Tibor, Filep Ágnes, Földi Lajos, dr. Bozóki Zoltán, Varga Attila, **dr. Szabó Gábor**:
„Természetes és mesterségesen generált aeroszolok mérésére és aeroszolfajták megkülönböztetésére alkalmas optikai abszorpciós elvű fotoakusztikus mérőműszer fejlesztése és alkalmazásai”,
IX. Magyar Aeroszol Konferencia Balatonfüred, 2009. 04. 27. - 28.
51. T. Ajtai, Á. Filep, Z. Bozóki, M. Schnaiter, C. Linke, M. Vragel, L. Fodi, **G. Szabó**:
„Demonstration of the Applicability of Novel Photoacoustic Aerosol Monitor for Optical Absorption Coefficient Determination. Laboratory and Field Test.”,
ISSIR 2009. Hunedoara (Románia), 2009. 04. 22. - 24.
52. T. Ajtai, M. Schnaiter, C. Linke, M. Vragel, Á. Filep, L. Fodi, G., Motika, Z. Bozóki, **G. Szabó**:
Demonstration of the Applicability of Novel Photoacoustic Aerosol Monitor for Optical Absorption Coefficient Determination. Laboratory and Field Test.,
EGU General Assembly 2009. Bécs (Ausztria), 2009. 04. 20. - 24.
Geophysical Research Abstracts 11, Paper 4332
53. Andrea Pogány, Árpád Mohácsi, Zoltán Bozóki, **Gábor Szabó**, Attila Varga, László Horváth, Tamás Weidinger:
“Ammonia concentration and gradient measurements at various sites with a room temperature diode laser based photoacoustic instrument (WaSil-Flux)”,
NitroEurope 4th General Assembly and Annual Meeting, 2009, Gothenburg (Sweden)
54. Pogány, Á. Mohácsi, Z., Galbács, T. Weidinger, L. Horváth, A. Varga, Z. Bozóki, **G. Szabó**:
“Diode laser based photoacoustic instrument for ammonia concentration and flux monitoring”,
10th International Symposium „Interdisciplinary Regional Research” Romania-Hungary-Serbia, 2009, Hunedoara (Romania)
55. Z. Bozóki, A. Pogány, A. Varga, Á. Mohácsi and **G. Szabó**:
„Diode laser based photoacoustic gas detection instruments for environmental monitoring applications”,
EGU General Assembly, 2009, Vienna (Austria), Paper 4924
56. Z. Bozóki, A. Pogány, A. Varga, Á. Mohácsi and **G. Szabó**:
„Diode laser based photoacoustic gas detection instruments for environmental monitoring applications”,
EGU General Assembly, 2009, Vienna (Austria), Paper 4924
57. Pogány, Á. Mohácsi, Z. Bozóki, T. Weidinger, L. Horváth, and **G. Szabó**:
“Diode laser based photoacoustic instrument for ammonia concentration and flux monitoring”,
EGU General Assembly, 2009, Vienna (Austria)
Geophysical Research Abstracts 11: Paper 4041
58. Gajdátsy G, Benedek F, Kokavec J, **Szabó G**, Kornis J:
Improved fiber optic device for in situ determination of electrolyte stratification in lead-acid batteries.
Review of Scientific Instruments, 80 (12), Art. No.: 125108 (DEC 2009)
59. Róbert Kákonyi, Miklós Erdélyi and **Gábor Szabó**:
Monte Carlo analysis of energy dependent anisotropy of bremsstrahlung x-ray spectra.
Med. Phys. Volume 36, Issue 9, pp. 3897-3905 (September 2009)

60. Kőkuti Zoltán, Kokavecz János, Holczer István, Danyi Antal, Gábor Zoltán, Czirják Attila, **Szabó Gábor**, Ailer Piroska, Pézsa Nikolett, Németh Huba, Palkovics László: „*Torziós lengéscsillapítóban alkalmazott viszkózus folyadék modellezése*”, A Jövő Jáműve, 2009/3-4, pp. 61-65
61. Szakáll M., Varga A., Pogány A., Bozóki Z., **Szabó G.**: *Novel resonance profiling and tracking method for photoacoustic measurements.* Applied Physics B-Lasers and Optics, 94(4): 691-698 MAR 2009
62. Hopp B, Smausz T, Vass C, **Szabó G**, Bohme R, Hirsch D, Zimmer K: *Laser-induced backside dry and wet etching of transparent materials using solid and molten tin as absorbers.* Applied Physics A-Materials Science and Processing 94 (4): 899-904 (MAR 2009)
63. Pogány A, Mohácsi A, Varga A, Bozóki Z, Galbács Z, Hováth L, **Szabó G**: *A compact ammonia detector with sub-ppb accuracy using near-infrared photoacoustic spectroscopy and preconcentration sampling.* Environmental Science and Technology 43 (3): 826-830 (FEB 2009)
64. Erdélyi M, Lajkó M, Kákonyi R, **Szabó G.**: *Measurement of the x-ray tube anodes' surface profile and its effects on the x-ray spectra.* Medical Physics 36 (2): 587-593 (FEB 2009)

2008

65. Hopp Béla, Vass Csaba, Smausz Tomi, **Szabó Gábor**: *Átlátszó anyagok lézeres finommegmunkálása.* Kvantumelektronika 2008, Budapest, 2008. október 17. M-3
66. Z. Bozóki, A. Mohácsi, A. Varga, H. Huszár, **G. Szabó**: *WaSul: Photoacoustic instruments for various applications.* The 16th International Conference on Advanced Laser Technologies, Sept 13-18, 2008 Siófok, meghívott előadás
67. Pogány, Á. Mohácsi, L. Horváth, Z. Bozóki, **G. Szabó**: *A photoacoustic system for measuring ammonia exchange between the biosphere and atmosphere.* EGU General Assembly 2008. Bécs (Ausztria), 2008. április 14-18., Geophysical Research Abstracts, Vol. 10, EGU2008-A-01665, 2008, SRef-ID: 1607-7962/gra/EGU2008-A-01665
68. H. Huszár, Z. Bozóki, Á. Mohácsi, **G. Szabó**, A. Zahn: *WaSul-Hygro: A diode laser based photoacoustic instrument for airborne measurement of water vapour and total water concentration.* EGU General Assembly 2008. Bécs (Ausztria), 2008. április 14-18., Geophysical Research Abstracts, Vol. 10, EGU2008-A-01890, 2008, SRef-ID: 1607-7962/gra/EGU2008-A-01890
69. Z. Bozóki, T. Ajtai, M. Schnaiter, C. Linke, M. Vragel, Á. Filep, A. H. Veres, **G. Szabó**: *Novel Multi Wavelength photoacoustic system (WaSul-MuWaPas) for spectral characterization of aerosols.* EGU General Assembly 2008. Bécs (Ausztria), 2008. április 14-18., Geophysical Research Abstracts, Vol. 10, EGU2008-A-04052, 2008, SRef-ID: 1607-7962/gra/EGU2008-A-04052

70. A.Varga.; Á. Mohácsi; A Szabó; V. Hanyecz, Z. Bozóki; **G. Szabó:**
Photoacoustic detection system for biogas applications.
 EGU General Assembly 2008. Bécs (Ausztria), 2008. április 14-18., Geophysical Research Abstracts, Vol. 10, EGU2008-A-04748, 2008, SRef-ID: 1607-7962/gra/EGU2008-A-04748
71. Helga Huszár, Andrea Pogány, Zoltán Bozóki, Árpád Mohácsi, László Horváth, **Gábor Szabó:**
Ammonia monitoring at ppb level using photoacoustic spectroscopy for environmental application
 Sensors and Actuators B: Chemical 134 (2), 1027-1033 (Sept 2008)
72. B Hopp, T Smausz, T Csizmadia, J Budai, A Oszkó, **G Szabó:**
Laser-induced backside dry etching: wavelength dependence
 Journal of Physics D: Applied Physics 41, 175501 (6pp) (AUG 2008)

2007

73. T.Ajtai, Á. Filep, A. H. Veres, G. Motika, Z. Bozóki, **G. Szabó:**
Novel Multi-Purpose Sensor for Atmospheric Monitoring Using Nd:YAG Laser Based Multi-wavelength Photoacoustic System.
 (EGU2007-A-11646), EGU General Assembly 2007, Geophysical Research Abstracts, Vol. 9, 11646, 2007, SRef-ID: 1607-7962/gra/EGU2007-A-11646
74. T.Ajtai, Á. Filep, A. H. Veres, G. Motika, Z. Bozóki, **G. Szabó:**
Multi purpose air quality monitoring photoacoustic system for aerosol, NO₂ and ozone detection: laboratory and field test.
 (EGU2007-A-11653), EGU General Assembly 2007., Geophysical Research Abstracts, Vol. 9, 11635, 2007, SRef-ID: 1607-7962/gra/EGU2007-A-11635
75. A.Varga.; Á. Mohácsi; M. Szakáll; Z. Bozóki; **G. Szabó:**
Photoacoustic system for monitoring hydrogen sulphide (H₂S) in natural gas and in biogas.
 EGU General Assembly 2007. Bécs (Ausztria), 2007. április 15-20., Geophysical Research Abstracts, Vol. 9, 11678, 2007, SRef-ID: 1607-7962/gra/EGU2007-A-11678
76. Miklós Szakáll, János Csikós, Zoltán Bozóki, **Gábor Szabó:**
On the temperature dependent characteristics of a photoacoustic water vapor detector for airborne application.
 Infrared Physics and Technology 51 (2): 113-121 October (2007)
77. Zoltán Filus, Tibor Ajtai, Zoltán L. Horváth, Zoltán Bozóki, Gábor Pap, Tibor Nagy, Tamás Katona, **Gábor Szabó:**
A novel apparatus based on a photoacoustic gas detection system for measuring permeation parameters of polymer samples
 Polymer Testing, 26 (5): 606-613 August (2007)
78. **Gábor Szabó,** Zoltán Bozóki, Gábor Pap, Tamás Katona, Zoltán Filus:
Development and application of photo-acoustic and photo-thermal systems for the measuring of the gas permeability of polymers.
 (Entwicklung und Anwendung fotoakustischer bzw. fothermischer Systeme zur Messung der Gasdurchlässigkeit von Polymeren.)
 Gummi Fasern Kunststoffe, 2007/6, 343-347

2006

79. Csoma Z, Koreck A, Ignacz F, Bor Z, **Szabo G**, Bodai L, Dobozy A, Kemeny L:
PUVA treatment of the nasal cavity improves the clinical symptoms of allergic rhinitis and inhibits the immediate-type hypersensitivity reaction in the skin
Journal of Photochemistry and Photobiology B-Biology 83 (1): 21-26 Apr 3 (2006)
80. Attila Varga, Zoltán Bozóki, Árpád Mohácsi, Miklós Szakáll, **Gábor Szabó**:
Photoacoustic system for on-line process monitoring of hydrogen sulfide (H₂S) and water vapor concentration in natural gas streams
Petroleum Engineering Summer School, Workshop 20: Natural gas from reservoir to the burner tip (part two); Dubrovnik, Croatia, 2006
81. Z. Filus, T. Ajtai, Z. Bozóki, G. Pap, **G. Szabó**, I. Domonkos, T. Nagy and T. Katona:
Novel gas detection method for permeability measurement
Oilfield Engineering with Polymers, 29-30 March 2006, London, UK
82. C. Linke, O. Mohler, A. Veres, Á. Mohácsi, Z. Bozóki, **G. Szabó** and M. Schnaiter:
Optical properties and mineralogical composition of different Saharan mineral dust samples: a laboratory study.
Atmospheric Chemistry and Physics Discussions 6 (2): 2897-2922 (2006)
83. C. Linke, O. Mohler, A. Veres, Á. Mohácsi, Z. Bozóki, **G. Szabó** and M. Schnaiter:
Optical properties and mineralogical composition of different Saharan mineral dust samples: a laboratory study.
Atmospheric Chemistry and Physics. 6: 3315-3323 (2006)
84. Varga, Z. Bozóki, M. Szakáll and **G. Szabó**:
Photoacoustic System for On-line Process Monitoring of Hydrogen Sulfide (H₂S) Concentration in Natural Gas Streams
Applied Physics B-Lasers and Optics 85 (2-3): 315-321 Nov (2006)
85. H. Huszár, Z. Bozóki, Á. Mohácsi, S. Puskás, J. Tamás and **G. Szabó**:
Combination of photoacoustic detector with diffusion sampler for the measurement of water vapor concentration in ethylene glycols for the natural gas industry.
Sensors and Actuators B Chemical 119 (2): 600-607 Dec 7 (2006)
86. Szakáll, H. Huszár, Z. Bozóki and **G. Szabó**:
On the Pressure Dependent Sensitivity of a Photoacoustic Water Vapor Detector Using a Novel Modulation Method.
Infrared Physics and Technology 48 (3) 192-201 Aug 2006

2005

87. Dr. Demény András, Dr. Erostyák János, **Dr. Szabó Gábor**, Dr. Trócsányi Zoltán:
Fizika I. Klasszikus mechanika (Általa írt fejezetcímek: Hidrosztatika, Aerosztatika, Molekuláris jelenségek, Áramlástan (269-333. oldal)
Nemzeti Tankönyvkiadó, Budapest, 2005
88. **Szabó Gábor**, Bozóki Zoltán, Mohácsi Árpád, Szakáll Miklós, Hegedűs Veres Anikó, Filus Zoltán, Ajtai Tibor, Huszár Helga és Varga Attila:
Fotoakusztikus gázdetektáló rendszerek alkalmazásorientált fejlesztése.
Magyar Tudomány 2005/12 1489-1494.
89. Mohácsi Árpád, Bozóki Zoltán, Varga Attila, Szakáll Miklós, Puskás Sándor, Tamás János, **Szabó Gábor**:
Földgázok vízgőz- és kén-hidrogén-tartalmának mérése kombinált fotoakusztikus berendezéssel.
MOL Szakmai Tudományos Közlemények 2005/2 (181-183)

90. Huszár Helga, Bozóki Zoltán, Mohácsi Árpád, **Szabó Gábor**, Puskás Sándor, Tamás János:
Etilén-glikol víztartalmának mérése diffúziós mintavevővel ellátott fotoakusztikus detektorral.
MOL Szakmai Tudományos Közlemények 2005/2 (177-180)
91. **Szabó G.** és Bor Zs.:
Többszörös leképezési módszerek az optikai mikrolitográfiában.
Magyar Tudomány, 50., 2005, 1495-1498.
92. Koreck A, Csoma Zs, Ignác F., Bodai L, Kadocsa Edit, **Szabó G**, Bor Zs, Nékám K, Dobozy A és Kemény L:
Intranazalis fototerápia az allergiás rhinitis kezelésében.
Orvosi Hetilap, 146. évf. 19. szám, (2005) 965-969
93. Koreck AI, Csoma Z, Bodai L, Ignacz F, Kenderessy AS, Kadocsa E, **Szabo G**, Bor Z, Erdei A, Szony B, Homey B, Dobozy A, Kemeny L:
Rhinophototherapy: A new therapeutic tool for the management of allergic rhinitis
Journal of Allergy and Clinical Immunology 115 (3): 541-547 MAR 2005
94. M. Szakáll, Z. Bozóki, Á. Mohácsi, A. H. Veres, A. Varga, H. Huszár and **G. Szabó**:
Photoacoustic Detectors for Gas Emission and Imission Monitoring.
7th Atmospheric Spectroscopy Applications Meeting, Reims-France, 6-8 September 2005
95. H. Huszár, M. Szakáll, Z. Bozóki, A. Zahn and **G. Szabó**:
Characterization of Photoacoustic Water Vapor Detector for Atmospheric Applications.
7th Atmospheric Spectroscopy Applications Meeting, Reims-France, 6-8 September 2005
96. Zoltán Bozóki, Miklós Szakáll, Árpád Mohácsi Attila Varga, Helga Huszár, Anikó Hegedis Veres, Zoltán Filus, János Csikós and **Gábor Szabó**:
Photoacoustic System Development for Industrial and Environmental Gas Monitoring.
Forum Acousticum, Budapest 2005. August 29 - September 2 2005
97. H. Veres, F. Sarlós, A. Varga, **G. Szabó**, Z. Bozóki, G. Motika and J. Gyapjas:
Nd:YAG laser based photoacoustic detection of ozone; comparison of pulsed and quasi continuous wave operation and field tests.
Spectroscopy Letters, **38** (2005) 377-388.

2004

98. Csoma Z., Ignacz F., Bor Z., **Szabo G.**, Bodai L., Dobozy A., Kemeny L.:
Intranasal irradiation with the xenon chloride ultraviolet B laser improves allergic rhinitis,
Journal of Photochemistry and Photobiology B-Biology 75 (3): 137-144 Sep (2004)
99. H. Veres, F. Sarlós, A. Varga, **G. Szabó**, Z. Bozóki, G. Motika, J. Gyapjas:
Nd:YAG laser based photoacoustic detection of ozon and its field tests,
Proceedings of the 11th Symposium on Analytical and Environmental Problems, Abstract book p: 252-256, 2004
100. M. Szakáll, Z. Bozóki, Á. Mohácsi, A. Varga and **G. Szabó**:
Diode laser based photoacoustic water vapor detection system for atmospheric research.
Applied Spectroscopy, 58 (2004) 792-798

2003

101. Anikó Veres, Zoltán Bozóki, Árpád Mohácsi, Miklós Szakáll and **Gábor Szabó**:
External cavity diode laser based photoacoustic detection of CO₂ at 1.43 μm; the effect of molecular relaxation.
Applied Spectroscopy. 57, 900-905 (2003)
102. Z. Bozóki, M. Szakáll, Á. Mohácsi, **G. Szabó** and Zs. Bor:
Diode laser based photoacoustic humidity sensors.
Sensors and Actuators B. 91, 219-226 (2003)

2002

103. Zoltán Bozóki, Miklós Szakáll, Árpád Mohácsi, **Gábor Szabó** and Zsolt Bor:
Diode laser based photoacoustic humidity sensors
The 9th International meeting on chemical sensors, Boston USA, 7-10 July 2002, Abstract book p. 114.
104. Z. Bozóki, A. Mohácsi, **G. Szabó**, Zs. Bor, M. Erdélyi, Weidong Chen, F.K. Tittel:
Near-infrared diode laser based spectroscopic detection of ammonia: a comparative study of photoacoustic and direct optical absorption methods.
[Journal Paper] Applied Spectroscopy, 56 (6), June 2002, pp.715-19. Publisher: Soc. Appl. Spectrosc, USA.

2001

105. Bicanic D, Doka O, Luterotti S, Bohren A, Sikovec M, van Veldhuizen B, Berkessy O, Chirtoc M, Franko M, **Szabo G**, Sigrist M:
Assessing the extent of oxidation in thermally stressed vegetable oils. Part I: Optical characterization by photothermal and some conventional physical methods
Analytical Sciences **17**, 547-550 (2001)
106. Feurer T, Glass A, Rozgonyi T, Sauerbrey R, **Szabo G**:
Control of the photodissociation process of CsCl using a feedback-controlled self-learning fs-laser system
Chem. Phys. 267 (1-3), 223-229 (2001)
107. Hacker M, Feurer T, Sauerbrey R, Lucza T, **Szabo G**:
Programmable femtosecond laser pulses in the ultraviolet
J. of Opt. Soc. of Am. **B** 18(6), 866-871 (2001)
108. M. Chirtoc, J. Gibkes, H.G. Walther, A. Christ, J.S. Antoniow, D. Bicanic, Z. Bozóki, **G. Szabo**, B. Bein, J. Pelzl, M. Kleebauer, H. Bader and M. Marinelli:
Comparative Study of Coating Thickness Determination in Packaging Composite Materials Using Photothermal Radiometry, Photoacoustic and Photopyroelectric methods.
Analytical Sciences. **17**. s185-188. (2001).
109. L. Kemény, B. Bónis, A. Dobozy, Zs. Bor, **G. Szabó** and F. Ignác:
308-nm excimer laser therapy for psoriasis.
Arch. Dermatol. **137** (2001) 95-96.
110. E. Baltas, P. Nagy, B. Bonis, Z. Novak, F. Ignacz, **G. Szabo**, Zs. Bor, A. Dobozy and L. Kemeny:
Repigmentation of localized vitiligo with the xenon chloride.
British Journal of Dermatology **144**(6) (2001) 1266-1267.

2000

111. Nishikawa H, Kanai M, **Szabo G**, Kawai T:
Mechanism for excimer-laser ablation in alkaline-earth metals
Phys. Rev B 61 (2), 967-973 (2000)
112. K. Michelmann, A. Glaß, T. Feurer, R. Sauerbrey, **G. Szabó**:
Temporal probing of an ultrafast plasma shutter driven by a KrF femtosecond laser system
Appl. Phys. B **71**, 487-490 (2000)
113. A. Glaß, T. Rozgonyi, T. Feurer, R. Sauerbrey, **G. Szabó**:
Control of the photodissociation of CsCl
Appl. Phys. B 71, 267-276 (2000)
114. Szakáll M., Mohácsi Á., Veres A., Bozóki Z, **Szabó G.**, Bor Zs.:
Csomagolóanyagok vízgőzátersztő-képességének mérése diódalézeren alapuló nagyérzékenységű fotoakusztikus módszerrel
Kvantumelektronika 2000, P41 Budapest, 2000. november 3.
115. Szakáll M., **Szabó G.**, Bozóki Z., Mohácsi Á., Veres A., Bor Zs.:
Nagyérzékenységű fotoakusztikus vízgőzmérő rendszer.
17. Nemzetközi Szakkiállítás és Szemináriumon belül OPAKFI Szimpózium: Perspektívák és eredmények az optikai kutatások hazai és nemzetközi projektjeiben, Budapest, 2000. Szeptember 7.
116. Szakáll M., Mohácsi Á., Veres A., Bozóki Z., **Szabó G.**, Bor Zs.:
Csomagolóanyagok vízgőzátersztő képességének mérése.
17. Nemzetközi Szakkiállítás és Szemináriumon belül OPAKFI Szimpózium: Perspektívák és eredmények az optikai kutatások hazai és nemzetközi projektjeiben, Budapest, 2000. Szeptember 7.
117. Szakáll M., Mohácsi Á., Veres A., Bozóki Z., **Szabó G.**, Bor Zs.:
Diódalézeren alapuló nagyérzékenységű fotoakusztikus vízgőzmérő rendszer és alkalmazásai
XXIII: Országos Lumineszcencia Spektroszkópia Konferencia Pécs, 2000. Október 16-18.
118. Á. Mohácsi, M. Szakáll, Z. Bozóki, **G. Szabó** and Zs. Bor:
High Stability external cavity diodelaser system for photoacoustic gas detection.
Laser Physics, **10** (1) (2000) 1-4.
119. A. Nógrádi, B. Hopp, K. Révész, **G. Szabó**, Zs. Bor and L. Kolozsvári:
Atomic force microscopic study of the human cornea following excimer laser keratectomy.
Exp. Eye Res. **70** (2000) 363-368.

1999

120. J. Sneider, Z. Bozóki, **G. Szabó** and Zs. Bor:
Methane detection with single laser photoacoustic Raman spectroscopy
In Photoacoustic and Photothermal Phenomena: 10th International Conference, ed. by: F. Scudieri and M. Bertolotti, AIP Conference Proc. 463, The American Inst. of Physics, New York, 1999., pp. 271-273.
121. B. Hopp, Zs. Bor, B. Rácz, **G. Szabó**, D. Xenakis, C. Kalpouzou, C. Fotakis:
Single shot picosecond time-resolved measurement of the transient reflectivity increase of ablated polymer surfaces; Advances in Sciences and technology, Surface Engineering Proc. 9th CIMTEC World Forum on New Materials, Ed.: P. Vincenzini, TECHNFAENZA (1999) pp. 337-342

122. Zs. Bor, M. Erdélyi, Z.L. Horváth, **G. Szabó**, K. Osvay, W.L. Wilson and F.K. Tittel:
Application of Non-Diffracting Beams
 18th Congress of the International Commission for Optics 2-6 August 1999 (3749-32) S4A,
 San Francisco California USA, [Conference Paper] SPIE-Int. Soc. Opt. Eng. Proceedings
 of Spie - the International Society for Optical Engineering, vol.3749, 1999, pp.76-7. USA.
123. Á. Mohácsi, **G. Szabó**, Z. Bozóki, M. Szakáll:
Fotoakusztika: a láthatóvá tett fény
 Békéssy Centenárium Konferencia, Szeged (1999)
124. Szakáll M., Bozóki Z., Mohácsi Á., **Szabó G.**, Bor Zs:
Fotoakusztikus mérőrendszer fejlesztése vízgőz, ammónia és metán mérésére
 Országos Lumineszcencia-Spektroszkópia Konferencia, Pécs (1999)
 Megjelent: A lumineszcencia kutatások aktuális kérdései, XXII. Kötet, 82-87
125. Á. Mohácsi, Z. Bozóki, M. Szakáll, **G. Szabó**, Zs. Bor:
High Stability external cavity diode laser system for photoacoustic gas detection
 8th International Laser Physics Workshop (Lphys'99 Budapest)
126. Z. Bozóki, **G. Szabó**, A. Miklós, Á. Mohácsi, M. Szakáll, Zs. Bor:
Photoacoustic Spectroscopy: A Toll For High Sensitivity Gas Detection
 International Békéssy Conference, Budapest (1999)
 (Satellite Conference of the World Science Congress of UNESCO)
127. Z. Bozóki, J. Sneider, Z. Gingl, Á. Mohácsi, M. Szakáll, Zs. Bor, **G. Szabó**:
*A high-sensitivity, near-infrared tunable-diode-laser-based photoacoustic water-vapour-
 detection system for automated operation*
 Meas. Sci. Technol. 10 (1999) 999-1003.
128. J. Sneider, Z. Bozóki, **G. Szabó**, Zs. Bor:
Methane detection with single laser photoacoustic Raman spectroscopy
 X. Int. Conf. on Photoacoustic and Photothermal Phenomena: Tenth International
 Conference, edited by: F. Scudieri and M. Bertolotti, AIP Conference Proceedings 463,
 The American Institute of Physics, New York, 1999, pp. 271-273.

1998

129. J. Sneider, Z. Bozóki, **G. Szabó**, Zs. Bor
Water Vapour Detection in Gases with External Cavity Diode Laser Based Photoacoustics
 7th Workshop of "Laser-based Photoacoustic Trace Gas Research in Life Science",
 Nijmegen (The Netherlands) 5-6 February 1998 Book of Abstracts (1998)
130. J. Sneider, Z. Bozóki, **G. Szabó**, Zs. Bor:
Methane detection with single laser photoacoustic Raman spectroscopy
 X. International Conference on Photoacoustic and Photothermal Phenomena, Rome 23-27
 August 1998. Book of Abstracts pp. 201-202 (1998)
131. Bor Zs., Bozóki, Z., Sneider J. és **Szabó G.**:
*Fotoakusztikus elven működő, vízgőzkoncentráció meghatározásával alkalmas lézeres
 mérőműszerek fejlesztése és alkalmazása az élelmiszeriparban*
 (Development of a laser based photoacoustic water vapour measuring instrument and its
 application for the food industry). SZÉF '98
132. B. Hopp, Zs. Bor, B. Rácz, **G. Szabó**, D. Xenakis, C. Kalpouzios, C. Fotakis:
*Single shot picosecond time-resolved measurement of the transient reflection increase of
 ablated polymer surfaces*
 TTK book 1998

- 133.M. Erdélyi, Zs. Bor, **G. Szabó**, K. Osvay and F.K. Tittel:
Resolution and depth of focus enhancement in optical microlithography using off-axis illumination
TTK book 1998
- 134.**G. Szabó**, J. Péter, S.D. Carpenter, P.M. Weber, T. Szakács, A. Lőrincz:
Self-learning optical system based on a genetic algorithm driven spatial light modulator
Proc. SPIE3423, Second GR-I International Conference on New Laser Technologies and Applications, 130 (Jul 1998)
- 135.**G. Szabó**, J. Péter, S.D. Carpenter, P.M. Weber, T. Szakács, A. Lőrincz:
Self-learning optical system based on a genetic algorithm driven spatial light modulator
TTK book 1998
- 136.Á. Mohácsi, M. Szakáll, Z. Bozóki, J. Sneider, **G. Szabó** and Zs. Bor:
Diode laser based high sensitive gas detection
TTK book 1998
- 137.B. Hopp, K. Révész, M. Csete, F. Ignác, **G. Szabó**, B. Rác, Zs. Bor:
Excimer laser induced surface chemical modification of polyimide and polytetrafluoroethylene
TTK book 1998
- 138.B. Hopp, K. Révész, M. Csete, F. Ignác, **G. Szabó**, B. Rác, Zs. Bor:
Excimer laser induced surface chemical modification of polyimide and polytetrafluoroethylene
TTK book 1998
- 139.J. Sneider, Z. Bozóki, **G. Szabó**, Zs. Bor, Á. Mohácsi, M. Szakáll:
Towards portable diode laser based photoacoustic sensors for the determination of water vapour and H₂S
ISEAC'98 Conference, Genova, Book Abstracts, PA 03 (1998)
- 140.J. Sneider, Z. Bozóki, **G. Szabó**, Zs. Bor, Á. Mohácsi, M. Szakáll:
Toward sub ppm. water vapour detection based on external cavity diode laser and photoacoustic spectroscopy
5th Int. Symposium on Gas Analysis by Tunable Diode Lasers Freiburg, VDI Berichte 1366, pp. 63 (1998)
- 141.Z. Bozóki, J. Sneider, M. Szakáll, Á. Mohácsi, G. Tóth, Zs. Bor, **G. Szabó**:
Gas-detection instrument based on external-cavity diode lasers and photoacoustic detectors
J. Proc. SPIE Vol. 3423, p. 238-241, 2nd GR-I Int. Conf. on New Laser Technologies Application, Paolo de Lazzaro, ed. (1998)
- 142.Bónis Béla, Kemény Lajos, Bor Zsolt, **Szabó Gábor**, Ignác Ferenc, Dobozy Attila:
A psoriasis 308 nm-es XeCl excimer lézer kezelése
Bőrgyógyászati és venerológiai szemle 74. évf. 3. 143-145. (1998)
- 143.B. Hopp, K. Révész, M. Csete, F. Ignác, **G. Szabó**, B. Rác, Zs. Bor:
Excimer laser induced surface chemical modification of polyimide and polytetrafluorethylene
TTK kiadvány (1998)
- 144.B. Hopp, Zs. Bor, B. Rác, **G. Szabó**, D. Xenakis, C. Kalpouzou, C. Fotakis:
Single shot measurement picosecond time-resolved measurement of the transient reflectivity increase of ablated polymer surfaces
TTK kiadvány (1998)

145. B. Hopp, Zs. Bor, B. Rácz, **G. Szabó**, D. Xenakis, C. Kalpouzos and C. Fotakis:
Single shot picosecond time-resolved measurement of the transient reflection increase of ablated polymer surfaces.
 CIMTEC'98
146. B. Hopp, Zs. Bor, B. Rácz, **G. Szabó**, D. Xenakis, C. Kalpouzos, C. Fotakis:
Single shot measurement picosecond time-resolved measurement of the transient reflectivity increase of ablated polymer surfaces
 9th Internat. Conf. on Modern Materials and Technologies, Florence, Italy, 14-19 June 98.
147. J. Sneider, Z. Bozóki, Á. Mohácsi, M. Szakáll, **G. Szabó** and Zs. Bor:
Development and application of external cavity diode laser systems for photoacoustic gas detection.
 Optika '98 5th Congress on Modern Optics, 14-17 Sept. 1998 Budapest, Hungary. SPIE Vol. 3573, 256-259 (1998).
148. J. Sneider, Z. Bozóki, Á. Mohácsi, M. Szakáll, A. Miklós, **G. Szabó** and Zs. Bor:
Optimisation of diode laser based photoacoustic laser system for high sensitivity detection of water vapour, methane and carbon-dioxide.
 Optika '98 5th Congress on Modern Optics, 14-17 Sept. 1998 Budapest, Hungary. SPIE Vol. 3573, 260-263 (1998).
149. J. Sneider, Z. Bozóki, M. Szakáll, Á. Mohácsi, Zs. Bor and **G. Szabó**:
On the possible application areas of the diode laser based photoacoustic gas detection method.
 Optika '98 5th Congress on Modern Optics, 14-17 Sept. 1998 Budapest, Hungary. SPIE Vol. 3573, 264-267 (1998).
150. F.K. Tittel, M. Erdélyi, Z.L. Horváth, A. Kroyan, W.L. Wilson, M.C. Smayling, Zs. Bor, **G. Szabó**:
Present and future trends in excimer –laser –based microlithography
 Proc. SPIE Vol. 3403, p. 248-253, Int. Conf. on Atomic and Molecular Pulsed Lasers II, Victor F. Tarasenko, Georgy V. Mayer, Gueorgii G. Petrash, Eds. Publ. Date: 06/1998.
151. Z.L. Horváth, M. Erdélyi, **G. Szabó**, Zs. Bor, F.K. Tittel, J.R. Cavallaro:
Generation of zero-order Bessel beams with Fabry-Perot interferometer
 Proc. SPIE Vol. 3423, p. 135-139, Second GR-I, Int. Conf. on New Laser Technologies and Applications, Paolo di Lazzaro, E. Publication Date: 07/1998. [29967 (1685818)]
152. M. Erdélyi, Zs. Bor, **G. Szabó**, K. Osvay, F.K. Tittel:
Resolution and Depth of focus enhancement in optical microlithography using off-axis illumination
 TTK book, 1998.
153. M. Erdélyi, Zs. Bor, **G. Szabó**, F.K. Tittel:
Enhanced microlithography using coated objectives and image duplication
 Opt. Microlithography XI. Santa Clara, CA SPIE Proc. Vol. 3334, pp. 579-589 (1998)

1997

154. Z. Bozóki, J. Sneider, M. Szakáll, Á. Mohácsi, G. Tóth, Zs. Bor, **G. Szabó**:
Toward a Gas Detection Instrument Based on External Cavity Diode Lasers and Photoacoustic Detection
 2nd GR-I International Conference on "New Laser Technologies and Application", Olympia, Greece, June 1-4, 1997
155. Sneider János, Bozóki Zoltán, **Szabó Gábor**, Bor Zsolt:
Dióadalézeren alapuló fotóakusztikus gázdetektálás
 Országos Lumineszcencia-Spektroszkópia Konferencia, 1997. okt. 7-9, Balatonföldvár

156. Bor Zsolt, **Szabó Gábor**, Bozóki Zoltán, Sneider János, Puskás Sándor:
Dióda lézeres fényforráson alapuló fotoakusztikus gáزدetektálási módszer olajipari alkalmazhatóságának vizsgálata és mérőeszköz fejlesztése
MOL Szakmai Tudományos Konferencia '97, 1997. október 8-10, Siófok
157. Szakáll Miklós, Mohácsi Árpád, Bozóki Zoltán, Sneider János, Bor Zsolt, **Szabó Gábor**:
Fotoakusztikus Gáزدetektálás Külsőrezonátoros Diódalézerrel
"Kvantumelektronika 97", Budapest 1997. október 30. posztterek összefoglalói, P49
158. Mohácsi Á., Szakáll M., Bozóki Z., Sneider J., Bor Zs., **Szabó G.**:
Fotoakusztikus vízgőزدetektálás különböző gázokban
"Kvantumelektronika 97", Budapest 1997. október 30 posztterek összefoglalói, P50
159. Szakáll M., Bozóki Z., Mohácsi Á., **Szabó G.**:
Fotoakusztikus elven működő mérőrendszer fejlesztése vízgőz, ammónia és metán detektálásához.
XXII: Országos Lumineszcencia Spektroszkópia Konferencia Pécs, 1999. október 19-21,
Megjelent: A lumineszcencia kutatások aktuális kérdései, XXII. Kötet, 82-87
160. B. Bónis, L. Kemény, A. Dobozy, Zs. Bor. **G. Szabó** and F. Ignác:
308 nm UVB excimer laser for psoriasis.
The Lancet, 1997, Vol. 350, p. 1522.
161. Erdelyi, M.; Horvath, Z.L.; **Szabo, G.**; Bor, Z.; and others:
Generation of diffraction-free beams for applications in optical microlithography
Journal of Vacuum Science & Technology B (Microelectronics and Nanometer Structures), 15 (2):287-292. March (1997)
162. Tittel, F.K.; Erdelyi, M.; **Szabo, G.**; Bor, Zs.; and others:
High resolution microlithography applications of deep-UV excimer lasers
(XI International Symposium on Gas Flow and Chemical Lasers and High-Power Laser Conference). Proceedings of the SPIE - The International Society for Optical Engineering, 1997, vol.3092:462-6.
163. M. Erdélyi, Z. L. Horváth, Zs. Bor, **G. Szabó**, J. R. Cavallaro, M. C. Smayling and F. K. Tittel:
Optical microlithography with nearly nondiffracting beams
SPIE's Microlithography'97 Symposium, Optical Microlithography X, Santa Clara, California, 1997.
164. M. Erdélyi, Z. L. Horváth, **G. Szabó**, Zs. Bor, J. R. Cavallaro and F. K. Tittel:
Enhancement of depth of focus using nearly nondiffracting Bessel beams in optical microlithography
Submitted to the seminar on „New Nanostructures below 100 nm: Perspectives & Applications”, Bad Honnef, Germany (27-30 January 1997)
165. Zs. Bor, M. Csete, M. Erdélyi, Zs. Geretovszky, P. Heszler, B. Hopp, Z. Horváth, Z. Kántor, B. Rácz, K. Révész, **G. Szabó**, T. Szörényi and Zs. Tóth:
Surface structuring by laser-based techniques
International Workshop and Grain Boundary Segregation, NANO. Konf. Eger, 1997.
166. J. Sneider, Z. Bozóki, A. Miklós, Zs. Bor and **G. Szabó**:
On the Possibility of Combining External Cavity Diode Laser with Photoacoustic Detector for High Sensitivity Gas Monitoring
Int. J. of Env. Anal. Chem. 67 (1-4) 253-260 (1997)
167. J. Sneider, Z. Bozóki, **G. Szabó** and Zs. Bor:
Photoacoustic Gas Detection Based on External Cavity Diode Laser Light Source
Opt. Eng. . Vol. 36(2) 482-486 (1997)

168. Z.L. Horváth, M. Erdélyi, **G. Szabó**, Zs. Bor, F.K. Tittel and J. Cavallaro:
Generation of nearly nondiffracting Bessel Beams with a Fabry-Perot interferometer
J. Opt. Soc. Am. A, vol. **14** pp. 3009-3013 (1997)

1996

169. J. Sneider, Z. Bozóki, A. Miklós, **G. Szabó**:
On the possibility of Combining External Cavity Diode Laser with Photoacoustic Detector for High Sensitivity Gas Monitoring
26th International Symposium on Environmental Analytical Chemistry, Vienna Austria, April 9-12 1996. Book of Abstracts, TH 20
170. Z. Bozóki, J. Sneider, **G. Szabó**, A. Miklós, M. Serényi, G. Nagy, M. Fehér:
Intracavity Photoacoustic Gas Detection with an External Cavity Diode Laser
Appl. Phys. B. **63** (1996) 399-401
171. M. Erdélyi, Z.L. Horváth, **G. Szabó**, Zs. Bor, F.K. Tittel, J.R. Cavallaro, M.C. Smayling:
Application of Nondiffracting Bessel Beams to Optical Lithography
Second International Symposium on 193 nm Lithography, Colorado Springs CO (July 30-Aug 2, 1996) – poszter
172. Zs. Bor, M. Erdélyi, Z.L. Horváth, **G. Szabó**, F.K. Tittel, J.R. Cavallaro, M.C. Smayling:
Generation of Diffraction-Free Beams for Application in Optical Microlithography
Workshop „Holography as Realized” Kecskemét, Hungary, June 3-4, 1996
173. F.K. Tittel, M. Erdélyi, **G. Szabó**, Zs. Bor, J.R. Cavallaro, M.C. Smayling:
High Resolution Microlithography Applications of Deep-UV Excimer Lasers, submitted to GCL/HPL'96 Edinburgh, U.K. (Aug. 26-30, 1996)
174. M. Erdélyi, Zs. Bor, **G. Szabó**, J.R. Cavallaro, M.C. Smayling, F.K. Tittel, W.L. Wilson:
Sub-quarter micron contact hole fabrication using annular illumination
Optical Microlithography IX. Santa Clara, CA (March 10-13, 1996); SPIE Proc. 2726, 271 (1996)
175. C. Sengupta, M. Erdélyi, Zs. Bor, J.R. Cavallaro, M.C. Smayling, **G. Szabó**, F.K. Tittel, W.L. Wilson:
An Integrated CAD Framework Linking VLSI Layout Editors and Process Simulators
Optical Microlithography IX. Santa Clara, CA (March 13-15, 1996); SPIE Proc. 2726, 271 (1996)
176. H. Nishikawa, **G. Szabo** and T. Kawai:
Time-Resolved Studies of Ion Desorption from Ca Surfaces Using Double-Pulsed Laser Ablation Technique
Jpn. J. App. Phys. Vol. 35 (1996) pp. 985-988
177. F.K. Tittel, M. Erdélyi, C. Sengupta, Zs. Bor, **G. Szabó**, J.R. Cavallaro, M.C. Smayling, W.L. Wilson:
Ultrahigh resolution lithography with excimer lasers
E.J. Witteman and V.N. Ochkin (eds.), Gas Lasers- Recent Developements and Future Prospects, 263-272. (1996)

1995

178. M. Erdélyi, Zs. Bor, J.R. Cavallaro, **G. Szabó**, W.L. Wilson, C. Sengupta, M. Smayling, and F.K. Tittel:
Enhanced Microlithography Using Combined Phase Shifting and Off-axis Illumination
Jap. J. Appl. Phys. 34, L 1629-1631 (1995)

179. M. Erdélyi, Zs. Bor, F.K. Tittel, J.R. Cavallaro, **G. Szabó**, W.L. Wilson, M. Smayling and C. Sengupta:
A Phase Shifting Technique for Ultrahigh Resolution Deep-UV Lithography
First International Symposium on 193 nm Lithography
Colorado, CO, Aug 15-18, (1995)
180. Z. Ball, B. Hopp, F. Ignácz, M. Csete, B. Rácz, **G. Szabó**, and R. Sauerbrey:
Transient optical properties of excimer laser irradiated polyimide II: Carbon cluster scattering
Appl. Phys. A 61, 575-578 (1995)
181. Z. Ball, B. Hopp, F. Ignácz, M. Csete, B. Rácz, **G. Szabó**, and R. Sauerbrey:
Transient optical properties of excimer laser irradiated polyimide I: Refractive index
Appl. Phys. A 61, 547-551 (1995)
182. **G. Szabo**, B. Hopp, M. Csete, B. Rácz, Z. Ball, and R. Sauerbrey:
Mechanism of laser ablation; time resolved studies
CLEO/Pacific Rim '95 Chiba, Japan 1995, (invited)
183. B. Hopp, M. Csete, **G. Szabó**, and Zs. Bor:
Time resolved study of ArF excimer laser ablation processes of PolyMethylMethAcrylate (PMMA)
Appl. Phys. A 61, 339-345 (1995)
184. M. Kido, **G. Szabó**, J.R. Cavallaro, W.L. Wilson, M.C. Smayling, and F.K. Tittel:
Submicron Optical Lithography Based on a New Interferometric Phase Shifting Technique
Jap. J. Appl. Phys. 34, 4269-4273 (1995)
185. Zs. Bor, B. Rácz, **G. Szabó**, D. Xenakis, C. Kalpouzos, C. Fotakis:
Femtosecond transient reflection from polymer surfaces during femtosecond UV photoablation
Appl. Phys. A 60, 365-368 (1995)
186. B. Amstrup, G.J. Toth, **G. Szabo**, H. Rabitz and A. Lorincz:
Genetic algorithm with migration on topology conserving maps for optimal control of quantum systems
J. Phys. Chem. 93, 5206-5213 (1995).
187. Zs. Bor, J.R. Cavallaro, M. Erdelyi, M. Kido, C. Sengupta, M.C. Smayling, **G. Szabo**, F.K. Tittel, W. Wilson:
A New Phase Shifting Technique for Deep UV Excimer Laser Based Lithography
Photonics West '95, San Jose, CA (Feb. 1995)
188. M. Erdelyi, C. Sengupta, Zs. Bor, R.J. Cavallaro, M. Kido, M.C. Smayling, F.K. Tittel, W.L. Wilson and **G. Szabo**:
A New Interferometric Phase Shifting Technique for Sub-half Micron Laser Microlithography
Optical/Laser Microlithography VIII, Santa Clara (Feb. 1995)

1994

189. D. Xenakis, C. Kalpouzos, C. Fotakis, Z. Bor, B. Rácz, **G. Szabó**:
Non-linear reflection from polymer surfaces during femtosecond ultraviolet photoablation
X.-th International Symposium on Gas Flow and Chemical Lasers
Friedrichshafen, Germany, 1994
SPIE Proceedings Vol. 2502, p. 682 (1994)

190. M. Kido, **G. Szabó**, J.R. Cavallaro, W.L. Wilson, M.C. Smayling, and F.K. Tittel:
Advanced high resolution interferometric phase shift technique for microlithography
CLEO '94 Anaheim CA p. 395
191. B. Amstrup, **G. Szabo**, R. Sauerbrey and A. Lorincz:
Chirped pulse control of CsI fragmentation: An experimental possibility
Chem. Phys. 188, 87-97 (1994)
192. M. Kido, J.R. Cavallaro, **G. Szabó**, W.L. Wilson, and F.K. Tittel:
A new phase shifting method for high resolution microlithography
Proc. of 1994 NSF Design and Manufacturing Grantees Conference
Society of Manufacturing Engineers Press, p. 577 (1994)
193. F.K. Tittel, J.R. Cavallaro, M. Kido, M.C. Smayling, **G. Szabó**, and W.L. Wilson:
Interferometric phase shift technique for High Resolution Deep-UV Microlithography
X.-th Conference on Gas Flow and Chemical Lasers Friedrichshafen, Germany 1994
SPIE Proceedings Vol. 2502, pp. 614-627 (1994)
194. M. Kido, **G. Szabó**, J. R. Cavallaro, W. L. Wilson, and F. K. Tittel:
A new phase shifting method for high resolution microlithography
SPIE Conference on Optical/Laser Microlithography VII. San Jose, USA, 1994
195. **G. Szabó** and Zs. Bor
Frequency conversion of ultrashort pulses
Applied Physics B. 58, 237-241 (1994)

1993

196. B. Amstrup, J. D. Doll, R. A. Sauerbrey, **G. Szabó** and A. Lőrincz:
Optimal control of quantum systems by chirped pulses
Phys. Rev. A 48, 3830-3836 (1993)
197. **G. Szabó**, K. Mossavi and F. K. Tittel:
Ultrahigh-power, femtosecond ArF excimer laser system
16th Congress of the International Commission for Optics, ICO 16,
SPIE Vol. 1993, 25-27 (1993)
198. Le Blanc, S. P.; Cote, F.; **Szabo, Gabor**; Sauerbrey, Roland A.:
Single-shot phase-sensitive autocorrelator for short-pulse ultraviolet lasers
Proc. SPIE Vol. 1861, 161-169, Ultrafast Pulse Generation and Spectroscopy (1993)
199. B. Rácz, Zs. Bor, B. Hopp, **G. Szabó**, I. Süveges, J. Mohay, I. Ratkay and Á. Füst:
Ultrafast Photography of the Cornea Ablation
Laser '93, München, DoK3 p. 14.
200. **G. Szabó** and K. Mossavi:
Ultrahigh-brightness, short pulse excimer laser system at 193 nm
Conference on Lasers and Electro-Optics CLEO'93,
Baltimore, May 2-7, 1993. (invited)
201. Zs. Bor, **G. Szabó**, B. Hopp, Zs. Márton and T. Juhász:
Dynamics of laser ablation of biological tissues
Conference on Laser Ablation, Knoxville, 1993 (invited)
202. F. K. Tittel, K. Mossavi and **G. Szabó**:
Recent progress of terawatt excimer laser sources
Short Wavelength V.: Physics with intense laser pulses
San Diego, March 1993.

- 203.Zs. Bor, B. Rácz, **G. Szabó**, M. Hilbert and H.A. Hazim:
Femtosecond pulse front tilt caused by angular dispersion
Opt. Eng. 32, 2501-2504 (1993)
- 204.Zs. Bor, B. Hopp, B. Rácz, **G. Szabó**, Zs. Márton, I. Ratkay, J. Mohay, I. Süveges and Á. Füst:
Physical problems of excimer laser cornea ablation
Opt. Eng. 32, 2481-2486 (1993)
- 205.K. Mossavi, Th. Hofmann, F. K. Tittel and **G. Szabó**:
Ultra-high-brightness, femtosecond ArF excimer laser system
Appl. Phys. Lett. 62 1203-1205 (1993)
- 206.K. Mossavi, Th. Hofmann, F. K. Tittel and **G. Szabó**:
Femtosecond gain characteristics of the discharge pumped ArF excimer amplifier
Opt. Lett. 18 635-638 (1993)
- 207.Zs. Bor, B. Hopp, B. Rácz, G.Szabó, I. Ratkay, I. Süveges, Á. Füst and J. Mohay:
Plume emission, shock wave formation during excimer laser ablation of the cornea
Refractive and Corneal Surgery 9 (1993) s111-s115.

1992

- 208.Groma G.I., **Szabó G.**, Varó G., Ráksi F., Keszthelyi L.:
Bacteriorhodopsin: A picosecond optoelectric signal transducer
BioSystems, 27 (4) 201-202 (1992)
- 209.I. Groma, **G. Szabó** and L. Keszthelyi:
Conformation changes in bacteriorhodopsin studied by pump and probe tryptophane fluorescence decay
SPIE Vol. 1921, Laser Spectroscopy of Biomolecules, 172-176, (1992)
- 210.K. Mossavi, Th. Hofmann, F. K. Tittel, and **G. Szabó**:
Generation and amplification of broadband radiation at 193 nm
Proceedings of the International Conference on Lasers'92
1992, Houston, 125-130
- 211.T. Juhász, L. Turi, Zs. Bor, B. Frueh and **G. Szabó**:
Experimental investigation of picosecond optical breakdown in water and biological tissues
Proceedings of the International Conference on Lasers'92
1992, Houston, 739-746
- 212.J. Mohay, I. Süveges, I. Ratkay, Á. Füst, Zs. Bor, **G. Szabó**, B. Rácz, B. Hopp and Sz. Virágh:
Scanning electron microscopical study of corneal incisions induced by an excimer laser
Szemészet, 129 (1992)
- 213.Th. Hofmann, K. Mossavi, **G. Szabó**, and F. K. Tittel:
Generation and amplification of subpicosecond ArF radiation
SPIE Vol. 1810, Gas flow and chemical lasers, 400-403, (1992)
- 214.K. Osvay, Zs. Bor, B. Rácz, **G. Szabó**:
Propagation-time-dispersion in a streak camera lens
Ultrafast Processes in Spectroscopy 1991 ed.:A. Laubereau,
A. Seilmeier, Institute of Physics Conference Series Number 126
Institute of Physics, Bristol and Philadelphia (1992) 169-171

215. Th. Hofmann, F. K. Tittel, K. Mossawi, and **G. Szabó**:
Spectrally compensated sum-frequency mixing scheme for generation of broadband radiation at 193 nm
 Opt. Lett. 17 1691-1693 (1992)
216. Zs. Bor, B. Rácz, **G. Szabó** and B. Hopp, I. Süveges, J. Mohay and I. Ratkay:
Time resolved study of surface shock wave formation during excimer laser ablation of the cornea
 Conference on Lasers and Electro Optics, Anaheim, CA, paper CThL6, 1992
217. B. Rácz, Á. Patócs, **G. Szabó**, Zs. Bor and F. Ignácz:
Subnanosecond Pulse Generation by a Miniature Excimer Laser
 XVIII International Quantum Electronics Conference (1992) Vienna, Austria
218. S.P. Le Blanc, **G. Szabó** and R. Sauerbrey:
Single-shot phase-sensitive autocorrelator for the ultraviolet
 CLEO'92 CTuB7
 Conference on Lasers and Electro Optics (1992) Anaheim
219. Zs. Bor, B. Rácz, **G. Szabó** and B. Hopp:
Time resolved study of surface shock wave formation during excimer laser ablation of the cornea
 CLEO'92 CThL6
 Conference on Lasers and Electro Optics (1992) Anaheim
220. B. Rácz, Á. Patócs, **G. Szabó**, Zs. Bor and F. Ignácz:
Direct generation of subnanosecond pulses by a high pressure miniature excimer laser
 Appl. Phys. B54 (1992) 513-515
221. Zs. Bor, K. Osvay, H. A. Hazim, A. Kovács, **G. Szabó** B. Rácz and O. E. Martinez:
Adjustable prism compressor with constant transit time for synchronously pumped mode locked laser
 Opt. Commun. 90 (1992) 70-72
222. H. M. Philips, D. L. Callahan, R. Sauerbrey, **G. Szabó** and Zs. Bor:
Direct Laser Ablation of Sub-100 nm Line Structures into Polyimide
 Appl. Phys. A54 (1992) 158-165
223. Th. Hofmann, T. E. Sharp, C. B. Dane, P. J. Wisoff, W. L. Wilson, F. K. Tittel and **G. Szabó**:
Characterization of an Ultrahigh Peak Power XeF(C₂F₄) Excimer Laser System
 IEEE J. of Quant. El. 28 (1992) 1366-1375
224. F. K. Tittel, Th. Hofmann, T. E. Sharp, P. J. Wisoff, W. L. Wilson and **G. Szabó**:
Blue-Green Dye Laser Seeded Operation of a Terawatt Excimer Amplifier
 Dye Lasers 25 Years, Springer-Verlag Berlin Heidelberg 1992

1991

225. **G. Szabó**, T. E. Sharp, F. K. Tittel and P. J. Wisoff:
Dispersion measurements of single-mode fibers in the blue-green spectral region by an interferometric method
 Appl. Optics 30 (1991) 5224-5225
226. Th. Hofmann, T. E. Sharp, **G. Szabó**, F. K. Tittel and P. J. Wisoff:
A Terawatt XeF(C₂F₄) Excimer Laser System
 Seventh Interdisciplinary Laser Science Conference Monterey, CA 1991

227. K. Osvay, Zs. Bor, B. Rácz and **G. Szabó**:
Propagation-Time-Dispersion in a Streak Camera Lens
 VIIth International Symposium on Ultrafast Processes in Spectroscopy, Bayreuth, 1991
228. K. Osvay, Zs. Bor, A. Kovács, **G. Szabó**, B. Rácz, H. A. Hazim and O. E. Martinez:
Prismatic Pulse Compressor for Synchronously Pumped Mode Locked Lasers
 VIIIth International Symposium on Ultrafast Processes in Spectroscopy, Bayreuth, 1991
229. T. E. Sharp, C. B. Dane, D. Barber, F. K. Tittel, P. J. Wisoff and **G. Szabó**:
Tunable, High-Power, Subpicosecond Blue-Green Dye Laser System with a Two-Stage Dye Amplifier
 IEEE J. of Quant. El. 27 (1991) 1221-1227
230. G. I. Groma, **G. Szabó**, Gy. Váró, F. Ráksi and L. Keszthelyi:
Bacteriorhodopsin: picosecond optoelectric signal transducer
 Proceeding of Initial Meeting of International Society for Molecular Electronics and Biocomputing (1991)
231. F. K. Tittel, Th. Hofmann, T. E. Sharp, **G. Szabó** and P. J. Wisoff:
Ultrahigh Intensity Visible Excimer Laser System
 LASERION'91, München (1991)
232. H. M. Philips, D. L. Callahan, R. Sauerbrey, **G. Szabó** and Zs. Bor:
Sub-100 nm lines produced by direct laser ablation in polyimide
 Appl. Phys. Lett. 58 (1991) 2761-2763
233. **G. Szabó**, A. Müller and Zs. Bor:
A sensitive single shot method to determine duration and chirp of ultrashort pulses with a streak camera
 Opt. Commun. 82 (1991) 56-62
234. S. P. Le Blanc, **G. Szabó** and R. Sauerbrey:
Femtosecond single-shot phase-sensitive autocorrelator for the ultraviolet
 Optics Letters 16 (1991) 1508-1510
235. H. Philips, R. Sauerbrey, D. Callahan, **G. Szabó** and Zs. Bor:
70-nm lines produced by direct laser ablation in polyimide
 CLEO'91 CFF6
 Conference on Lasers and Electro Optics (1991) Baltimore
236. T. E. Sharp, Th. Hofmann, W. L. Wilson Jr., F. K. Tittel, P. J. Wisoff and **G. Szabó**:
Self-focusing effects in a high power, ultrashort pulse XeF(C_A) excimer system
 CLEO'91 CThA7
 Conference on Lasers and Electro Optics (1991) Baltimore
237. Th. Hofmann, T. E. Sharp, P. J. Wisoff, W. L. Wilson, F. K. Tittel and **G. Szabó**:
Femtosecond pulse amplification by a XeF(C_A) excimer system
 CLEO'91 CThA6 Conference on Lasers and Electro Optics (1991) Baltimore
238. **G. Szabó**, A. Müller and Zs. Bor:
Femtosecond resolution pulse duration and chirp measurement by picosecond streak camera
 CLEO'91 CTuW42
 Conference on Lasers and Electro Optics (1991) Baltimore
239. Frank K. Tittel; P. Canarelli; Brent Dane; Thomas Hofmann; Roland A. Sauerbrey; Tracy S. Sharp-Clement; **Gabor Szabo**; William L. Wilson, Jr.; P. J. Wisoff; Shigeru Yamaguchi:
Advanced concepts of electron-beam-pumped excimer lasers
 SPIE Proceedings Vol. 1397 8th Intl Symp on Gas Flow and Chemical Lasers, 21-30 (Feb 1991)

240. Th. Hofmann, T. S. Sharp-Clement, C. B. Dane, P. J. Wisoff, W. L. Wilson, F. K. Tittel;
Szabó, Gabor:
Characterization of a subpicosecond XeF(C_A) excimer laser
Proc. SPIE Vol. 1412, p. 84-90, Gas and Metal Vapor Lasers and Applications
OE/LASE'91 Los Angeles (1991)

1990

241. C. B. Dane, T. E. Sharp, Th. Hofmann, W. L. Wilson Jr., F. K. Tittel, **G. Szabó** and P. J. Wisoff:
Amplification of High Intensity Ultrashort Blue-Green Laser Pulses Using a XeF(C_A) Excimer Amplifier
LEOS'90 Boston 1990, p. 271
242. F. K. Tittel, P. Canarelli, C. B. Dane, Th. Hofmann, R. Sauerbrey, T. E. Sharp, **G. Szabó**, W. L. Wilson and S. Yamaguchi:
Advanced concepts of electron beam pumped excimer lasers
Eighth International Symposium on Gas Flow and Chemical Lasers
SPIE 1397 (1990)
243. T. E. Sharp, Th. Hofmann, C. B. Dane, W. L. Wilson Jr., F. K. Tittel, **G. Szabó**, and P. J. Wisoff:
Ultrashort-laser-pulse amplification in a XeF(C_A) excimer amplifier
Optics Letters 15 (1990) 1461-1463
244. Zs. Bor, K. Osvay, B. Rácz and **G. Szabó:**
Group refractive index measurement by Michelson interferometer
Opt. Commun. 78 (1990) 109-112
245. **G. Szabó** and Zs. Bor:
Broadband frequency doubler for femtosecond pulses
Appl. Phys. B50 (1990) 51-54

1989

246. Z. Gogolák, Zs. Bor and **G. Szabó:**
Compensation of cubic phase term of a prismatic pulse compressor
UPS'89 Neubrandenburg (1989)
247. Zs. Benkő, Z. Gogolák, Zs. Bor and **G. Szabó:**
Pulse front distortion measurements in prisms by time-of-flight interferometry
UPS'89 Neubrandenburg (1989)
248. P. Heszler, Zs. Bor, G. Kovács and **G. Szabó:**
Cu-vapor laser pumped 1 ns dye laser
UPS'89 Neubrandenburg (1989)
249. Zs. Bor, Z. Gogolák and **G. Szabó:**
Femtosecond resolution pulse front distortion measurement by time-of-flight interferometry
Opt. Lett. 14 (1989) 862-864
250. Michael Steyer; Ouyang Bin; Krassimir A. Stankov; **Gabor Szabo**; Hakaru Mizoguchi; Fritz P. Shafer:
Wide aperture X-ray preionized excimer laser with variable cross-section using flat electrodes
SPIE Proceedings Vol. 1023 Excimer Lasers and Applications, 75-79 (1989)

251. P. Heszler, Zs. Bor, G. Kovács and **G. Szabó**:
Cu-vapor laser-excited short-pulse dye laser
 Applied Spec. 43 (1989) 728-729
252. **G. Szabó** and Zs. Bor:
Frequency doubling of femtosecond laser pulses
 Conference on Lasers and Electro Optics (1989) Baltimore (invited talk) 453 p.
253. Zs. Bor, **G. Szabó** and A. Müller:
Chirp-sensitive single-shot autocorrelation technique for femtosecond pulses
 Conference on Lasers and Electro Optics (1989) Baltimore (invited talk)
254. Z. Gogolák, Zs. Bor and **G. Szabó**:
Compensation of cubic phase term of a prismatic pulse compressor
 UPS'89 Neubrandenburg (1989)

1988

255. G.I. Groma, F. Ráksi, **G. Szabó** and Gy. Váró:
Picosecond and nanosecond components in bacteriorhodopsin light-induced electric response signal
 Biophys. J. 54, (1988) 77-80
256. Zs. Bor and **G. Szabó**:
Femtosecond pulse generation at the excimer laser lines using distributed feedback dye lasers
 EQEC '88 European Conference on Quantum Electronics, Hannover (1988)
257. Zs. Bor and **G. Szabó**:
A novel picosecond distributed feedback dye laser arrangement for excimer laser pumping
 Appl. Phys. B 47, (1988) 135-140
258. **G. Szabó**, Zs. Bor, A. Müller:
A phase sensitive single pulse autocorrelator for ultrashort laser pulses
 6th International Conference on Ultrafast Phenomena (ICUP'88) 1988
259. **Szabó G.**, Bor Zs., Rácz B., és Ketskeméty I.;
Excimer lézerek felhasználása a környezetkutató célú távérzékelésben
Fizikai módszerek az emberi környezet kutatásában és védelmében,
 Szerk. Berényi Dénes
260. **G. Szabó**, Zs. Bor and A. Müller:
Phase-sensitive single-pulse autocorrelator for ultrashort laser pulses
 Opt. Lett. 13, (1988) 746-748
261. J. Klebniczki, Zs. Bor and **G. Szabó**:
Theory of travelling-wave amplified spontaneous emission
 Appl. Phys. B 46, (1988) 151-155
262. **G. Szabó** and Zs. Bor:
300 femtosecond pulses at 497 nanometer generated by an excimer laser pumped cascade of distributed feedback dye lasers
 Appl. Phys. B 47, (1988) 299-302
263. Zs. Bor and **G. Szabó**:
Generation and measurement of picosecond and femtosecond laser pulses
 OPTIKA '88 Third International Symposium on Modern Optics, Budapest (1988) 53-59

264. Bor Zs., Rácz B., **Szabó G.**, és Klebniczki J.,;
Lézerfizikai kutatások Szegeden III., Festéklézerek
Fizikai szemle 9. (1987) pp. 376-384
265. Zs. Bor, **G. Szabó** and F. Ráksi:
Investigation of saturation induced self phase modulation in high gain amplifiers
World Scientific Publisher, Singapore, p. 33 (1987)
266. Zs. Bor, **G. Szabó** and F. Ráksi:
Investigation of saturation induced self phase modulation in high gain amplifiers
Proceedings of the V. International Symposium on Ultrafast Phenomena in Spectroscopy,
Vilnius, USSR (1987) 272 p. (invited)
267. G.I. Groma, F. Ráksi, Gy. Váró and **G. Szabó**:
Opto-electronic properties of bacteriorhodopsin in picosecond and nanosecond regions
9th International Symposium on Bioelectrochemistry and Bioenergetics, Szeged (1987)
268. G.I. Groma, F. Ráksi, **G. Szabó** and Gy. Váró:
Picosecond and nanosecond components in bacteriorhodopsin electric response signal
9th International Biophysics Congress, Jerusalem, Israel (1987)
269. G.I. Groma, F. Ráksi, Gy. Váró, **G. Szabó** and L. Nagy:
Light induced picosecond electric response signal of bacteriorhodopsin protein
XIIIth International Conference on Photochemistry, Budapest (1987)

1986

270. Bor Zs., Rácz B., **Szabó G.**, és Hebling J.,
Festéklézerek
Kvantumelektronika Őszi Iskola, Visegrád (1986)
271. **Szabó G.**, Bor Zs., Hebling J., és Rácz B.
Lézer rezonátorok, tranziens jelenségek lézerekben
Kvantumelektronika Őszi Iskola, Visegrád (1986)
272. Zs. Farkas, É. Farkas, I. Ketskeméty, J. Hebling, G. Kovács and **G. Szabó**:
Investigations of the polarized fluorescence of prolate-shaped molecules by subnanosecond laser spectroscopy
J. of Lumin. 35, (1986) 207-211
273. P. Simon, J. Klebniczki and **G. Szabó**:
A study of picosecond pulse generation by a double-resonator dye laser
Opt. Comm. 56, (1986) 359-364

1985

274. J. Klebniczki, P. Simon and **G. Szabó**:
Optimization of double-resonator picosecond dye lasers
UPS-85 Reinhardsbrunn (1985)

1984

275. G.I. Groma, **G. Szabó** and Gy. Váró:
Direct measurement of picosecond charge separation in bacteriorhodopsin
Nature 308 (1984) 557-558

276. **G. Szabó**, B. Rácz, Zs. Bor and A. Müller:
Travelling-wave pumped ultrashort pulse distributed feedback dye laser
 Proceedings of IVth Conference on Ultrafast Phenomena, Monterey, California (1984)
 60-62
277. **G. Szabó**, Zs. Bor, B. Rácz, A. Müller and I. Ketskeméty:
Picosecond and subpicosecond pulse generation by travelling wave amplified spontaneous emission and distributed feedback dye lasers
 Symposium Optika '84, Budapest (1984) 170-172
278. **G. Szabó**, B. Rácz, A. Müller, B. Nikolaus and Zs. Bor:
Travelling-wave-pumped ultrashort-pulse distributed-feedback dye laser
 in Picosecond Phenomena IV. Edited by D. H. Auston, K. B. Eisenthal, Springer-Verlag
 Berlin, Heidelberg, New York (1984) p. 60
279. **G. Szabó**, B. Rácz, A. Müller, B. Nikolaus and Zs. Bor:
Travelling-wave-pumped ultrashort-pulse distributed-feedback dye laser
 Appl. Phys. B 34, (1984) 145-147

1983

280. A. Müller, H.-P. Dorn, Zs. Bor, B. Rácz and **G. Szabó**:
Picosecond distributed feedback dye lasers
 ICL Digest International Conference on Lasers, (1983) 287-288
 Guangzhon China (1983)
281. Zs. Bor, B. Rácz, **G. Szabó**, A. Müller, H.P. Dorn:
Picosecond distributed feedback lasers conference on lasers an electro-optics
 CLEO Baltimore, Maryland (1983), Optical Society of America, p. 156
282. Zs. Bor, S. Szatmári, **G. Szabó** and B. Rácz:
Distributed feedback dye laser tuning by divergent pumping beams
 Acta Phys. et Chem. 29, (1983) 17-25
283. Zs. Bor, B. Rácz, **G. Szabó**, A. Müller and H.P. Dorn:
Picosecond pulse generation by distributed feedback dye lasers
 Digest of the Conference of the Condensed Matter Division of the EPS, (1983) 98
284. **G. Szabó**, Zs. Bor and A. Müller:
Amplification and measurement of single 1.6-3.5 ps pulses generated by a distributed feedback dye laser
 Appl. Phys. B 31, (1983) 1-4
285. Zs. Bor, B. Rácz, **G. Szabó**, A. Müller and H.P. Dorn:
Picosecond pulse generation by distributed feedback dye lasers
 Helv. Phys. Acta 56, (1983) 383-392

1982

286. Zs. Bor, B. Rácz, **G. Szabó** and A. Müller:
The pulse duration of a distributed feedback dye laser under single pulse conditions
 Picosecond Phenomena III., (1982) 62-65, ed.: K.B. Eisenthal, R.M. Hochstrasser,
 W. Kaiser, A. Laubereau Springer-Verlag (1982)
287. Zs. Bor, B. Rácz, **G. Szabó**, S. Szatmári, A. Müller and F.P. Schafer:
Picosecond pulse generation by distributed feedback dye lasers
 4th Conference on Luminescence, Szeged, (1982) 263-271

288. **G. Szabó**, Zs. Bor and A. Müller:
20 mw 2.5 ps pulse generation by a mode-locked nd-YAG laser pumped distributed feedback dye laser
4th Conference on Luminescence, Szeged, (1982) 323-326

289. Zs. Bor, B. Rácz, **G. Szabó**, S. Szatmári, A. Müller and F.P. Schafer:
Picosecond pulse generation by distributed feedback dye lasers
International Conference and School "Laser and Applications", Bucharest (1982) 307-321

1981

290. B. Rácz and **G. Szabó**:
Improved model of nitrogen laser pumped dye lasers
Acta Phys. et. Chem. 26, (1980) 127-135

291. Zs. Bor, B. Rácz, **G. Szabó** and Z. Gy. Horváth:
Halo laser
Digest of the Conference on Optics, Budapest (1980)

292. B. Rácz, Zs. Bor, **G. Szabó** and S. Szatmári:
Generation of subnanosecond pulses in nitrogen laser-pumped tunable dye lasers
Acta Phys. et Chem. 26, (1980) 117-125

293. Zs. Bor, B. Rácz, **G. Szabó** and Z. Gy. Horváth:
Two-dimensional halo laser performance
J. Opt. Soc. Am. 70, (1980) 1410

294. Zs. Bor, B. Rácz, **G. Szabó** and Z. Gy. Horváth:
Two-dimensional halo laser performance
Phys. Lett. 80A, (1980) 153-155

1979

295. Bor Zs., Ketskemény I., Rácz B., Kozma L. és **Szabó G.**;
Nitrogén lézerrel gerjesztett festéklézerek vizsgálata szubnanoszekundomos impulzusok előállítására
Fizikus vándorgyűlés, Miskolc (1979)

296. B. Rácz, Zs. Bor, I. Ketskemény, L. Kozma and **G. Szabó**:
Short-pulse generation by a long cavity dye laser
3rd Conference on Luminescence, Szeged, (1979) 291-297

297. **G. Szabó**, Zs. Bor, I. Ketskemény, L. Kozma and B. Rácz:
Improvement of the spectral properties of a single-cavity dye laser, by using an intracavity lens
3rd Conference on Luminescence, Szeged, (1979) 285-289

1978

298. Ketskemény I., Rácz B., Bor Zs., Sánta I., és **Szabó G.**
Kvantumelektronikai vizsgálatok a JATE Kísérleti Fizikai Intézetében
Az integrált optika, optoelektronika és lézerkutatás helyzete.
Tudományos ülésszak, Budapest (1978)

1977

299.B. Rácz, Zs. Bor, **G. Szabó** and Cs. Zoltán:

Subnanosecond relaxation oscillations in nitrogen laser pumped dye lasers

Acta Phys. et Chem. 23, (1977) 367-374