

Szabó Gábor
konferencia kiadványokban megjelent cikkeinek jegyzéke (1979 - 2010)

1979

1. **G. Szabó**, Zs. Bor, I. Ketskeméty, L. Kozma and B. Rácz:
Improvement of the spectral properties of a single-cavity dye laser, by using an intracavity lens
3rd Intern. Conference on Luminescence, Szeged, (1979) 285-289
2. B. Rácz, Zs. Bor, I. Ketskeméty, L. Kozma and **G. Szabó**:
Short-pulse generation by a long cavity dye laser
3rd Intern. Conference on Luminescence, Szeged, (1979) 291-297

1982

3. 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
4. **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
5. 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
6. 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)

1983

7. 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
8. 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)
9. 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
Guangzhou China (1983)

1984

10. **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
11. **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

1985

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

1987

13. 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)
14. 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)
15. 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)
16. 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) (invited)

1988

17. 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
18. **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
19. 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)

1989

20. Z. Gogolák, Zs. Bor and **G. Szabó**:
Compensation of cubic phase term of a prismatic pulse compressor
UPS'89 Neubrandenburg (1989)
21. 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)
22. **G. Szabó** and Zs. Bor:
Frequency doubling of femtosecond laser pulses
Conference on Lasers and Electro Optics (1989) Baltimore (invited talk)
23. P. Heszler, Zs. Bor, G. Kovács and **G. Szabó**:
Cu-vapor laser pumped 1 ns dye laser
UPS'89 Neubrandenburg (1989)
24. Zs. Benkő, Z. Gogolák, Zs. Bor and **G. Szabó**:
Pulse front distortion measurements in prisms by time-of-flight interferometry
UPS'89 Neubrandenburg (1989)
25. Z. Gogolák, Zs. Bor and **G. Szabó**:
Compensation of cubic phase term of a prismatic pulse compressor
UPS'89 Neubrandenburg (1989)

1990

26. 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)
27. 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

1991

28. Th. Hofmann, T. E. Sharp, C. B. Dane, P. J. Wisoff, W. L. Wilson, F. K. Tittel and **G. Szabó**:

Characterization of a subpicosecond XeF(C_A) excimer amplifier
OE/LASE'91 Los Angeles (1991)

29. 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
30. 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
31. 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
32. 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
33. F. K. Tittel, Th. Hofmann, T. E. Sharp, G. Szabó and P. J. Wisoff:
Ultrahigh Intensity Visible Excimer Laser System
LASERION'91, München (1991)
34. G.I. Groma, G. Szabó, Gy. Váró, F. Ráksi and L. Keszhelyi:
Bacteriorhodopsin: picosecond optoelectric signal transducer
Proceeding of Initial Meeting of International Society for Molecular Electronics and Biocomputing (1991)
35. 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
VIIth International Symposium on Ultrafast Processes in Spectroscopy, Bayreuth, 1991
36. 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
37. Th. Hofmann, T. E. Sharp, G. Szabó, F. K. Tittel and P. J. Wisoff:
A Terawatt XeF(C_A) Excimer Laser System
Seventh Interdisciplinary Laser Science Conference Monterey, CA 1991

1992

38. 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

39. 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
40. 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
41. 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
42. 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
43. 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
44. 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)
45. J. Mohay, I. Süveges, I. Ratkay, Á. Füst, Zs. Bor, **G. Szabó**, B. Rácz, B. Hopp and Sz. Virág:
Scanning electron microscopical study of corneal incisions induced by an excimer laser
Szemészet, 129 (1992)
46. 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
47. 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
48. 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)

1993

49. 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.
50. 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)
51. **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)
52. 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.
53. **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)

1994

54. 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
55. 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)
56. 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)
57. 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
58. 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)

1995

59. 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)
60. 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)
61. **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)
62. M. Erdélyi, Zs. Bor, F.K. Tittel, J.R. Cavallaro, **G. Szabó**, W.L.Wilson, M. Smayling
and C. Sengupta:
A Phase Shifting Techique for Ultrahigh Resolution Deep-UV Lithography
First International Symposium on 193 nm Lithography
Colorado, CO, Aug 15-18, (1995)

1996

63. 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)
64. 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)
65. F.K. Tittel, M. Erdélyi, **G. Szabó**, Zs. Bor, J.R. Cavallaro, M.C. Smayling:
High Resolution Microlithography Applications of Deep-UV Excimer Lasers,
GCL/HPL'96 Edinburgh, U.K. (Aug. 26-30, 1996)
66. 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
67. 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

68. 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

1997

69. 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. /ref. No. 2749W/ 3, p.1-8. (1997)
70. 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.
71. 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 Nanostuctures below 100 nm: Perspectives & Applications”, Bad Honnef, Germany (27-30 January 1997)
72. 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.
73. 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.
74. 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

1998

75. M. Erdélyi, Zs. Bor, **G. Szabó**, F.K. Tittel:
Enhanced microlithography using coated objectives and image duplication

76. 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.
77. F.K. Tittel, M. Erdélyi, Z.L. Horváth, A. Kroyan, W.L. Wilson, M.C. Smayling, Zs. Bor, **G. Szabó**:
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.
78. 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).
79. J. Sneider, Z. Bozóki, Á. Mohácsi, M. Szakáll, A. Miklós, **G. Szabó** and Zs. Bor:
Optimalisation 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).
80. 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).
81. 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.
82. 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
83. 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)
84. 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)

85. 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)
86. 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)
87. 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)

1999

88. 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.
89. Z. Bozóki, **G. Szabó**, A. Miklós, Á. Mohácsi, M. Szakáll, Zs. Bor:
Photoacoustic Spectroscopy: A Toll For High Sensitivity Gas Detection
International Békésy Conference, Budapest (1999)
(Satellite Conference of the World Science Congress of UNESCO)
90. 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)
91. 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.
92. B. Hopp, Zs. Bor, B. Rácz, **G. Szabó**, D. Xenakis, C. Kalpouzos, 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, TECHNA Faenza (1999) pp. 337
93. J. Sneider, Z. Bozóki, **G. Szabó** and Zs. Bor:
Methane detection with single laser photoacoustic Raman spektroscopy
In Photoacoustic and Photothermal Phenomena: 10th International Conference, ed. by:

F. Scudieri and M. Bertolotti, AIP Conference Proc. 463, The Americal Inst. of Physics, New York, 1999., pp. 271-273.

2002

94. 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.

2004

95. A. 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
96. A. 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

2005

97. 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
98. H. Huszár, M. Szakáll, Z. Bozóki, A. Zahn and **G. Szabó**: *Characterization of Photoacoustic Water Vapor Detector for Atmospheric Applications*.
7th Athmospheric Spectroscopy Applications Meeting, Reims-France, 6-8 September 2005
99. M. Szakáll, Z. Bozóki, Á. Mohácsi, A. H. Veres, A. Varga, H. Huszár and **G. Szabó**: *Photoacoustic Detectors for Gas Emission and Immission Monitoring*.
7th Athmospheric Spectroscopy Applications Meeting, Reims-France, 6-8 September 2005

2006

100. 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
101. 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

2007

102. **Gábor Szabó**, Zoltán Bozóki, Gábor Pap, Tamás Katona, Zoltán Filus:
Entwicklung und Anwendung fotoakustischer bzw. fotothermischer Systeme zur Messung der Gasdurchlässigkeit von Polymeren
Gummi Fasern Kunststoffe, 2007/6, 343-347
103. 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
104. 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
105. 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

2008

106. 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
107. 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
108. 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
109. A. 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

110. 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

2009

111. A. 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)
112. 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)
113. A. 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)
114. 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)
115. 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.
116. 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 (România), 2009. 04. 22. - 24.
117. Ajtai Tibor, Filep Ágnes, Födi Lajos, dr. Bozóki Zoltán, Varga Attila, **dr. Szabó Gábor:**
„Természetes és mesterségesen generált aeroszolok mérésére és aeroszolfajták megkülönböztetésére alkalmas optikai abszorpcióos elvű fotoakusztikus mérőműszer fejlesztése és alkalmazásai”,
IX. Magyar Aeroszol Konferencia Balatonfüred, 2009. 04. 27. - 28.
118. 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.

119. 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
120. 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
121. 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