

**ANDRÁS GUTTMAN**  
**PUBLICATION LIST**

**PEER REVIEWED****1980-1987**

1. L.Bencze, V.Galamb, **A.Guttman**, Gy.Pályi and A.Magini, The Reaction of Aluminum Trichloride with Mixed-Ligand Transition Metal Carbonyls, *Atti. Acad. Nat. Dei. Lincei. Rend. Cl. Sci. Fis. Mat.e. Nat.*, 68 (1980) 437-447. *IF: -, citations: 0*
2. **A.Guttman**, M.Sasvári-Székely, M.Staub and F.Antoni, "In Situ" Detection of Deoxythymidine Kinase Activity on Polyacrylamide Slab Gel, *Izotóptechnika*, 24 (1981) 109-118. *IF: -, citations: 0*
3. **A.Guttman**, L.Fehér and K.Magyar, A Sensitive Filmdetection Method for Quantitative Determination of 3-H Labeled Compounds on Thin-Layer Containing Ion-Exchanger, *Acta Biochim. Biophys. et Acad. Sci. Hung.* 17 (1982) 175-183. *IF: -, citations: 0*
4. M.Sasvári-Székely, M.Staub, **A.Guttman**, V.Töröcsvári and F.Antoni, Pyrimidine Salvage Enzymes in Human Tonsil Lymphocytes. I. Separation and Properties of Thymidine Kinase Isoenzymes, *Acta Biochim. et Acad. Sci. Hung.* 20 (1985) 163-172. *IF: -, citations: 0*
5. **A.Guttman**, J.Nagy and K.Magyar, The Metabolism of EGYT-475, a New Antidepressant Agent in Rats, *Pol. J. Pharmacol. Pharm.*, 39 (1987) 123-128. *IF: 0.257, citations: 0*
6. M.Fonyó, **A.Guttman** and K.Magyar, Species Differences in the in vivo Metabolism of EGYT-475, a New Antidepressant Agent, *Pol. J. Pharmacol. Pharm.* 39 (1987) 129-134. *IF: 0.257, citations: 0*

**1988**

7. **A.Guttman**, A.Paulus, A.S.Cohen, N.Grinberg and B.L.Karger, The Use of Complexing Agents for Selective Separation in High Performance Capillary Electrophoresis: Chiral Resolution via Cyclodextrins Incorporated within Polyacrylamide Gel Columns, *J. Chromatogr.*, 448 (1988) 41-53. *IF: 1.414, citations: total: 347, independent: 333*
8. A.S.Cohen, D.R.Najarian, A.Paulus, **A.Guttman**, J.A.Smith and B.L.Karger, Rapid Separations and Purification of Oligonucleotides by High Performance Capillary Gel Electrophoresis, *Proc. Natl. Acad. Sci. U.S.A.*, 85 (1988) 9660-9663. *IF: 10.032, citations: total: 297, independent: 264*
9. **A.Guttman**, A.Paulus, A.S.Cohen, B.L.Karger and H.Rodriguez, W.S.Hancock, High Performance, Capillary Gel Electrophoresis: High Resolution and Micropreparative Applications, *Electrophoresis'88, Proceedings* (Ed.: C.Schafer-Nielsen) VCH, Weinheim, Germany, (1988) pp.151-159. *IF: -, citations: total: 7, independent: 7*

**1989**

10. B.L.Karger, A.S.Cohen and **A.Guttman**, Capillary Electrophoresis in the Biological Sciences, *J. Chromatogr.-Biomed Appl.*, 492 (1989) 585-614. *IF: 1.534, citations: total: 305, independent: 271*
11. R.J.Nelson, A.Paulus, A.S.Cohen, **A.Guttman** and B.L.Karger, Use of Peltier Thermoelectric Devices to Control Column Temperature in High Performance Capillary Electrophoresis, *J. Chromatogr.* 480 (1989) 111-127. *IF: 1.684, citations: total: 122, independent: 103*

**1990**

12. **A.Guttman**, A.S.Cohen, D.N.Heiger and B.L.Karger, Analytical and Micropreparative Ultrahigh Resolution of Oligonucleotides by Polyacrylamide Gel High Performance Capillary Electrophoresis, *Analytical Chemistry*, 62 (1990) 137-141. *IF: 4.227, citations: total: 247, independent: 209*
13. **A.Guttman**, E.Sperling, L.Fehér and K.Magyar, A Sensitive Film Detection Method for the Determination of 3-H Labeled Compounds in Planar Ion-Exchange Chromatography, *J.Planar Chromatography*, 3 (1990) 527-530. *IF: -, citations: total: 2, independent: 2*

**1991**

14. **A.Guttman** and N.Cooke, Effect of Temperature on the Separation of DNA Restriction Fragments in Capillary Gel Electrophoresis, *J.Chromatogr.* 559 (1991) 285-294. *IF: 1.706, citations: total: 62, independent: 54*

15. **A.Guttman** and N.Cooke, Capillary Gel Affinity Electrophoresis. Use of Ethidium Bromide as a Soluble Complexing Agent for the Polyacrylamide Capillary Gel Electrophoresis of DNA Fragments, *Analytical Chemistry*, 63 (1991) 2038-2042. *IF: 3.592, citations: total: 143, independent: 129*
16. **A.Guttman** and N.Cooke, Denaturing Capillary Gel Electrophoresis, *American Biotechnology Laboratory*, Vol 9, No 4 (1991) 10. *IF: 0.532, citations: total: 5, independent: 5*

**1992**

17. K.Ganzler, K.S.Greve, A.S.Cohen, B.L.Karger and **A.Guttman**, N.Cooke, High Performance Capillary Electrophoresis of SDS-protein Complexes Using UV-transparent Polymer Networks, *Analytical Chemistry*, 64 (1992) 2665-2671. *IF: 4.494, citations: total: 201, independent: 181*
18. **A.Guttman**, Effect of Operation Variables on the Separation of DNA Molecules in Capillary Polyacrylamide Gel Electrophoresis, *Applied and Theoretical Electrophoresis*, 3 (1992) 91-96. *IF: -, citations: total: 9, independent: 9*
19. **A.Guttman**, R.J.Nelson and N.Cooke, Prediction of Migration Behavior of Oligonucleotides in Capillary Gel Electrophoresis, *J.Chromatogr.*, 593 (1992) 297-303. *IF: 1.958, citations: total: 44, independent: 43*
20. **A.Guttman**, A. Arai and K. Magyar, Influence of the pH on the Migration Properties of Oligonucleotides in Capillary Gel Electrophoresis, *J. Chromatogr.*, 608 (1992) 175-179. *IF: 1.958, citations: total: 15, independent: 14*
21. **A.Guttman** B. Wanders and N.Cooke, Enhanced Separation of DNA Restriction Fragments by Capillary Gel Electrophoresis Using Field Strength Gradients, *Analytical Chemistry*, 64 (1992) 2348-2351. *IF: 4.494, citations: total: 48, independent: 44*

**1993**

22. **A.Guttman**, J.A.Nolan and N.Cooke, SDS Capillary Gel Electrophoresis of Proteins, *J.Chromatogr.*, 632 (1993) 171-175. *IF: 1.874, citations: total: 57, independent: 49*
23. **A.Guttman**, J.Horváth and N.Cooke, Influence of Temperature on the Sieving Effect of Different Polymer Matrices in Capillary SDS Gel Electrophoresis of Proteins, *Analytical Chemistry*, 65 (1993) 199-203. *IF: 4.075, citations: total: 74, independent: 64*
24. **A.Guttman**, P.Shieh and N.Cooke, P/ACE SDS-Capillary Gel Electrophoresis of Proteins, *American Laboratory*, 2 (1993) 21. *IF: 0.571, citations: 0*
25. **A.Guttman**, J.A.Nolan, P.Shieh and N.Cooke, Protein Gel Analysis by Capillary Electrophoresis, *American Biotechnology Laboratory*, Vol 11, No9, (1993) 36-38. *IF: 0.157, citations: total: 3, independent: 3*

**1994**

26. **A.Guttman**, P.Shieh, D.Hoang, J.Horváth and N.Cooke, Effect of Operational Variables on the Separation of Proteins by Capillary SDS Gel Electrophoresis, *Electrophoresis*, 15 (1994) 221-224. *IF: 2.274, citations: total: 23, independent: 19*
27. **A.Guttman** and N.Cooke, Practical Aspects of Chiral Separation of Pharmaceuticals by Capillary Electrophoresis: I. Separation Optimization, *J.Chromatogr.A*, 680 (1994) 157-162. *IF: 2.523, citations: total: 45, independent: 40*
28. P.Shieh, D.Hoang, **A.Guttman** and N.Cooke, Capillary SDS Gel Electrophoresis of Proteins: I. Reproducibility and Stability, *J.Chromatogr. A*, 676 (1994) 219-226. *IF: 2.523, citations: total: 25, independent: 22*
29. **A.Guttman** and N.Cooke, Practical Aspects of Chiral Separation of Pharmaceuticals by Capillary Electrophoresis: II. Quantitation and Detection linearity, *J.Chromatogr.A*, 685 (1994) 155-159. *IF: 2.523, citations: total: 40, independent: 39*
30. **A.Guttman**, P.Shieh, J.Lindahl and N.Cooke, Capillary SDS Gel Electrophoresis of Proteins: II. Automated Ferguson Analysis, *J.Chromatogr.A*, 676 (1994) 227-231. *IF: 2.523, citations: total: 26, independent: 25*
31. K.Benedek and **A.Guttman**, Ultrafast High Performance Capillary SDS Gel Electrophoresis of Proteins, *J.Chromatogr.A*, 680 (1994) 375-381. *IF: 2.523, citations: total: 26, independent: 25*

32. **A.Guttman** and J.A.Nolan, Comparison of the Separation of Proteins by SDS Slab Gel Electrophoresis and Capillary SDS Gel Electrophoresis, *Anal.Biochem.*, 221 (1994) 285-289. *IF: 2.313, citations: total: 27, independent: 27*
33. M.J. van der Schans, J.Allen, B.Wanders and **A.Guttman**, Effects on Sample Matrix and Injection Plug on DNA Migration in Capillary Gel Electrophoresis, *J.Chromatogr.A*, 680 (1994) 511-516. *IF: 2.523, citations: total:19, independent: 15*
34. **A.Guttman**, N.Cooke and C.Starr, Capillary Electrophoresis Separation of Oligosaccharides: I. Effect of Operational Variables, *Electrophoresis*, 15 (1994) 1518-1522. *IF: 2.274, citations: total: 14, independent: 11*
35. C.Starr, S.Striepeke and **A.Guttman**, Fluorophore-Assisted Capillary Electrophoresis for the Analysis of Carbohydrates in Biotechnology and Medicine, *Biomedical Products*, 19 (1994) 24-25. *IF: -, citations: 0*

**1995**

36. **A.Guttman**, Novel Methods Development Scheme for Capillary Electrophoresis Separation of Enantiomers, *Electrophoresis*, 16 (1995) 1900-1905. *IF: 2.730, citations: total: 45, independent: 45*
37. **A.Guttman**, On the Separation Mechanism of Capillary SDS Gel Electrophoresis of Proteins, *Electrophoresis*, 16 (1995) 611-616. *IF: 2.730, citations: total: 19, independent: 18*
38. **A.Guttman**, C.Jurado, S.Brunet and N.Cooke, Rapid Chiral Separation Methods Development Scheme by Cyclodextrin Mediated Capillary Electrophoresis Separation for Acidic and Basic Compounds., *Chirality*, 7 (1995) 409-414. *IF: 1.449, citations: total: 23, independent: 21*
39. **A.Guttman** and H.E.Schwartz, Artifacts Related to Sample Introduction in Capillary Gel Electrophoresis Effecting Separation Performance and Quantitation, *Analytical Chemistry*, 67 (1995) 2279-2283. *IF: 4.509, citations: total: 33, independent: 31*
40. **A.Guttman** and C.Starr, Carbohydrate Profiling, Comparison between PAGE and CE, *Electrophoresis*, 16 (1995) 993-997. *IF: 2.730, citations: total: 19, independent: 16*
41. **A.Guttman** and T.Pritchett, Capillary Gel Electrophoresis Separation of High-mannose Type Oligosaccharides derivatized by 1-aminopyrene-3,6,8-trisulfonic acid *Electrophoresis*, 16 (1995) 1906-1911. *IF: 2.730, citations: total: 47, independent: 35*
42. A.Aumatell and **A.Guttman**, Ultra Fast Chiral Separation of Basic Drugs by Capillary Electrophoresis., *J.Chromatogr.A* 717 (1995) 229-234. *IF: 2.296, citations: total: 21, independent: 21*
43. **A.Guttman**, A.Aumatell, S.Brunet and N.Cooke, Cyclodextrin Array Chiral Analysis, *American Laboratory*, Vol 27, No 18 (1995) 18-22. *IF: 0.532, citations: total: 1, independent: 1*

**1996**

44. **A.Guttman**, Fu-Tai,A.Chen and Ramon A. Evangelista, Separation of APTS Labeled Asparagine-Linked Fetuin Glycans by Capillary Gel Electrophoresis, *Electrophoresis*, 17 (1996) 412-417. *IF: 2.467, citations: total: 40, independent: 33*
45. **A.Guttman**, S.Brunet and N.Cooke, Capillary Electrophoresis Separation of Enantiomers by Cyclodextrin Array Chiral Analysis, *LC.GC*, 14 (1996) 32-42. *IF: 2.393, citations: total: 11, independent: 11*
46. **A.Guttman**, A.Chen, R.Evangelista and N.Cooke, High Resolution Capillary Gel Electrophoresis of Reducing Oligosaccharides Labeled with 1-Aminopyrene-3,6,8-trisulfonate (APTS), *Anal.Biochem.*, 233 (1996) 234-242. *IF: 2.047, citations: total: 86, independent: 66*
47. **A.Guttman**, S.Brunet and N.Cooke, Capillary Electrophoresis Separation of Enantiomers by Cyclodextrin Array Chiral Analysis, *LCGC International*, 9 (1996) 88-100. *IF: 2.393, citations: total: 13, independent: 13*
48. **A.Guttman**, Edit Sperling and I.Mazsaroff, Performance and Economics in Micropreparative Capillary Electrophoresis of Oligosaccharides, *J.Liq.Chrom.*, 19 (1996) 1539-1549. *IF: 1.058, citations: total: 4, independent: 3*
49. **A.Guttman**, Carbohydrate Profiling by Capillary Gel Electrophoresis, *Nature*, 380 (1996) 461-462. *IF: 28.417, citations: total: 47, independent: 36*

50. **A.Guttman** and S.Herrick, Effect of the Quantity and Linkage Position of Mannose ( $\alpha$ 1,2) Residues in Capillary Gel Electrophoresis of High Mannose Type Oligosaccharides, *Anal.Biochem.*, 235 (1996) 236-239. *IF: 2.047, citations: total: 14, independent: 10*
51. **A.Guttman**, Capillary Electrophoresis Separation of Enantiomers (Reply) *LC.GC*, 14 (1996) 247. *IF: 2.393, citations: 0*
52. R.Evangelista, **A.Guttman** and A.Chen, Acid-Catalyzed Reductive Amination of Reductive Oligosaccharides, *Electrophoresis*, 17 (1996) 347-351. *IF: 2.467, citations: total: 31, independent: 30*
53. **A.Guttman**, Effect of the Temperature on the Peak Efficiency in Capillary Gel Electrophoresis, *Trends in Anal.Chem.*, 15 (1996) 194-198. *IF: 2.563, citations: total: 4, independent: 3*
54. **A.Guttman** and E.Szoko, Capillary Gel Electrophoresis Separation of DNA Restriction Fragments in Discontinuous Buffer System, *J.Chromatogr.A*, 744 (1996) 321-324. *IF: 2.457, citations: total: 10, independent: 10*
55. **A.Guttman**, S.Brunet and N.Cooke, Capillary Electrophoresis Fingerprinting of Carbohydrates in the Biopharmaceutical and Food/Beverage Industry. *LC.GC Magazine* 14 (1996) 788-792. *IF: 2.393, citations: total: 5, independent: 5*
56. **A.Guttman**, Capillary SDS Gel Electrophoresis of Proteins (review) *Electrophoresis*, 17 (1996) 1333-1341. *IF: 2.467, citations: total: 47, independent: 46*
57. R.Evangelista, A.Chen and **A.Guttman**, Reductive Amination of N-linked Oligosaccharides Using Acid Catalysts, *J.Chromatogr.A*, 745 (1996) 273-280. *IF: 2.457, citations: total: 22, independent: 22*

**1997**

58. **A.Guttman**, Analysis of Monosaccharide Composition by Capillary Electrophoresis *J.Chromatogr.A*, 763 (1997) 271-278. *IF: 2.697, citations: total: 68, independent: 63*
59. **A.Guttman**, Multistrukture Sequencing of N-linked Fetuin Glycans by Capillary Gel Electrophoresis and Enzyme Matrix Digestion, *Electrophoresis*, 18 (1997) 1136-1141. *IF: 2.848, citations: total: 23, independent: 21*
60. **A.Guttman** and K.J.Ulfelder, Exoglycosidase Matrix Mediated Sequencing of a Complex Glycan Pool by Capillary Electrophoresis, *J.Chromatogr.A*, 781 (1997) 547-554. *IF: 2.697, citations: total: 13, independent: 12*
61. H.Suzuki, O.Muller, **A.Guttman** and B.L.Karger, Analysis of 1-Aminopyrene-3,6,8-trisulfonate (APTS) Derivatized Oligosaccharides by Capillary Electrophoresis with Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry, *Analytical Chemistry*, 69 (1997) 4554-4559. *IF: 4.743, citations: total: 60, independent: 60*
62. **A.Guttman**, Rehydratable Polyacrylamide Gels for Capillary Electrophoresis, *J.Liq.Chrom.&Rel.Technol.*, 21 (1998) 1249-1258. *IF: 1.272, citations: total: 3, independent: 3*
63. M.Bathori, I.Mathu, and **A.Guttman**, Capillary Electrophoresis Analysis of Egdysteroids, *Chromatographia.*, 48 (1997) 145-148. *IF: 2.079, citations: total: 8, independent: 7*

**1998**

64. P.Trost and **A.Guttman**, Fiber bundle based scanning detection system for automated DNA sequencing, *Analytical Chemistry*, 70 (1998) 3930-3935. *IF: 4.580, citations: total: 18, independent: 3*
65. J.Hiebl, M.Blanka, **A.Guttman**, H.Kollmann, K.Leitner, G.Mayrhofer, F.Rovensky and K.Winkler, A Detailed Investigation of the Preparation of 2,7-diaminosuberic Acid and 2,5-diaminoadipic acid Derivatives Using Kolbe Electrolysis, *Tetrahedron*, 54 (1998) 2059-2074. *IF: 2.160, citations: total: 23, independent: 20*
66. S.Cassel and **A.Guttman**, Membrane Mediated Sample Loading Method for Automated DNA Sequencing, *Electrophoresis*, 19 (1998) 1341-1346. *IF: 3.054, citations: total: 18, independent: 2*
67. C.Barta, M.Sasvári-Székely and **A.Guttman**, Simultaneous analysis of various mutations on the 21-hydroxylase gene by multi-allele specific amplification (MASA) and capillary gel electrophoresis, *J.Chromatogr.A*, 817 (1998) 281-286. *IF: 2.321, citations: total: 13, independent: 10*

68. **A.Guttman**, C. Barta, M.Szoke, M.Sasvári-Székely and H.Kalasz, Real time detection of allele specific PCR products by automated ultra-thin layer agarose gel electrophoresis, *J.Chromatogr. A*, 828 (1998) 481-487. *IF: 2.321, citations: total: 22, independent: 6*
69. **A.Guttman** and K.Ulfelder, Separation of DNA by Capillary Electrophoresis, *Advances in Chromatography*, 38 (1998) 301-341. *IF: 3.059, citations: total: 17, independent: 17*
70. **A.Guttman**, K.Benedek and H.Kalasz, On the Separation Parameters in DNA Sequencing by Capillary Gel Electrophoresis, *American Laboratory*, Vol 30, No 8 (1998) 63-66. *IF: 0.595, citations: total: 2, independent: 2*

**1999**

71. **A.Guttman**, Automated DNA fragment analysis by high performance ultra-thin-layer agarose gel electrophoresis, *LC/GC Magazine*, 17 (1999) 1020-1026. *IF: 4.704, citations: total: 9, independent: 3*
72. M.Szoke, M.Sasvari-Szekely and **A.Guttman**, Ultra-thin-layer agarose gel electrophoresis. I. Effect of the gel concentration and temperature on the separation of DNA fragments, *J.Chromatogr.A*, 830 (1999) 465-471. *IF: 2.520, citations: total: 6, independent: 3*
73. M.Szoke, M.Sasvari-Szekely, Cs.Barta and **A.Guttman**, Human dopamine D<sub>4</sub> receptor allele genotyping by ultra thin agarose gel electrophoresis with To-Pro-3 complexation, *Electrophoresis*, 20 (1999) 497-501. *IF: 3.447, citations: total: 8, independent: 3*
74. **A.Guttman**, Sample stacking during membrane mediated loading in automated DNA sequencing, *Analytical Chemistry*, 71 (1999) 3598-3602. *IF: 4.555, citations: total: 15, independent: 10*
75. T. Lengyel and **A.Guttman**, Effect of linear polymer additives on the electroosmotic characteristics during agarose gel electrophoresis, *J.Chromatogr. A*, 853 (1999) 511-518. *IF: 2.520, citations: total: 14, independent: 6*
76. **A.Guttman**, High performance ultra-thin-layer agarose gel electrophoresis, *Trends in Analytical Chemistry*, 18 (1999) 694-702. *IF: 2.507, citations: total: 6, independent: 1*
77. T. Lengyel, M.Sasvari-Szekely and **A.Guttman**, High throughput genotyping of factor V Leiden mutation by ultra-thin-layer agarose gel electrophoresis, *J.Chromatogr. A*, 853 (1999) 519-525. *IF: 2.520, citations: total: 4, independent: 3*

**2000**

78. **A.Guttman**, T.Lengyel, M.Szoke and M.Sasvari-Szekely, Ultra-thin-layer agarose gel electrophoresis, 2. Separation of DNA fragments by composite agarose – linear polymer matrices, *J.Chromatogr. A*, 871 (2000) 289-298. *IF: 2.551, citations: total: 3, independent: 3*
79. M.Sasvari-Szekely, A.Gerstner, Zs.Ronai, M.Staub and **A.Guttman**, Rapid genotyping of factor V Leiden mutation using single tube bidirectional allele specific amplification and automated ultra-thin-layer agarose gel electrophoresis, *Electrophoresis*, 21 (2000) 816-821. *IF: 3.385, citations: total: 19, independent: 9*
80. A.Gerstner, Zs.Csapo, M.Sasvari-Szekely and **A.Guttman**, Ultra-thin-layer SDS gel electrophoresis of Proteins. Effects of Gel composition and temperature on the separation of SDS-protein complexes, *Electrophoresis*, 21 (2000) 834-840. *IF: 3.385, citations: total: 14, independent: 12*
81. Z.Csapo, A.Gerstner, M.Sasvari-Szekely and **A.Guttman**, Automated ultra-thin-layer SDS gel electrophoresis of proteins using non-covalent fluorescent labeling, *Analytical Chemistry*, 72 (2000) 2519-2525. *IF: 4.587, citations: total: 27, independent: 21*
82. A.Gerstner, M.Sasvari-Szekely, H.Kalasz and **A.Guttman**, Sequencing difficult DNA templates using membrane mediated loading with hot sample application, *BioTechniques*, 28 (2000) 628-630. *IF: 1.756, citations: total: 4, independent: 2*
83. Z.Ronai, **A.Guttman** and Z.Nemoda, M.Staub, H.Kalasz, M.Sasvari-Szekely, Rapid and Sensitive Genotyping of Dopamine D<sub>4</sub> Receptor Tandem Repeats by Automated Ultra-thin-layer Gel Electrophoresis., *Electrophoresis*, 21 (2000) 2058-2061. *IF: 3.385, citations: total: 26, independent: 2*
84. Z.Ronai and **A.Guttman**, Analytical and Micropreparative Capillary Gel Electrophoresis of DNA Fragments, *American Laboratory*, 32 (2000) 28-31. *IF: 0.593, citations: total: 3, independent: 1*

85. **A.Guttman**, Z.Ronai, Z.Csapo, A.Gerstner, and M.Sasvari-Szekely, Rapid Analysis of Covalently and Non-covalently Fluorophore Labeled Proteins Using Ultrathin-layer Sodium Dodecylsulfate Gel Electrophoresis, *J.Chromatogr.A*, 894 (2000) 329-335. *IF: 2.551, citations: total: 6, independent: 4*
86. **A.Guttman** and Z.Ronai, Ultra-thin-layer Gel Electrophoresis of Biopolymers, *Electrophoresis*, 21 (2000) 3952-3964. *IF: 3.385, citations: total: 21, independent: 15*

## 2001

87. Z.Ronai, C.Barta, M.Sasvari-Szekely and **A.Guttman**, DNA Analysis on Electrophoretic Microchip: Effect of operational variables, *Electrophoresis*, 22 (2001) 294-299. *IF: 4.282, citations: total: 30, independent: 30*
88. Ronai, C.Barta, **A.Guttman**, K.Lakatos, J.Gervai, M.Staub and M.Sasvari-Szekely, Genotyping the -521CT Functional Polymorphism in the Promoter Region of the Dopamine D4 Receptor (DRD4) Gene by Agarose Gel Electrophoresis, *Electrophoresis*, 22 (2001) 1102-1105. *IF: 4.282, citations: total: 21, independent: 14*
89. C.Barta, Z.Ronai, M.Sasvari-Szekely and **A.Guttman**, Rapid single nucleotide polymorphism analysis by primer extension and capillary electrophoresis using polyvinyl pyrrolidone matrix, *Electrophoresis*, 22 (2001) 779-782. *IF: 4.282, citations: total: 20, independent: 17*
90. M.Theodoropoulou, C.Barta, M.Szoke, **A.Guttman**, M.Staub, T.Niederland, J.Solyom, G.Fekete, M.Sasvari, Prenatal Diagnosis of Steroid 21-hydroxylase Deficiency by Allele Specific Amplification, *Fetal Diagnosis and Therapy*, 16 (2001) 237-240. *IF: 1.142, citations: total: 2, independent: 2*
91. **A.Guttman**, H.G.Gao, R.Haas, Rapid Quantitative Analysis of Mitochondrial DNA Heteroplasmy in Diabetics by Gel Microchip Electrophoresis, *Clinical Chemistry*, 47 (2001) 1469-1472. *IF: 4.371, citations: total: 9, independent: 9*
92. C.Barta, Z.Ronai, Z.Nemoda, A.Szekely, E.Kovacs, M.Sasvari-Szekely and **A.Guttman**, Analysis of Dopamine D4 Receptor Gene Polymorphism using Microchip Electrophoresis, *J.Chromatogr.A*. 924 (2001) 285-290. *IF: 2.793, citations: total: 14, independent: 9*
93. Z.Nemoda, Z.Ronai, A.Szekely, E.Kovacs, S.Shandrick, **A.Guttman** and M.Sasvari-Szekely, High Throughput Genotyping of Repeat Polymorphism in the Regulatory Region of Serotonin Transporter Gene by Gel Microchip Electrophoresis, *Electrophoresis* 22 (2001) 4008-4011. *IF: 4.282, citations: total: 10, independent: 6*

## 2002

94. **A.Guttman**, Z.Csapo and D.Robbins, Rapid Two Dimensional Analysis of Proteins by Ultra-thin-layer Gel Electrophoresis, *Proteomics* 2 (2002) 469-474. *IF: 4.007, citations: total:12 , independent: 10*
95. J.Khandurina and **A.Guttman**, Biochemical Analysis in Microfluidic Devices. Review, *J.Chromatogr.A*. 943 (2002) 159-183. *IF: 3.098, citations: total: 201, independent: 194*
96. T.Chovan and **A.Guttman**, Microfabricated Devices in Biotechnology and Chemical Processing, *Trends in Biotechnology*, 20 (2002) 116-122. *IF: 6.291, citations: total: 135, independent: 133*
97. S.Shandrick, Z.Ronai and **A.Guttman**, Ultra-fast Submicroliter PCR with Subsequent Gel Microchip Electrophoresis, *Electrophoresis*, 23 (2002) 591-595. *IF: 4.325, citations: total: 6, independent: 5*
98. Z.Ronai, **A.Guttman**, Z.Nemoda, J.Gervai and M.Sasvári-Székely, Direct Haplotype Detection of Adjacent Polymorphic Sites in the Regulatory Region of the Dopamine D4 Receptor (DRD4) Gene, *Electrophoresis*, 23 (2002) 1512-1516. *IF: 4.325, citations: total: 5, independent: 2*
99. J.Khandurina, T.Chovan and **A.Guttman**, Micropreparative Fraction Collection in Microfluidic Devices, *Anal.Chem.* 74 (2002) 1737-1740. *IF: 5.094, citations: total: 31, independent: 23*
100. J.Khandurina and **A.Guttman**, Microchip based HTS analysis of combinatorial libraries, *Curr. Opin. Chem. Biol.* 6 (2002) 359-366. *IF: 7.492, citations: total: 53, independent: 51*
101. K.Boor, Z.Ronai, Z.Nemoda, P.Gasztner, M.Sasvari-Szekely, **A.Guttman** and H.Kalasz, Noninvasive Genotyping of Dopamine Receptor D4 (DRD4) using Nanograms of DNA from

Substance-Dependent Patients. *Curr. Med. Chem.* 9 (2002) 793-797. *IF*: 4.966, *citations: total: 20, independent: 6*

102. J.Khandurina, H.S.Chang, B.Wanders and **A.Guttman**, Automated High Throughput RNA Analysis by Capillary Electrophoresis, *BioTechniques*, 32 (2002) 1226-1230. *IF*: 2.173, *citations: total: 5, independent: 4*
103. Z.Ronai, M.Sasvari-Szekely and **A.Guttman**, Miniaturized SNP Detection: Quasi-Solid Phase Restriction Fragment Length Polymorphism (RFLP) Analysis, *Nature Genetics (eből Technical Tips Online)*, 2002, 1: T02678. *IF*: 26,711, *citations: 0*
104. J.Khandurina, H.S.Chang, B.Wanders, and **A.Guttman**, An Ultra fast Method to Evaluate RNA Quality, *P/ACE Setter*, 6 (2002) 4-5. *IF*: -, *citations: 0*
105. **A.Guttman**, Zsolt Ronai, Csaba Barta, Yu-Ming Hou, Xun Wang and Steven Briggs, Membrane Mediated Restriction Digestion and Consequent Analysis of DNA Fragments by Ultra-Thin-Layer Gel Electrophoresis, *Electrophoresis* 23 (2002) 1524-1530. *IF*: 4.325, *citations: total: 13, independent: 8*
106. J.Khandurina, E.Legg, X.Wang and **A.Guttman**, Rapid automated agarose gel electrophoresis of dsDNA fragments on a commercial DNA sequencer. *BioTechniques*, 33 (2002) 1008-1014. *IF*: 2.173, *citations: total: 2, independent: 1*
107. Z.Rónai, M.Sasvári-Székely, T.Chován and **A.Guttman**, The use of electrophoretic microchips for rapid DNA analysis, *Biokémia*, 26 (2002) 26-32. *IF*: -, *citations: 0*
108. J.Khandurina and **A.Guttman**, Micromachined capillary cross-connector for high precision fraction collection, *J. Chromatogr A*, 979 (2002) 105-113. *IF*: 3.098, *citations: total: 11, independent: 9*

## 2003

109. L.Shi, J.Khandurina, Z.Ronai, BY.Li, W.K.Kwan, X.Wang and **A.Guttman**, Micropreparative capillary gel electrophoresis of DNA: Rapid expressed sequence tag library construction, *Electrophoresis*, 24 (2003) 86-92. *IF*: 4.040, *citations: total: 6, independent: 5*
110. M.Berdichevski, J.Khandurina and **A.Guttman**, Microgel Electrophoresis: A Novel Approach for Rapid and Efficient DNA Analysis, *Am.Biotech.Lab.* 21 (2003) 22-23. *IF*: -, *citations: total: 2, independent: 2*
111. B.L.Karger and **A.Guttman**, From capillaries to the Genome., *Gen.Prot.Techn*, 3 (2003) 12-16. *IF*: -, *citations: 0*
112. Z.Ronai, Y.Wang, J.Khandurina, P.Budworth, M. Sasvari Szekely, X.Wang and **A.Guttman**, Transcription factor binding study by capillary zone electrophoretic mobility shift assay, *Electrophoresis*, 24 (2003) 96-100. *IF*: 4.040, *citations: total: 12, independent: 10*
113. Z.Ronai, M.Sasvari-Szekely and **A.Guttman**, Miniaturized SNP detection: Quasi-Solid Phase RFLP Analysis, *BioTechniques* 34 (2003) 1172-1173. *IF*: 2.383, *citations: total: 2, independent: 2*
114. J.Boros and **A.Guttman**, Genetism: Genes and Society, *Gen.Prot.Techn.* 3 (2003) 6-10. *IF*: -, *citations: 0*
115. **A.Guttman**, L.Shi, J.Khandurina and X.Wang, Differential Gene Expression Analysis by Micro-Preparative Capillary Gel Electrophoresis, *J.Chromatogr.A.* 1014 (2003) 29-35. *IF*: 2.922, *citations: total: 4, independent: 4*
116. M.Guttman, P.Fules and **A.Guttman**, Rapid Analysis of Site-directed Mutagenesis Constructs by Capillary Gel Electrophoresis, *J.Chromatogr.A.* 1014 (2003) 21-27. *IF*: 2.922, *citations: total: 2, independent: 2*
117. **A.Guttman** and A.Paulus (Editors) *Electrophoresis*, HPCE 2003, Special Issue 24 (2003) pp311. *IF*: 4.040, *citations: 0*
118. J.Khandurina and **A.Guttman** Microscale Separation and Analysis, *Curr. Opin. Chem. Biol.* 7 (2003) 595-602. *IF*: 7.760, *citations: total: 27, independent: 25*
119. A.Paulus and **A.Guttman**, (Editors) *J.Chromatogr A.*, Vol 1013 and 1014 (2003) pp238 and 231. *IF*: 2.922, *citations: 0*

120. **A.Guttman**, Gel and Polymer Solution Mediated Separation of Biomolecules by Capillary Electrophoresis (Review), *J.Chrom.Sci.*, 41 (2003) 449-459. *IF: 1.153, citations: total: 7, independent: 7*
121. **A.Guttman**, J.Khandurina, Z.Ronai and M.Sasvari-Szekely, High Throughput Genotyping by Microchip Electrophoresis, *J.Capillary Electrophoresis*, 8 (2003) 77-80. *IF: -, citations: 0*

2004

122. Z.Ronai, **A.Guttman**, G.Keszler and M.Sasvari-Szekely, Capillary electrophoresis study on DNA-protein complex formation in the polymorphic 5' upstream region of the dopamine D4 receptor (DRD4) gene, *Currents in Medicinal Chemistry*, 11 (2004) 1023-1029. *IF: 4.382, citations: total: 13, independent: 10*
123. **A.Guttman**, J.Khandurina, P.Budworth, W.Xu, Y.M.Hou and X.Wang, Analysis of combinatorial natural products by HPLC and CE, *LC.GC North America* 22 (2004) 58-67. *IF: 0.519, citations: 0*
124. Z.Ronai, E.Szantai, R.Szmola, Z.Nemoda, A.Szekely, J.Gervai, **A.Guttman** and M.Sasvari-Szekely, A novel A/G SNP in the -615<sup>th</sup> position of the dopamine D4 receptor promoter region as a source of misgenotyping of the -616 C/G SNP. *American Journal of Medical Genetics Part B (Neuropsychiatric Genetics)*, 126B (2004) 74-78. *IF: 2.000, citations: total: 11, independent: 8*
125. **A.Guttman**, J.Khandurina, P.Budworth, W.Xu, Y.M.Hou and X.Wang, Analysis of combinatorial natural products by HPLC and CE, *PharmaGenomics* 4 (2004) 32-42. *IF: -, citations: 0*
126. Y.Berdichevsky, J.Khandurina, **A.Guttman** and Y.H.Lo, UV/Ozone modification of Poly(dimethylsiloxane) microfluidics channels, *Sens.Actuators B.*, 97 (2004) 402-408. *IF: 2.083, citations: total: 76, independent: 76*
127. **A.Guttman**, M.Varoglu and J.Khandurina, Multidimensional separations in the pharmaceutical arena. *Drug Discovery Today* 9 (2004) 136-144. *IF: 6.928, citations: total: 43, independent: 43*
128. A.Koller, J.Khandurina, J.Li, J.Kreps and **A.Guttman**, Structure Analysis of High-Mannose Type Oligosaccharides by uLC/MS and Capillary Electrophoresis, *Electrophoresis*, 25 (2004) 2003-2009. *IF: 3.743, citations: total: 15, independent: 15*
129. **A.Guttman**, J.Khandurina, P.Budworth, W.Xu, Y.M.Hou and X.Wang, Analysis of combinatorial natural products by HPLC and CE, *LC.GC Europe* 17 (2004) 104-111. *IF: 1.194, citations: total: 1, independent: 1*
130. J.Boros and **A.Guttman**, Genetizmus: Gének és társadalom (Genetism: Genes and Society), *Magyar Tudomány* 6 (2004) 752-756. *IF: -, citations: total: 1, independent: 1*
131. J.Khandurina, D.L.Blum and **A.Guttman**, Automated Carbohydrate Profiling by Capillary Electrophoresis: A bioindustrial approach, *Electrophoresis* 25 (2004) 2326-2331. *IF: 3.743, citations: total: 10, independent: 7*
132. S.Liu, **A.Guttman**, Electrophoresis Microchips for DNA Analysis, *Trends in Anal.Chem.*, 23 (2004) 422-431. *IF: 3.888, citations: total: 23, independent: 22*
133. **A.Guttman**, Z.Ronai, J.Khandurina, T. Lengyel, M. Sasvari-Szekely, Rapid Analysis of Factor V Leiden Mutation by Membrane Mediated Restriction Digestion and Ultra-Thin Layer Gel Electrophoresis, *Chromatographia*, 60 (2004) S295-S298. *IF: 1.145, citations: total: 2, independent: 2*
134. **A.Guttman**, The Evolution of Capillary Gel Electrophoresis: From Proteins to DNA Sequencing, *LC.GC North America*, 22 (2004) 896-904. *IF: 0.519, citations: total: 3, independent: 3*
135. J.Khandurina, **A.Guttman**, Industrial-Scale Carbohydrate Profiling Using High Speed CE with Automated Batch Sampling from a 96 Well Plate, *P/ACE Setter*, 8 (2004) 1-3. *IF: -, citations: 0*
136. J.Khandurina, N.A.Olson, A.A.Anderson, K.A.Gray, **A.Guttman**, Large-scale carbohydrate analysis by capillary array electrophoresis. Part 1. Separation and scale-up, *Electrophoresis* 25 (2004) 3117-3121. *IF: 3.743, citations: total: 9, independent: 6*
137. J.Khandurina, A.A.Anderson, N.A.Olson, J.Stege, **A.Guttman**, Large-scale carbohydrate analysis by capillary array electrophoresis. Part 2. Data normalization and quantification, *Electrophoresis* 25 (2004) 3122-3127. *IF: 3.743, citations: total: 9, independent: 5*

138. E.Szantai, A.Szilagyi, **A.Guttman**, M.Sasvari-Szekely, Z.Ronai, Genotyping and haplotyping of the dopamine D4 receptor gene by capillary electrophoresis, *J.Chromatogr.A.* 1053 (2004) 241-245. *IF: 3.359, citations: total: 5, independent: 2*
139. **A.Guttman** and R.Giese, (Editors) "Bioanalytical Chemistry: Perspectives and Recent Advances" *J.Chromatogr A.*, 1053 (2004) pp308. *IF: 3.359, citations: 0*
140. J.Boros and **A.Guttman**, Gének, Társadalom és az értelmezés tudománya, *Magyar Tudomány* 9 (2004) 1029-1032. *IF: -, citations: 0*
141. N.A.Olson, J.Khandurina, **A.Guttman**, DNA profiling by Capillary Array Electrophoresis with non-covalent fluorescent labeling, *J.Chromatogr.A.* 1051 (2004) 155-160. *IF: 3.359, citations: total: 2, independent: 2*
142. **A.Guttman**; Obituary: Professor Csaba Horváth (1930–2004) *Electrophoresis* 25 (2004) 3067. *IF: 3.743, citations: 0*

## 2005

143. P.Budworth, J.Khandurina, **A.Guttman**, Combinatorial Natural Products: From Cloning to Analysis, *Currents in Medicinal Chemistry*, 12 (2005) 703-711. *IF: 4.904, citations: total: 1, independent: 1*
144. **A.Guttman** and A.Rathore, (Editors) "Separation Science: Past, Present and Future" *J.Chromatogr A.*, 1079 (2005) pp 424. *IF: 3.096, citations: 0*
145. E.Szantai, Z.Ronai, A.Szilagyi, M.Sasvari-Szekely, **A.Guttman**, Haplotyping by capillary electrophoresis, *J.Chromatogr A.*, 1079(2005) 41-49. *IF: 3.096, citations: total: 10, independent: 8*
146. J.Khandurina, **A.Guttman**, High resolution capillary electrophoresis of oligosaccharide structural isomers, *Chromatographia*, 62 (2005) S37-S41. *IF: 0.959, citations: total: 4, independent: 4*
147. E.Szantai, R.Szmola, M.Sasvari-Szekely, **A.Guttman**, Z.Ronai, The polymorphic nature of the human dopamine D4 receptor gene: A comparative analysis of known variants and a novel 27 bp deletion in the promoter region. *BMC Genetics*, 6 (2005) 39-49. *IF: 1.769, citations: total: 5, independent: 3*
148. L.Székely and **A.Guttman**, New advances in microchip fabrication for electrochromatography, *Electrophoresis*, 26 (2005) 4590-4604. *IF: 3.850, citations: total: 30, independent: 29*

## 2006

149. A.Vegvari and **A.Guttman**, Theoretical and nomenclatural considerations of capillary electrochromatography with monolithic stationary phases, *Electrophoresis* 27 (2006) 716-725. *IF: 4.101, citations: total: 11, independent: 11*
150. L.Székely and **A.Guttman**, Comparison of various channel fabrication techniques for microchip electrophoresis, *Current Analytical Chemistry*, 2 (2006) 195-201. *IF: 1.500, citations: total: 1, independent: 1*
151. E.Szantai, Z.Ronai, M.Sasvari-Szekely and **A.Guttman**, Haplotyping of the deoxycytidine kinase gene by multicapillary electrophoresis, *Anal. Biochem.* 352 (2006) 148-150. *IF: 2.948, citations: 0*
152. A.Szilagyi, B.Blasko, G.Fust, M.Sasvari-Szekely, Z.Ronai and **A.Guttman**, Rapid quantification of human complement component c4a and c4b genes by capillary gel electrophoresis, *Electrophoresis* 27 (2006) 1437-1443. *IF: 4.101, citations: total: 4, independent: 3*
153. V.Amirkhanian, M.Liu, **A.Guttman** and E.Szantai, Cost benefit analysis of a multicapillary electrophoresis system, *American Lab.*, 38 (2006) 26-28. *IF: 0.220, citations: 0*
154. L.Székely and **A.Guttman**, Simple approaches to close the open structure of microfluidic chips and connecting them to the macro-world, *J.Chromatogr B.*, 841 (2006) 123-128. *IF: 2.647, citations: total: 1, independent: 1*
155. E.Szantai, Z.Ronai, M.Sasvari-Szekely, G.Bonn and **A.Guttman**, Multi-capillary electrophoresis analysis of single nucleotide sequence variations in the deoxycytidine kinase gene, *Clinical Chemistry* 52 (2006) 1756-1762. *IF: 5.454, citations: total: 2, independent: 2*
156. I. Feuerstein, M.Najam-ul-Haq, M.Rainer, L.Trojer, R.Bakry, N.H Aprilita, G.Stecher, C.W.Huck, G. K. Bonn, H.Klocker, G.Bartsch and **A.Guttman**, Material Enhanced Laser Desorption/Ionization (MELDI) – a new protein profiling tool utilizing specific carrier materials

for TOF-MS Analysis, *JASMS*, 17 (2006) 1203-1208. *IF*: 3.307, *citations: total: 27, independent: 10*

157. A.Toth-Petroczy, A.Szilagy, Z.Ronai, M.Sasvari-Szekely, **A.Guttman**, Validation of a tentative microsatellite marker for the dopamine d4 receptor gene by capillary gel electrophoresis *J.Chromatogr A.*, 1130 (2006) 201- 205. *IF*: 3.554, *citations: 0*
158. A.Monzo, A.Szilagy, G.K.Bonn and **A.Guttman**, A Lectin Affinity Chromatography with Preparative Liquid Phase IEF and MALDI TOF MS as Tool to Study the Human Serum Glycoproteome, *Mol.Cell.Proteomics*, 5(2006) S100. *IF*: 9.620, *citations: 0*
159. **A.Guttman**, W.Hempel, M.Kuras, W.S.Hancock, N.Tardieu, A.Jullien, C.Malderez, E.Rajnavolgyi, K.Elesne-Toth, M.Marka, J.Kadas, B.L.Karger, L.Takacs, Biomarker discovery by antibody mediated proteomics, *Mol.Cell.Proteomics*, 5(2006) S86. *IF*: 9.620, *citations: 0*
160. A.Monzo, **A.Guttman**, Immobilization techniques for mono and oligosaccharide microarrays, *QSAR & Combinatorial Science* 25 (2006) 1033-1038. *IF*: 1.987, *citations: total: 8, independent: 8*
161. E.Szantai and **A.Guttman**, Genotyping with microfluidic devices, *Electrophoresis* 27 (2006) 4896-4903. *IF*: 4.101, *citations: total: 17, independent: 17*
162. I.Kovacs, J.Kadas, L.Takacs, G.Dibo, **A.Guttman**, Preparation and characterization of small-molecule metabolite libraries covalently attached to macromolecular carriers. *Peptide Science*, 43 (2006) 320. *IF*: -, *citations: 0*

## 2007

163. A.Monzo, G.K.Bonn, **A.Guttman**, Lectin immobilization strategies for affinity purification and separation of glycoconjugates, *Trends Anal.Chem.* 26 (2007) 423-432. *IF*: 5.827, *citations: total: 17, independent: 17*
164. A.Szilagy, G.Bonn, **A.Guttman**, Capillary gel electrophoresis analysis of G-quartet forming oligonucleotides used in DNA-protein interaction studies, *J.Chromatogr.A.* 1161 (2007) 15-21. *IF*: 3.641, *citations: total: 13, independent: 13*
165. **A.Guttman** and L.Takacs (Editors) "Biomarker Discovery and Related Topics" *Electrophoresis*, 28 (2007) 4259 Issue 23. *IF*: 3.609, *citations: 0*
166. S.Spisak, Z.Tulassay, B.Molnar, **A.Guttman**, Protein Microchips in Biomedicine and Biomarker Discovery, *Electrophoresis*, 28 (2007) 4261-4273. *IF*: 3.609, *citations: total: 31, independent: 28*
167. H.Zhou, J.Dai, QH.Sheng, RX.Li, CH.Shieh, **A.Guttman**, R.Zeng, A fully automated 2D LC-MS method utilizing online continuous pH and reverse phase gradients for global proteome analysis, *Electrophoresis* 28 (2007) 4311-4319. *IF*: 3.609, *citations: total: 29, independent: 12*
168. E.Csanky, P.Olivova, E.Rajnavolgyi, W.Hempel, N.Tardieu, A.Jullien, C.Malderes-Bloes, M.Kuras, M.X.Duval, L.Nagy, B.Scholtz, W.Hancock, B.L.Karger, **A.Guttman**, L.Takacs, Monoclonal antibody proteomics: discovery and pre-validation of chronic obstructive pulmonary disease biomarkers in a single step, *Electrophoresis* 28 (2007) 4401-4406. *IF*: 3.609, *citations: total: 7, independent: 3*
169. A.Monzo, G.Bonn, **A.Guttman**, Boronic acid - lectin affinity chromatography (BLAC): 1. Simultaneous glycoprotein binding with selective or combined elution, *Anal.Bioanal.Chem.*, 389 (2007) 2097-2102. *IF*: 2.867, *citations: total: 21, independent: 18*

## 2008

170. V.Vukics, B.Hevesi Toth, T.Ringer, K.Ludanyi, A.Kery, G.K.Bonn, **A.Guttman**, Quantitative and qualitative investigation of the main flavonoids in Heartsease (*Viola tricolor L.*), *J.Chrom.Sci.* 46 (2008) 97-101. *IF*: 1.135, *citations: total: 2, independent: 1*
171. Z.Rivera, G.Bonn, **A.Guttman**, Stable isotope coded labeling reagents for quantitative proteomics, *Current Organic Chemistry*, 12 (2008) 424-440. *IF*: 3.184, *citations: total: 1, independent: 1*
172. V.Vukics, A.Kery, G.K.Bonn, **A.Guttman**, Major flavonoid components of heartsease (*Viola tricolor L.*) and their antioxidant activities, *Anal.Bioanal.Chem.*, 390 (2008) 1917-25. *IF*: 3.328, *citations: total: 7, independent: 7*

173. M.Olajos, P.Hajos, G.K.Bonn, **A.Guttman**, Sample preparation for the analysis of complex carbohydrates by multi-capillary gel electrophoresis with LED induced fluorescence detection, *Anal.Chem*, 80 (2008) 4241-4246. *IF*: 5.712, *citations: total: 14, independent: 7*
174. S.Mittermayr, M.Olajos, T.Chovan and **A.Guttman**, Mobility Modeling of Peptides in Capillary Electrophoresis (Review), *Trends in Anal.Chem.*, 27 (2008) 407-417. *IF*: 5.485, *citations: total: 9, independent: 8*
175. M.Olajos, T.Chován, S.Mittermayr, T.Kenesei, I.Molnár, F.Darvas, **A.Guttman**, Artificial neural network modeling of pH dependent structure-mobility relationship for capillary zone electrophoresis of tripeptides, *J.Liq.Chrom.* 31 (2008) 2348 - 2362. *IF*: 1.026, *citations: total:4, independent: 3*
176. V.Vukics, T.Ringer, A.Kery, G.K.Bonn, **A.Guttman**, Analysis of heartsease (Viola tricolor L.) flavonoid glycosides by micro liquid chromatography coupled to multiple stage mass spectrometry, *J.Chromatogr.A.* 1206 (2008) 11-20. *IF*: 3.756, *citations: total: 9, independent: 8*
177. A.Monzo, M.Olajos, L.De Benedictis, G.K.Bonn, **A.Guttman**, Boronic acid - lectin affinity chromatography (BLAC) 2. Affinity micropartitioning mediated comparative glycosylation profiling, *Anal.Bioanal.Chem.* 392 (2008) 195-201. *IF*: 3.328, *citations: total: 4, independent: 4*
178. V.Vukics, A.Kery, **A.Guttman**, Analysis of polar antioxidants in heartsease (Viola tricolor L.) and garden pansy (Viola x wittrockiana Gams.), *J.Chrom.Sci.* 46 (2008) 823-827. *IF*: 1.135, *citations: total: 1, independent: 1*
179. Z.Rivera, G.Bonn, **A.Guttman**, Synthesis of fluorescent isotope coded affinity tag (FCAT) reagent for quantitative proteomics, *Bioorganic Chemistry*, 36 (2008) 299-311. *IF*: 1.958, *citations: total: 2, independent: 2*

**2009**

180. S.Mittermayr, T.Chovan, **A.Guttman**, Two variable semi-empirical and artificial neural network based modeling of peptide mobilities in capillary zone electrophoresis: The effect of temperature and organic modifier concentration, *Electrophoresis*, 30 (2009) 890-896. *IF*: 3.077, *citations: total: 2, independent: 2*
181. A.Monzo, E.Sperling, **A.Guttman**, Trypsin immobilization strategies for mass spectrometry based proteomics, *Trends in Anal.Chem.*, 28 (2009) 854-864. *IF*: 6.546, *citations: total: 12, independent: 12*
182. **A.Guttman** (Editor) "Biomarker Discovery and Related Topics" *Electrophoresis*, 30 (2009) 1095, issue 7. *IF*: 3.077, *citations: 0*
183. E.Szantai, Z.Elek, **A.Guttman**, M.Sasvari-Szekely, Candidate gene copy number analysis by PCR and multi capillary electrophoresis, *Electrophoresis* 30 (2009) 1098-1101. *IF*: 3.077, *citations: total: 2, independent: 1*
184. Z.Rivera-Monroy, G.K.Bonn, **A.Guttman**, Fluorescent Isotope Coded Affinity Tag (FCAT) 2: Peptide labeling and affinity capture, *Electrophoresis* 30 (2009) 1111-1118. *IF*: 3.077, *citations: total: 5, independent: 4*
185. B.L.Karger, **A. Guttman**, DNA Sequencing by Capillary Electrophoresis, *Electrophoresis* 30 (2009) S196-S202. *IF*: 3.077, *citations: total: 7, independent: 7*
186. A.Monzo, T.Rejtar, **A.Guttman**, Optimization of poly(GMA-co-EDMA) monolithic support for trypsin nanoreactor fabrication, *J.Chrom.Science*, 47 (2009) 467-472. *IF*: 0.863, *citations: 0*
187. S.Spisak, **A.Guttman**, Protein Microarrays in Biomarker Discovery, *Currents in Medicinal Chemistry*, 16 (2009) 2806-2815. *IF*: 4.708, *citations: total: 14, independent: 11*

**2010**

188. V.Vukics, **A.Guttman**, Structural characterization of flavonoid glycosides by LC-MS/MS, *Mass Spectrometry Reviews*, 29 (2010) 2806-2815. *IF*: 9.091, *citations: total: 19, independent: 19*
189. Z.Szabo, **A.Guttman**, B.L.Karger, Rapid release of N-linked glycans from glycoproteins by pressure cycling technology, *Analytical Chemistry* 82 (2010) 2588-2593. *IF*: 5.874, *citations: total: 4, independent: 3*

190. Z.Szabo, **A.Guttman**, T.Rejtar, B.L.Karger, Improved sample preparation method for glycan analysis of glycoproteins by CE-LIF and CE-MS, *Electrophoresis* 31 (2010) 1389-1395. *IF: 3.569, citations: total: 8, independent: 6*
191. O.A Rahman, M.Sasvari-Szekely, A.Szekely, G.Faludi, **A.Guttman**, Zs.Nemoda, Analysis of a polymorphic microRNA target site in the purinergic receptor P2RX7 gene, *Electrophoresis* 31 (2010) 1790-195. *IF: 3.569, citations: total: 2, independent: 2*
192. M.Olajos, A.Szekrenyes, D.T.Gjerde, **A Guttman**, Boronic acid - lectin affinity chromatography (BLAC) 3. Temperature dependence of glycoprotein isolation and enrichment, *Anal.Bioanal. Chem.* 397 (2010) 2401-2407. *IF: 3.841, citations: 0*
193. D.Vanderschaeghe, A.Székrenyes, C.Wenz, M,Gassmann, N,Naik, M,Bynum, H.Yin, J,Delanghe, **A.Guttman**, N.Callewaert, High-throughput profiling of the serum N-glycome on capillary electrophoresis microfluidics systems: toward clinical implementation of GlycoHepatoTest. *Anal Chem.* 82 (2010) 7408-7415. *IF: 5.874, citations: total: 7, independent: 6*
194. P.Smejkal, A.Szekrenyes, M.Ryvolova, F.Foret, **A.Guttman**, F.Bek, M.Macka, Chip-based CE for rapid separation of APTS derivatized glycans, *Electrophoresis* 31(2010) 3783-3786. *IF: 3.569, citations: total: 1, independent: 1*
195. J.Bones, S.Mittermayr, N.O'Donoghue, **A.Guttman**, P.Rudd, Ultra performance liquid chromatographic profiling of serum N-glycans for fast and efficient identification of cancer associated alterations in glycosylation, *Anal. Chem.* 82 (2010) 10208–10215. *IF: 5.874, citations: total: 8, independent: 6*

## 2011

196. A.Kovács, E.Sperling, J.Lázár, A.Balogh, J.Kádas, A.Székrenyes, I.Kurucz, L.Takács, **A.Guttman**, Fractionation of the human plasma proteome for monoclonal antibody proteomics based biomarker discovery, *Electrophoresis* 32 (2011) 1916-1925. *IF: 3.569, citations: 0*
197. Z.Szabo, **A.Guttman**, J.Bones, B.L.Karger, Rapid High Resolution Characterization of Functionally Important Monoclonal Antibody N-Glycans by Capillary Electrophoresis, *Analytical Chemistry* 83 (2011) 5329-5336. *IF: 5.874, citations: 0*
198. S.Mittermayr, J.Bones, M.Doherty, **A.Guttman**, P.M.Rudd, Multiplexed analytical glycomics: Rapid and confident IgG N-glycan structural elucidation. *Journal of Proteome Research*, 10 (2011) 3820-3829. *IF: 5.460, citations: 0*
199. M.Guergova-Kuras, I.Kurucz, W.Hempel, N.Tardieu, J.Kadas, C.Malderez-Bloes, A.Jullien, Y.Kieffer, M.Hincapie, **A.Guttman**, E.Csanky, S.Cseh, B.L.Karger. L.Takacs, Discovery of lung cancer biomarkers by profiling the plasma proteome with nascent monoclonal antibody libraries, *Molecular and Cellular Proteomics* (2011) In Press. *IF: 8.354, citations: 0*
200. **A.Guttman**, Biomarker discovery and related topics. *Electrophoresis*, 32(2011) 1915 *IF: 3.569, citations: 0*

## 2012

201. R.Garrido-Medina<sup>1</sup>, A.Puerta<sup>1</sup>, Z.Rivera-Monroy, M.de Frutos, **A.Guttman**, J.Carlos Diez-Masa, Analysis of alpha-1-acid glycoprotein isoforms using CE-LIF with fluorescent thiol-derivatization, *Electrophoresis* (2012) In Press. *IF: 3.569, citations: 0*
202. B.Mesko, Sz.Poliska, Z.Szekanecz, Sz.Szamosi, J.Podani, Cs.Varadi, **A.Guttman**, L.Nagy, Peripheral blood gene expression and IgG glycosylation profiles as markers of tocilizumab treatment in rheumatoid arthritis, *The Journal of Rheumatology* (2012) In Press. *IF: 3.551, citations: 0*
203. S.Mittermayr, **A.Guttman**, Influence of molecular configuration and conformation on the electromigration of oligosaccharides in narrow bore capillaries, *Electrophoresis* (2012) In Press. *IF: 3.569, citations: 0*

Cumulative impact factor: 648.551

Total number of citations: 4503

Total number of independent citations: 3908

SUBMITTED

1. Z.Szabol, **A.Guttman**, J.Bones, R.L.Shand, D.Meh and B.L.Karger, *Ultrasensitive capillary electrophoretic analysis of potentially immunogenic carbohydrate residues in biologics: 1. Galactose- $\alpha$ -1,3-Galactose Containing Structures* (2011) In Preparation
2. Z.Szabol, **A.Guttman**, J.Bones, R.L.Shand, D.Meh and B.L.Karger, *Ultrasensitive capillary electrophoretic analysis of potentially immunogenic carbohydrate residues in biologics: 2. Analysis of sialic acids* (2011) In Preparation

BOOK CHAPTERS

1. **A.Guttman**, Capillary Polyacrylamide Gel Electrophoresis, in *"Capillary Electrophoresis Technology"*, Ed.: N.A. Guzman, Marcel Dekker, New York, NY, (1992) pp.715-730.
2. **A.Guttman** and I.Mazaroff, Economical Performance Analysis in Preparative Capillary Gel Electrophoresis, *"New Approaches in Chromatography'91"*, Eds: H.Kalász and L.S.Etre, Intercongress, Budapest, Hungary, (1992) pp.63-75.
3. **A.Guttman**, Separation of DNA by Capillary Electrophoresis, in *"CRC Handbook of Capillary Electrophoresis: Principles, Methods, and Applications"*, Ed. J.P.Landers, CRC Press, Inc., Boca Raton, FL., (1993) pp.129-143.
4. **A.Guttman**, A.S.Cohen, D.N.Heiger, B.L.Karger, Analytical and Micropreparative Ultrahigh resolution of Oligonucleotides by Polyacrylamide Gel High Performance Capillary Electrophoresis in *"Milestones in Analytical Chemistry"*, Ed. M.Warner, ACS, Washington, DC, (1994) pp.410-414.
5. **A.Guttman**, Capillary Gel Electrophoresis, in *"Methods in Molecular Biology: Capillary Electrophoresis Protocols"*, Ed. K.D.Altria, Humana Press, Clifton, NJ, (1995) pp.157-169.
6. **A.Guttman**, Capillary Gel Electrophoresis of Nucleic Acids and their Fractions in *"Encyclopedia of Analytical Sciences"*, Ed. G.Fullerlove, Academic Press, London, UK, (1995) pp.1122-1125.
7. **A.Guttman**, Cyclodextrin Array Chiral Analysis, in *"CRC Handbook of Capillary Electrophoresis: Principles, Methods, and Applications"*, 2nd ed., Ed. J.P.Landers, CRC Press, Inc., Boca Raton, FL., (1996) pp.75-100.
8. K.Benedek and **A.Guttman**, High Performance Capillary Electrophoresis: An Overview in *"CRC Handbook of Preparative Chromatography"*, Ed. J.K.Swadesh, CRC Press, Inc., Boca Raton, FL. (1997) pp.305-345.
9. **A.Guttman**, Capillary Electrophoresis of 8-Aminopyrene-3,6,8-trisulfonate Labeled Oligosaccharides, in *"Techniques in Glycobiology"*, Ed. R.R.Townsend, Marcel Dekker, Inc., New York, NY., (1997) pp.377-389.
10. H.E.Schwartz **A.Guttman** and A.Vinters, Separation of Proteins by Capillary Electrophoresis, in *"Capillary Electrophoresis, Theory and Practice"*, 2nd ed. Ed: P.Camilleri, CRC Press, Boca Raton, FL (1998) pp.363-397.
11. **A.Guttman** and H.E.Schwartz, Separation of DNA by Capillary Electrophoresis, in *"Capillary Electrophoresis, Theory and Practice"*, 2nd ed. Ed: P.Camilleri, CRC Press, Boca Raton, FL (1998) pp.397-441.
12. P.Shieh N.Cooke and **A.Guttman**, Capillary Gel Electrophoresis, in *"High Performance Capillary Electrophoresis"*, Ed: M.G.Khaledi, John Wiley & Sons, Inc., New York, NY (1998) pp.185-218.
13. **A.Guttman** and K.Ulfelder, Separation of DNA by Capillary Electrophoresis, in *"Advances in Chromatography"*, Vol 38, Eds: P.Brown and E.Grushka, Marcel Dekker, New York, NY (1998) pp.301-340.
14. **A.Guttman**, P.Shieh and B.L.Karger, Capillary SDS Gel Electrophoresis of Proteins, in *"Gel Electrophoresis of Proteins: A Practical Approach"* 3<sup>rd</sup> ed. Ed: B.D.Hames, Oxford University Press, Oxford, UK, (1998) pp.105-126.
15. **A.Guttman** and N.Roos, Application of Cyclodextrins in Molecular Biology in *"The Encyclopedia of Molecular Biology"* Ed: T.E.Creighton, John Wiley & Sons, New York, NY (1999) Vol. 1, pp.597-599.

16. **A.Guttman**, Cs.Barta, A.Gerstner, M.Sasvari-Szekely and H.Kalasz, Ultrathin-layer Gel Electrophoresis (Ed. J.Cases), "*Dekker Encyclopedia of Chromatography*", Marcel Dekker, New York, NY (2000) pp.861-864.
17. **A.Guttman**, Electric Field Mediated Separation of Biopolymers on Planar Glass microchips (Ed.Sz.Nyiredy), "*Planar Chromatography 2000, Proceedings*" Pub.Res.Inst.Med.Plants, Budakalász, Hungary (2000) pp.47-56.
18. **A.Guttman**, Electric Field Mediated Separation of DNA Fragments on Planar Gel Microchips, in "*Integrated Microfabricated BioDevices: Advanced Technologies for Genomics, Drug Discovery, Bioanalysis, and Clinical Diagnostics*" (Editors: M.Heller and A.Guttman) Marcel Dekker, New York, NY (2001) pp.165-182.
19. T. Chovan and **A.Guttman**, Microfabricated Reactor Technology in "*Integrated Microfabricated BioDevices: Advanced Technologies for Genomics, Drug Discovery, Bioanalysis, and Clinical Diagnostics*" (Editors: M.Heller and A.Guttman) Marcel Dekker, New York, NY (2001) pp.351-370.
20. **A.Guttman**, Integrated Microfabricated Device Technologies Chromatography, in "*A Century of Discovery 1900-2000. The bridge to the Sciences/Technology*" (Eds: C.W.Gehrke, R.L.Wixom, E.Bayer.) Elsevier Science, Amsterdam, The Netherlands (2001) pp.200-205.
21. J.Khandurina and **A.Guttman**, High precision micropreparative separation system based on plastic microfluidics module-capillary coupling, in "*Micro Total Analysis Systems 2002*", (Eds: Y.Baba, S.Shoji, A.van den Berg), Kluwer Academic Publishers, Dordrecht, The Netherlands (2002), pp 251-253.
22. **A.Guttman**, DNA Sequencing: From Capillaries To Microchips, in "*Emerging Technologies in Protein and Genomic Material Analysis*" (Eds: G.Marko-Varga and P.Oroszlan) Elsevier Science, Amsterdam, The Netherlands, J.Chromatogr.Library. 68 (2003) 11-20.
23. **A.Guttman**, Capillary Gel Electrophoresis, in "*Electrokinetic Phenomena: Principles and Applications in Analytical Chemistry and Microchip Technology*", (Eds. A.S.Rathore and A.Guttman), Marcel Dekker, New York, NY (2003) pp 69-108.
24. **A.Guttman** and J.Khandurina, Microfabricated Bioanalytical Devices, in "*Chromatography, 6<sup>th</sup> Edition*" (Ed. Heftmann,E) Elsevier Science, Amsterdam, The Netherlands, (2004) pp 431-467.
25. J.Khandurina, T.Zhu and **A.Guttman**, Microchip based HTS analysis of combinatorial libraries in "*Chemical Genomics*" (Eds. F.Darvas, A.Guttman and F.Dorman), Marcel Dekker, New York, NY (2004) pp 101-136.
26. **A.Guttman**, Electrophoresis Microchips in Modern Bioanalytical Chemistry (Elektroforézis mikroszepek alkalmazása a modern bioanalitikában) (Ed. L.Szepesy), Budapest, 2006.
27. E.Szantai and **A.Guttman**, Capillary Electrophoresis of Nucleic Acids, in "*CRC Handbook of Capillary and Microchip Electrophoresis and Associated Microtechniques*", 3rd ed., Ed. J.P.Landers, CRC Press, Inc., Boca Raton, FL., (2007) pp 227-250.
28. P.Budworth, J.Khandurina, **A.Guttman**, Combinatorial Natural Products: From Cloning to Analysis in "*Frontiers in Medicinal Chemistry*" (Volume 4), Bentham Science Publishers, Oak Park, IL (2009) pp 237-247.
29. V.Vukics and **A.Guttman**, Analysis of flavonoid glycosydes in heartsease (Viola tricolor L.) Flavonoids: Biosynthesis, Biological Effects and Dietary Sources, Nova Science Publishers, Hauppauge, NY (2010). Submitted.
30. S.Spisak and **A.Guttman**, From chemical genomics to chemical proteomics: the power of microarray technology, "*Chemical Genomics and Proteomics*" (Eds. F.Darvas, A.Guttman and F.Dorman), Taylor & Francis, New York, NY (2010) Submitted.
31. D.Vanderschaeghe, **A.Guttman**, N.Callewaert, High-throughput profiling of the serum N-glycome on capillary electrophoresis microfluidics systems, *Methods in Molecular Biology*, Springer Protocols, Humana Press (2011) Submitted

## **BOOKS**

1. H.E.Schwartz and **A.Guttman**, *Separation of DNA by Capillary Electrophoresis* B.I.I. Primer #607397, Fullerton CA, (1995) 95 pages.
2. M.Heller and **A.Guttman** (Editors) "*Integrated Microfabricated BioDevices: Advanced Technologies for Genomics, Drug Discovery, Bioanalysis, and Clinical Diagnostics*", Marcel Dekker, New York, NY (2001) 456 pages.
3. A.S.Rathore and **A.Guttman** (Editors) "*Electrokinetic Phenomena: Principles and Applications in Analytical Chemistry and Microchip Technology*", Marcel Dekker, New York, NY (2003) 476 pages
4. F.Darvas, **A.Guttman** and G.Dorman (Editors) "*Chemical Genomics*", Marcel Dekker, New York, NY (2004) 352 pages.
5. F.Darvas, **A.Guttman** and G.Dorman (Editors) "Chemical Genomics and Proteomics", Taylor and Francis, New York, NY (2011) In Preparation.
6. **A.Guttman**, "*Capillary Gel Electrophoresis and Related Microseparation Techniques*" Elsevier (2011) In Preparation.

**PUBLICATIONS – educational, popular,**

1. **A.Guttman**, P.Shieh and N.Cooke: P/ACE SDS-Capillary Gel Electrophoresis of Proteins, *Beckman Technical Information Bulletin* #DS-827 (1992).
2. **A.Guttman**: Capillary Polyacrylamide Gel Electrophoresis, *Lombik és Reaktor*, 1 (1993) 14-15.
3. **A.Guttman**: Right and Left Handed Molecules, *Lombik és Reaktor*, 3 (1993) 31-32.
4. G.Dobos and **A.Guttman**, The Golden Age of the Biotechnology: Foams, *Lombik és Reaktor*, 4 (1994) 7-8.
5. **A.Guttman**: Recognizing Barry L. Karger, *LC.GC Magazine*, 17 (1999) 992.
6. **A.Guttman** and I.Molnár: Csaba Horváth Turns Seventy, *LC.GC Magazine*, 13 (2000) 384-386.
7. **A.Guttman**: Happy Birthday to Csaba Horváth, *American Laboratory*, 32 (2000) 6-10.
8. H.Kalasz and **A.Guttman**: Horváth Csaba Professor 70 éves (Prof. Csaba Horváth is 70 years old), *Magyar Kémikusok Lapja*, 10 (2000) 365-366.
9. **A.Guttman**: Prof. Csaba Horváth, the creator of HPLC is seventy (Horváth Csaba Professor, a HPLC megalkotója hetvenéves), *Lombik és Reaktor* 3 (2000) 33-36.
10. A.Paulus and **A.Guttman**, HPCE 2002: 15<sup>th</sup> International Symposium on Microscale Separations and Analysis, *Retention Times*, 9/2 (2002) 2-3.
11. **A.Guttman**, Microchip based HTS analysis of small molecule combinatorial libraries, *CGX NewsLetter* Fall-Winter (2002) 9-11.
12. **A.Guttman**, APCE 2002, Shanghai, China, *Retention Times* 9 (2002) 12-13.
13. A.Paulus and **A.Guttman**, Foreword, HPCE 2004, *J.Chromatogr.A*, 1013 (2003) 1-2.
14. **A.Guttman**, Professor Csaba Horváth (1930 – 2004), *Electrophoresis* 25 (2004) 3067-3068.
15. **A.Guttman** and Cs.Horváth, Barry: Recognition, recent events and philosophy, *J.Chromatogr.A*, 1053 (2004) 1-2.
16. **A.Guttman**, A photographic history of Professor Csaba Horváth, *J.Chromatogr.A*, 1079 (2005) N1-N8.
17. **A.Guttman** and A.Rathore, "Separation Science: Past, Present and Future" Preface, *J.Chromatogr.A*, 1079 (2005) 1-2.
18. H.Kalasz and **A.Guttman**, MKE-MFT Joint Scientific meeting (MKE-MFT együttes tudományos ülés), *Hungarian Chemical Journal*, 61 (2006) 33-34.
19. L.Takacs and **A.Guttman**, How can biotechnology be successful? (Hogyan lehet sikeres a Biotechnologia) *Magyar Hírlap*, 2006 Jan 19. p26.
20. **A.Guttman**, HPLC 2006 and the legacy of Professor Csaba Horvath, *J.Sep.Sci.* 29 (2006) 2698-2699.
21. **A.Guttman** and L.Takacs, Biomarker Discovery and Related Topics, *Electrophoresis*, 28 (2007) 4259.
22. **A.Guttman**, HPLC 2006 és Horváth Csaba szellemi öröksége, *Magyar Kémikusok Lapja* 63 (2008) 14.

23. **A.Guttman**, Professor Barry L. Karger turns seventy, *Electrophoresis* 30 (2009) 1096-1097.
24. **A.Guttman**, Csaba Horváth Memorial Lectureship, *Magyar Kémikusok Lapja* 65 (2010) 173.

### **GRANTS, FELLOWSHIPS**

1. Tét Hungarian – US Intergovernmental S and T Cooperation Program, JF.No. 654-96 (1997-2000), Activation of deoxycytidine kinase, pool sizes and their relation to the efficiency of chemotherapy.
2. NIH#1R43CA80569-1 (1996) High Performance Proteome Analyzer for Cancer Diagnostics.
3. FKFP 0658/1999 (1999-2000), Investigation of the polymorphic dopamine D4 receptor by SNP analysis.
4. ETT 30/2000 (2000-2002) Investigation of medically important SNPs and length polymorphism, using non-invasive DNA sampling.
5. OTKA T 035203 (2001-2004) Diagnostic and therapeutic relations of enzymes in purine and pyrimidine metabolism.
6. Tét Hungarian – US Intergovernmental S and T Cooperation Program (2001-2002)
7. Applications of high throughput electrophoretic technology for investigation of polymorphic genes related to the monoamine neurotransmitter system. US-Hungarian mobility grant. *MAKA64-MO* (2002).
8. Tét Hungarian – US Intergovernmental S and T Cooperation Program (2002-2003)
9. NKFP 1A/0008/2002 (2002-2005) Nature and nurture: Genetic and psychological risk factors for childhood attention deficit/hyperactivity disorder and juvenile drug addiction, their relations and treatment.
10. Tét Hungarian – US Intergovernmental S and T Cooperation Program (2003-2004)
11. Biotechnology (2002-2005) Application of DNA chip technology in psychogenetic research.
12. Marie Curie Chair of the European Commission (2004-2007) #006733
13. Szent-Gyorgyi Albert Professorship of the Hungarian Ministry of Education (2004-2005)
14. GenAu Grant of the Austrian Ministry of Science, Culture and Education (2005-2006)
15. Health Information Technologies Tirol, Austria (2006-2008), Project # HITT-38-HLBS
16. Austrian Academic Exchange Service (2006-2007) Project support # 05/2005
17. Spanish-Austrian Academic Exchange Service (2007-2008) Project # ES 07/2007
18. STREP grant of the European Commission (2007-2009) Project # PL 037730
19. Hungarian-Austrian Academic Exchange Service (20067-2009) Project support # HU 06/2007
20. Tirolean Science Foundation (Tiroler Wissenschaftsfonds)(2006-2007) Project # 2252007
21. Pilot Study Grant of the Austrian Ministry of Science, Culture and Education (2007-2008)
22. Czech-Austrian Academic Exchange Service (2008) Project support # 06/2008
23. Tirolean Future Foundation support for Analytical Systems Biology Professorship (2008) # 88/1997
24. OTKA research grant, Hungary, (2010) # K 681839

### **PATENTS**

1. **A.Guttman**, US patent # 5,213,669 (issued: 05-25-1993) Capillary Column Containing a Dynamically Cross-linked Composition and Method of Use.
2. **A.Guttman**, US patent # 5,296,116 (issued: 03-22-1994) Capillary Electrophoresis Using Time-Varying Field Strength.
3. **A.Guttman**, US patent # 5,332,481 (issued: 07-26-1994) Capillary Electrophoresis Using Replaceable Gels.
4. **A.Guttman**, C.H.Shieh, B.L.Karger, S.L.Pentoney, K.Konrad, S.Rampal and K.Ganzler, US patent #5,370,777 (issued: 12-6-1994) Capillary Column Containing Removable Separation Gel Composition and Method of Use.
5. **A.Guttman**, US patent # 5,421,980 (issued: 06-06-1995) Capillary Electrophoresis Using Replaceable Polymers.
6. **A.Guttman**, US patent # 5,503,722 (issued: 04-02-1996) Rehydratable Gels for Capillary Electrophoresis.

7. **A.Guttman**, N.Cooke, US patent # 5,662,787 (issued: 09-02-1997) Device for Profiling Oligosaccharides Released from Glycoproteins.
8. **A.Guttman**, N.Cooke, US patent #5,964,999 (issued: 19-12-1999) Methods for Profiling Oligosaccharides Released from Glycoproteins
9. **A.Guttman**, European patent # EP00497480A1 (issued: 08-05-1992) Capillary electrophoresis using replaceable gels
10. **A.Guttman**, L.Takács, US patent #6,277,259 (issued: 08-21-01) High performance multidimensional proteome analyzer
11. F.Darvas, **A.Guttman**, Hungarian Patent #220531 (issued: 01-09-02) Procedure for rapid biological screening of small molecules (Eljárás vegyületek gyors biológiai tesztelésére)
12. **A.Guttman**, US patent #US RE37,606 E (issued: 03-26-2002) Capillary electrophoresis using replaceable gels
13. F.Darvas, **A.Guttman**, L.Kovacs and G.Sagi, Hungarian Patent #221002 (issued: 10-16-02) Novel laser dyes, their manufacturing process and applications (Új lézerfestékek, eljárás azok előállítására és alkalmazására)
14. **A.Guttman**, US patent #US RE37,941 E (issued: 12-31-2002) Capillary electrophoresis using replaceable gels
15. **A.Guttman**, Z.Ronai and Cs.Barta, US patent # 6,998,251 (issued: 02-14-2006) Nanoporous membrane reactor for miniaturized reactions and enhanced reaction kinetics
16. L.Takacs, **A.Guttman**, W.S.Hancock, B.L.Karger, M.Duval, P.Berna, US2005004484 and WO 2005/077106, Biomarker discovery platform (2005)
17. **A.Guttman**, L.Takács, WO/2006/043179, Expression profiling technology platform Austral patent # 2005211790 (issued 08-05-2010)
18. L.Takacs, L.Kadas, **A.Guttman**, Multi-immunoaffinity based antigen identification, European Patent # 08 750051.8 (issued 03-22-2011)

Published Patent Applications:

1. **A.Guttman**, L.Shi, X.Wang, WO2002059564, Multicapillary fraction collection system and method.
2. **A.Guttman**, B.Wanders, P.Alei, US2003012117 and WO2002056004, Thin film electrophoresis apparatus and method.
3. J.Paszkowski, **A.Guttman**, X.Wang, US2003078045 and WO 2003078045, Microcapillary hybridization chambers containing probes for detection of nucleic acids.
4. L.Takacs, **A.Guttman**, M.Kuras, WO/2007/012982 Normalization of complex analyte mixtures (2007).
5. V.Amirkhanian, M.S.Liu, **A.Guttman**, # 60/858,049, Method and apparatus for high speed carbohydrate analysis (Nov 9, 2006)
6. **A.Guttman**, L.Takács, #US 2011 0077164 A1, Expression profiling technology platform Austral patent # 2005211790 (published 03-31-2011)