

Electrophoresis

1. REVIEWS AND BOOKS

- 1611 Altria, K.D. (Editor): *Capillary Electrophoresis Guidebook: Principles, Operation, and Applications*. In: *Methods Mol. Biol.* (Totowa), Humana, Totowa, 1996, 349 pp.; C.A., 124 (1996) 169985q.
- 1612 Buchberger, W.: Electrochemical detectors - tailor made techniques for liquid chromatography and capillary electrophoresis? *Fresenius J. Anal. Chem.*, 354 (1996) 797-802.
- 1613 Chrambach, A.: Quantitative and automated electrophoresis in sieving media. *Electrophoresis (Weinheim)*, 17 (1996) 454-464 - a review with 70 refs.
- 1614 Novotny, M.V.: Capillary electrophoresis. *Curr. Opin. Biotechnol.*, 7 (1996) 29-34; C.A., 124 (1996) 169610p - a review with many refs.
- 1615 Righetti, P.G. (Editor): *Capillary Electrophoresis in Analytical Biotechnology*. CRC, Boca Raton, 1996, 551 pp.; C.A., 124 (1996) 169986r.
- 1616 Timperman, A.T. and Schweieler, J.V.: Capillary electrophoresis with wavelength-resolved fluorescence detection. *Analyst (Cambridge)*, 121 (1996) 45R-52R.

See also 1618, 1637, 1646, 1648, 1666, 1672, 1676, 1679, 1680, 1682, 1686, 1691, 1697, 1698, 1707, 1708, 1712, 1715, 1718, 1720, 1721, 1727, 1745, 1753, 1756, 1759, 1770, 1808, 1819, 1820, 1822, 1874, 1880, 1889, 1906, 1913, 2176, 2231, 2232, 2248, 2289, 2366, 2376, 2377, 2407, 2408.

2. FUNDAMENTALS, THEORY AND GENERAL

2a. General

- 1617 Aalberts, D.P.: Electrophoretic mobility of asymmetric reptating polymers. *Phys. Rev. Lett.*, 75 (1995) 4544-4547; C.A., 124 (1996) 81273v.
- 1618 Altria, K.D.: Fundamentals of capillary electrophoresis theory. *Methods Mol. Biol. (Totowa)*, 52 (1996) 3-13; C.A., 124 (1996) 156714a - a review with 13 refs.
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- 1624 Masoliver, J. and Weiss, G.H.: Resolution in time of two electrophoretic peaks. *Sep. Sci. Technol.*, 31 (1996) 319-326; C.A., 124 (1996) 197553r.
- 1625 Michalke, B.: Capillary electrophoresis - a useful tool in separation investigation. *Fresenius J. Anal. Chem.*, 354 (1996) 557-565.
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See also 1680, 1700, 1717, 2335.

2b. Thermodynamics and theoretical relationships

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See also 1697, 1711, 1722, 2254, 2311.

2c. Relationship between structure and electrophoretic behaviour

See 1764.

2d. Measurement of physico-chemical and related values

- 1630 Ishihama, Y., Oda, Y. and Asakawa, N.: A hydrophobicity scale based on the migration index from microemulsion electrokinetic chromatography of anionic solutes. *Anal. Chem.*, 68 (1996) 1028-1032.

3. GENERAL TECHNIQUES

3a. Apparatus and accessories

- 1631 Djordjevic, N.M. and Ryan, K.: An easy way to enhance absorbance detection sensitivity of Waters Quanta-4000 capillary electrophoresis system. *J. Liq. Chromatogr.*, 19 (1996) 201-206.
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- See also 1729.
- 3b. Detectors and detection procedures**
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- 3c. Stabilization media for electrophoresis**
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See also 1687, 2234, 2276.

3d. Quantitative analysis

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- 1667 Qi, S., Huang, A. and Sun, Y.: Compensation of two kinds of bias in capillary zone electrophoresis and its use in internal normalization quantitation. *Anal. Chem.*, 68 (1996) 1342-1346.

3e. Preparative scale electrophoresis

- 1668 Corthals, G.L., Margolis, J., Williams, K.L. and Gooley, A.A.: The role of pH and membrane porosity in preparative electrophoresis. *Electrophoresis (Weinheim)*, 17 (1996) 771-775.

See also 1946, 2059.

3f. Programmed voltage and buffer gradients

See 2154.

4. SPECIAL TECHNIQUES

4a. Automation

See 1613, 1643, 1714, 1725, 1849, 2294.

4b. Computerization and modelling

- 1669 Desruisseaux, C. and Slater, G.W.: Pulsed-field trapping electrophoresis: a computer simulation study. *Electrophoresis (Weinheim)*, 17 (1996) 623-632.
- 1670 Masujima, T. and Tamura, A.: (Imaging of separation dynamics and looking for a new separation base). *Kuromatoguraf*, 16 (1995) 342-343; *C.A.*, 124 (1996) 127885b.

See also 1628, 1754, 1871, 1884, 1899, 1940, 1948, 1961, 1963, 2174, 2267.

4c. Combination with other physicochemical techniques, (MS, IR etc.)

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See also 1640, 1690, 1701, 1728, 1735, 1738, 1847, 1863, 1866, 1871, 1879, 1881, 1882, 1900, 1907, 1976, 2081, 2167, 2236, 2363, 2380, 2413.

4d. Affinity electrophoresis

See 1804, 1886, 2007, 2241, 2385.

4e. Capillary zone electrophoresis and electrokinetic chromatography

- 1679 Altria, K.D.: Additional application areas of capillary electrophoresis. *Methods Mol. Biol. (Totowa)*, 52 (1996) 309-344; *C.A.*, 124 (1996) 197272y - a review with 139 refs.
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- 1712 Moring, S.E.: Buffers, electrolytes, and additives for capillary electrophoresis. In: Righetti, P.G. (Editor), *Capillary Electrophor. Anal. Biotechnol.*, CRC, Boca Raton, 1996, pp. 37-60; C.A., 124 (1996) 249152f - a review with 43 refs.
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* The number of cross references in this section reflects the exponential growth of capillary electrophoretic applications. This section will be rearranged from January 1st 1997.

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21. PURINES, PYRIMIDINES, NUCLEIC ACIDS AND THEIR CONSTITUENTS
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35c. *Water pollution (complex mixtures; single compounds by cross-reference only)*

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See also 1629.

39. RADIOACTIVE AND OTHER ISOTOPE COMPOUNDS

See 1655.