

Electrophoresis

1. REVIEWS AND BOOKS

- 2437 Cann, J.R.: Theory and practice of gel electrophoresis of interacting macromolecules. *Anal. Biochem.*, 237 (1996) 1-16 - a review with 119 refs.
- 2438 Garfin, D.E.: Electrophoretic methods. In: Glasel, J.A. and Deutscher, M.P. (Editors), *Introd. Biophys. Methods Protein Nucleic Acid Res.*, Academic, San Diego, 1995, pp. 53-109; C.A., 124 (1996) 311413x - a review with many refs.
- 2439 Pyrzynska, K.: Speciation analysis of some organic selenium compounds. A review. *Analyst (Cambridge)*, 121 (1996) 77R-83R.
- 2440 Righetti, P.G., Harding, S. and Stocchi, V.: Alternative bioseparation techniques. In: Katz, E.D. (Editor), *High Perform. Liq. Chromatogr.: Princ. Methods Biotechnol.*, Wiley, Chichester, 1996, pp. 469-505; C.A., 125 (1996) 4634g - a review with 58 refs.
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See also 2476, 2495, 2499, 2509, 2510, 2514, 2515, 2517, 2518, 2519, 2528, 2582, 2584, 2659, 2663, 2664, 2670, 2677, 2679, 2680, 2681, 2831, 2958, 3002, 3043, 3096, 3111, 3118, 3123, 3127, 3128, 3133, 3148, 3149, 3156.

2. FUNDAMENTALS, THEORY AND GENERAL

2a. General

- 2442 Ermakov, S.V., Zhukov, M.Y. and Righetti, P.G.: On the solvent motion in electrophoretic systems. *Electrophoresis (Weinheim)*, 17 (1996) 1134-1142.
- 2443 Hoagland, D.A., Smisek, D.L. and Chen, D.Y.: Gel and free solution electrophoresis of variably charged polymers. *Electrophoresis (Weinheim)*, 17 (1996) 1151-1160.
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- 2447 Stedry, M., Popelka, S., Gas, B. and Kenndler, E.: Influence of transference number on migration and deformation of concentration boundaries in capillary zone electrophoresis. *Electrophoresis (Weinheim)*, 17 (1996) 1121-1125.
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See also 2489, 2492, 2509, 2513.

2b. Thermodynamics and theoretical relationships

- 2449 Muthukumar, M.: Theory of electrophoretic mobility of a polyelectrolyte in semidilute solutions of neutral polymers. *Electrophoresis (Weinheim)*, 17 (1996) 1167-1172.
- 2450 Radko, S.P. and Chrambach, A.: Mechanisms of retardation of rigid spherical particles with 3 to 1,085 nm radius in capillary electrophoresis, using buffered polyacrylamide (molecular weight 5×10^6) solutions. *Electrophoresis (Weinheim)*, 17 (1996) 1094-1102.

See also 2442, 2447, 2653, 2672, 3043, 3051.

2d. Measurement of physico-chemical and related values

See 2572, 3116.

3. GENERAL TECHNIQUES

3a. Apparatus and accessories

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- See also 2462, 2472, 2478, 2616, 2675, 2969, 3066, 3070.
- 3b. *Detectors and detection procedures*
- 2460 Cole, R.O., Hiller, D.L., Chwojdak, C.A. and Sepaniak, M.J.: Evaluation of extended light path capillaries for use in capillary electrophoresis with laser-induced fluorescence detection. *J. Chromatogr. A*, 736 (1996) 239-245.
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- See also 2514, 2520, 2522, 2614, 2772, 2885, 2946, 3046, 3112, 3113, 3164.
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See also 2448, 2458, 2489, 2502, 2518.

3e. Preparative scale electrophoresis

See 2671.

4. SPECIAL TECHNIQUES

4b. Computerization and modelling

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See also 2444, 2463, 2535, 2669, 2930, 3026, 3187.

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

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See also 2544, 2592, 2625, 2635, 2639, 2654, 2664, 2984, 3103, 3113, 3117, 3120, 3125, 3173, 3183.

4d. Affinity electrophoresis

See 2500, 2769, 2902.

4e. Capillary zone electrophoresis and electrokinetic chromatography

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4f. Isotachophoresis

- 2524 Blatny, P., Kvasnicka, F. and Kenndler, E.: Determination of anionic feed additives by two-dimensional capillary isotachophoresis. *J. Chromatogr. A*, 737 (1996) 255-262.
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See also 2494, 2551, 3135.

4g. Enantiomers, separation

- 2526 Boonkerd, S., Detaevernier, M.R., Vander Heyden, Y., Vindevoel, J. and Michotte, Y.: Determination of the enantiomeric purity of dexfenfluramine by capillary electrophoresis: use of a Plackett-Burman design for the optimization of the separation. *J. Chromatogr. A*, 736 (1996) 281-289.

* 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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See also 2481, 2493, 2503, 2507, 2515, 2535, 2607, 2611, 2615, 2618, 2619, 2620, 2621, 2622, 3095, 3119, 3126, 3127, 3129, 3131, 3133, 3136, 3140, 3142, 3144.

4h. Two dimensional electrophoresis

See 2524, 2582, 2601, 2628, 2647, 2657, 2658, 2662, 2664, 2668, 2669, 2680, 2685, 2704, 2731, 2738, 2739, 2769, 2770, 2794, 2799, 2813, 2849, 3006, 3093, 3167.

4i. Other special techniques

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8c. Other compounds with heterocyclic oxygen (incl. tannins)

See 2608.

9. OXO COMPOUNDS, ETHERS, EPOXIDES AND QUINONES
- See 3150.
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20. ENZYMES AND ENZYME ACTIVITY ESTIMATION

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- 20h. Isomerases**
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See also 2728.

21. PURINES, PYRIMIDINES, NUCLEIC ACIDS AND THEIR CONSTITUENTS

21a. Purines, pyrimidines, nucleosides, nucleotides

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34. FOOD ANALYSIS

34b. *Complex mixtures (single compounds by cross-reference only)*

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35c. *Water pollution (complex mixtures; single compounds by cross-reference only)*

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