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Electroanalytical methods. Publications in 1999-2004

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Abstract

The scientometric study of publications on electrochemical methods of analysis (EMA) in a number of journals and proceedings of some conferences for 1999-2004 has been carried out. The contribution of papers on EMA to the total number of publications on analytical chemistry and the contribution of papers on individual methods (amperometry, voltammetry, including stripping and cyclic voltammetry, polarography, etc., potentiometry, including potentiometry with ion-selective electrodes, conductometry, coulometry, and other methods) to the total number of publications on EMA are estimated. Significant changes in the subject of publications, as well as in methodology and terminology, are noted over the period under review and compared to those over the earlier period. This is due to going from traditional studies to studies in the field of micro- and nanosized samples. The contributions of amperometry, electrochemiluminescence, chronoamperometry, chronopotentiometry, impedance measurements, spectroelectrochemical methods, and electrochemical microscopy have increased. It is noted that voltammetry and potentiometry are less used, but they are applied to the study of micro- and nanosized samples. In Russian publications, traditional trends of studies are retained. The contribution of publications on EMA to the total number of publications in analytical chemistry for 1946-2004 is estimated. It is ~ 20% on the average in the last 25 years. © Nauka/Interperiodica 2006.

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