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Electrochemical studies of liquid-liquid interfaces

AUTHORS
Karima MORAKCHI / UNIVERSITY BADJI MOKHTAR ANNABA, BP12 ELHADJAR, ANNABA

PURPOSE OF THE ABSTRACT

The electrochemical properties of the interface between two immiscible electrolyte solutions ITIES have been studied intensely for more than 30 years now. In this work, the array of miniaturized interfaces between two immiscible electrolyte solutions was modified with a mesoporous silica material. In this work, the array of miniaturized interfaces between two immiscible electrolyte solutions was modified with a mesoporous silica materialThe electrochemical behavior of such silica deposits was evaluated with three analytes : TMA+ tetramethylammonium ,TBA+ tetrabuthylammonium ,TAA+ tetraalkylammonium. These ions differ in size, charge and chemical nature. The ion transfer potential and currents of these ions before and after modification of the ITIES with mesoporous silica were compared.

FIGURES

FIGURE 1

FIGURE 2

KEYWORDS

ion-transfer voltammetry | tetraalkylammonium cations | liq-liq interface | ITIES

BIBLIOGRAPHY

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