Stabilization of meso-tetraferrocenyl-porphyrin films by formation of composite with Prussian blue

Abstract
Supramolecular systems based on porphyrin-ferrocene have attracted the attention to inorganic electrochemistry due to unique electronic properties and synergetic behavior between porphyrin ring and peripheral ferrocene group. In order to improve the stability of the films of ferroceny1-porphyrin on electrode's surface, we used a combination of tetraferrocenylporphyrin and Prussian blue. The new structure formed was very stable and could be used in dopamine sensing, showing satisfactory analytical response comparable to other chemically modified electrodes described in the literature. (AU)