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Electrochromic Prussian Blue Thin Films*

VIRTUAL LAB

Electrochromic Prussian Blue Thin Films

PB films on ITO electrodes, Journal of Chemical Education

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Any opinions, findings, and conclusions or recommendations expressed in this report are those of the authors and do not necessarily reflect the views of the Foundation.

1. UVOD U ELEKTROKROMIZAM

Introduction to electrochromism

https://youtu.be/LxFLDOmS8dM

A flexible electrochromic **display**,
as developed by Siemens

2. PRIPRAVA TANKOG FILMA BERLINSKOG MODRILA ELEKTRODEPOZICIJOM

$[Fe_4[Fe(CN)_6]_3]$

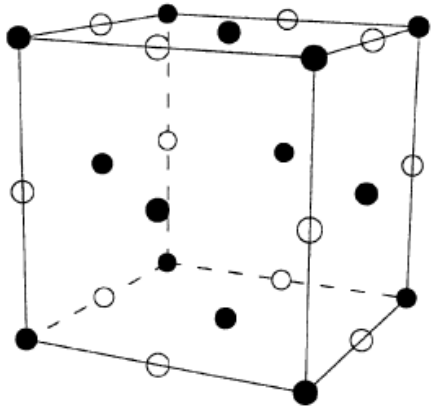


Fig. 1. Prussian Blue unit cell according to Keggin and Miles, plotted using data from measurements [6]; (●) Fe^{3+}, (○) Fe^{2+}.

Prussian Blue and Its Analogues: Electrochemistry and Analytical Applications

3. ELEKTROKROMIZAM BERLINSKOG MODRILA

Karakterizacija cikličkom voltammetrijom

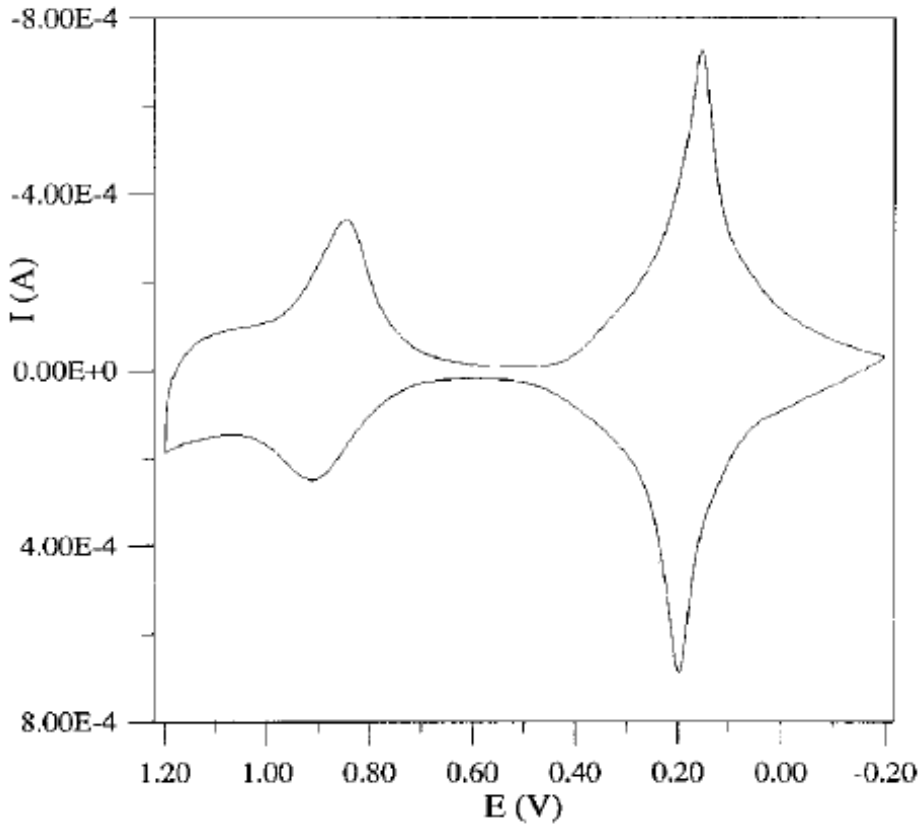
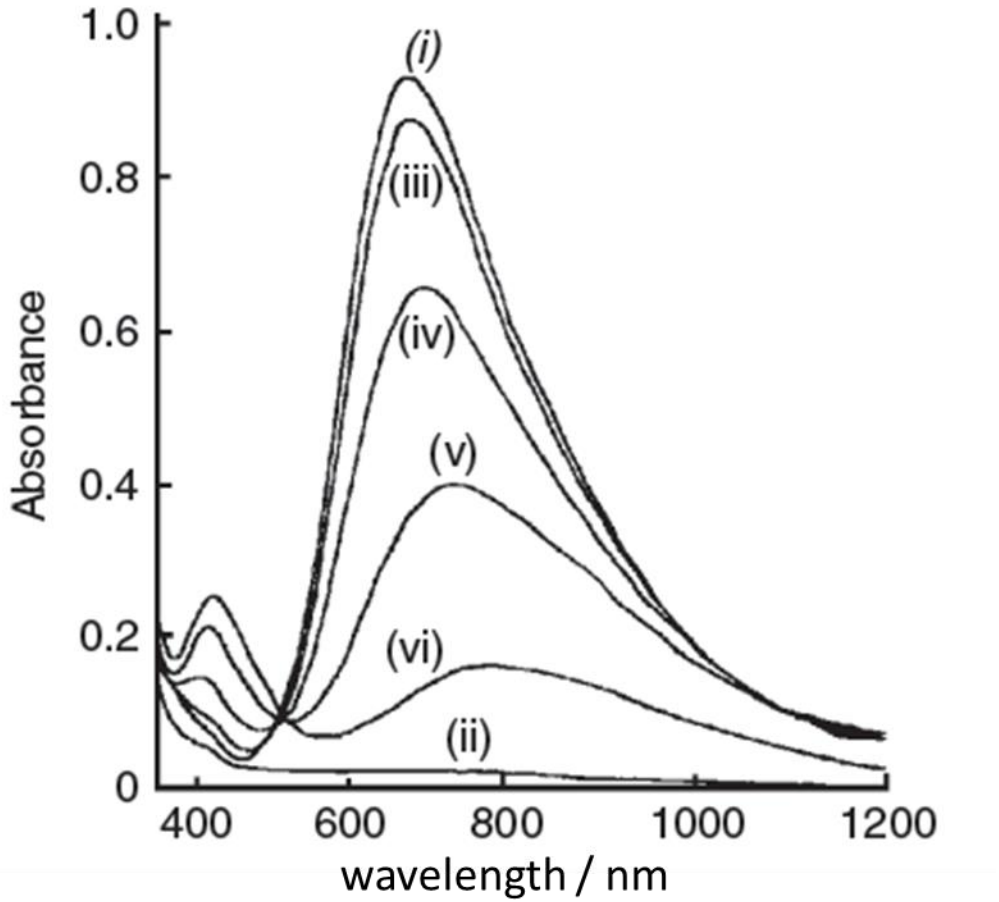


Figure 5. Complete CV of Prussian blue films on ITO electrode. All potentials referred to Ag/AgCl/1 M KCl.

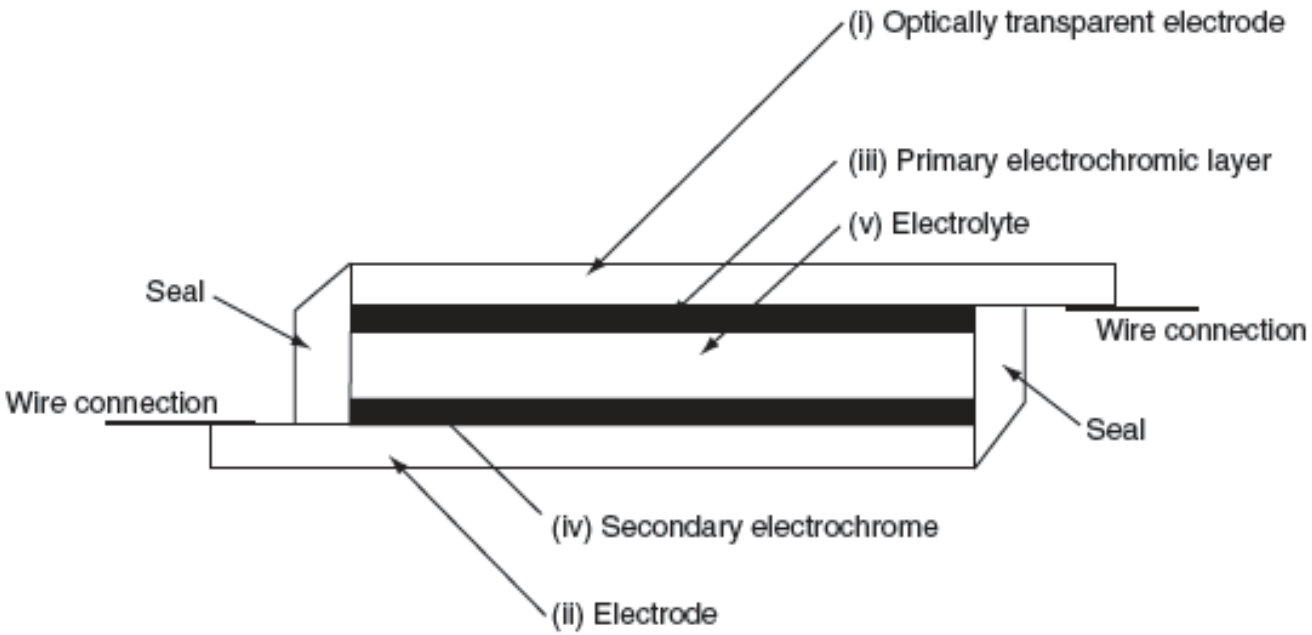
3. ELEKTROKROMIZAM BERLINSKOG MODRILA

Spektralni odziv BM filma na ITO elektrodi pri različitim potencijalima



Electrochromism by intervalence charge-transfer coloration: metal hexacyanometallates

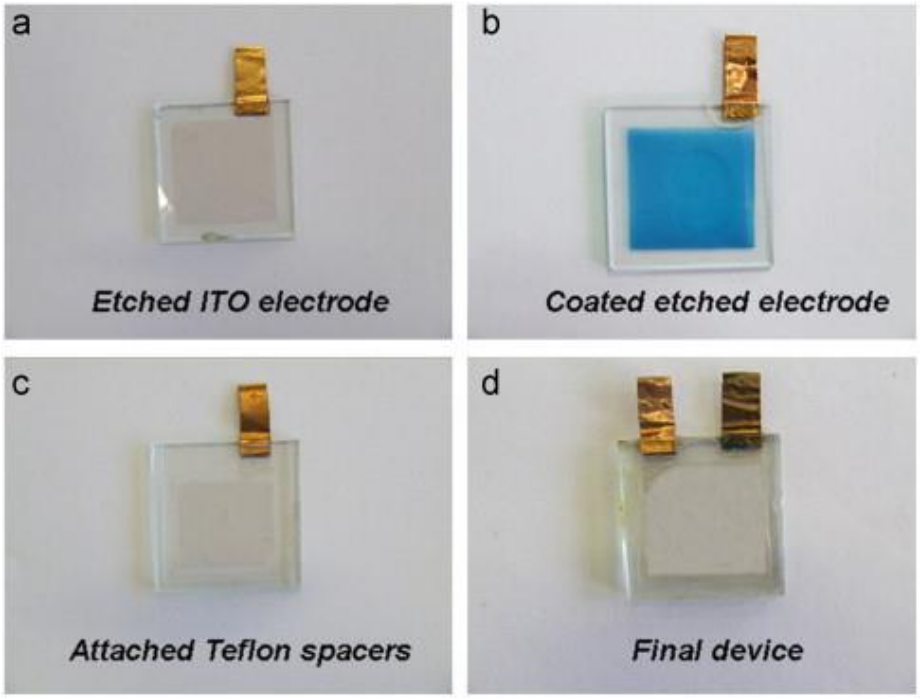
4. ELEKTROKROMATSKI UREĐAJI - IZVEDBA

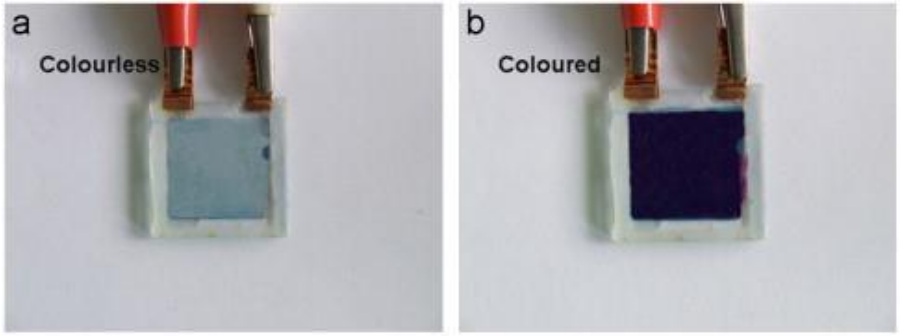


Fundamentals of device construction

4. ELEKTROKROMATSKI UREĐAJI - IZRADA

Electrochromic device based on surface-confined Prussian blue





5. ELEKTROKROMATSKI UREĐAJI – PAMETNI PROZORI

Properties, requirements and possibilities of smart windows for dynamic daylight and solar energy control in buildings: A state-of-the-art review

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Smart Windows

PRIMJER:

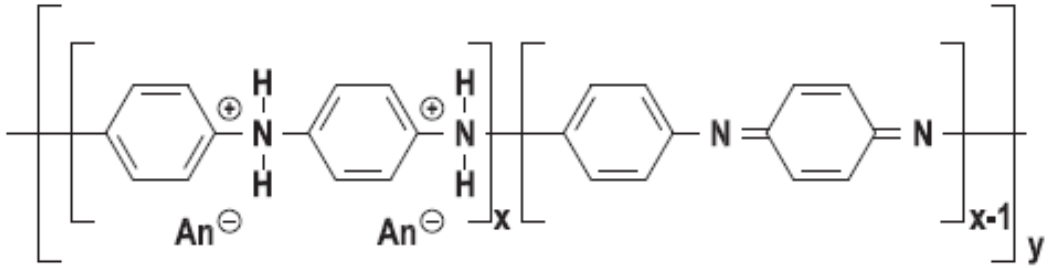

Fig. 4. A simplified formula for PANI consisting of reduced and oxidized units with benzenoid (B) and quinoid (Q) units that may be written as $[(-B-N(H)-B-N(H)-)_x (-B-N=Q=N-)_{1-x}]_y$ (redrawn from [136]).

5. ELEKTROKROMATSKI UREĐAJI – POLIANILIN KAO EC MATERIJAL

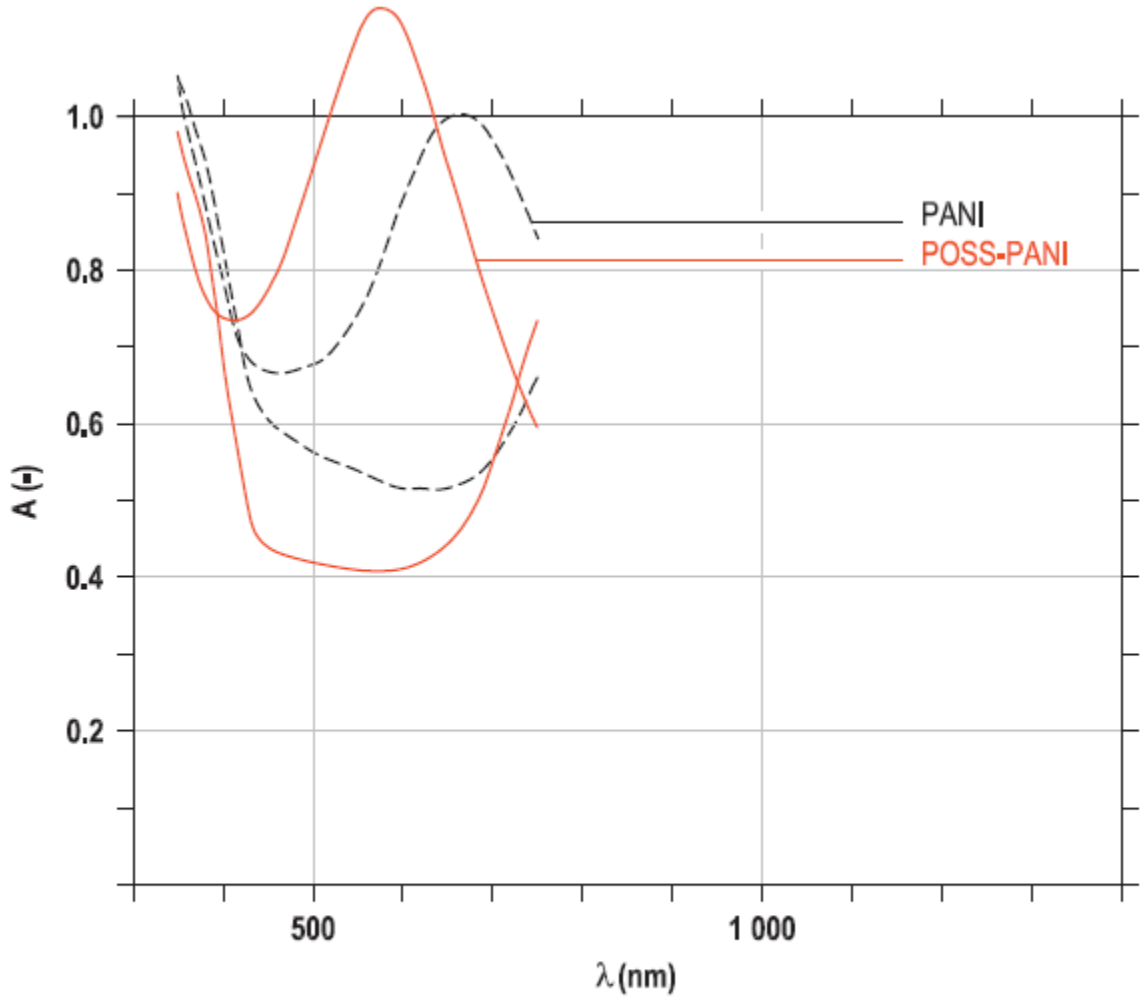

Fig. 5. UV–vis absorbance spectra of the complementary EC device PET|ITO|PANI|Electrolyte|WO_3|ITO|PET and PET|ITO|POSS-PANI|Electrolyte|WO_3|ITO|PET switched at 2.0 and −2.0 V. (redrawn from [151]).