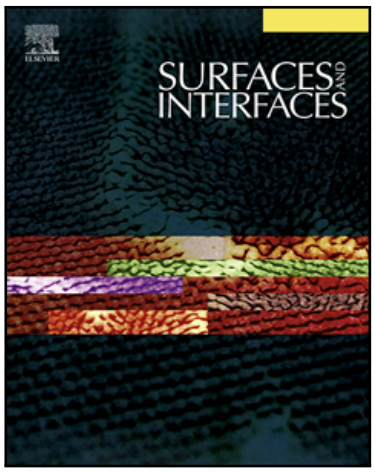

Study of photoelectrochemical conductivity mechanism and electrochemical impedance spectroscopy of bulk $CuInTe_2$ – electrolyte interface

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H I G H L I G H T S

- $CuInTe_2$ (CIT) thin films were electrosynthesized on fluorine doped tin oxide at higher pH 4.
- CIT films were studied by photoelectrochemical (PEC) response and confirm the p-type conductivity of CIT films.
- Charge transport mechanism was studied by electrochemical impedance spectroscopy.
- Impedance measurement shows tunnel diode like behavior at higher frequencies whereas diffusion mechanism of ionic species dominated at lower frequencies.
- The science behind photoelectrochemical and impedance measurement is explained in details.