

OPTICAL, ELECTRICAL, AND ELECTROCHEMICAL  
PROPERTIES OF INDIUM MONOSELENIDE  
INTERCALATED WITH IODINE

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S u m m a r y

We have investigated electrical, optical, and electrochemical properties of layered single crystals of InSe intercalated with iodine ions. By the method of X-ray electron-probe microanalysis, it is found that the insertion of iodine in near-surface layers is more intense than that into the bulk of the samples under study. It is established that the intercalation of indium selenide with iodine leads to a shift of the excitonic maximum to the high-energy region by  $\sim 9$  meV and to an increase of the half-width of the excitonic absorption band by  $\sim 3$  meV. The model of the formation of spatial chains of the intercalant in layered crystals is confirmed.