

ADSORPTION EDGE OF NONCRYSTALLINE  
SEMICONDUCTORS  $\text{As}_x\text{Se}_{1-x}$

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S u m m a r y

The optical absorption edge of amorphous and glass-like semiconductors  $\text{As}(\text{Sb})_x\text{Se}_{1-x}$  is studied. For pure Se, it is located between the absorption edges of its two crystalline modifications, trigonal and monoclinic ones. It is revealed that, on introducing the admixtures of As and Sb, a parallel shift of the exponential section of the absorption edge of Se to the low-energy region of the spectrum is observed. The region of absorption with a power dependence  $\alpha \sim f(h\nu)$  is thoroughly investigated, the character of the composition dependence of the optical energy gap is analyzed, and the phenomenological interpretation of the experimental results is presented.