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León, M.[a] , Levcenko, S.[b e] , Serna, R.[c] , Nateprov, A.[b] , Gurieva, G.[b e] , Merino, J.M.[a] , Schorr, S.[d] , Arushanov, E.[b]
Spectroscopic ellipsometry study of Cu2ZnGeSe4 and Cu2ZnSiSe4 poly-crystals
(2013) *Materials Chemistry and Physics*, 141 (1), pp. 58-62. 被引用数 1 回

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抄録 (Abstract)
We report the room temperature spectroscopic ellipsometry study of Cu 2ZnGeSe4 and Cu2ZnSiSe4 crystals, grown by modified Bridgman technique. Optical measurements were performed in the range 1.2-4.6 eV. The spectral dependence of the complex pseudodielectric functions as well as pseudo- complex refractive index, extinction coefficient, absorption coefficient, and normal-incidence reflectivity of Cu 2ZnGeSe4 and Cu2ZnSiSe4 crystals were derived. The observed structures in the optical spectra were analyzed by Adachi's model and attributed to the band edge transitions and higher lying interband transitions. The parameters such as strength, threshold energy, and broadening, corresponding to the E0, E1A and E 1B interband transitions, have been determined using the simulated annealing algorithm

著者キーワード
A. Semiconductors; C. Polarimeters and ellipsometers; C. X-ray scattering; D. band-structure; D. Optical properties

文献タイプ: Article
情報源: Scopus