

Surface gloss analysis of GaAs-based epitaxial films

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A correlation between the coefficient of specular light reflection from the surface of InGaAs epitaxial films with low In average content and the root-mean-square roughness of their surface was found. The specular reflection coefficient was determined using a glossmeter, and the surface morphology was measured by atomic force microscopy. The films under investigation were grown by molecular beam epitaxy on GaAs substrates with different surface orientations: (100), (110), (111)A.

Keywords: atomic-force microscopy, molecular-beam epitaxy, GaAs, root-mean-square roughness, reflection coefficient.

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