

THE VERIFICATION OF DATA ON OPTICAL CHARACTERISTICS OF SEMICONDUCTORS BY THE KRAMERS-KRONIG ANALYZING

The report considers various approaches to using the Kramers-Kronig analysis in semiconductor optics. A new approach is proposed – the use of Kramers-Kronig relations to verify known data of well-known semiconductors. As the research has shown, many data require clarification. It was found that a greater deviation is observed for diatomic crystals than for monatomic crystals, like silicon and germanium, for example. The results of the work are useful for the practical application of optical data, in materials science, etc.

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