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Stable method for optical monitoring the deposition of multilayer optical coatings. (English. Russian original) [Zbl 1455.78013](#)
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Summary: For optical monitoring of layer thickness in the deposition of multilayer optical coatings, a stable method is proposed that completely eliminates the cumulative effect of errors in the thicknesses of deposited layers. The considered monitoring method relies on a nonlocal algorithm for analyzing data measured in the course of coating deposition monitoring. Computer simulation of coating deposition is used to demonstrate the effectiveness of the proposed type of monitoring as compared with other optical monitoring methods.

MSC:

- 78A55 Technical applications of optics and electromagnetic theory
- 78M99 Basic methods for problems in optics and electromagnetic theory
- 78-05 Experimental work for problems pertaining to optics and electromagnetic theory

Cited in 1 Document

Keywords:

multilayer coatings; monochromatic optical monitoring; numerical algorithms; analysis of experimental data

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