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Control and Broadband Monitoring of Transparent Multilayer Thin Films Deposited by Magnetron Sputtering

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ABSTRACT: A multilayer thin film deposition system has been developed that implements broadband process control and monitoring. Running on a simple algorithm, the system stringently controls the thickness of each of the multilayers thereby avoiding thickness error build up throughout the deposition process. The system which also has process monitoring capability can be implemented on any platform. Antireflection coatings deposited by the new system yielded spectral characteristics of commercial standards.

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