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## **【116】 Growth by pulsed laser deposition of SrVO<sub>3</sub> thin films for optical applications**

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Light-matter interaction can be strongly enhanced by confining the electric field in optical cavities. These require a well-suited stacking of reflecting and transparent materials selected for the frequency range of interest. In our study, we target the Terahertz spectrum and have chosen the SrVO<sub>3</sub> compound for its high reflectivity in this frequency range. We report results on the growth of SrVO<sub>3</sub> thin films by pulsed laser deposition unraveling the complex dependence of resistivity and crystalline quality on the Ar/O<sub>2</sub> growth atmosphere as well as laser fluence and target-substrate distance. Optical measurements performed by Fourier Time-domain InfraRed spectroscopy show that the reflectivity window is within the scope of our applications.

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