

ACE 600

Application note	No. 1
Scope:	Deposition of layers of defined thickness using thickness monitor
Version 1.1	22 May 2018

When sputtering, the layer thickness is measured by the oscillating quartz crystal in discrete time intervals during the process in an approximate manner. The amount of deposited metal is exactly balanced and corrected for the sample height only after the deposition has been stopped, which results in enlarged uncertainty in layer thickness up to 1 nm using standard parameters of the Au deposition recipe.

Remedy to this lies in lowering of the sputtering current (deposition rate) to give the thickness monitor more time to measure the actual deposited thickness during the process and to decide more exactly the stop point of the process.

In case you need to make such modification to the process, please create a new recipe with the suffix "slow".