

## Accepted Manuscript

Title: The influence of deposition parameters on Ti/Pt film growth by confocal sputtering and the temperature dependent resistance behavior using  $\text{SiO}_x$  and  $\text{Al}_2\text{O}_3$  substrates

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PII: S0169-4332(14)01244-6  
DOI: <http://dx.doi.org/doi:10.1016/j.apsusc.2014.05.203>  
Reference: APSUSC 28022

To appear in: *APSUSC*

Received date: 10-2-2014  
Revised date: 5-5-2014  
Accepted date: 28-5-2014

Please cite this article as: G. Schmidl, J. Dellith, E. Kessler, U. Schinkel, The influence of deposition parameters on Ti/Pt film growth by confocal sputtering and the temperature dependent resistance behavior using  $\text{SiO}_x$  and  $\text{Al}_2\text{O}_3$  substrates, *Applied Surface Science* (2014), <http://dx.doi.org/10.1016/j.apsusc.2014.05.203>

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## Highlights

- The influence of different sputtering pressure 0.5 – 8 Pa and power 100 - 500W on the microstructure as well as on crystalline and electrical properties is investigated.
- Ti/Pt films deposited on oxidized Si and on Al<sub>2</sub>O<sub>3</sub> show a preferred (111) crystalline orientation, but films on Al<sub>2</sub>O<sub>3</sub> have an additional polycrystalline structure
- The crystal size is influenced by annealing process.
- The highest TCR is achieved at a pressure of 1.2 Pa and a sputtering power of 100W.

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