

Accepted Manuscript

Full Length Article

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PII: S0169-4332(18)31210-8
DOI: <https://doi.org/10.1016/j.apsusc.2018.04.231>
Reference: APSUSC 39230

To appear in: *Applied Surface Science*

Received Date: 8 January 2018
Revised Date: 24 April 2018
Accepted Date: 26 April 2018

Please cite this article as: M.K. Schütz, M. Petit, L. Michez, A. Ranguis, G. Monier, C. Robert-Goumet, J.-M. Raimundo, Thiol-functionalization of Mn_5Ge_3 thin films, *Applied Surface Science* (2018), doi: <https://doi.org/10.1016/j.apsusc.2018.04.231>

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Thiol-functionalization of Mn_5Ge_3 thin films

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HIGHLIGHTS

The surface state of Mn_5Ge_3 exposed to air and common solvents, is analyzed by XPS.

The surface free energy of Mn_5Ge_3 is calculated with the OWRK method.

The grafting of Mn_5Ge_3 films by octane- and perfluorodecane-thiol SAMs is proposed.

KEYWORDS

thiol; passivation; self-assembled monolayers; manganese germanide; Mn_5Ge_3 ; wettability; spintronics; surface free energy.

ABSTRACT

Hybrid organic/inorganic interfaces could pave the way to chemically designed or new multifunctional electronic devices, in particular in the spintronics field where, for instance, the interfacial spin

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