



# Spontaneous assembly of silylethane-thiol derivatives on Au(111): a chemically robust thiol protecting group as the precursor for the direct formation of aromatic gold thiolate monolayers

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Auteur	Niebel, Claude [1], Calard, François [2], Jarrosson, Thibaut [3], Lère-Porte, Jean-Pierre [4], Breton, Tony [5], Serein-Spirau, Françoise [6]
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Résumé en anglais	Self-assembled monolayers (SAMs) on gold were obtained by the direct absorption of a fully conjugated phenylenethienylene derivative presenting robust silylethane-thiol protecting groups as anchoring agents. The thiol deprotection and SAM formation have been evidenced by quartz crystal microbalance (QCM) measurements and X-ray photoelectron spectroscopy (XPS), and have been compared to the SAM obtained from its thioacetate analog. The chemically robust silylethane-thiol protecting group appeared as a surprisingly effective anchoring agent for the preparation of aromatic SAMs on Au(111), suitable for subsequent post-functionalization.
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## Liens

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