# Digital printing of SERS active texture via inkjet technology

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## Abstract

*In this paper we propose a new method for printing of noble metals colloids by digital inkjet printing to archive SERS active pattern. Without any extensive preparation digital printing technology allows an easy way to create freeform SERS active pattern on a wide variety of substrate. Thereby the pattern can easily adopt on the samples or analyzing problem and provide the roughness necessary using the SERS effect.*

*Using two different piezo-driven inkjet printer (EPSON R230 and Dimatix DMP) and 3 different type of metal inks the study shows the potential of the method to be adopt on a wide variety of analyzing problems.*

## Author Biography

*Lutz Engisch received his diploma and PhD in surface chemistry and spectroscopy at Chemnitz University of Technology. Since April 2007, he has been working as a DFG postdoc fellow at the School of Physical und Chemical Science at the Queensland University of Technology in Brisbane, Australia in the group of Prof. P. Fredericks. His work focuses the combination of vibrational spectroscopy and digital fabrication by inkjet printing.*

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