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SEMINAR

aus

Halbleiterphysik und Nanotechnologie

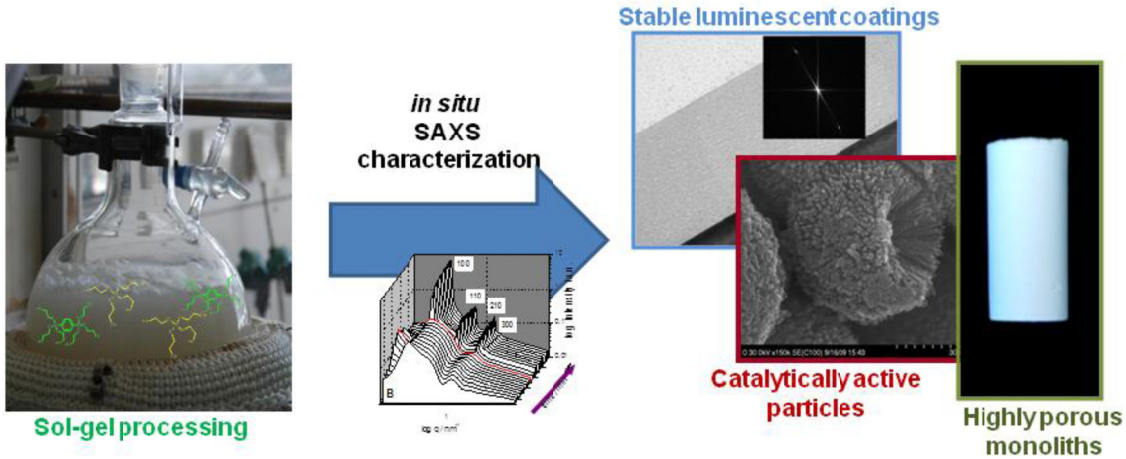
Di, 14.1.2014, 11:15 Uhr
Hörsaal für Physik

"Highly porous functional materials - sometimes less is more -"

Prof. Dr. Nicola Hüsing

Materials Science and Physics, Paris-Lodron University Salzburg

Research on synthesis – structure – property relationships is a central challenge in materials chemistry. Sol-gel processing has been proven to be a versatile approach towards monolithic silica gels with porosities of more than 90%, which have a high potential in translucent heat insulation. But does it always have to be silica? Can pore structures be deliberately tailored, e.g. for the separation of molecules or other applications?



This presentation will give an overview of the recent research activities at the Department of Materials Science and Physics at Paris-Lodron University Salzburg. Innovative synthetic concepts towards highly porous networks and structural aspects as well as applications of these structures in various fields, e.g. electrochemical energy storage in lithium ion batteries, separation science and catalysis will be presented.