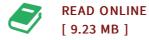




Preparation of hybrid by sol-gel method

By Seenaa Hussein

LAP Lambert Academic Publishing Apr 2015, 2015. Taschenbuch. Book Condition: Neu. 220x150x8 mm. This item is printed on demand - Print on Demand Neuware - The effect of water content in different ratio for water/Tetraethylorthosilicate (H2O/TEOS molar ratio) (R=2,3,4,and 5) was studied. R=2 was chosen as best ratio for adding organic polymers (PMMA&PVC) to prepare films from organic -inorganic materials and organic dye to prepare films of hybrid materials. Two silica forms were prepared. Silica xerogel rod was Prepared by molding method and silica thin film were prepared spin coating method. Organic-inorganic hybrids films were prepared with different mixing ratios(20%Polymer+80%TEOS,50%Polymer+50%TEOS,80%Polymer +20% TEOS). The of X-ray diffraction showed the formation of amorphous structure .The transmission spectra for samples showed a good transparency and homogeneity .FTIR Spectroscopy was studied in the range 3700-3500 cm-1 which correspond to O-H starching vibration of molecular water. The band range 2200-1600cm -1 correspond to O-H bending vibration of molecular water and solvent (alcohol C2H5OH). In the range 1300 -400 cm-1 the band at 1378-1060 cm-1 assigns to asymmetric stretching vibration of Si-O-Si and the band at 470-450 cm -1 associated with Si-O-Si bond bending vibration . 140 pp. Englisch.



Reviews

Very beneficial to all of class of people. I am quite late in start reading this one, but better then never. You may like just how the writer create this publication.

-- Audra Klocko PhD

Thorough information! Its this type of great go through. It is amongst the most incredible publication i actually have read through. It is extremely difficult to leave it before concluding, once you begin to read the book.

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