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Optical investigations concerning layered metalphthalocyanine nanostructures affected by NO_2

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Keywords

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Abstract

The paper deals with investigations concerning the coefficient of optical transmission of selected metalphthalocyanine layers, viz. CuPc, NiPc, PbPc, FePc and CoPc by means of optical spectroscopy. The coefficient of transmission was investigated for phthalocyanine layers in the presence of atmospheric air and after the exposition of these layers to 100 ppm nitrogen dioxide. These investigations concerned wavelengths in the range from about 300 to 1300 nm. Moreover, several phthalocyanine layers were measured in the air and at 100 ppm NO_2 applying the X-ray diffraction method. These investigations have made it possible to determine changes occurring in the structure of phthalocyanine exposed to nitrogen dioxide.