1. Record Nr. UNINA9910346720303321 Autore **Bach Mathias** Titolo Near Infrared Laser Sensor System for In-Line Detection of Conversion in UV-Cured Polymer Coatings Pubbl/distr/stampa KIT Scientific Publishing, 2012 1000027435 **ISBN** Descrizione fisica 1 electronic resource (VII, 129 p. p.) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia The work describes a method for the determination of the conversion Sommario/riassunto by radical photopolymerization of acrylic coatings that is suitable for an in situ monitoring during the coating process. The applied method is based on the 1620 nm overtone absorption of the acrylate end group. The capability of the sensor to discriminate between polymerized and unpolymerized coatings on metal substrates down to a coating thickness of less than 16µm is demonstrated and and proved by reference measurements.