1. Record Nr. UNINA9910346913303321 Autore Pérez Grassi Ana Titolo Variable illumination and invariant features for detecting and classifying varnish defects Pubbl/distr/stampa KIT Scientific Publishing, 2010 1000019094 **ISBN** Descrizione fisica 1 online resource (158 p. p.) Collana Forschungsberichte aus der Industriellen Informationstechnik / Institut für Industrielle Informationstechnik (IIIT), Karlsruher Institut für Technologie Soggetti Technology: general issues Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto This work presents a method to detect and classify varnish defects on wood surfaces. Since these defects are only partially visible under certain illumination directions, one image doesn't provide enough information for a recognition task. A classification requires inspecting the surface under different illumination directions, which results in image series. The information is distributed along this series and can be extracted by merging the knowledge about the defect shape and light direction.