1. Record Nr. UNINA9910346912403321 Autore Sandfort Kai Titolo The factorization method for inverse scattering from periodic inhomogeneous media Pubbl/distr/stampa KIT Scientific Publishing, 2010 1000019400 **ISBN** Descrizione fisica 1 online resource (X, 152 p. p.) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia This book addresses the identification of the shape of penetrable Sommario/riassunto periodic media by means of scattered time-harmonic waves. Mathematically, this is about the determination of the support of a function which occurs in the governing equations. Our theoretical analysis shows that this problem can be strictly solved for acoustic as well as for electromagnetic radiation by the so-called Factorization Method. We apply this method to reconstruct a couple of media from

numerically simulated field data.