1. Record Nr. UNINA9910317763003321 Sol-Gel Method: Design and Synthesis of New Materials with Titolo Interesting Physical, Chemical and Biological Properties / / edited by Guadalupe Valverde Aguilar IntechOpen, 2019 Pubbl/distr/stampa [Place of publication not identified]:,: IntechOpen,, 2019 **ISBN** 1-83962-019-6 1-78985-334-6 Descrizione fisica 1 online resource (106 pages) Disciplina 667.9 Soggetti Protective coatings Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Sommario/riassunto The sol-gel method is a powerful route of synthesis used worldwide. It produces bulk, nano- and mesostructured sol-gel materials, which can encapsulate metallic and magnetic nanoparticles, non-linear azochromophores, perovskites, organic dyes, biological molecules, etc.. This can have interesting applications for catalysis, photocatalysis; drug delivery for treatment of neurodegenerative diseases such as cancer, Parkinson's and Azheimer's. In this book, valuable contributions related to novel materials synthesized by the sol-gel route are provided. The effect of the sol-gel method to synthesize these materials with potential properties is described, and how the variation of the parameters during the synthesis influences their design and allows to adjust their properties according to the desired application is

discussed.