1. Record Nr. UNINA9910557713203321 Autore **Duchet-Rumeau Jannick** Titolo Polymers and Ionic Liquids: Shaping up a New Generation of High Performances Nanomaterials Pubbl/distr/stampa Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2020 Descrizione fisica 1 electronic resource (152 p.) Soggetti History of engineering & technology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia The main objective of polymer materials scientists is to develop and Sommario/riassunto design high performance polymer-based materials via the introduction of block copolymers, ionomers or inorganic-organic hybrids, in order to introduce functionalities such as mechanical reinforcement, gas barrier properties, fire retardancy, shape memory behavior or selfhealing ability. In the last ten years, ionic liquids have demonstrated huge potential as new components within polymer-based materials, leading to a wide range of applications. Due to their many physicalchemical properties, as well as their various possible combinations,

ionic liquids represent a new path to produce multifunctional materials.