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""3.2. Crosslinking Polymerization in Presence of Soluble Substances (Particles of Sugars, Salts) which Are Washed out from theHydrogel after Polymerization""""3.3. Crosslinking Polymerization in the Presence of SubstancesReleasing Gases which Remain in the Resulting Hydrogel"";
""3.4. Freeze-Sublimation of the Hydrogel Swollen in Water (Lyophilization of Swollen Hydrogel)""; ""4. CHARACTERIZATION OF POROUS HYDROGELS""; ""4.1. Mercury Porosimetry""; ""4.2. BET Surfeace Area Measurements""; ""4.3. Scanning Electron Microscopy (SEM)"";
""4.4. Confocal Microscopy""; ""4.5. Diffusion Properties""
""4.6. Mechanical Properties""""5. MODIFICATION OF POROUS HYDROGELS""; ""6. AUTHORA?S EXPERIENCE WITH POROUS HYDROGELSPREPARED IN THE PRESENCE OF POROGEN PARTICLES"";
""6.1. Porous Hydrogels (According to 3.2.) for Tissue Engine""; ""6.2. Characterization of the Porous Hydrogels Prepared According to 3.2"";
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Sommario/riassunto

A porous material is a solid that is saturated by an interconnected network of pores filled with liquid or gas. It is an inorganic or organic cross linked or uncross linked containing pores of all sizes. The pore network is assumed to be continuous, forming two interpenetrating continua such as in a sponge. Examples of porous media range from porous silicon which is porous on the sub manometer scale to limestone caves and underground river systems on the kilometre scale. Most research on porous media analyses the transport processes in a macro scale approximation.This book focuses on semi-analytical solutions for thermo-poroelasticity field equations; pore size from units to hundreds of micro meters and assumptions and reactive processes as well as the mathematical formulations of these models. It represents the different concepts of porous media as it is used in many areas of applied science and engineering.