



STUDIES ON PROPERTIES OF ORGANIC HYBRID HYDROGELS

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Condition: New. Publisher/Verlag: VDM Verlag Dr. Müller | RESEARCH, PREPARATION, APPLICATION | Hydrogels are three-dimensional hydrophilic polymers which swell but do not dissolve when brought into contact with water, and they sometimes undergo a volume phase change in response to a change in surrounding conditions, such as temperature, pH value, ionic strength, and electric field. In this book, the first part, prepare a series of the organic hybrid hydrogels based on N-isopropylacrylamide (NIPAAm) and gelatin, and to investigate systematically their swelling behavior and physical properties in deionized water at different temperatures. In second part, the objective in this part is to investigate the effect of the crosslinking agent of gelatin in the organic hybrid gels on the drug release behavior for the drugs with different molecular size and charges. In third part, a series of hydrogels based on gelatin and intercalated-hydrotalcite (IHT) were prepared by crosslinked with glutaraldehyde. The effect of different contents of IHT in the hybrid nanocomposite gels on the swelling behavior and physical properties was investigated. Moreover, the drug release behaviors of these gels were also investigated. | Format: Paperback | Language/Sprache: english | 68 pp.



Reviews

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