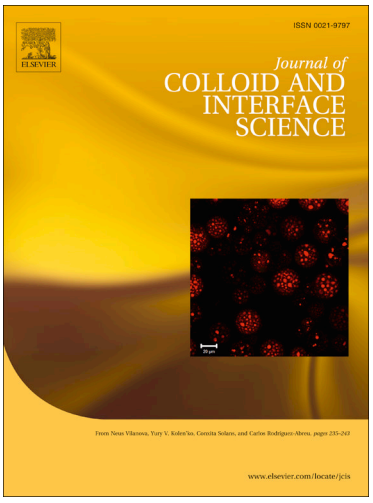

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Tuning of elasticity and surface properties of hydrogel cell culture substrates by simple chemical approach

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Abstract

When designing materials for tissue engineering applications various parameters characterizing both materials and tissue have to be taken into account. The characteristics such as chemistry, elasticity, wettability, roughness and morphology of the substrate's surface have significant impact on cell behavior. The paper presents biopolymer (collagen/chitosan) based hydrogel materials with tunable elasticity and surface properties useful for fabrication of substrates for cell culture. Using simple chemical approach involving