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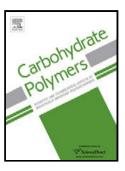
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ACCEPTED MANUSCRIPT

Structural and mechanical characterization of bacterial cellulose-polyethylene

glycol diacrylate composite gels

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Highlights

• Bacterial cellulose—polyethylene glycol diacrylate (BC-PEGDA) composite gels were prepared.

• The molecular dynamics of the gels was investigated by the solid relaxation analyses.

The mechanical strength of the gels depended on the amount of PEGDA.

• • The hardness prevented the tactile sensation from changing after consecutive contacts.

The BC-3% and 5% PEGDA gels had similar viscoelastic behaviors as a BC gel.

Abstract

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