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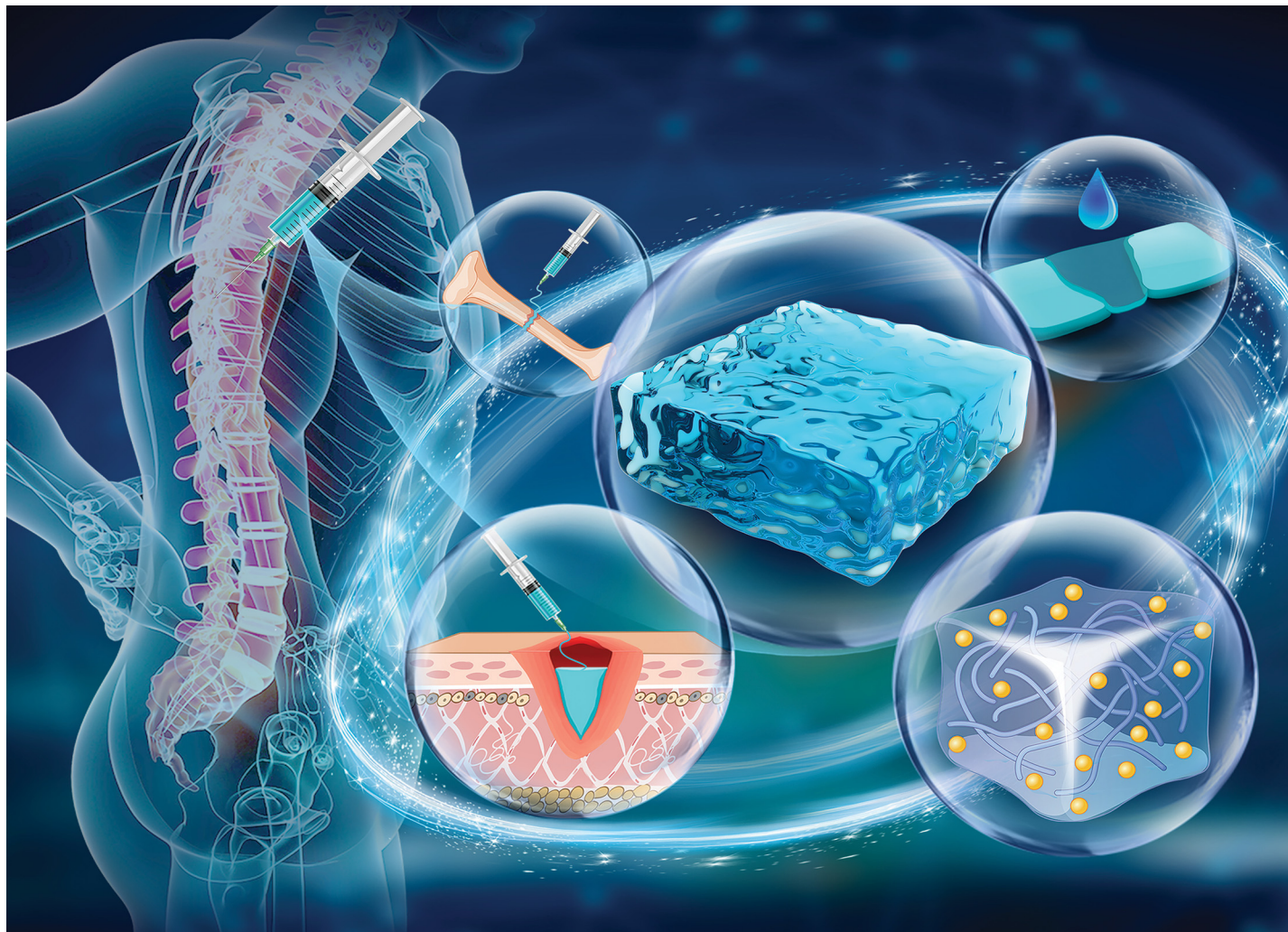


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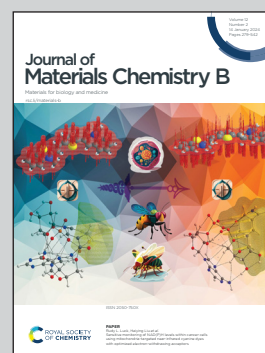


Showcasing research from Professor Hongbo Zeng's laboratory, Chemical & Materials Engineering Department, University of Alberta, Edmonton, Alberta, Canada.

Recent advances in fabricating injectable hydrogels via tunable molecular interactions for bio-applications

Injectable hydrogels with shear-thinning and/or *in situ* formation properties, allowing direct delivery to target sites through facile syringe injection, offer distinct advantages by simplifying the implantation process and minimizing tissue invasion. This work summarizes our recent progress in preparing injectable hydrogels and discusses their corresponding performance in various bioengineering fields. Moreover, the underlying molecular interactions governing the injectable and functional properties of these hydrogels were elucidated using nanomechanical techniques such as surface forces apparatus (SFA) and atomic force microscopy (AFM).

As featured in:



See Hongbo Zeng *et al.*,
J. Mater. Chem. B, 2024, **12**, 332.