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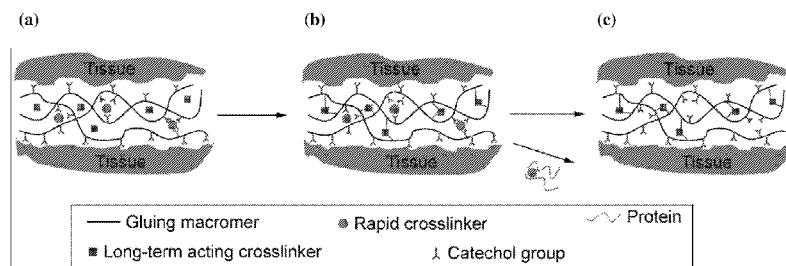
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(54) Title: BIOLOGICAL TISSUE ADHESIVE COMPOSITION AND METHOD OF PREPARATION THEREOF

FIG. 1



(57) **Abstract:** A biological tissue adhesive composition is provided. The biological tissue adhesive composition comprises one or more macromolecules grafted with at least one catechol moiety and comprising at least one cross-linkable functional group, a first cross-linker for cross-linking the at least one catechol moiety, wherein the first cross-linker comprises or consists of 10 a multivalent metal ion, and a second cross-linker for covalently cross-linking the at least one cross-linkable functional group, wherein the one or more macromolecules are cross-linked by (a) complex formation between the at least one catechol moiety and the multivalent metal ion, and (b) covalent bonding of the at least one cross-linkable functional group with the second cross-linker. Fabrication method and working principle of a biological tissue adhesive 15 composition are also provided. FIG. 1 (figure for publication with abstract)