

## Additive manufacturing of bioinks for multilayered 3D bioprinting

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We report extrusion-based additive manufacturing of bioinks for multilayered 3D bioprinting by using natural polymers such as hyaluronic acid, alginate, gelatin. The synthesis mechanism is Schiff Base reaction. The additive printing was tens of layers with cells and their post-printing stability in lattice, diamond and other shapes was observed. Their mechanical properties have been verified by testing with texture analyses such as mechanical properties and adhesiveness of the printed gel. Cell viability tests demonstrated no cell damages *in vitro* and *in vivo* evaluations.

**Keywords :** *3D Printing, Bioinks, Tissue Engineering, Chitosan, Carboxymethylcellulose*

### Reference

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