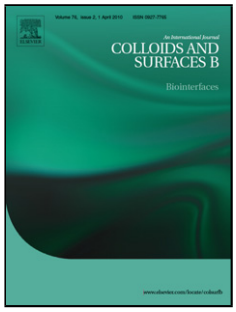

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Synthesis of copper-containing bioactive glass nanoparticles using a modified Stöber method for biomedical applications

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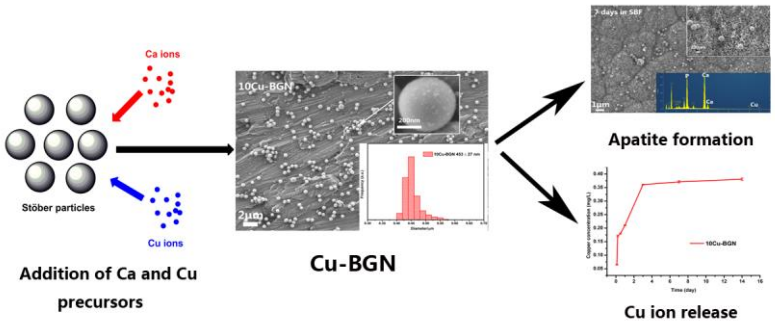
Graphical abstract



Highlights

1. Cu-BGNs could be synthesized using a convenient modified Stöber method.
2. Cu-BGNs were highly dispersed with a uniformly spherical shape (400-450 nm).
3. Copper content in Cu-BGNs could be tailored.
4. Cu-BGNs exhibited a rapid apatite formation upon immersion in SBF.
5. Cu-BGNs could release copper ions for up to at least 14 days.