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Abstract

Calcic bioceramics have been widely used as substitutes or filling materials in bone grafts. Among them, $CaCO_3$ is also favored due to its good biocompatibility and biodegradability. Herein, combined with chondroitin sulfate, $CaCO_3$ can be selectively deposited on a chemical gradient surface generated by plasma polymerization. The chemical gradient in amino groups resulted in a gradient in deposited calcites number. The cell adhesion and spreading of SaoS-2 cells increased across the gradient surface with the