

Supporting Information

Bionic Gradient Scaffolds for Osteochondral Tissue Engineering: Construction Strategies, Interface Optimization, Gradient Characterization, and Controllability Research

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Table S1. List of Abbreviations

Abbreviation	Full name
AC-HA	acetylated hyaluronic acid
ACPC	amorphous calcium phosphate nanoclusters
ACs	articular chondrocytes
Ac- β -CD	acrylate- β -cyclodextrin
AFM	atomic force microscopy
AM	acrylamide
APM	N-(3-aminopropyl)methacrylamide
APS	acrylate β -cyclodextrin
BG	bioactive glass
BMP-2	bone morphogenetic protein 2
BMP-7	bone morphogenetic protein 7
BMSCs	bone marrow mesenchymal stem cells
BV/TV	bone volume percentage
CCS	carboxymethyl chitosan
CMC	carboxymethylcellulose
COL-I	type I collagen
COL-II	type II collagen
CS-GMA-CHO	methacrylate-functionalized oxidized chondroitin sulfate
CSMA	chondroitin methacrylate sulfate
Cur	curcumin
DFO	deferoxamine
DLP	digital light processing
DS	diclofenac sodium
ECM	extracellular matrix
EDS	energy-dispersive X-ray spectroscopy
FF	diphenylalanine
FT	fibrin
FT-IR	Fourier-transform infrared spectroscopy
Gel	gelatin
GelMA	methacrylic acid gelatin
GG	gellan gum
GO	graphene oxide
HANFs	hydroxyapatite nanofibers
HAp	hydroxyapatite
HBC	hydroxybutyl chitosan
HIF-1 α	hypoxia-inducible factor-1 α
HUVECs	human umbilical vein endothelial cells
ICRS	International Cartilage Repair Society Score
KGN	kartogenin

Abbreviation	Full name
KH570	γ -methacryloxypropyltrimethoxysilane
MagHA	superparamagnetic nHAp nanorods
MCH	magnesium carbonate hydroxide
MEW	melt electro-writing
micro-CT	Micro-computed Tomography
MSCs	marrow mesenchymal stem cells
NFMs	nanofibrous mats
nHAp	hydroxyapatite nanoparticles
OC	osteocondral
OCCPS	oxidized <i>Cuscuta chinensis</i> polysaccharide
OCS	oxidized chondroitin sulfate
OHA	oxyhyaluronic acid
PAM	polyacrylamide
PCEC	poly (ϵ -caprolactone)-block-poly (ethylene glycol)-block-poly (ϵ -caprolactone)
PCL	polycaprolactone
PDMS	polydimethylsiloxane
PEDOT:PSS	poly(3,4-ethylenedioxythiophene)/poly (styrene sulfonate)
PEGDA	poly (ethylene glycol) diacrylate
PLCL	poly(L-lactide-co-caprolactone)
PLGA	poly(lactide-co-glycolide)
PLL	polylysine
PLLA	poly-L-lactic acid
SA	sodium alginate
SAMA	sodium methacrylate-formyl alginate
SDF-1 α	stromal cell-derived factor-1 α
SLS	selective laser sintering
Sr-CSH	strontium-substituted xonotlite
SZP	superficial zone protein
Ta	tannic acid
TGF- β 1	transforming growth factor- β 1
VEGF	vascular endothelial growth factor
β -TCP	β -tricalcium phosphate
γ -PGA-ADH	hydrazinylated poly (γ -glutamic acid)