

Supporting Information

Multiscale Hierarchical Design of Tough Hydrogels: From Natural to Biomimetic

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Full Names and Abbreviations of Terms Used in the Article

Table S1. Full Names and Abbreviations

Abbreviations	Full name
ECM	extracellular matrix
COL-I	type I collagen
PGs	proteoglycans
COL-II	type II collagen
GAGs	glycosaminoglycan
COL-IV	type IV collagen
Alg	alginate
PAM/PAAm	polyacrylamide
PHEA-API	poly (2-hydroxyethyl aspartamide) modified with aminopropyl imidazole
PVA	poly(vinyl alcohol)
CNF	cellulose nanofiber
PEDOT:PSS	poly (3,4-ethylenedioxythiophene):poly (styrene sulfonic acid)
ANFs	aramid nanofibers
TA	tannic acid
CY-ANFs	cyano-p-aramid nanofibers
PU	polyurethane
P(AAm-co-AA)	poly(acrylamide-co-acrylic acid)

HA	hyaluronic acid
Gp	β -Glycerophosphate sodium
AgNPs	silver nanoparticles
PAA	Poly(acrylic acid)
CMCS	carboxymethyl chitosan
EYL	egg yolk lecithin
NIPAm	N-isopropylacrylamide
PEG	polyethylene glycol
PCL	poly- ϵ -caprolactone
GelMA	gelatin methacrylate
SDS	sodium dodecyl sulfate
CNCs	cellulose nanocrystals
AMPS	2-acrylamido-2-methyl-1-propanesulfonic acid
UPyHCBA	4-(6-(3-(6-methyl-4-oxo-1,4-dihydropyrimidin-2-yl)ureido)hexylcarbamoyloxy)-butyl acrylate
PAANa	sodium polyacrylate
BC	bacterial cellulose
AA	acrylic acid
DG	d-guanosine
AN	acrylonitrile
DACs	cellulose dialdehyde
COF	covalent organic framework
PDMS	Polydimethylsiloxane
TN	triple-network
MA	methyl acrylate
AAPBA	(3-acrylamidophenyl)boronic acid
PNIPAM-PAM	poly(n-isopropylacrylamide-polyacrylamide)
