

Supplementary Information for

Design Data and Finite Element Analysis of 3D Printed Poly(ϵ -Caprolactone)-Based Lattice Scaffolds: Influence of Type of Unit Cell, Porosity, and Nozzle Diameter on the Mechanical Behavior

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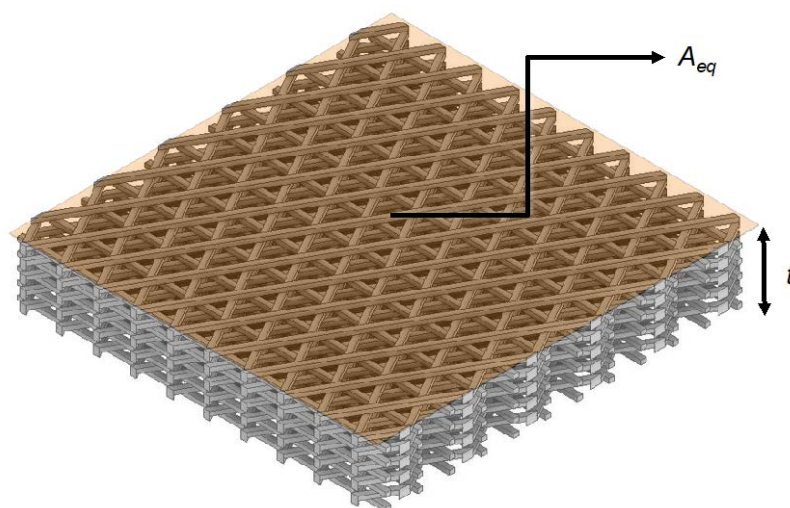


Figure S1. Explanation picture about the quantities reported in Equations (2) and (3).

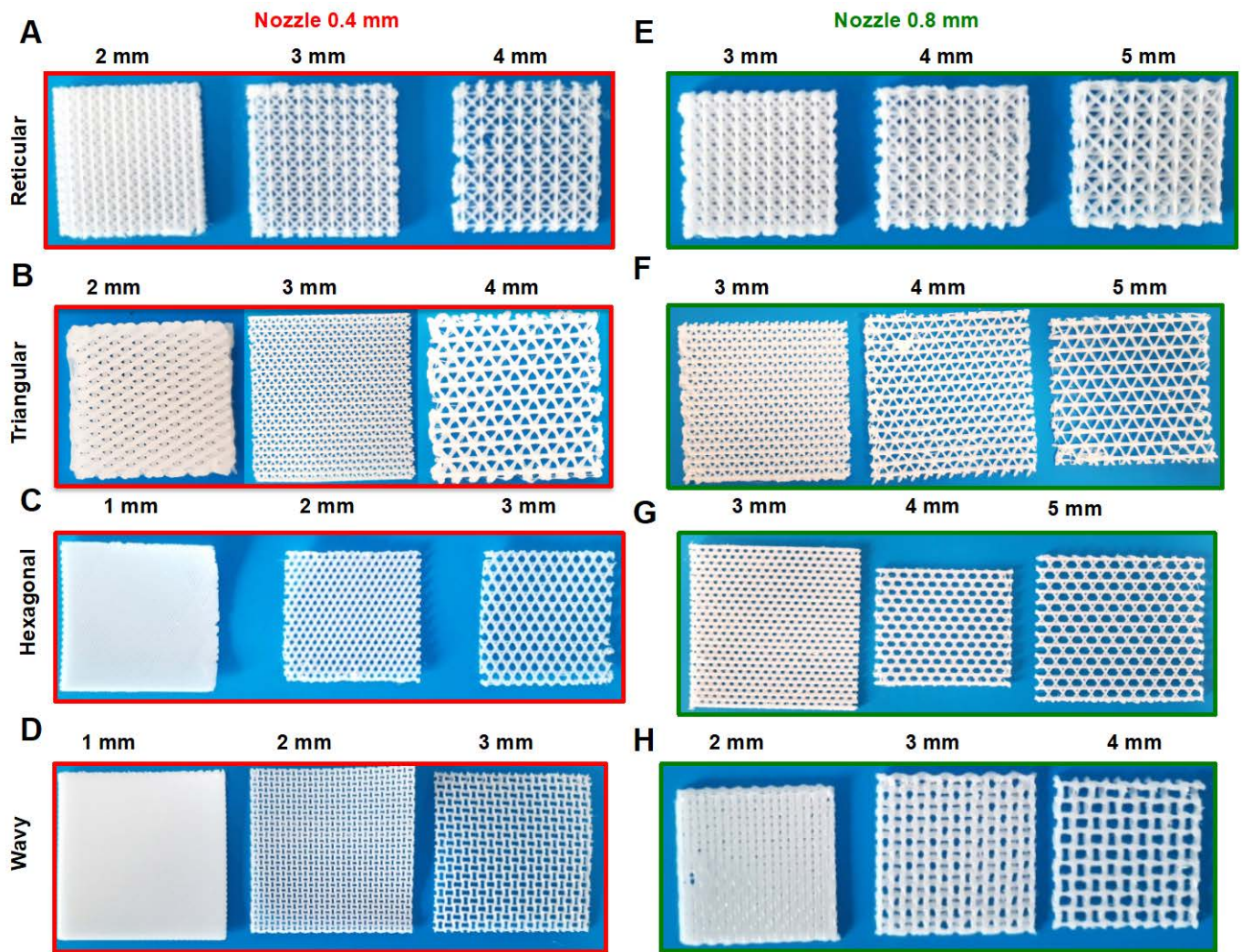


Figure S2. 3D printed PCL scaffolds with different geometries and nozzle diameters.

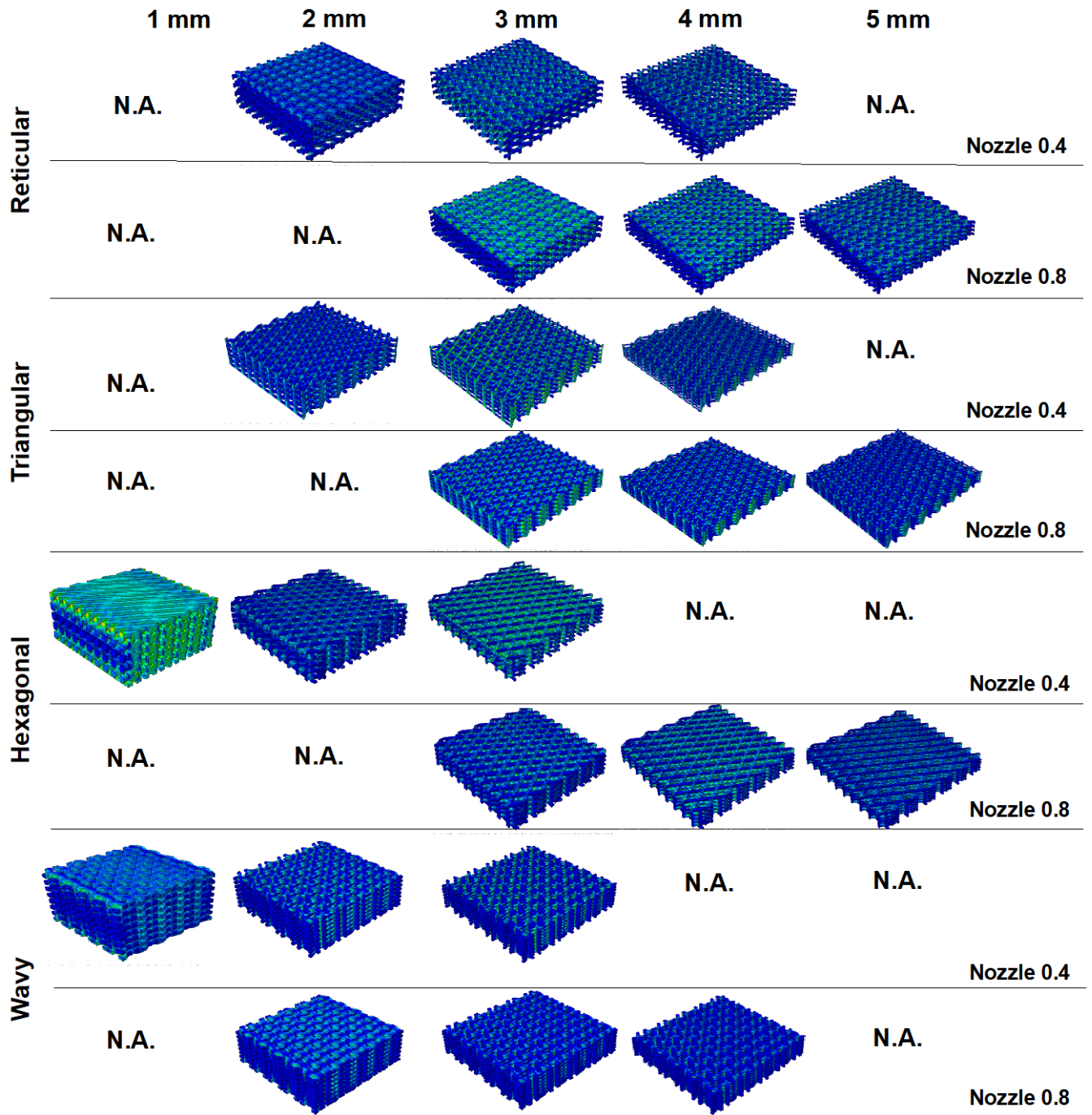


Figure S3. The Von-Mises stress-strain distributions in the simulated shear test by FEM in the y -directions.

Table S1. Comparison of shear moduli in the linear model of four types of scaffolds with different nozzle diameter and unit cell sizes.

Shear Modulus	G_{zx}	G_{zy}	G_{zx}	G_{zy}	G_{zx}	G_{zy}	G_{zx}	G_{zy}
Unit Cell Size (mm)	Reticular (MPa)		Triangular (MPa)		Hexagonal (MPa)		Wavy (MPa)	
1 (nozzle 0.4)	-	-	-	-	29.43	29.96	20.48	20.48
2 (nozzle 0.4)	5.52	5.52	3.16	3.24	3.30	3.35	2.59	2.59
3 (nozzle 0.4)	1.32	1.32	0.83	0.85	0.56	0.58	0.74	0.74
4 (nozzle 0.4)	0.47	0.47	0.34	0.35	-	-	-	-
5 (nozzle 0.4)	-	-	-	-	-	-	-	-
1 (nozzle 0.8)	-	-	-	-	-	-	-	-
2 (nozzle 0.8)	-	-	-	-	-	-	11.68	11.68
3 (nozzle 0.8)	5.69	5.69	2.98	3.03	2.92	2.97	2.81	2.81
4 (nozzle 0.8)	1.92	1.92	1.19	1.20	0.75	0.77	1.16	1.16
5 (nozzle 0.8)	0.99	0.99	0.62	0.63	0.26	0.27	-	-