

Figure S1. Representation of the ultrasonic method.

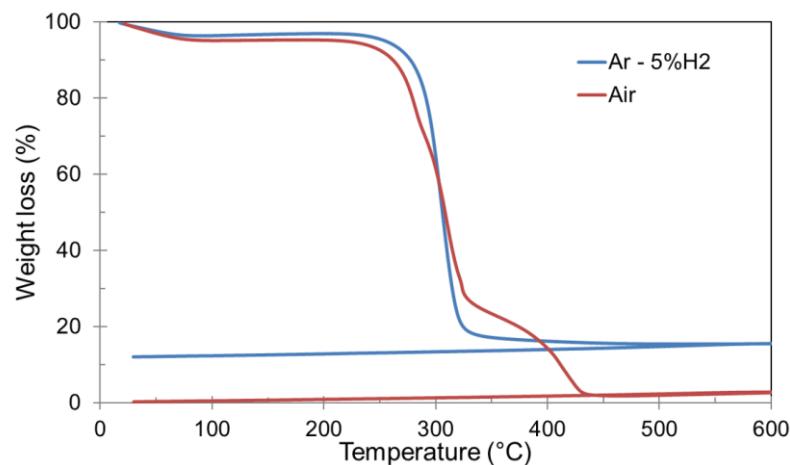


Figure S2. TGA of the methylcellulose under air and Ar/5% H₂ atmosphere.

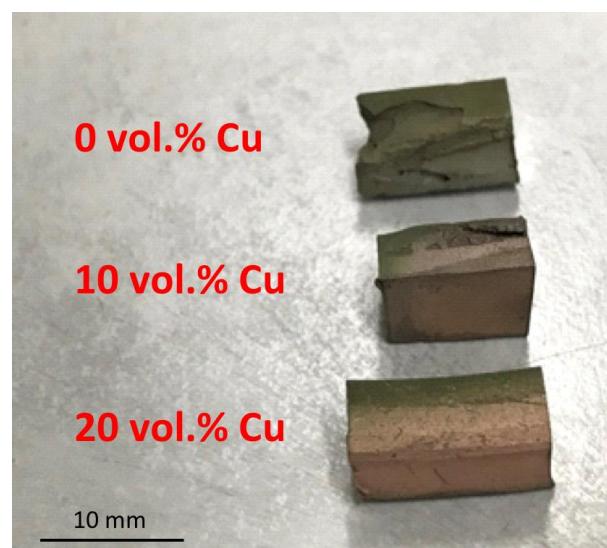


Figure S3. Photographs of 316L + Cu samples with different Cu contents.

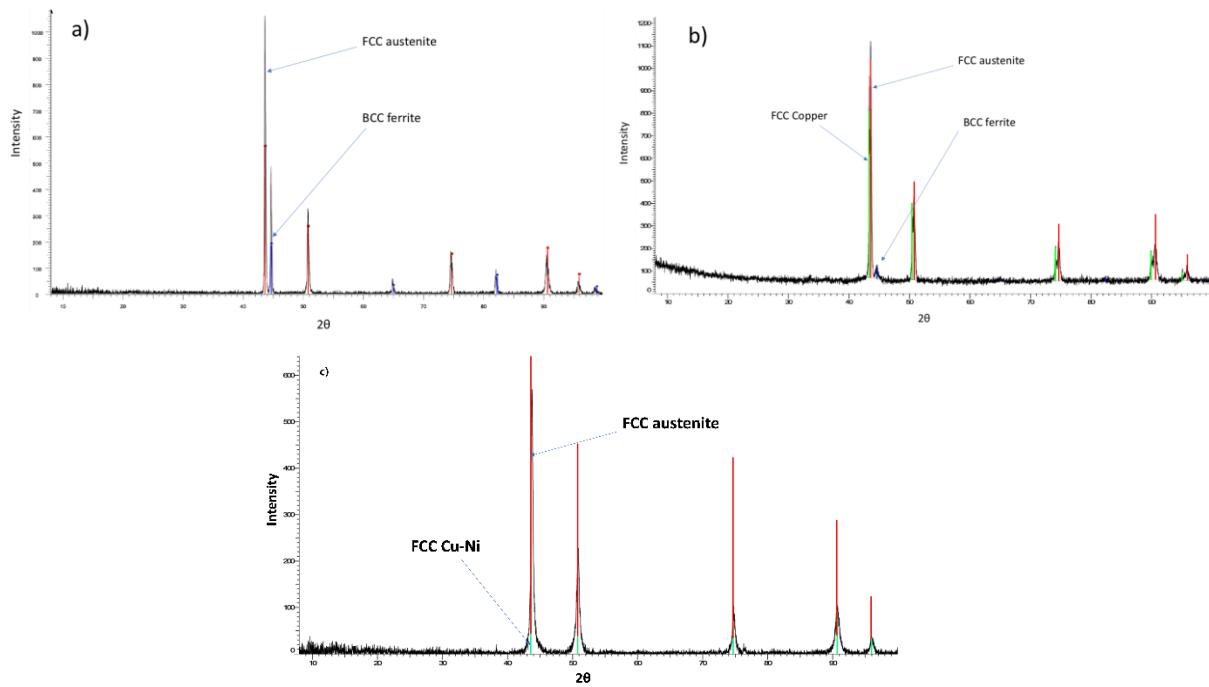


Figure S4. XRD diffractograms for (a) pure 316L powder, (b) sample before sintering, and (c) sample after sintering for 5 hours.

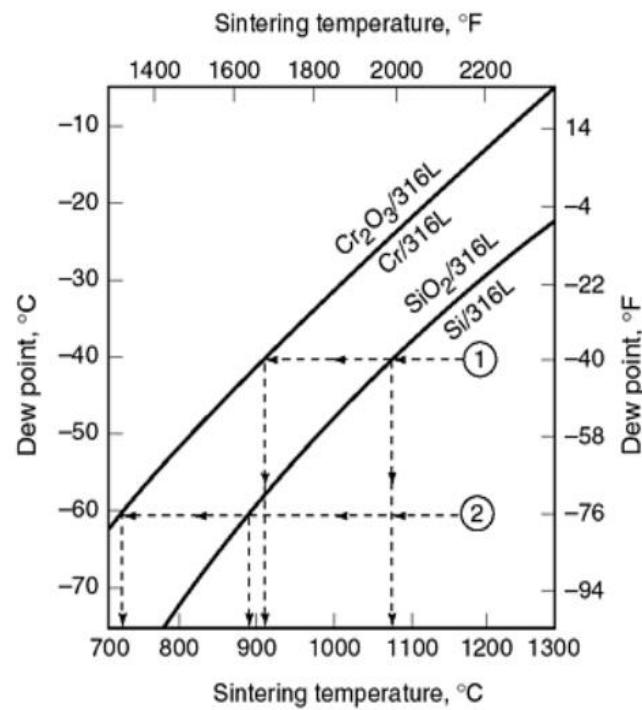


Figure S5. Dew points to reduce Cr and Si oxides at different temperatures.

Table S1. Printing parameters.

Nozzle Size	0.564 mm
Layer height	0.28 mm
Print bed temperature	20 °C
Chamber temperature	20°C
Retraction distance	3.2 mm
Retraction speed	30 mm/s
Costing distance	0.2 mm
Retraction vertical lift	0.2 mm

Table S2. Measured corrosion rates in 5% HCl of 316L + Cu samples.

Copper Content	Sintering Dwell Time	Densification	Corrosion Rate (g·h ⁻¹ ·m ⁻²)
0 %	5 h	71 %	5.14
	10 h	79 %	9.05
10 %	5 h	75 %	0.51
	10 h	86 %	0.44
20 %	5 h	87 %	0.38
	10 h	88 %	0.44
He et al. [30]	-	93 %	0.22
		98 %	0.08