

Supplementary Information

Laser Powder Bed Fusion Additive Manufacturing of a Low Modulus Ti-35Nb-7Zr-5Ta Alloy for Orthopedic Applications

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Table S1: X-Ray diffraction analysis results from the first four BCC peaks

Energy Density (J/mm³)	2θ ($^{\circ}$)	FWHM ($^{\circ}$)	Crystallite Size D (nm)	Dislocation Density (nm⁻²)	Microstrain ($\times 10^{-4}$)
46.6	38.44	0.047	180.5	0.03	5.833
	55.59	0.105	85.16	0.138	8.729
	69.67	0.124	78.24	0.163	7.755
	82.58	0.128	82.32	0.148	6.381
48.9	38.62	0.046	181.38	0.03	5.779
	55.74	0.146	61.76	0.262	12.007
	69.83	0.114	84.99	0.138	7.126
	82.72	0.128	82.44	0.147	6.362
50.0	38.30	0.047	179.84	0.031	5.875
	55.43	0.105	85.15	0.138	8.753
	69.53	0.113	85.25	0.137	7.131
	82.45	0.178	59.18	0.285	8.888
54.8	38.20	0.147	57.24	0.305	18.506
	55.35	0.145	61.71	0.263	12.093
	69.48	0.183	52.73	0.359	11.536
	82.42	0.178	59.16	0.286	8.893