

Materials List for:

Processing of Bulk Nanocrystalline Metals at the US Army Research Laboratory

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Materials

Name	Company	Catalog Number	Comments
Copper powder	Alfa Aesar	42623	Spherical, -100+325 mesh, 99.9%
Tantalum powder	Alfa Aesar	10345	99.97%, -325 mesh
Iron powder	Alfa Aesar	00170	Spherical, <10 micron, 99.9+%
Nickel powder	Alfa Aesar	43214	-325 mesh, 99.8%
Zirconium powder	American Elements	ZR-M-03-P	99.90%
SPEX mills (high energy shaker mills)	SPEX SamplePrep	8000M	
Zoz mills (high energy horizontal rotary ball mill)	Zoz GmbH	CM01 (small mill) CM08 (large mill)	
Focused Ion Beam	FEI	Nova600i Nanolab dual beam FIB/SEM	
Scanning Electron Microscope	FEI	Nova600i Nanolab dual beam FIB/SEM	
Precision Ion Polishing System	Gatan	Model 695	
Transmission Electron Microscope	JEOL	2100F	multipurpose field emission TEM
Atom Probe Tomography	CAMECA	LEAP 5000XR	
Equal Channel Angular Extrusion	ShearForm	custom built	
Hot Isostatic Press	Matsys		