

Materials List for:

# Hyperpolarized Xenon for NMR and MRI Applications

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URL: <https://www.jove.com/video/4268>

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## Materials

Name	Company	Catalog Number	Comments
Rb ingot	Sigma-Aldrich	276332-1G	
P <sub>4</sub> O <sub>10</sub>	Sigma-Aldrich	79610-500G	
Ar	Praxair		
Xe	Sigma-Aldrich	00472-1EA	
O <sub>2</sub>	Sigma-Aldrich	00476-1EA	
Laser system	QPC Lasers/Laser Operations	Brightlock 50	
Vacuum system	Pfeiffer	HiCube	
Thermocouples	Newport Omega	SA2F-KI-3M	
Silicon heater	Newport Omega	FMA5514	
Pressure transducer	Newport Omega	PR 33X-V-10	
Process meter	Newport Omega	INFCP-100B	
Mass flow controllers	Newport Omega	MFC	
PID regulators	Newport Omega	CN7800	
Control Software	Newport Omega	DasyLab	
Data acquisition	Newport Omega	Daqboard 3000	
Vacuum sensor	Oerlikon	TTR91	
Vacuum controller	Vacom	MVC-3	
Beam collimator	Thorlabs	F810SMA-780	
Polarizing beam splitter cube	Thorlabs	GL15-B	
λ/4 wave plate	Thorlabs	WPQ10M-780	
Beam expansion lenses	Thorlabs		
Optical spectrometer	Ocean Optics	HR4000	
Optical fiber	Ocean Optics		
Low pressure NMR tube	Wilmad	513-7LPV-7	
5mm NMR tube	Sigma-Aldrich	HX58.1	
Helmholtz coils	Phywe	06960-00	
Fused silica capillaries	Polymicro	TSG 250350	