

Materials List for:

Functional MRI in Conjunction with a Novel MRI-Compatible Hand-Induced Robotic Device to Evaluate Rehabilitation of Individuals Recovering from Hand Grip Deficits

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Materials

Name	Company	Catalog Number	Comments
Ball bearings, plastic with glass balls (8)	McMaster-Carr	6455K97	
Bi-directional logic level converter	Adafruit	395	
Dual LS7366R Quadrature Encoder Buffer	SuperDroid Robots	TE-183-002	
Feather M0 WiFi w/ATWINC1500	Adafruit	Adafruit 3010	
Flanged nuts, fiberglass, 3/8"-16 (8)	McMaster-Carr	98945A041	
Garolite rod, 3/4" dia, 4' long	McMaster-Carr	8467K84	
Laptop	Various		Any laptop with USB2.0 port(s) and MATLAB
Load Cell (20kg)	Robotshop	RB-PHI-119	
Load Cell Amplifier- HX711	Mouser	474-SEN-13879	
MATLAB	MathWorks		2008 version or later with Psychophysics Toolbox
Magnetic resonance imaging scanner	Siemens	Skyra 3T	3T full body scanner with BOLD and GRAPPA capabilities
MR_CHIRODV3	fabricated in-house		Bespoke plastic & 3D printed structure
Op amp development board	Schmartboard	710-0011-01	
Panel Mount Power Supply	Delta	PMT-D2V100W1AA	
Plastic tubing & tube fittings	McMaster-Carr	various	
Pyrex/graphite piston/cylinder module	Airpot	2KS240-3	
Screws, 1/4"-20, nylon	McMaster-Carr	various	
Shaft Collars for 3/4" dia shaft, nylon (2)	McMaster-Carr	9410T6	Stock metal clamping screws replaced with plastic screws
Shielded cables (2)	US Digital	CA-C5-SH-C5-25	
Threaded rod, fiberglass, 3/8"-16	McMaster-Carr	91315A010	
Transmissive optical encoder code strip	US Digital	LIN-2000-3.5-0.5	
Transmissive Optical Encoder Module	US Digital	EM2-0-2000-I	

PTFE sleeve bearings	McMaster-Carr	2639T32	
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