

Materials List for:

Tuning Oxide Properties by Oxygen Vacancy Control During Growth and Annealing

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Materials

Name	Company	Catalog Number	Comments
SrTiO ₃	Crystec		Single crystalline (001) oriented, 0.05-0.2 degree miscut angle
LaAlO ₃	Shanghai Daheng Optics and Fine Mechanics Co.Ltd.		Single crystalline
Al ₂ O ₃	Shanghai Daheng Optics and Fine Mechanics Co.Ltd.		Single crystalline
Chemicals and gases	Standard suppliers		
Silver paste	SPI Supplies, Structure Probe Inc		05001-AB, High purity silver paint
Ultrasonicator	VWR		USC500D HF45kHz/100W
Wedge wire bonder	Shenzhen Baixiangyuan Science & Technology Co.,Ltd.		HS-853A Aluminum wire bonder
Pulsed laser deposition	Twente Solid State Technologies (TSST)		PLD from TSST with software version V3.0.29, equipped with a 248 nm KrF nanosecond laser (Compex Pro 205 F) from Coherent
Resistance measurement setup	Custom made		Based on the following electrical instruments and custom written software: Keithley 6221 DC and AC current source Keithley 2182A nanovoltmeter Keithley 7001 switch system with a matrix card Keithley 6487 picoammeter
Hall measurements	Cryogenics		Based on the following electrical instruments and custom written software: Keithley 2400 DC current source Keithley 2182A nanovoltmeter Keithley 7001 switch system with a matrix card
Furnace	Custom made		Custom written software control of a FTF 500/70 tube furnace from Scandia Ovn AS and a eurotherm 2216e temperature controller