

Materials List for

In Situ Gas Analysis and Fire Characterization of Lithium-Ion Cells During Thermal Runaway Using an Environmental Chamber

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Citation

Kwon, B., Cui, W., Sharma, A., Liao, Y.T., Takahashi, F., Juarez-Robles, D., Parhizi, M., Jeevarajan, J. *In Situ Gas Analysis and Fire Characterization of Lithium-Ion Cells During Thermal Runaway Using an Environmental Chamber. J. Vis. Exp.* (193), e65051, doi:10.3791/65051 (2023).

Date Published

March 31, 2023

DOI

10.3791/65051

URL

jove.com/video/65051

Materials

Name	Company	Catalog Number	Comments
Balance	A&D	EJ-6100	
Carbon filter	Whatman	WHA67041500	
Current transducer	NK Technologies	AT1-010-000-FT	
Front camera	Sony	FDR-AX53	
FTIR gas analyzer	Fire Testing Technology	Protea atmosFIR AFS-A-15	
Heating tape (1.00" x 2.00")	Birk Manufacturing, Inc.	BK3512-19.6-L24-03	
High-temperature resistant tape	Kapton		
Hydrogen sensor	Amphenol	AX220135	
K-type, thermocouple	Omega	KMQSS-020U-12	
LabVIEW	National Instruments		
Matlab	MathWorks		
NI-9213	National Instruments	NI-9213	
NI-9219	National Instruments	NI-9219	
NI-cDAQ-9174	National Instruments	NI-cDAQ-9174	
NI-USB-6009	National Instruments	NI-USB-6009	
PID controller	Omega	CN8200	
PILOT5000 Chemical Resistant Diaphragm Vacuum Pump	The Lab Depot	TLD5000	
Pressure relief valve	Straval	RVL20-10T-N4675	
Pressure Transmitter	Keller	0308.01601.081303.02	
Pure Nickel Strip (0.1x5x100mm 99.6% Nickel)	U.S. Solid Product		
Respirator	McMaster	55865T52	
Respirator Cartridge	Honeywell	75Scp100L	
Rotary vane vacuum pump (0.5 hp)	Alcatel	Pascal 2010	

Side camera	Sony	HDR-CX110	
Spot Welder	SUNKKO	737G+	
TeamViewer	TeamViewer		
Voltage transducer	CR Magnetics Inc.	CR4510-50	