

# The Traceable Calibration of Thrust Stand by Electrostatic Force

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## Citation

Wang, B., Yang, Y., Hu, Z., Zheng, Y. The Traceable Calibration of Thrust Stand by Electrostatic Force. *J. Vis. Exp.* (), e63465, doi:10.3791/63465 (2022).

## Date Published

January 31, 2022

## DOI

10.3791/63465

## URL

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## Materials

Name	Company	Catalog Number	Comments
Motorized linear stage	Zolix	TSA50-C	Resolution 0.625 $\mu\text{m}$
Capacitance bridge	Andeen-Hagerling	AH2550A	Resolution 0.8 aF, Accuracy $\pm 5$ PPM
High voltage source measure unit (SMU) instrument	Keithley	2410	Precision 0.012%, $\pm 5$ $\mu\text{V}$ – $\pm 1100$ V
Laser interferometer	Renishaw	RLE10	Resolution 10 nm
Circular parallel plate capacitor	Processed by high precision grinding		The plates are processed by high precision grinding of aluminum alloy. The diameter of plate A is 6 cm, and the diameter of plate B is 4 cm.
Thrust stand	Processed by high precision grinding		Pendulum type thrust stand