

Materials List for:

Measurement of Dynamic Force Acted on Water Strider Leg Jumping Upward by the PVDF Film Sensor

Lele Zhang¹, Meirong Zhao¹, Zhiyi Wang¹, Yunxi Li¹, Yinguo Huang¹, Yelong Zheng¹

State Key Laboratory of Precision Measuring Technology and Instruments, Tianjin University

Correspondence to: Yelong Zheng at zhengyelongby@163.com

URL: https://www.jove.com/video/58221

DOI: doi:10.3791/58221

Materials

Name	Company	Catalog Number	Comments
PVDF film sensor	TE Connectivity	DT1-028K/L	The PVDF film sensor is used to sense the dynamic contact force .
Charge amplifier	Wuxi Shiao Technology co.,Ltd	YE5852B	The charge amplifier is an electronic current integrator that produces a voltage output proportional to the integrated value of the input
Data acquisition device	National Instruments	USB-4431	The data acquisition device is used to read the voltage data.
Displacement stage	ZOLIXINSTRUMENTS CO.LTD	KSAV1010-ZF	KSAV1010/2030-ZF is a wedge vertical stage with high-resolution, high-stability and high-load.
CCD camera	Shenzhen Andonstar Tech Co., Ltd	digital microscope A1	Frame rate: 30 frames/sec;Focal distance: 5mm - 30mm
Computer	Lenovo	G480	
Servomotor	EMAX US Inc.	ES08MD	It's not bad this servo with speed varying from 0.10 sec/60° / 4.8v to 0.08 sec/60°/6.0v.
Mechanical Pipettes	Dragon Laboratory Instruments Limited	YE5K693181	The pipettes cover volume range of 0.1 µl to 2.5 µl