

Self-Powered Acceleration Sensor Based on Multilayer Suspension Structure and TPU-RTV Film for Vibration Monitoring

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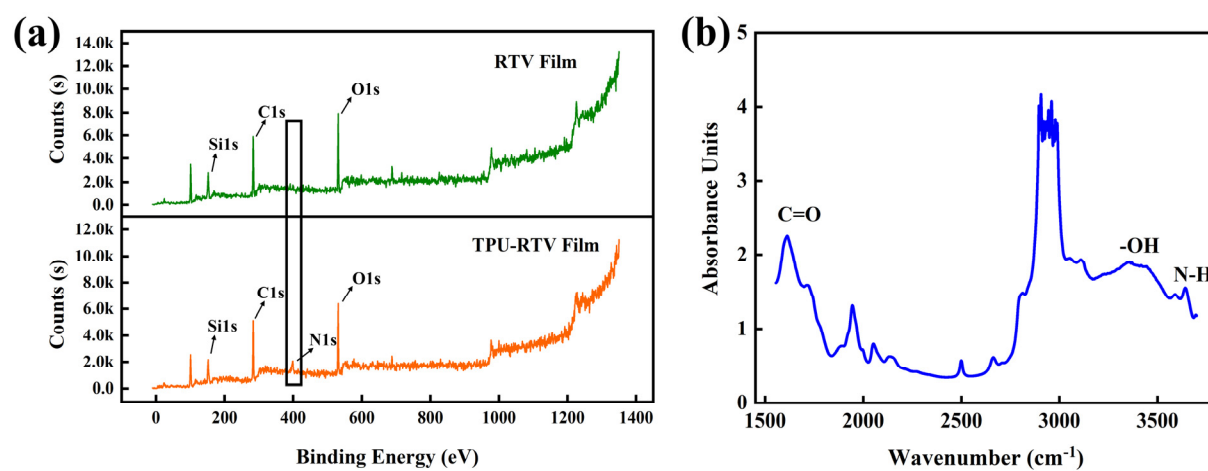


Figure S1. (a) Material properties of the films tested by XPS. (b) Material properties of doped films tested by FT-IR.

Table S1. Comparison of vibration energy harvesting and self-powered sensors

Sensitivity (V/(m/s ²))	Linearity	Range (m/s ²)	Output voltage (V)	References
N.A.	N.A.	1.07 ~ 1.25	3.1	[1]
143.2	N.A.	0.5 ~ 5	245	[2]
17.64	0.99	0 ~ 1.76×10 ⁵	35	[3]
0.26	N.A.	0 ~ 60	15.5	[4]
0.29	N.A.	13 ~ 40	20	[5]
1.53	N.A.	1 ~ 15	16	[6]
1.33	N.A.	0 ~ 6	0.01	[7]
N.A.	N.A.	N.A.	316	[8]
N.A.	N.A.	N.A.	1	[9]
N.A.	N.A.	N.A.	150	[10]
N.A.	N.A.	N.A.	8.2	[11]
N.A.	0.99	N.A.	0.4	[12]
23.08	0.98	1 ~ 15	250	This work

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Video S1. Real-time monitoring of a shaker by the MSSAS.

Video S2. The MSSAS powers a small calculator.