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Supporting Information



Figure S1. a) Cross-section imaging of GS-fiber by optical microscope. The scale bar was 500 μ m. b) FTIR of organogel electrode and corresponding characteristic band.



Figure S2. Output voltages of Parallel-teng after different contact-separation cycles.



Figure S3. The a) output voltages, b) Q_{sc} and c) J_{sc} , electrode resistances of Parallel-teng at stretching states. λ was the ratio of the fabric length at stretching states *vs* original state in warp fibers direction.



Figure S4. Parallel-teng's output voltages in different temperature environments. The output performances were obtained by hand tapping.



Figure S5. Output performances of Parallel-teng in two-electrode working mode. The counterpart materials were Kapton, paper and cotton.

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TENG textile	Output voltage	Qsc	Electrode	J _{sc} (mA/m ²)	Matched	Power	Capacitor Charging rate		
			resistance		resistance	Density	(mV/s)		
			(MΩ)		(MΩ)	(mW/m ²)	1.0 µF	4.7 µF	22 µF

Table S1. Comparison of the properties of Parallel-teng and GS-teng

Parallel-teng	92 V	24.8 nC	1.2	5.84	10	187	634	231	44
GS-teng	40 V	9.8 nC	324	0.49	300	42	213	32	Non