

Supporting Information

Capture and Detection of Escherichia coli with Graphene Aerogels

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Table S1. The fitting parameters of culture medium.

Time (min)	R_m (ohm)	CPE1 (S·secⁿ)	R_{ct} (ohm)	CPE2 (S·secⁿ)	C_{g/e} (F)	R_{g/e} (ohm)	R_L (ohm)
15	1894	4.697E-7	53.15	0.0308	0.1615	0.01	2.675E010
30	1859	4.771E-7	52.83	0.03041	0.1608	0.258	8.515E016
45	1937	2.779E-7	50.46	0.118	5.385E-8	14.26	1.304E009
60	1811	4.587E-7	52.68	0.03006	0.1597	0.099	1.889E012

Table S2. The fitting parameters of 10000 cfu/mL *E. coli*.

Time (min)	R_m (ohm)	CPE1 (S·secⁿ)	R_{ct} (ohm)	CPE2 (S·secⁿ)	C_{g/e} (F)	R_{g/e} (ohm)	R_L (ohm)
15	42.33	0.0251	117.2	0.1057	1.65E-8	27.13	3.79E016
30	38.97	0.0247	74.53	0.1038	2.332E-8	30.3	6.869E011
45	13.43	0.4259	87.84	0.5568	3.227E-8	32.49	1.211E016
60	23.57	0.7564	76.71	0.2672	1.561E-8	15.36	1.213E008