

Electronic Supplemental Information
Effect of Different Gel Electrolytes on Graphene Based Solid-State
Supercapacitors

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Table S1. Specific capacitance, energy and power densities of devices with different
gel electrolytes.

Electrolyte (0.01mol-1gPVA- 10mlH ₂ O)	Specific capacitance ($\mu\text{F}/\text{cm}^2$)	Energy density (mWh/cm^2)	Power density (mW/cm^2)
H ₃ PO ₄	15	1.3×10^{-6}	1.1×10^{-3}
H ₂ SO ₄	820	4.5×10^{-4}	1.6×10^{-1}
KOH	2.2	7.6×10^{-8}	1.2×10^{-4}
NaOH	2.4	8.5×10^{-8}	1.2×10^{-4}
NaCl	0.5	6.4×10^{-8}	1.0×10^{-4}
KCl	1.5	2.1×10^{-7}	1.4×10^{-4}

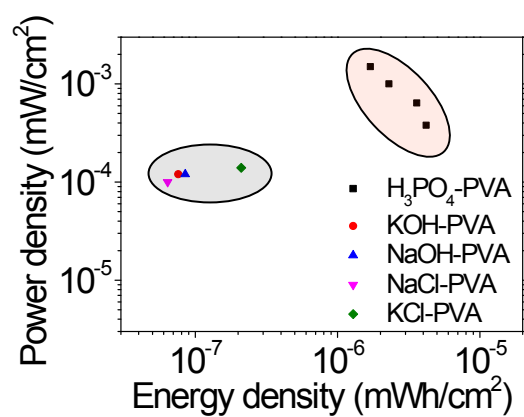


Figure S1. Ragone plots for the supercapacitors with the H₃PO₄-PVA, KOH-PVA, NaOH-PVA, KCl-PVA and NaCl-PVA gel electrolytes. The plots in up-right circle region is for devices using H₃PO₄-PVA electrolyte, while the left circle is for those using base and salt electrolytes.