

Support Information

Ultralow loading of carbon quantum dots leading to significantly improved breakdown strength and energy density of P(VDF-TrFE-CTFE)

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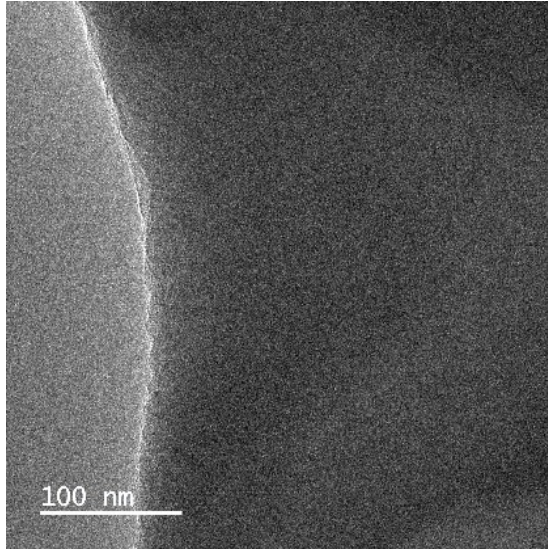


Figure S1. The TEM image of 0.2 wt% CQDs nanocomposite.

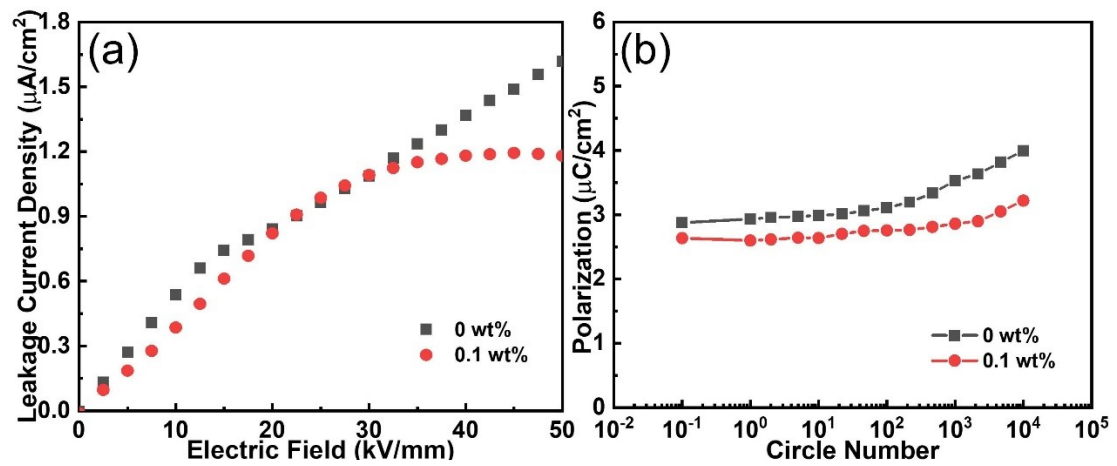


Figure S2. (a) The leakage current density and (b) the cycle test of pristine polymer and 0.1 wt% CQDs nanocomposite at electric field of 50 kV/mm.

Table S1. Property comparisons with similar material systems.

samples	$E_b/\text{kV mm}^{-1}$	$U_e/\text{J cm}^{-3}$	$\eta/\%$	References
P(VDF-TrFE-CTFE)	500	10.3	33.3	<i>Polymer</i> , 2009, 50, 707-715.
4 vol.% $\text{KTa}_{0.2}\text{Nb}_{0.8}\text{O}_3$ - BaTiO ₃ /P(VDF-TrFE- CTFE)	300	7.7	-	<i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 2501–2511.
P(VDF-TrFE-CTFE)-g- PMMA/PLZST	450	13.0	78	<i>IET Nanodielectrics</i> , 2021, 4, 171-178.
4 vol.% P(VDF-TrFE- CTFE)/BNNSs	335	8.42	-	<i>IET Nanodielectrics</i> , 2022, 5, 50-61.
5 vol.%TiO ₂ @SnO ₂ /P(VDF -TrFE-CTFE)	~265	-	-	<i>Polymers</i> , 2020, 12, 85.
0.1 wt% CQDs/ P(VDF- TrFE-CTFE)	340	12.9	52.3	This work