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# **Graphene oxide quantum dot-derived nitrogen-enriched hybrid graphene nanosheets by simple photochemical doping for high-performance supercapacitors**

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## Highlights

- Binder-free electrodes were fabricated with GQDs and GO for supercapacitors.
- GQDs as “spacers” insert between GO sheets to increase layer spaces and enlarge, surface areas.
- The combination of photoreduction and  $\text{NH}_3$  not only reduces the GO and GQDs, composites in a shorter time but also induces a high level of nitrogen.
- Nitrogen-enriched graphene (denoted as NrGO/GQDs) showed the highest specific, capacitance.

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