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# **Fabrication of functionalized graphene oxide/maleic anhydride grafted polypropylene composite film with excellent gas barrier and anticorrosion properties**

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## **Highlights**

- The mGO-ODA/MAPP composites were prepared for gas barrier and anti-corrosion studies.
- The H<sub>2</sub> and O<sub>2</sub> gas barrier film was fabricated by spray coating of composite on nylon film.
- The barrier film showed 95.0% reduction of O<sub>2</sub>GTR compared to the nylon film.
- The lowest corrosion rate was  $2.26 \times 10^{-3}$  mm/year for the composite.

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