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$NiCoO_2$@CMK-3 composite with nanosheets-mesoporous structure as an efficient oxygen reduction catalyst

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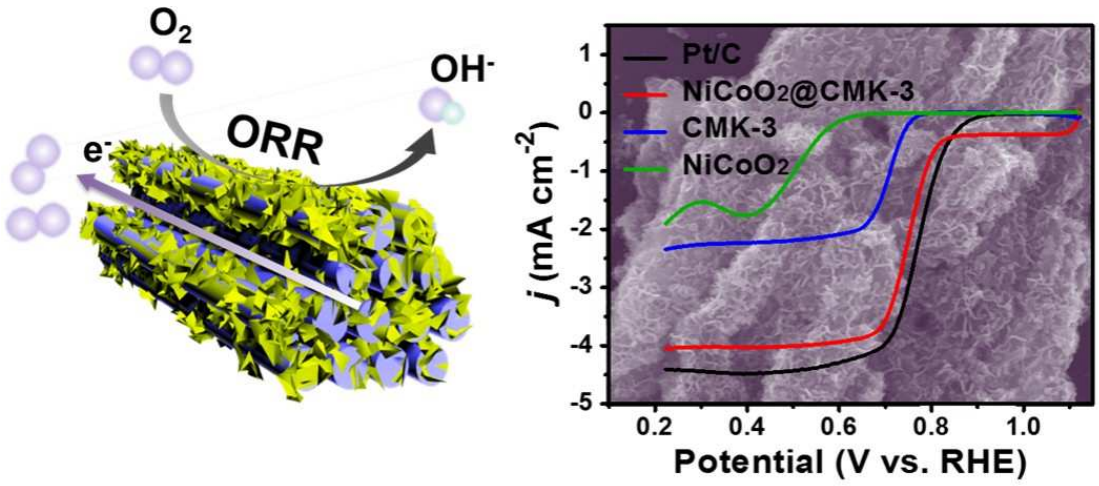
Graphical Abstract



A novel $NiCoO_2$@CMK-3 composite with nanosheets-shaped hierarchical structure was synthesized via a facile hydrothermal method. The as-prepared $NiCoO_2$@CMK-3 composite exhibits comparable ORR electrocatalytic activity and better methanol-tolerance and electrochemical stability to the commercial Pt/C catalyst. The outstanding performance confirms the $NiCoO_2$@CMK-3 composite as a promising efficient ORR catalyst in fuel cells and metal-air batteries.