N/S co-doped Zeolitic Imidazolate Frameworks for Oxygen Reduction Reaction Kinectics

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Metal organic framework (MOF) materials get increasing interests and show potential catalytic performances in various fields. Zeolitic Imidazolate Frameworks is one of MOF materials and also get interests from many researchers. For better performancing fuel cells, accomplishing a highly active cathode surface with efficient electrocatalysts for oxygen reduction kinetics is inevitable. Herein, we show a neglected but important issue in the ZIF-derived materials. To achieve better performance in oxygen reduction reaction, we prepare cobalt with nitrogen and sulfur co-doped carbon (Co-NSC) with various conditions. ZIF8@ZIF67 is reported in this work and show synergistic effect of co-doping in acidic media.