

# Study on structure regulation and synergistic adsorption and degradation mechanism of N-doped barium titanate strontium aerogel

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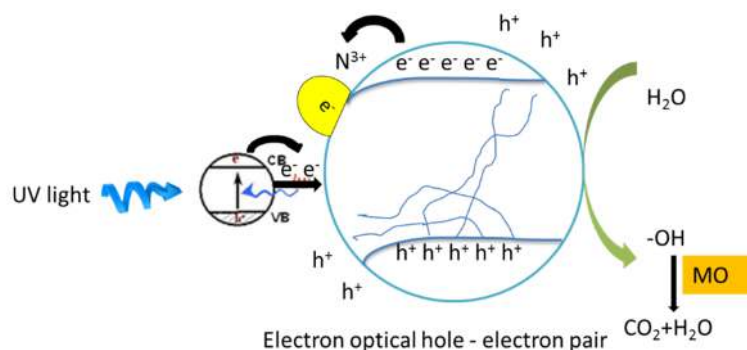
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**Abstract :** Perovskite-type aerogel of new material ternary system has the characteristics of large porous specific surface area and strong adsorption, and has important application potential in the field of photocatalytic degradation such as water treatment technology. At present, the low efficiency, small functional adjustability and difficulty in recovery and reuse of photocatalyst are the bottlenecks restricting the further development of ternary perovskite aerogel. Preliminary studies have shown that the use of different valence metal ions or non-metallic elements for element substitution or doping of ternary perovskite aerogel structural units and the construction of porous network structure with large specific surface area are expected to achieve efficient degradation adsorption. The implementation of this project will provide a new idea and technical support for the visible light response of barium strontium titanate in terms of property modification and photocatalytic degradation of dye wastewater, which is conducive to promoting its engineering application process.

**Keywords:** barium titanate strontium aerogel; Band gap adjustment; Photocatalytic degradation; Property modification; Visible respons

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**Fig.1** Mechanism of N - doped BaTiO<sub>3</sub> strontium aerogel adsorption degradation of dyes

### **Reference**

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