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# ACCEPTED MANUSCRIPT

# Recent Developments in Nanostructured Inorganic Materials for Sorption of Cesium and Strontium: Synthesis and Shaping, Sorption Capacity, Mechanisms, and Selectivity – A Review

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Highlights for

- Recent Developments in Nanostructured Inorganic Materials for Sorption of Cesium and Strontium: Synthesis and Shaping, Sorption Capacity, Mechanisms, and Selectivity – A Review
- Delhia Alby<sup>1</sup>, Clarence Charnay<sup>1</sup>, Marc Heran<sup>2</sup>, Bénédicte Prelot<sup>1</sup>, Jerzy Zajac<sup>1</sup>
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- Highlights
- Recent trends in the sorbent preparation for removal of Cs and Sr from wastewater
- Nanostructured inorganic ion exchangers with improved retention performance
- Preparation and shaping procedures, sorption capacity, mechanisms, and selectivity

### **ABSTRACT**

Liquid wastes containing non-ferrous heavy metal ions and some radionuclides, <sup>137</sup>Cs and <sup>90</sup>Sr in particular, represent one of the most dangerous sources of environmental contamination. The

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