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ACCEPTED MANUSCRIPT

Analysis of Contaminated Nuclear Plant Steel by Laser-Induced Breakdown Spectroscopy

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Highlights

- Standoff LIBS analysis of Sr and Cs contaminated nuclear plant steel is demonstrated at millimetre distances.
- Standoff LIBS has the potential to allow surveying of contamination at much larger distances (metres).
- Multi pulse LIBS can also provide depth resolved information on contaminant distribution in steel.

Abstract

Laser Induced Breakdown Spectroscopy (LIBS) has the potential to allow direct, standoff measurement of contaminants on nuclear plant. Here, LIBS is evaluated as an analytical tool for measurement of Sr and Cs contamination on type 304 stainless steel surfaces. Samples were

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