

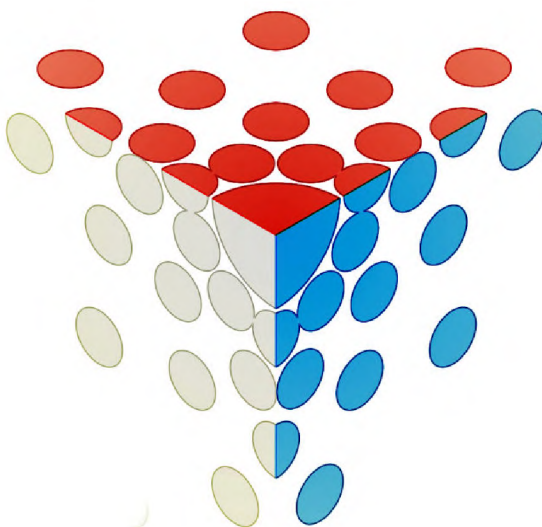
The joint event of

**The Eleventh Young Researchers' Conference
Materials Science and Engineering**

and

**The First European Early Stage Researchers' Conference on
Hydrogen Storage**

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PROGRAM AND THE BOOK OF ABSTRACTS

**MATERIALS RESEARCH SOCIETY of SERBIA
INSTITUTE of TECHNICAL SCIENCES of SASA
VINČA INSTITUTE of NUCLEAR SCIENCES, UNIVERSITY of BELGRADE
HYDROGEN STORAGE INITIATIVE SERBIA**

PROGRAM AND THE BOOK OF ABSTRACTS

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SCIENCE AND ENGINEERING**

AND

**THE 1ST EUROPEAN EARLY STAGE RESEARCHERS' CONFERENCE ON HYDROGEN
STORAGE**

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Nenad Ignjatović

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COMPARATIVE ANALYSIS OF CESIUM SORPTION BEHAVIOR OF THERMALLY, MECHANO-CHEMICALLY MODIFIED AND RAW DIATOMITE

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This paper presents the effect of cesium immobilization in raw and modified diatomaceous earth (DE). The modification of diatomite was carried out by mixing DE and Ti powder mechano-chemically and thermally. X-ray diffraction (XRD) of samples modified by different way was performed. Thermal processing leads to structural changes of diatomite. The specific surface of diatomite which is available for the immobilization of cesium is modified by mechano-chemical treatment for different time. The effect of cesium immobilization of diatomite increases after mechano-chemical treatment, especially for 22h.

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