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BOOK OF ABSTRACTS



A PRELIMINARY STUDY OF TL AND OSL TRAPS FOR THE ARAGONITE MINERAL

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Luminescence (thermoluminescence (TL) and optically stimulated luminescence (OSL)) methods are important for dosimetric studies. Understanding the TL and OSL traps of dosimetric materials is critical to explain their different and similar properties. In this study, TL and OSL signals of natural aragonite mineral were recorded using lexsys smart TL/OSL reader after different beta irradiations. TL and OSL trap properties were compared with each other using the obtained TL glow curves and OSL signals. In sequential measurements, while the TL signals were observed after the OSL measurements, the OSL signals were not observed after the TL measurements. In conclusion, TL and OSL traps are located close to each other within the band gap of aragonite mineral and the OSL traps affect the TL signals if the TL measurements are done firstly.

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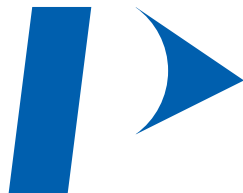
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