

## Radiation damage in quartz: Simulation for various occurrences of radionuclides with different sectioning

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Lighter colored part due to alpha radiation from neighboring radioactive mineral is often seen in quartz under cathodoluminescence (CL). We simulated radiation damage for various occurrences of radionuclides with different sectioning. A great effect of the spatial distribution pattern in addition to the retention time and the concentration of radionuclides was shown. The character of radiation damage in section was also shown in case for the spherical occurrences. The results together with further discussion will make use of the CL halo as a dosimeter.