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## Analysis of corundum crystals optical and ultraviolet transmittance after electron beam exposure

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Development of new materials and instrumentations for detection of charge particle beams and measuring their parameters are very topical in modern accelerator physics [1]. Cherenkov effect is well-known phenomenon that can be used for beam diagnosis. Commonly, diamond crystals is considered to be used as Cherenkov radiators for this purposes since this material has high resistance to radiation exposure. However, corundum crystals which are much cheaper also can be considered for beam diagnosis applications [2]. In previous study we demonstrated that corundum crystals provides high stability of their optical properties under electron irradiation [3]. This report continues investigations in changes of optical and ultraviolet transmittance of corundum crystals irradiated with high dose rate electron beams.

### References

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