PSI Center for Corporate Services

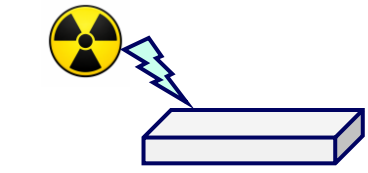
RADIOPHOTOLUMINESCENCE (RPL)

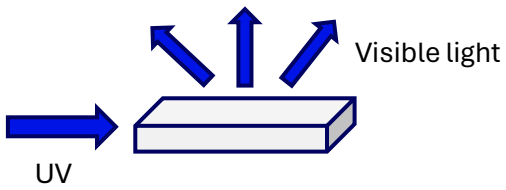
personal dosimeters for photons and beta rays

DESIGN

PRINCIPLE OF OPERATION

Radiation creates stable color centers





visible light intensity is proportional to dose
(readout does not destroy color centers)

SPECIFICATIONS

Minimum detectable dose:
0.05 mSv*

Maximum dose:
5 Sv*

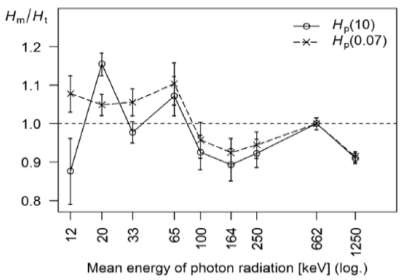
Photon energy range:
10 keV – 10 MeV* (see graph)

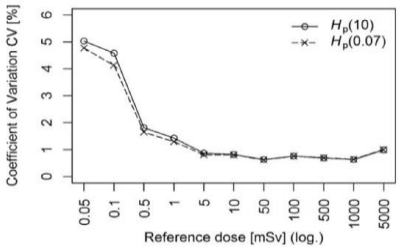
Beta energy range:
^{147}Pm - ^{90}Sr/^{90}Y*

Fading:
None

Reproducibility:
see graph

DATA





* Assenmacher et al. Radiat. Meas. 106, 235-241 (2017)

The information provided is for illustrative purposes only and should not be considered a substitute for the original data or details contained in the referenced materials.