

Abstract Submitted
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Analysis of the effects of improved calculations of bremsstrahlung and other atomic processes effects on key dosimetric data. PAUL BERGSTROM, NIST — An accurate characterization of radiative processes in certain media is a critical element in primary dosimetric standards. Depending on the energy spectrum of the radiation that is being measured, photoionization, inelastic photon-atom scattering and pair production are key processes as is electron bremsstrahlung in the atomic field. It has been nearly three decades since much of the work that serves as the foundation for this key data was established. Since that time, many developments in the evaluation of these processes have occurred. These developments are applied to understanding changes that may be necessary in primary dosimetric standards.

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