Abstracts

Simulations of Photon Migration and Image Formation in Highly Scattering Media

J.C. Haselgrove. "Simulations of Photon Migration and Image Formation in Highly Scattering Media." 1991 MTT-S International Microwave Symposium Digest 91.2 (1991 Vol. II [MWSYM]): 909-912.

A computer model has been used to simulate transillummation imaging of a sharp edge in the center of a highly scattering object. It is shown that R the width of the edge-spread-function of an infinitely absorbing edge increases with the migration time of the photon in a non-linear fashion. Furthermore, the spread - function is offset with respect to the edge: the offset is linearly related to the migration time. The effect is explained in terms of the non-linear nature of the imaging process.

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