

Gamma Absorption Coefficient

Nuclear Physics Lab

Report 3

Questions:

1. Explain the interaction between beta particles and the absorbing matter.
2. What affects the transmittance of radiation through materials?
3. What function describes radiation attenuation in the absorbing medium?
4. What is the difference between the linear absorption coefficient and the mass attenuation coefficient?
5. What is the relationship between μ and μ_m .

References:

Knoll, G. F.; Radiation Detection and Measurement; 3rd ed.
Kenneth, S. K.; Introductory Nuclear Physics.

¹ <http://www.ecse.rpi.edu/~schubert/Course-Teaching-modules/A054-Absorption-coefficient-of-various-semiconducting-materials.pdf>