

# Meia espessura para Al e Co

## Referências:

NIST – programa XCOM

The screenshot shows the NIST Physical Reference Data website. The main content area lists several data categories with brief descriptions:

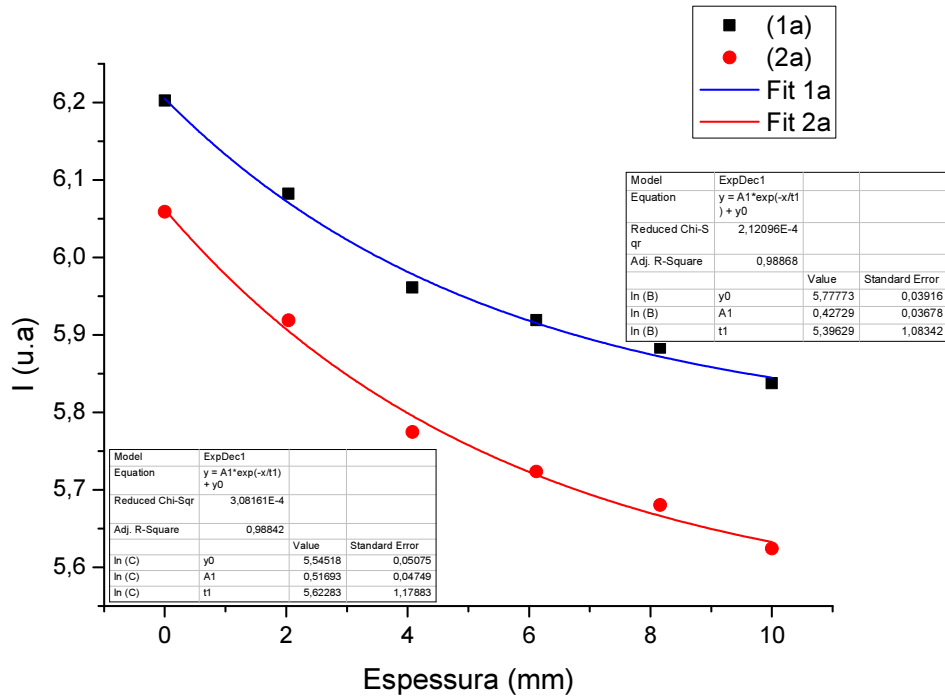
- Physical Reference Data**: Provides access to the holdings of NIST Physical Measurement Laboratory online data organized by element.
- Elemental Data Index**: Provides access to the holdings of NIST Physical Measurement Laboratory online data organized by element.
- Periodic Table: Atomic Properties of the Elements**: Contains NIST critically-evaluated data on atomic properties of the elements. Suitable for high-resolution color printing for desk or wall-chart display.
- Physical Constants**: Contains values of the fundamental physical constants and a related bibliographic database.
- Atomic Spectroscopy Data**: Contains databases for energy levels, wavelengths, and transition probabilities for atoms and ions and related bibliographic databases.
- Molecular Spectroscopic Data**: Includes databases containing spectroscopic data for small molecules, hydrocarbons, and interstellar molecules. In addition, there are two publications containing equations and the underpinning theory for molecular spectroscopy.
- Atomic and Molecular Data**: Contains databases on thermophysical properties of gases, electron-impact cross sections (of atoms & molecules), potential energy surfaces of group II dimers, and atomic weights and isotopic compositions.
- X-Ray and Gamma-Ray Data**: Contains databases on the interaction of x-rays and gamma-rays with elements and compounds.
- Radiation Dosimetry Data**: This database calculates stopping-power and range tables for electrons, protons, or helium ions.
- Nuclear Physics Data**: Contains a table of the half lives of 65 radionuclides and a database of the isotopic compositions, atomic weights and relative atomic masses of the elements.
- Condensed Matter Physics Data**: This database consists of evaluated data for use in total-energy calculations of electronic structure by density-functional theory. It contains total energies and orbital energy eigenvalues for all atoms from hydrogen to uranium.
- Other NIST Data**: Provides access to all data sets at NIST.

The right sidebar includes a search bar, a Google Translator link, a graph showing a spectrum, and contact information for the NIST Physical Measurement Laboratory.

Outra fonte: International Atomic Energy Agency (iaea.org)

Meia espessura			
Cs (662 KeV)		Co (1,17 e 1,33 MeV)	
Al	Pb	Al	Pb
34,2 mm	6,5 mm	5,36 cm	1,1 cm

Dados obtidos anteriormente



A(X)	B(Y)	C(Y)	D(yEr-)	F(Y)	G(Y)
Espessura mm	intensidade	intensidade	desvio	ln (B)	ln (C)
0	494	428	20,68816	6,20254	6,05912
2,04	438	372	19,2873	6,08222	5,91889
4,08	388	322	17,94436	5,96101	5,77455
6,12	372	306	17,49286	5,91889	5,72359
8,16	359	293	17,11724	5,88332	5,68017
10	343	277	16,64332	5,83773	5,62402

494 → 247 → > 10 mm  
 428 → 214 → ~ 10 mm