1. Record Nr. UNISA996279879703316 Titolo ANSI Std N42.12-1980: American National Standard Calibration and Usage of Sodium Iodide Detector Systems / / Institute of Electrical and **Electronics Engineers** New York, New York:,: IEEE,, 1980 Pubbl/distr/stampa **ISBN** 0-7381-4163-1 Descrizione fisica 1 online resource (11 pages) Disciplina 621.381522 Soggetti Germanium diodes - Standards Gamma rays - Measurement - Standards Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Methods are established for performance testing, calibration, and use Sommario/riassunto of sodium iodide detector systems for the measurement of gamma-ray emission rates of radionuclides, assay for radioactivity, and the determination of gamma-ray energies. Both energy calibration and efficiency calibration are covered. Three techniques are considered: total spectrum counting, which employs a system that counts all events above a low-energy threshold; single-channel analyzer counting, which employs a system with a counting window that establishes upper and lower energy boundaries; and multichannel analyzer counting, which employs a system utilizing multiple counting windows.