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Sommario/riassunto

This tutorial text provides an introduction to the subject of radiation thermometry, focusing on sources of measurement error and giving advice on methods for minimizing or eliminating these errors. Topics covered include: blackbody radiation, emissivity, reflection errors, and atmospheric absorption and emission; commonly used radiation thermometer types; uncertainty calculation; and procedures for in-house calibration of radiation thermometers. Included is a chapter containing detailed measurement examples for a variety of furnace types and operating conditions found in the methanol, ammonia, and refining industries.
