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Nota di contenuto	Front Cover; Specular Gloss; Copyright Page; Table of Contents; Preface; Notation; Video Clip Examples of Gloss in Different Applications; Disclaimer; Chapter 1 Introduction; Chapter 2 Light Reflection from Ideal Surface; 2.1. Electromagnetic theory of light waves; 2.1.1. Wave equation; 2.1.2. Maxwell equations for free space; 2.2. Light irradiance; 2.3. Light polarization; 2.4. Real refractive index; 2.5. Group velocity; 2.6. Normal reflection of light; 2.7. Light reflection at an oblique angle of incidence; 2.8. Complex refractive index; 2.9. Beer-Lambert law 2.10. Oblique angle reflection from light-absorbing isotropic media 2.11. Reflectance from anisotropic media; 2.12. Specular reflection from nanostructured medium; Chapter 3 Light Reflection from a Rough

Surface; 3.1. Statistical surface roughness parameters; 3.2. Light diffraction from finishing marks; 3.3. Kubelka-Munk function for diffuse reflection; 3.4. Specular reflection of laser beam from moderately rough surface; 3.5. Specular reflection from surface with normal distribution of surface heights; 3.6. Speckle pattern; 3.7. Statistical parameters for specular gloss

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5.5.4. Laser beam directionality

Sommario/riassunto

The aesthetic appearance of various objects is important to human beings. One measure of the quality of an object is its surface quality, which can be characterized with the concept of gloss. Nowadays measurement of the gloss is a routine off-line method in assessment of quality of product at various sectors of industry. The book gives a fresh treatment on the concept of gloss. Theoretical description will be on more general basis of optical physics than in other sources. The text will give a modern treatise of machine vision based glossmeters and furnish the ideas how to measure and analyse
