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Autore	Pignedoli, Antonio
Titolo	Atti del convegno in onore del prof. Antonio Pignedoli : Bologna 21-22 Ottobre 1988 / eds. Dip. Mat. Univ. Bologna, CNR
Pubbl/distr/stampa	Bologna : Dip. Mat. Univ. Bologna, 1988
Descrizione fisica	vii, 155 p. ; 24 cm.
Classificazione	AMS 00B AMS 00B30
Disciplina	510
Soggetti	Pignedoli, Antonio - Congresses
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Conference/Meeting Bologna 1988

2. Record Nr. UNINA9911006794703321

Autore	Stover John C
Titolo	Optical scattering : measurement and analysis / / John C. Stover
Pubbl/distr/stampa	Bellingham, Wash., : SPIE, 2012
ISBN	9781680151008 1680151002 9780819492524 0819492523
Edizione	[3rd ed.]
Descrizione fisica	1 online resource (332 p.)
Collana	SPIE Press monograph ; ; PM224
Disciplina	535/.43
Soggetti	Light - Scattering Optics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 283-302) and index.
Nota di contenuto	Preface to the first edition -- Preface to the second edition -- Acknowledgments for the second edition -- Preface to the third edition -- Acknowledgments for the third edition -- List of acronyms -- Chapter 1. Quantifying light scatter -- Chapter 2. Quantifying surface roughness -- Chapter 3. Scatter calculations and diffraction theory -- Chapter 4. Using Rayleigh-Rice to calculate smooth-surface statistics from the BRDF -- Chapter 5. Polarization of scattered light -- Chapter 6. Scattering models for discrete surface features -- Chapter 7. Instrumentation and measurement issues -- Chapter 8. Predicting scatter from roughness -- Chapter 9. Detection of discrete defects -- Chapter 10. Appearance and scattered light -- Chapter 11. Industrial applications -- Chapter 12. Published scatter standards -- Chapter 13. Scatter specifications -- Appendix A. Review of electromagnetic wave propagation -- Appendix B. Kirchhoff diffraction from sinusoidal gratings -- Appendix C. BSDF data -- Appendix D. Units -- References -- Works consulted.
Sommario/riassunto	The first edition of this book concentrated on relating scatter from optically smooth surfaces to the microroughness on those surfaces. After spending six years in the semiconductor industry, Dr. Stover has updated and expanded the third edition. Newly included are scatter

models for pits and particles as well as the use of wafer scanners to locate and size isolated surface features. New sections cover the multimillion-dollar wafer scanner business, establishing that microroughness is the noise, not the signal, in these systems. Scatter measurements, now routinely used to determine whether small-surface features are pits or particles and inspiring new technology that provides information on particle material, are also discussed. These new capabilities are now supported by a series of international standards, and a new chapter reviews those documents. New information on scatter from optically rough surfaces has also been added. Once the critical limit is exceeded, scatter cannot be used to determine surface-roughness statistics, but considerable information can still be obtained - especially when measurements are made on mass-produced products. Changes in measurement are covered, and the reader will find examples of scatter measurements made using a camera for a fraction of the cost and in a fraction of the time previously possible. The idea of relating scatter to surface appearance is also discussed, and appearance has its own short chapter. After all, beauty is in the eye of the beholder, and what we see is scattered light.