



Building Electro-Optical Systems: Making It all Work

By Hobbs, Philip C. D.

Wiley, 2009. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service! Summary:
Preface.Acknowledgments.1. Basic Optical Calculations.1.1 Introduction.1.2 Wave Propagation.1.3 Calculating Wave Propagation in Real Life.1.4 Detection.1.5 Coherent Detection.1.6 Interferometers.1.7 Photon Budgets and Operating Specifications.1.8 Signal Processing Strategy.2. Sources and Illuminators.2.1 Introduction.2.2 The Spectrum.2.3 Radiometry.2.4 Continuum Sources.2.5 Interlude: Coherence.2.6 More Sources.2.7 Incoherent Line Sources.2.8 Using Low-Coherence Sources: Condensers.2.9 Lasers.2.10 Gas Lasers.2.11 Solid-State Lasers.2.12 Diode Lasers.2.13 Laser Noise.2.14 Diode Laser coherence control.3. Optical Detection.3.1 Introduction.3.2 Photodetection in Semiconductors.3.3 Signal to Noise Ratios.3.4 Detector figures of merit.3.5 Quantum detectors.3.6 Quantum Detectors with Gain.3.7 Thermal Detectors.3.8 Image intensifiers.3.9 Silicon Array Sensors.3.10 How do I know which noise source dominates'.3.11 Hacks.4. Lenses, Prisms, and Mirrors.4.1 Introduction.4.2 Optical Materials.4.3 Light Transmission.4.4 Surface Quality.4.5 Windows.4.6 Pathologies of Optical Elements.4.7 Fringes.4.8 Mirrors.4.9 Glass Prisms.4.10 Prism Pathologies.4.11 Lenses.4.12 Complex Lenses.4.13 Other Lenslike Devices.5. Coatings, Filters, and Surface Finishes.5.1 Introduction.5.2 Metal Mirrors.5.3 Transmissive Optical Coatings.5.4 Simple Coating Theory.5.5 Absorptive Filters.5.6 Beam Dumps and Baffles.5.7 White Surfaces and Diffusers.6. Polarization.6.1 Introduction.6.2 Polarization of Light.6.3 Interaction of Polarization with Materials.6.4 Absorption

Reviews

This book is very gripping and exciting. I was able to comprehend everything out of this written e publication. You will not truly feel monotony at at any time of your respective time (that's what catalogs are for concerning should you question me).

-- **Eulalia Schamberger**

A top quality pdf and also the font applied was fascinating to learn. it was actually writtern extremely properly and valuable. I discovered this publication from my i and dad recommended this publication to find out.

-- **Jan Schowalter**