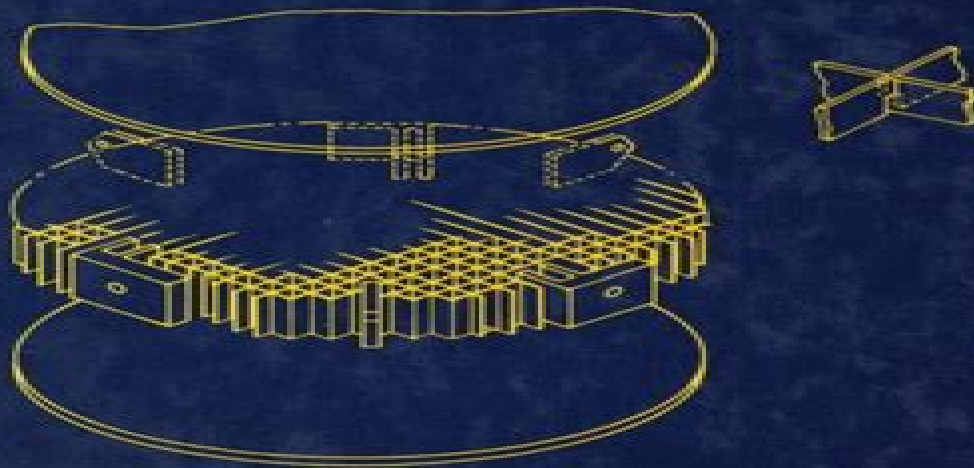


# **OPTO-MECHANICAL SYSTEMS DESIGN**



**PAUL R. YODER, JR.**

# Opto Mechanical Systems Design

**Paul Yoder, Daniel Vukobratovich**



## **Opto Mechanical Systems Design:**

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Yoder, Daniel Vukobratovich, Roger A. Paquin, 1992-10-29 Rewritten and updated this text provides information on opto mechanical systems design guidelines and their day to day applications in real environments It emphasizes proven techniques for accomplishing design tasks and outlines techniques for mounting various optical elements and groupings

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pertaining primarily to optics smaller than 50 cm aperture It summarizes the opto mechanical design process considers pertinent environmental influences lists and updates key parameters for materials illustrates numerous ways for mounting individual and multiple lenses shows typical ways to design and mount windows and similar components details designs for many types of prisms and techniques for mounting them suggests designs and mounting techniques for small mirrors explains the benefits of kinematic design and uses of flexures describes how to analyze various types of opto mechanical interfaces demonstrates how the strength of glass can be determined and how to estimate stress generated in optics and explains how changing temperature affects opto mechanical assemblies The second volume Design and Analysis of Large Mirrors and Structures concentrates on the design and mounting of significantly larger optics and their structures including a new and important topic detailed consideration of factors affecting large mirror performance The book details how to design and fabricate very large single substrate segmented and lightweight mirrors describes mountings for large mirrors with their optical axes in vertical horizontal and variable orientations indicates how metal and composite mirrors differ from ones made of glass explains key design aspects of optical instrument structural design and takes a look at an emerging technology the evolution and applications of silicon and silicon carbide in mirrors and other types of components for optical applications

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In a world inundated with monitors and the cacophony of instantaneous transmission, the profound energy and emotional resonance of verbal artistry often diminish in to obscurity, eclipsed by the constant barrage of noise and distractions. Yet, nestled within the lyrical pages of **Opto Mechanical Systems Design**, a captivating perform of literary beauty that pulses with fresh feelings, lies an remarkable journey waiting to be embarked upon. Composed by a virtuoso wordsmith, this interesting opus manuals visitors on a psychological odyssey, delicately revealing the latent possible and profound influence stuck within the delicate web of language. Within the heart-wrenching expanse of this evocative examination, we shall embark upon an introspective exploration of the book is central styles, dissect their charming publishing style, and immerse ourselves in the indelible impact it leaves upon the depths of readers souls.

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