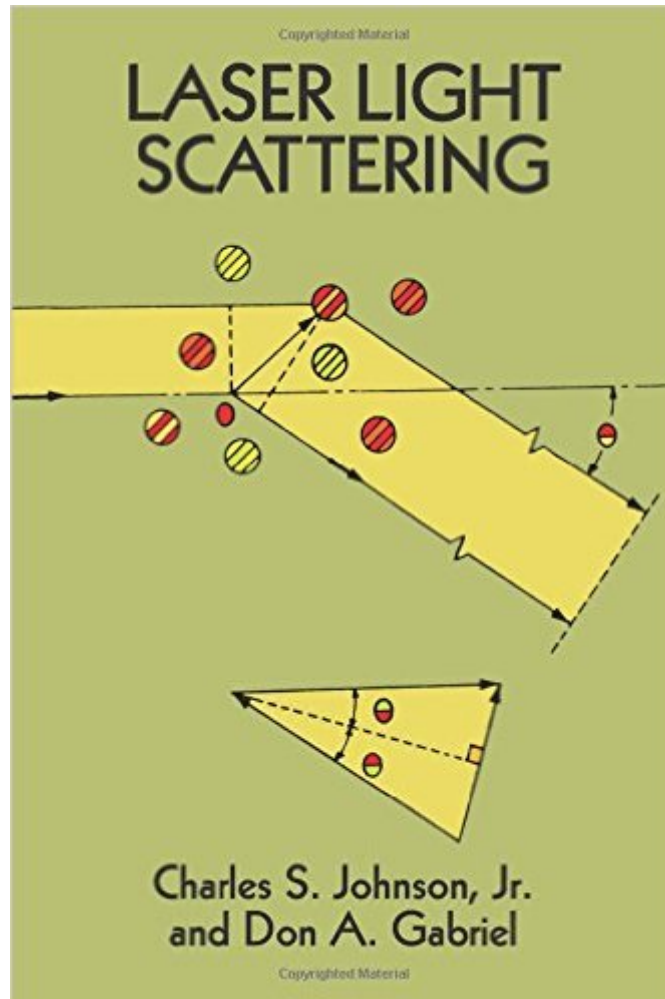


The book was found

# Laser Light Scattering (Dover Books On Physics)



## Synopsis

Light scattering has provided an important method for characterizing macro-molecules for at least three decades. Now, through the use of intense, coherent laser light and efficient spectrum analyzers and autocorrelators, experiments in the frequency and time domains can be used to study molecular motion, e.g. diffusion and flow and other dynamic processes, as well as the equilibrium properties of solutions. As a result, laser light scattering has become a powerful form of spectroscopy with applications in physics, biochemistry, and other fields. This volume, which employs a relatively simple approach in order to reach the widest audience, focuses on two main topics: classical light scattering (scattering intensity, concentration dependence, size dependence, and polydispersity) and dynamic light scattering (time and frequency dependence, translational diffusion, directed flow, rotational motion, and more). A series of useful appendixes and a list of references complete this concise, accessible work, a valuable resource for physicists, chemists, and anyone interested in the increasingly important field of laser light scattering.

## Book Information

Series: Dover Books on Physics

Paperback: 112 pages

Publisher: Dover Publications; Corrected edition (January 9, 1995)

Language: English

ISBN-10: 0486683281

ISBN-13: 978-0486683287

Product Dimensions: 6.2 x 0.3 x 9.2 inches

Shipping Weight: 11.4 ounces (View shipping rates and policies)

Average Customer Review: 4.5 out of 5 stars [See all reviews](#) (2 customer reviews)

Best Sellers Rank: #400,105 in Books (See Top 100 in Books) #45 in [Books > Science & Math > Physics > Light](#) #1162 in [Books > Textbooks > Science & Mathematics > Physics](#) #1827 in [Books > Engineering & Transportation > Engineering > Electrical & Electronics](#)

## Customer Reviews

The material in this book is from 1981. It is not the cutting edge of laser physics. But the treatments are still valid. The derivations of light scattering are from introductory quantum mechanics. The Schrodinger equation and Maxwell's equations are perfectly adequate to describe the phenomena. The property of the incoming laser light is, of course, its coherence. Plus, typically, it is collimated as plane waves. Various applications in spectroscopy and atomic and nuclear physics are

studied. Turns out that the spectroscopy lends itself well to various diagnostic and industrial uses. As with all Dover books, the price is very economical. When typical texts from other publishers might be in the \$100 range.

this is a good book on the theory of laser light scattering. the experimental details are all outdated (this is a dover book, after all...)this book arrived in the condition specified.

[Download to continue reading...](#)

Laser Light Scattering (Dover Books on Physics) Scattering Theory: The Quantum Theory of Nonrelativistic Collisions (Dover Books on Engineering) ISO/TR 11146-3:2004, Lasers and laser-related equipment - Test methods for laser beam widths, divergence angles and beam propagation ratios - Part 3: ... propagation and details of test methods ISO 11146-2:2005, Lasers and laser-related equipment - Test methods for laser beam widths, divergence angles and beam propagation ratios - Part 2: General astigmatic beams Atomic Physics (Oxford Master Series in Atomic, Optical and Laser Physics) Atoms and Molecules Interacting with Light: Atomic Physics for the Laser Era Modern Classical Optics (Oxford Master Series in Atomic, Optical and Laser Physics) The Physics of Laser-Atom Interactions (Cambridge Studies in Modern Optics) Physics for Scientists and Engineers with Modern Physics: Volume II (3rd Edition) (Physics for Scientists & Engineers) Head First Physics: A learner's companion to mechanics and practical physics (AP Physics B - Advanced Placement) Thermodynamics and the Kinetic Theory of Gases: Volume 3 of Pauli Lectures on Physics (Dover Books on Physics) Atomic Physics and Human Knowledge (Dover Books on Physics) Physics for Scientists and Engineers, Volume 2: Electricity, Magnetism, Light, and Elementary Modern Physics Day Light, Night Light: Where Light Comes From (Let's-Read-and-Find-Out Science 2) 3D CAD with Autodesk 123D: Designing for 3D Printing, Laser Cutting, and Personal Fabrication The Laser Campaign Manual Optoelectronics, Fiber Optics, and Laser Cookbook High Power Laser Handbook An Introduction to Laser Spectroscopy: Second Edition How the Laser Happened: Adventures of a Scientist

[Dmca](#)