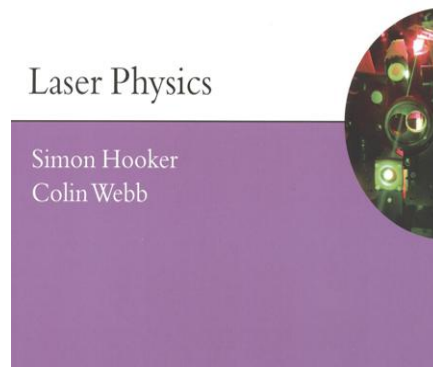


OXFORD MASTER SERIES IN ATOMIC, OPTICAL,
AND LASER PHYSICS



S. Hooker and C. E. Webb, *Laser Physics* (Oxford University, Oxford, 2010).

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Book Review

This is a thorough well-written introduction to laser physics co-authored by a pioneer in gas laser research, Colin Webb. In 18 chapters the reader is introduced to the fundamentals; from the interaction of radiation and matter, broadening mechanisms and lineshapes, stimulated emission, and gain saturation... to practical laser concepts such as oscillators and cavity effects. The book then focuses on specific laser systems such as solid-state lasers, semiconductor lasers, fibre lasers, molecular lasers, different types of gas lasers, and dye lasers. Towards the back of this impressive array of topics the reader is exposed to nonlinear optics, frequency control, ultrafast lasers, and short-wavelength lasers. Each chapter contains a complete set of problems and the authors highlight important results to guide readers and students. Again, it should be emphasized that the book is very well-written while using a clear and concise style. Figures are plentiful and neatly printed (not a given in today's digital era). *Laser Physics*, by Hooker and Webb, is highly recommended as a textbook and to practitioners seeking to review some of the fundamentals.