



A. A. Kaminskii, Academy of Sciences of the USSR, Moscow (Ed.)

Laser Crystals

Their Physics and Properties

2nd ed. 1990. XVI, 456 pp. 89 figs. 56 tabs. (Springer Series in Optical Sciences, Vol. 14) Softcover DM 98,- ISBN 3-540-52026-0

This convenient source of reference analyzes spectro-physical properties in activated insulating laser crystals and systematizes mechanisms for obtaining stimulated emission based on these properties. Tabulations of the most important spectroscopic and pumping parameter data for insulating laser materials and the wavelengths of stimulated emission from activated insulating laser crystals permit selection of the active medium for a specific application. In addition, the book discusses the fundamental properties responsible for laser phenomena in activated crystals and a number of spectroscopic methods devised to investigate these processes. Thus it can also serve as an introduction to the physics of laser crystals and to the stimulated emission spectroscopy of activated crystals. The second edition contains updated data in the tables and more recent literature references.

W. Koechner, Fibertek, Herndorn, VA

Solid-State Laser Engineering

2nd compl. rev. and updated ed. 1988. XII, 606 pp. 371 figs. (Springer Series in Optical Sciences, Vol. 1) Hardcover DM 138,- ISBN 3-540-18747-2

Contents: Introduction. - Properties of Solid-State Laser Materials. - Laser Oscillator. - Laser Amplifier. - Optical Resonator. - Optical Pump System. - Heat Removal. - Q-Switches and External Switching Devices. - Mode Locking. - Nonlinear Devices. - Damage of Optical Elements. - Appendices. - References. - Subject Index.

Springer-Verlag Berlin Heidelberg New York
London Paris Tokyo Hong Kong

Heidelberger Platz 3, D-1000 Berlin 33 · 175 Fifth Ave., New York, NY 10010, USA · 8 Alexandra Rd., London SW19 7JZ, England · 26, rue des Carmes, F-75005 Paris · 37-3, Hongo 3-chome, Bunkyo-ku, Tokyo 113, Japan · Citicorp Centre, Room 1603, 18 Whitfield Road, Causeway Bay, Hong Kong



Springer

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CHINESE JOURNAL OF LASERS

中国激光

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Volume 17 · Number 4 · April 1990

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