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## Short-Wavelength Lasers

### and Their Applications

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Coherent sources in the short wavelength region are developing rapidly. They are expected to find many applications in the areas of atomic physics, photochemistry, photobiology, spectroscopy, microprocessing and microelectronics. The contributions to this book describe recent progress in this field, including new results on X-ray lasers and scaling to shorter wavelengths, free electron lasers using storage rings and induction linacs, excimer lasers, laser fusion research using short wavelength lasers, and applications to X-ray holography, X-ray lithography, and photochemistry. The papers discuss problems that have yet to be solved (modeling of the atomic process for X-ray emission is not yet accurate enough; damage of mirrors and optical elements in free electron and excimer lasers; achieving pulse compression in excimer lasers) but also report on the status of existing and planned installations for free electron lasers, laser fusion research, and excimer lasers.

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