Call for Papers

CW Mode-Locked Optical Parametric Oscillators

Optical Parametric Oscillators (OPOs) are powerful and reliable light sources for the generation of tunable ultrashort light pulses in the near-infrared spectral region. In particular, CW mode-locked systems that are synchronously pumped by a CW mode-locked light source can produce tunable picosecond and femtosecond pulses with high repetition rates. The high repetition rate is of particular importance for time-resolved spectroscopy with a high signal-to-noise ratio.

In recent years impressive progress has been made in the development of CW mode-locked OPOs regarding pulse length, tuning range and output power. Using improved pump sources, new nonlinear crystals and new experimental techniques, pulses as short as 40 fs tunable over a wavelength range from 600 nm to 4.5 μm were reported. First applications of these tunable light sources in solid-state physics show that CW mode-locked OPOs have matured to a state of being used successfully.
This feature issue of **Applied Physics B** is dedicated to research work on CW mode-locked optical oscillators in order to obtain an overview of the present state-of-the-art in this field. Contributions dealing with applications are welcome, too.

There will be both invited and contributed papers solicited in the areas mentioned.

Deadline for submission

July 15, 1994.

Contributors are asked to pay attention to the formal requirements for publication in Applied Physics, as they are outlined at the beginning of each issue. All papers submitted will be refereed.

Contributions to this feature issue consisting of an original plus two copies should be submitted directly to the guest editor:

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Papers received and/or accepted too late will be published in subsequent (regular) issues of Appl. Phys. B.

FORTHCOMING PAPERS

Second-Harmonic-Generation Studies of Inclined Thin Films

R. Stolle, G. Marowsky, M. Pinnow, O. Befort (Germany)

Observation of Collimation and Decollimation of an Atomic Beam in a Misaligned Standing Wave

Y.Z. Wang, L. Liu, X.Z. Chen, X.J. Wang, S.W. Fang, W.Q. Cai, S.Y. Zhou, Y.S. Liu (P.R. China)

Frequency Chain Towards the Ca Intercombination Line Based on Laser Diodes: First Step

A.M. Akulshin, K. Nakagawa, M. Ohtsu (Japan)

Nonlinear Behaviour of Atomic Fluorescence in Mercury Vapours Following Double-Resonance Laser Excitation

N. Omenetto, O.I. Matveev (Italy), W. Resto, R. Badini, B.W. Smith, J.D. Winefordner (USA)

Fibre-End Micro-Lens System for Endoscopic Erbium-Laser Surgery Application

D. Helfer, M. Frenz, V. Romano, H.P. Weber (Switzerland)

Tunable Ti:Sapphire Regenerative Amplifier for Femtosecond Chirped-Pulse Amplification

K. Yamakawa, A. Magana, P.H. Chiu (USA)

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