

Editorial Board:

Zygmunt Bodnar — Chairman, Miron Gaj, Bedřich Havelka, Roman Ingarden, Bohdan Karczewski, Joachim Klebe, Jan Matysiak, Maksymilian Pluta, Zbigniew Puzewicz, Antoni Sojecki, Szczepan Szczeniowski, Bogusława Trzebiatowska

Editor in Chief — Miron Gaj

Secretary — Grażyna Mułak

Editorial Office:

Institute of Physics, Technical University of Wrocław, 50-370 Wrocław, Wybrzeże Wyspiańskiego 27, Poland.

Publisher:

Technical University of Wrocław (Politechnika Wrocławskiego) 50-370 Wrocław, Wybrzeże Wyspiańskiego 27, Poland

In addition to larger original papers brief reports will be published of the authors' own research work. The reports should be sent out according to the above guide lines.

The Editorial Board invites the readers to send over any remarks or observations referring to the publications which will appear in the Optica Applicata. The correspondence of essential importance will be published in a separate column dealing with letters to the Editor.

Review of matter

Application of the diffraction theory quantum optics, problems in radiation coherence, light sources, holography and its application, scientific photography, methods of image reconstruction, optical application of Fourier transforms, theory of optical system, criteria of optical image evaluation, optical materials, technology of manufacturing optical elements, aspheric optics, optical properties of solids and thin films, lasers and their application, photo- and radiometry, problems in spectroscopy, nonlinear optics, optical data processing, optical measurements, fibre optics, optical instrumentation, interferometry, microscopy, non-visible optics, automation of optical computing, optoelectronics, colorimetry, optical detectors, ellipsometry and photoelasticity.

OPTICA APPLICATA

VII 2

Contents

Longitudinal discharge travelling wave pulse laser device, J. WOJTKOWIAK	37
Off-axis paraxial interpretation of holography, M. MILER	41
Diffraction theory of image formation in presence of linear coma: incoherent annulus object, A. K. GUPTA, K. SINGH	47
Influence of preparation conditions of gadolinium oxide films on their optical properties and structure, K. TRUSZKOWSKA, C. WEŁŁOWSKA	55
Mode-locking in a two-component, tuned dye laser, J. BISSINGER, K. RACZYŃSKI	59
Photovoltaic spectrum in Si-Zn ₃ As ₂ heterojunctions, J. M. PAWLICKOWSKI, E. MAJCHROWSKA, B. KOCHAN	63
Communication	
A new versatile He-Ne laser for optical adjustment, F. KACZMAREK, A. MIETLAREK	69

Содержание

Лазер, возбуждаемый вдоль оси с бегущей волной, Е. Войтковяк	37
Интерпретация внеосевой голограммы с параксиальном приближением, М. Милер	41
Дифракционная теория образования изображения в присутствии линейной комы: кольцевой некогерентный предмет, А. К. Гупта, К. Синг	47
Влияние условий приготовления плёнок из окиси гадолиния на их оптические свойства и структуру, К. Трушковска, Ц. Весоловска	55
Синхронизация модов в двухкомпонентном настраиваемом красительном лазере, Я. Биссингер, К. Рачински	59
Фотовольтаитный спектр в гетеросоединениях Si-Zn ₃ As ₂ , Я. М. Павликовски, Э. Майхровска, Б. Коchan	63
Коммюнике	69