

平成11年度 分子科学研究所研究会
「高機能全固体レーザーとその応用」
- 「非線形光学材料／素子の新展開」 -
- New aspects of nonlinear optical materials and devices -

分子科学研究所主催 Organized by Institute for Molecular Science
レーザー学会協賛 Approved by the Laser Society of Japan

開会の辞 Opening Remarks

10:10-10:40

"Material potential of stoichiometric LiTaO₃ and LiNbO₃ for bulk quasi-phase matching devices"

Yasunori FURUKAWA, Kenji KITAMURA, Syunji TAKEKAWA (NIRIM)

10:40-11:00

"Second-order nonlinearity in stoichiometric LiNbO₃ and LiTaO₃"

Takumi FUJIWARA, Akira J. IKUSHIMA, Yasunori FURUKAWA*, Kenji KITAMURA*

(Toyota Institute of Technology, *NIRIM)

11:00-11:20

"Exact measurement of electrooptic coefficients in LiNbO₃ crystals

- nonstoichiometric dependences and effect of doping Ce- or Fe-ions - "

Yukiko KONDO, Yuri YAMASHITA, Takeshi FUKUDA, Yasunori FURUKAWA*, Kenji KITAMURA*, Hirochika NAKAJIMA (Waseda Univ., *NIRIM)

11:20-11:40

"Large second-order optical nonlinearity in thermally poled silica glass"

Akihiro KAMEYAMA, Atsushi YOKOTANI, Kou KUROSAWA (Miyazaki Univ.)

11:40-12:00

"Sublattice-reversal epitaxy for QPM devices"

Shinji KOH, Takashi KONDO (Univ. of Tokyo)

12:00-12:20

Photo-induced damage in GdYCOB and its circumvention

M. YOSHIMURA, H. FURUYA, H. NAKAO, I. YAMADA, Y. F. RUAN, Y. K. YAP, Y. MORI, T. SASAKI (Osaka Univ.)

昼食 Lunch (13:15 写真撮影 commemorative photo taking)

分子研レーザーセンター長挨拶 Introduction of "Institute for Molecular Science"

13:30-14:00

Special talk: "Future prospects of fiber lasers and LD arrays"

Prof. Ken-ichi UEDA (Univ. of Electro-Communications)

14:00-15:00

Special talk: "Recent developments in microstructured nonlinear materials and their applications"

Prof. Martin M. FEJER (Stanford Univ.)

Coffee Break

15:20-15:40

"Miniaturized SHG blue laser and application to optical disk"

Kazuhisa YAMAMOTO, Yasuo KITAOKA, Kiminori MIZUUCHI (Matsushita Electric Industrial Co., Ltd.)

15:40-16:00

"QPM-SHG device using periodically poled MgO-LiNbO₃"

Yasukazu NIHEI, Akinori HARADA, Shin'ichiro SONODA, Masami HATORI, Koji KAMIYAMA, (Fuji Photo Film Co., Ltd.)

16:00-16:20

"Liquid phase epitaxial growth of LiNbO₃ thin films for QPM-SHG devices"

T. KAWAGUCHI, K. MIZUUCHI*, M. IMAEDA, K. YAMAMOTO*, T. FUKUDA* (NGK Insulators, *Matsushita Electric Industrial Co., Ltd., *IMR, Tohoku Univ.)

16:20-16:40

"1.5 μm-band quasiphase matched LiNbO₃ wavelength converters for optical communication systems"

Chang-qing XU (Oki Electric Industry Co., Ltd.)

閉会の辞 Closing Remarks