

**Special Issue**

## Review of Research Fruits by the Technical Committees of JSPE

**Review**

- **Report on Activities of Technical Committee of High Speed • High Efficiency Milling**  
Masahiko FUKUI..... 1093
- **Planarization CMP for Semiconductor LSI Devices and Its Applications  
—Globalization Activities and Education Activities—**  
Toshiro Karaki DOI, Masaharu KINOSHITA and Keiichi KIMURA..... 1097
- **The Trend in Mechatronics toward the Growth of the Technical Society**  
Kiyoshi NISHIMOTO..... 1102
- **Introduction of Special Interest Group on Industrial Application of Image Processing : SIG-IAIP**  
Shun'ichi KANEKO..... 1106
- **Fabrication of Functional Surfaces with Micromachining Processes**  
Nobuyuki MORONUKI..... 1110
- **A Scheme to Activate Kyushu Branch of JSPE**  
Heiji YASUI..... 1114
- **JSPE Technical Committees** ..... 1118
- **My Experience in Precision Engineering**  
Kouzo IIZUKA ..... 1131
- **Gravure & Interview**  
Special Interest Group on Industrial Application of Image Processing ..... 1089  
Shun'ichi KANEKO  
Interview : Keiichi SHIRASE
- **Introduction to Precision Engineering**  
Basic Knowledge of Robot Motion Control ..... 1123  
Hisashi OSUMI
- **Introduction of Laboratories**  
Department of Intelligent Machinery and Systems, Faculty of Engineering, Kyushu University ..... 1127  
Iwata Laboratory, Shizuoka University ..... 1129
- JSPE News ..... 1171
- JSPE Membership Guidance ..... 1172
- From the Lecture Committee ..... 告 10-1
- Editor's Note ..... 告 10-17

## Paper

- **Effect of SF<sub>6</sub> Assist Gas on Silicon Wafer Laser Processing** ————— 1132  
Chikara AIKAWA, Kunimitsu TAKAHASHI, Toshio KASAI and Tomoyuki YONEYAMA
- **V-Shaped Microgrooving with Two Flat-Ends by 6-axis Control Machining** ————— 1137  
Takamasa MORIYA, Tohru ISHIDA, Koji TERAMOTO, Toshiyuki ENOMOTO and Yoshimi TAKEUCHI
- **Study on Slicing Characteristics of Vibratory OD-blade Slicing** ————— 1142  
—FEM Simulation of OD-blade Self-Corrective Effect by Vibration and Its Experimental Considerations—  
Michio UNEDA, Hiromasa TSUKADA, Ken-ichi ISHIKAWA and Hitoshi SUWABE
- **Nanoprocessing on Silicon (100) Surface by Using SPM and the Study of the Structural Change** ————— 1149  
Hiroya YOSHIDA, Akihito MATSUMURO, Hiroyuki IWATA and Makoto TAKAGI
- **General Tool Setting Error Compensation Method for 5-axis Control Ultraprecision Machining** ————— 1154  
Makoto SONO, Tohru ISHIDA, Koji TERAMOTO, Toshiyuki ENOMOTO and Yoshimi TAKEUCHI
- **Mirror Finishing Using Laser-Induced Periodic Surface Structures** ————— 1159  
Hiroshi SAWADA, Kosuke KAWAHARA and Atsunobu MORI
- **Development of Versatile Micro Robot for Microscopic Operation (5th report)** ————— 1164  
—Performance Analysis of Piezoelectric Actuator and Improvement of Motion Speed—  
Ohmi FUCHIWAKI, Daigo MISAKI, Akihiro OHTA, Futoshi IWATA, Takashi USUDA and Hisayuki AOYAMA

## Short Article

- **Application of Absolute Displacement Sensor to Anti-Vibration Apparatus** ————— 1169  
Shinji WAKUI, Daisuke KOJIMA, Masato TAKAHASHI and Koji YAMAMOTO