

# Contents

1. Finite Element Approach for Schrödinger Equation With Lennard-Jones Potential ..... 1  
.....Hideyuki ARAI · Isao KANESAKA · Yukio KAGAWA
2. On the Reduction of the Artificial Dolomite obtained from Sea-water  
Magnesia by Fe-Si ..... 7  
.....Masao IKEDA · Kiyoshi TERAYAMA
3. Optimal Reduced Order Models of Linear, Discrete-Time Systems by Non-Linear  
Programming.....Motofumi SASAKI .....14
4. The Effects of the Metallic Structures on the Friction and Lubrication in the Cold  
Deformation Processing of Carbon Steel .....18  
.....Mitsugu TOKIZAWA · Kazuo MUROTANI
5. On the bulk modulus of hydraulic fluid under entrained air condition .....25  
.....Takayuki NAKAGAWA · Tsuyoshi OSUMI
6. Improvement of Transfer Coefficient Using Gas Bubble Intermixture  
..... Hisashi MIYASHITA · Masuji SUGATA · Kazuhiko KITA .....31
7. Electrical and Optical properties of GaSe-SnO<sub>2</sub> Heterojunctions .....36  
.....Chiei TATSUYAMA · Shôji ICHIMURA
8. Crystal Growth and Electricial properties of GaN .....43  
.....Shin-ichi TACHI · Chiei TATSUYAMA · Shôji ICHIMURA
9. The Interface Circuits of a Small Magnetic Drum .....48  
.....Toshikazu ASO · Takeshi NAKADA · Takao KURIYAMA · Hiroshi INOUE