

日本의 科學技術動向(2000 年度)

—目 次—

◆物理学分野

- | | | |
|---|---------------------|----|
| 1. Evidence for Top Quark Production in $\bar{p}p$ Collisions
at $\sqrt{s} = 1.8\text{TeV}$ (Physical Review D) | Shin-Hong Kim | 1 |
| 2. Evidence for Top Quark Production in $\bar{p}p$ Collisions
at $\sqrt{s} = 1.8\text{TeV}$ (Physical Review Letter) | Shin-Hong Kim | 62 |

◆環境・化学・材料工学分野

- | | | |
|---|---------------------|-----|
| 1. Fabrication and Femtosecond Optical Response of
Langmuir-Blodgett Films with Two-Dimensional
J-Aggregates | Lyong-Sun Pu | 69 |
| 2. Nanoscopic Evidence for Dissociative Adsorption of
Asymmetric Disulfide Self-Assembled Monolayers on
Au(111) | Jae-Geun Noh | 75 |
| 3. Nanoscopic Investigation of the Self-Assembly Processes
of Dialkyl Disulfides and Dialkyl Sulfides on Au(111)..... | Jae-Geun Noh..... | 79 |
| 4. Tensile Properties of Pure Fe-C-Si Cast Iron..... | Soon-Gi Shin | 85 |
| 5. Thermal Diffusivity Measurement of Polyamide Mesh by
Temperature Wave Analysis | Woo-Duck Jung | 97 |
| 6. 일본의 폐 PCB(Polychlorinated biphenyls) 처리기술
동향 | 박 승택 | 107 |

◆生命工学分野

- | | | |
|---|--------------------|-----|
| 1. Compactin Suppresses Bone Resorption by Inhibiting the
Fusion of Prefusion Osteoclasts and Disrupting the Actin
Ring in Osteoclasts | Je-Tae Woo | 115 |
| 2. Induction of Germline Transcription in the TCR γ Locus
by Stat5:Implications for Accessibility Control by
the IL-7 Receptor | Sang-Kyu Ye | 128 |
| 3. Mouse C2 Myoblast Cells Resist HVJ(Sendai Virus)
-Mediated Cell Fusion in the Proliferating Stage
but Become Capable of Fusion after Differentiation | Je-Man Kim | 139 |
| 4. Pharmacokinetic Analysis for the Development of
New Potent Anti-HIV-1 Agents, the KR-V Series | Young-Mi Lee | 150 |

5. Recent Development of Plant Factory.....	Chang-Hoo Chun	157
6. DNA マーカーを利用したアブラナ科野菜根こぶ病抵抗性 育種「1」.....	南 基泰.....	165
7. DNA マーカーを利用したアブラナ科野菜根こぶ病抵抗性 育種「2」.....	南 基泰.....	172
8. 骨粗鬆症の治療薬としての骨破壊抑制剤の開発	禹 浩泰.....	177

◆情報・通信工学分野

1. Enhanced Hybrid Genetic Algorithm for Engineering Optimization Problems	Young-Su Yun	185
2. Genetic Algorithm Reinforced by Fuzzy Logic Controller for Preemptive/Non-Preemptive Job-Shop Scheduling Problems.....	Mitsuo Gen	191
3. Ultrafast Nonlinear Optical Response of Squarylium Dye J-aggregates Spincoated Films and Application to T bps Demultiplexer	Lyong-Sun Pu.....	204
4. 中国のインターネットとECの現状	辛 在卿.....	210

◆電子工学分野

1. Submicron Stacked-junction Fabrication from $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ Whiskers by Focused-ion-beam Etching	Sang-Jae Kim.....	222
2. 原子層吸着拡散法による極浅接合の形成とサブ 0.1 μm MOSトランジスタの試作	高 光旭.....	225

◆土木・建築工学分野

1. 高速道路の設計・管理における新たな方法—可視化技術を 用いたドライビングシミュレーターの開発—	金 鍾旻.....	231
2. サンプリングによる応力解放を考慮した圧密試験	金 宰永.....	238

◆機械・航空宇宙工学分野

1. Dominant Factors of Mechanical Properties in Titanium/Aluminium Dissimilar Materials Friction Welds	You-Chul Kim	244
2. Postbuckling Behavior of Composite Beams with Multiple Delaminations	Chang-Hee Lee	250
3. 光学式エンドミル外周刃逃げ面摩耗測定装置の試作	李 和樹	256