



Special Section : My Sour Smile



Editorial Preface	Hiroyuki MORIKAWA	1
1. International Standard Development for a Lame Duck in English Language	Juro OHGA	2
2. Videophone and Its Standardization	Sakae OKUBO	5
3. An Engineer with Foresight and Belief in the Future	Susumu KOIKE	8
4. Struggling Days against the Precipitous Cliffs Blocking My Way : A Hidden Episode at the Dawn of Computer-age	Hitoshi WATANABE	10
5. Challenges to Advanced ICT : Be Strong-minded after Several Failures	Masatsugu KIDODE	13
6. What is the Nature of Branch Points of Your Life?	Hideyuki NAKASHIMA	15
7. Challenge to Replace Hard Disk Drive with Semiconductor Memory	Yoshinori SAKAUE	17



Special Section : Three-Dimensional MOSFET Technology for 32nm Node VLSI



Editorial Preface	Atsushi ANDO	19
1. Simulation Techniques for Multiple-gate FinFET	Yasuhisa OMURA	20
2. Advanced FinFET Process Integration Technology for 32nm Node and Beyond	Satoshi INABA	25
3. Four-terminal FinFET Device Technology	Meishoku MASAHARA	30
4. Circuit Application Techniques of XMOS Transistors	Hanpei KOIKE	36

Technical Survey

Practical Use of Surface Acoustic Wave Devices and Their Trend in the Future	Michio KADOTA	41
Secure RFID	Takanori YAMAZOE	49
TRECVID Approach towards Video Contents Analysis	Shin'ichi SATOH	55
High-speed Burst-mode Transmission Technologies	Shunji KIMURA	60

Tutorial

Device Technology and Prospect of CMOS Image Sensor	Kazuichiro ITONAGA	66
---	--------------------	----

News Analysis

Ultrafast ALL-optical Phase-modulator Using Intersubband Transition in InGaAs/AIAs/AIAsSb Coupled Quantum Wells		69
Emission of Single Photons with an Identical Energy from Isoelectronic Impurity Atoms Doped in III-V Semiconductors		70