



Special Section : ICT Technology for Disaster Management and Mitigation



Editorial Preface	Jinhui CHAO	161
1. Disaster Information		
1-1 Prerequisite of Information System for Disaster Mitigation	Atsushi TANAKA	162
2. Emergency Infrastructure		
2-1 Information System to Promote Both the Individual Disaster Mitigation Activities and the Adequate Response for the Disaster	Nobuo FUKUWA	168
2-2 Disaster Countermeasures by the Carrier	Masahide OKA	174
2-3 Issues and Countermeasures on the Availability of Mobile Phone Systems	Kazunori OKADA	179
3. Community Activity		
3-1 Information Sharing Necessary for Effective Disaster Response	Takeyasu SUZUKI	185
3-2 Disaster Mitigation of High-rise Building by Collaboration with a Local Government and Residents	Yoshiaki HISADA, Masahiro MURAKAMI, Akihiro SHIBAYAMA, and Osamu TAKIZAWA	192
3-3 Recognition of the People for a Tsunami Warning and Its Issues : Situation of Less People Taking Action of Evacuation	Fumihiko IMAMURA	198
4. Technology Research		
4-1 Present Situation and Future Prospects of Rescue Robots	Satoshi TADOKORO	203
4-2 Sensor Network for the Earthquake Hazard Mitigation : About the Approach by the IT Strong Motion Seismometer	Kiyoshi TAKANO	209

Technical Survey

How to Design Provable Secure Hash Functions	Kazuo OHTA, Noboru KUNIHIRO, and Lei WANG	218
Basic Law for Space Activities and the Future of Japanese Space Development	Kazuto SUZUKI	224

Lecture Series

Optimization Computation for 3-D Understanding of Images [I] : Line Fitting	Yasuyuki SUGAYA and Kenichi KANATANI	229
---	--------------------------------------	-----

Tutorial

Intrabody Communication Using Electric Field on Human Body Surface	Mitsuru SHINAGAWA	234
--	-------------------	-----

News Analysis

World Record Quantum Cryptography Bit Rate Enables Ultra-secure Networks : Secure Key Bit Rates Exceed 1 Mbit/s for the First Time		239
--	--	-----