

Contents

1	Nadine: A Social Robot that Can Localize Objects and Grasp Them in a Human Way	1
	Nadia Magnenat Thalmann, Li Tian and Fupin Yao	
2	Data-Driven Analysis of Collections of Big Datasets by the Bi-CoPaM Method Yields Field-Specific Novel Insights	25
	Basel Abu-Jamous, Chao Liu, David J. Roberts, Elvira Brattico and Asoke K. Nandi	
3	Do You Mean What You Say? Recognizing Emotions in Spontaneous Speech	55
	Rupayan Chakraborty, Meghna Pandharipande and Sunil Kumar Kopparapu	
4	Sensors and Actuators for HCI and VR: A Few Case Studies	65
	Daniel Thalmann	
5	Frequency Conversion Layers for Si Solar Cell Efficiency Improvement	85
	Fabrice Gourbilleau, Lucile Dumont, Julien Cardin, Anaïs Gouesmel, Ing-Song Yu, Christophe Labbé and Hocine Merabet	
6	Design and Fabrication of 320×256 Focal-Plane Array Using Strain-Coupled Quaternary Capped InAs/GaAs Quantum Dots Infrared Photo-Detectors for Thermal Imaging	93
	H. Ghadi, H. Rawool, K.C. Goma Kumari and Subhananda Chakrabarti	
7	Metamaterial-Based Planar Antennas	101
	Gnanam Gnanagurunathan and Krishnasamy T. Selvan	

8	An Overview on Memristor-Based Non-volatile LUT of an FPGA	117
	T. Nandha Kumar	
9	Radio-Frequency Integrated Circuit Design	133
	Jie Li	
10	Cyber Situational Awareness for CPS, 5G and IoT	147
	Elizabeth Chang, Florian Gottwalt and Yu Zhang	

Frontiers in Electronic Technologies

Trends and Challenges

Prabaharan, S.R.S.; Thalmann, N.M.; Kanchana

Bhaaskaran, V.S. (Eds.)

2017, XV, 161 p. 88 illus., 64 illus. in color., Hardcover

ISBN: 978-981-10-4234-8