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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Reconsideration of Ouija Board Motion in Terms of Haptics Illusions (II) -Development of 1-DoF Linear Rail Device- -- Haptic Perception of Macro Texture -- Natural Human Movements in Geometrically Constrained Haptic Environments -- Expression of 2DOF Fingertip Traction with 1DOF Lateral Skin Stretch -- Perceived Hardness by Tapping: The Role of a Secondary Mode of Vibration -- Experiments on Two-handed Localization of Impact Vibrations -- Rubber hand illusion using tactile projector -- Colorful tactile stimuli. Association between colors and tactile-display stimuli on Russel's psychological plane -- 3DOF Multitouch Haptic Interface with Movable Touchscreen -- A novel

3RRS wearable fingertip cutaneous device for virtual interaction -- Thermal-Radiation-Based Haptic Display - Calibration and Shape display - -- Touching 2D Images Using Haptogram System -- Hybrid Haptic Texture Rendering Using Kinesthetic and Vibrotactile Feedback -- Simultaneous Representation of Texture and Geometry on a Flat Touch Surface -- Ferro-Fluid based Lightweight and Portable Tactile Display for Persuasive Tactile Cues including Orientation and Texture -- Sole Tactile Display using Tactile Illusion by Vibration on Toenail -- Scalable Architecture for Airborne Ultrasound Tactile Display -- HapStep: A Novel Method to Sense Footsteps while Remaining Seated using Longitudinal Friction on the Sole of the Foot -- Initial progress toward surface morphable tactile interface -- Simulating Texture Sensation of Textile using Thermal and Vibro-tactile Stimulations -- Tactile Display Based on Skin-Propagated Vibration -- High-quality texture display: The Use of Vibrotactile and Variable friction Stimuli in Conjunction -- Hybrid Focus Using 70 kHz and 40 kHz Ultrasound in Mid-air Tactile Display -- Tactile Presentation using Mechanical and Electrical Stimulation -- Development of a One-dimensional Lateral Tactile Display for the Sensation of Texture Using a Speaker Array -- Encountered-type Visual Haptic Display Using MR Fluid -- Whole Hand Interaction with Multi-finger Movement-based Vibrotactile Stimulation -- Signal and Power Transfer to Actuators Distributed on Conductive Fabric Sheet for Wearable Tactile Display -- Multi-Electrodes-based Electrostatic Tactile Display -- Development of a Sole Pressure Display -- A Design of a New Electro Tactile Beat Module -- Proposal and Implementation of Non-Grounded Translational Force and Torque Display Using Two Vibration Speakers -- Engaging Weight Feedback for Bimanual Interaction -- Substituted Force Feedback using Palm Pressurization for a Handheld Controller -- Virtual Two-Finger Haptic Manipulation Method -- Inducing Wrist Twist during Arm Swing by using Gyro Effect -- Passive Haptics: Pulsive Damping Brake for Greater Impulse Perception -- Hanger Reflex of the Head and Waist with Translational and Rotational Force Perception -- Stable Haptic Feedback Generation during Mid air Interactions Using Hidden Markov Model based Motion Synthesis. -- Relationship between Force Sensation and Stimulation Parameters in Tendon Electrical Stimulation -- Force your hand - PAM enabled wrist support -- Unplugged powered suit with pneumatic gel muscles -- Prototype Kinesthetic Illusory Device Using Combination of Active and Passive Motion -- A fast update approach of a stiffness matrix for a multi-rate finite element deformation simulation -- Object Manipulation by Hand with Force Feedback -- Visuo-tactile Interaction with Virtual Objects that Yields Kinetic Effects on Real Objects -- Enhancement of Perceived Force from the Hanger Reflex on Head and Ankle by Adding Vibration -- An Immersive Visuo-Haptic VR Environment with Pseudo-Haptic Effects on Perceived Stiffness -- Multi Degree-of-Freedom Successive Stiffness Increment Approach for High Stiffness Haptic Interaction -- A Cooking Support System with Force Visualization Using Force sensors and an RGB-D Camera -- Turning Surfaces into Touch Panels: A Granite-Touch Pad -- A finger sensor for sharing visual and tactile experience -- On a Haptic Phenomenon by Combined Use of the Rubber Artificial Skin Layer with a Strain Gauge and the Tactile Contact Lens -- Measurement of Stickiness with a Pressure Distribution Sensor -- A wearable haptic ring for the control of extra robotic fingers -- Relax and Tighten - A Haptics-based Approach to Simulate Sphincter Tone Assessment -- Training on muscle palpation using artificial muscle nodule models -- Basic Study on Motor Ability Evaluation and Training System Using Virtual Collision Avoidance -- Bimanual Haptic

Simulator for Training Hand palpation and Lumbar puncture -- Prostate Tumor Palpation Simulator Based on Pneumatic and Augmented Haptics -- Haptic Directional Instruction System for Sports -- Tactile Treasure Map: Integrating Allocentric and Egocentric Information for Tactile Guidance -- Motion-Based Augmented Broadcasting System with Haptic Feedback -- Perceiving Physical Attributes of Objects using an Electrostatic Tactile Display -- Hapbeat : Tension-based Wearable Vibroacoustic Device -- Comparison of Tactile Signals for Collision Avoidance on Unmanned Aerial Vehicles -- Data-Driven Rendering of Anisotropic Haptic Textures -- PhysVib: Physically Plausible Vibrotactile Feedback Library to Collisions on a Mobile Device -- Towards Universal Haptic Library: Library-Based Haptic Texture Assignment Using Image Texture and Perceptual Space -- An Empirical Study of Haptic-Audio Based Online Shopping System for the Blind -- Character Recognition by Flick Movements Presented on Fingers. -- A Tool for Collecting and Designing Haptic Experiences -- A novel multimodal tactile module that can provide vibro-thermal feedback -- Tactile Perception of Digital Images -- VibGrip++ : haptic device allows feeling the music for hearing impaired people -- A Smart Cushion System with Vibrotactile Feedback for Active Posture Correction -- HapTONE: Haptic Instrument for Enriched Musical Play (II) -System Detail- -- Visual Haptic Interface by Using 2-DOF Indirect Haptic Interface -- HaptoCloneAR (Haptic-Optical Clone with Augmented Reality) for Mutual Interactions with Midair 3D Floating Image and Superimposed 2D Display. -- Haplug: A Haptic Plug for Dynamic VR Interactions -- Magnification-Changeable Haptic-Optical Clone -- Computer-created interactive 3D image with midair haptic feedback -- Mobile HapticAid: Wearable Haptic Augmentation System Using a Mobile Platform -- Synesthesia Suit.

Sommario/riassunto

This book comprises the proceedings of the second International Conference, AsiaHaptics 2016, held in Kashiwanoha, Japan. The book treats the state of the art of the diverse haptics (touch)-related research, including scientific research of haptics perception and illusion, development of haptics devices, and applications to a wide variety of fields such as education, medicine, telecommunication, navigation, and entertainment. This work helps not only active haptic researchers, but also general readers to understand what is going on in this interdisciplinary area of science and technology.