

IEEE TRANSACTIONS ON HAPTICS

A PUBLICATION OF THE IEEE ROBOTICS AND AUTOMATION SOCIETY

APRIL-JUNE 2023

VOLUME 16

NUMBER 2

ITHEBX

(ISSN 1939-1412)

SURVEY/TUTORIAL PAPERS

The Classification and New Trends of Shared Control Strategies in Telerobotic Systems: A Survey	G. Li, Q. Li, C. Yang, Y. Su, Z. Yuan, and X. Wu	118
Haptic Communication of Language.....	C. M. Reed, H. Z. Tan, and L. A. Jones	134
Survey on Hand-Based Haptic Interaction for Virtual Reality	Q. Tong, W. Wei, Y. Zhang, J. Xiao, and D. Wang	154
Inducing Self-Motion Sensations With Haptic Feedback: State-of-The-Art and Perspectives on “Haptic Motion”	A. Costes and A. Lécuyer	171

REGULAR PAPERS

How to Train Your Posture: Haptic Feedback Can be Used for Postural Adaptation of the Trunk During Upper-Limb Motor Training	R. Agarwal, A. Hussain, D. Campolo, and V. SKM	182
Perception of Torque is Impacted by a Subset of Features Related to the Motor Command	N. M. Cai and N. Gurari	194
Perceptual Substitution Based Haptic Texture Rendering for Narrow-Band Reproduction	U. A. Alma, R. Rosenkranz, and M. E. Altinsoy	204
Faster Indentation Influences Skin Deformation To Reduce Tactile Discriminability of Compliant Objects	B. Li, S. C. Hauser, and G. J. Gerling	215
Navigation Method Enhancing Music Listening Experience by Stimulating Both Neck Sides With Modulated Musical Vibration	Y. Yamazaki and S. Hasegawa	228
Perceptual Localization Performance of the Whole Hand Vibrotactile Funneling Illusion	H. Luo, Z. Wang, Z. Wang, Y. Zhang, and D. Wang	240
Object Recognition Using Mechanical Impact, Viscoelasticity, and Surface Friction During Interaction	P. Uttayopas, X. Cheng, J. Eden, and E. Burdet	251
General Discretization Method for Enhanced Kinesthetic Haptic Stability	L. Peclí and K. Hashtrudi-Zaad	261
MateJam: Multi-Material Teeth-Clutching Layer Jamming Actuation for Soft Haptic Glove	Z. Wang, X. Zhou, Z. Zhou, Y. Zhang, Y. Zhang, and D. Wang	276
Specifying Visual Parameters for Haptic-Visual Sequential Matching of Material Softness	Y. Ujitoko and T. Kawabe	287
Bimanual Motor Strategies and Handedness Role in Human-Robot Haptic Interaction	E. Galofaro, E. D'Antonio, N. Lotti, F. Patané, M. Casadio, and L. Masia	296
A Soft Hand Exoskeleton With a Novel Tendon Layout to Improve Stable Wearing in Grasping Assistance	T. Bagneschi, D. Chiaradia, G. Righi, G. D. Popolo, A. Frisoli, and D. Leonardis	311
“I See Where This is Going”: A Psychophysical Study of Directional Mid-Air Haptics and Apparent Tactile Motion ...	D. Pittéra, O. Georgiou, and W. Frier	322

SHORT PAPERS

Distributed Tactile Display with Dual Array Design	Y. Massalim, D. Faux, and V. Hayward	334
On the Analysis of Tactile Sensation Based on Time Measurement: An Experimental Case Study on the Interaction Between Skin and Lotion	H. Nagano, N. Saito, K. Matsumori, T. Kazama, M. Konyo, and Y. Yokokohji	339
Pseudo-Haptic Heaviness Influenced by the Range of the C/D Ratio and the Position of the C/D Ratio Within a Given Range	T. Kawabe and Y. Ujitoko	345
