

# Contents

## Part I Perceptual Softness

<b>1</b>	<b>Physical Aspects of Softness Perception . . . . .</b>	<b>3</b>
	Wouter M. Bergmann Tiest and Astrid M.L. Kappers	
<b>2</b>	<b>Visual-Haptic Compliance Perception . . . . .</b>	<b>17</b>
	Roberta L. Klatzky and Bing Wu	
<b>3</b>	<b>Vibrotactile Sensation and Softness Perception . . . . .</b>	<b>31</b>
	Yon Visell and Shogo Okamoto	
<b>4</b>	<b>Perception and Synthesis of Sound-Generating Materials. . . . .</b>	<b>49</b>
	Bruno L. Giordano and Federico Avanzini	
<b>5</b>	<b>Computational Aspects of Softness Perception . . . . .</b>	<b>85</b>
	Massimiliano Di Luca and Marc O. Ernst	

## Part II Sensorimotor Softness

<b>6</b>	<b>Exploratory Movement Strategies in Softness Perception . . . . .</b>	<b>109</b>
	Knut Drewing	
<b>7</b>	<b>The Perception of the Centre of Elastic Force Fields: A Model of Integration of the Force and Position Signals . . . . .</b>	<b>127</b>
	Gabriel Baud-Bovy	
<b>8</b>	<b>Dynamic Combination of Movement and Force for Softness Discrimination . . . . .</b>	<b>147</b>
	Markus Rank and Sandra Hirche	
<b>9</b>	<b>Perception of Stiffness with Force Feedback Delay . . . . .</b>	<b>167</b>
	Ilana Nisky, Raz Leib, Amit Milstein and Amir Karniel	

**Part III Artificial Softness**

<b>10 Compliance Perception Using Natural and Artificial Motion Cues . . . . .</b>	<b>189</b>
Netta Gurari and Allison M. Okamura	
<b>11 A Fabric-Based Approach for Softness Rendering . . . . .</b>	<b>219</b>
Matteo Bianchi, Alessandro Serio, Enzo Pasquale Scilingo and Antonio Bicchi	
<b>12 Haptic Augmentation in Soft Tissue Interaction. . . . .</b>	<b>241</b>
Seokhee Jeon, Seungmoon Choi and Matthias Harders	

Multisensory Softness  
Perceived Compliance from Multiple Sources of  
Information

Di Luca, M. (Ed.)

2014, XIII, 257 p. 80 illus., Hardcover

ISBN: 978-1-4471-6532-3