

<i>Preface</i>	vii
<i>Contributors</i>	ix
<i>Future Contributions</i>	xi
1. Photometric Stereo: An Overview	1
Vasileios Argyriou and Maria Petrou	
1. Introduction	2
2. Definitions	3
3. Radiometry and Image Formation Overview	6
4. Bidirectional Reflectance Distribution Function	9
5. Reflectance Models	11
6. Surface-Recovering Methods	17
7. Color Photometric Stereo [Assumption (1)]	26
8. Photometric Stereo with Highlights and Shadows [Assumptions (4) and (5)]	26
9. Photometric Stereo with an Extended Light Source [Assumption (2)]	28
10. Dynamic Photometric Stereo and Motion [Assumption (6)]	30
11. Perspective Photometric Stereo [Assumption (3)]	33
12. Photometric Stereo Error Analysis	38
13. Optimal Illumination Configuration for Photometric Stereo	46
14. Conclusions	51
Acknowledgments	52
References	52
2. The Fourier Transform in Clifford Analysis	55
Fred Brackx, Nele De Schepper, and Frank Sommen	
1. Introduction	56
2. The Clifford Analysis Toolkit	58
3. The Fractional Fourier Transform	86
4. The Clifford–Fourier Transform	95
5. Clifford Filters for Early Vision	143
6. The Cylindrical Fourier Transform	167
Acknowledgments	197
References	197

3. Carbon Nanotube Electron Sources for Electron Microscopes	203
Niels de Jonge	
1. Introduction	204
2. Mounting of Individual Carbon Nanotubes with Closed Caps	205
3. TEM Investigations of Carbon Nanotube Electron Sources	208
4. The Electron Emission Process	213
5. Figure of Merit of Electron Optical Performance	216
6. Evaluation of the Use of Carbon Nanotube Electron Sources for Electron Microscopes	222
7. Specifications	229
8. Summary and Outlook	230
Acknowledgments	231
References	232
4. Localized Waves: A Review	235
Erasmus Recami and Michel Zamboni-Rached	
1. Localized Waves: A Scientific and Historical Introduction	236
2. A More Detailed Introduction	243
3. Complementary Material: A Historical Perspective (Theoretical and Experimental)	256
4. Structure of Nondiffracting Waves and Some Interesting Applications	277
5. “Frozen Waves” and Subluminal Wave Bullets	301
Acknowledgments	344
References	344
Contents of Volumes 151–155	355
Index	357