## **Table of Contents**

The Fascination of Macro Photography	2
01 The Basics	7
The Basics in Theoretical Terms	8
The Basics in Numbers	12
The Deepest Depths	16
02 Equipment	19
Cameras for Macro Photography	20
Standard Lenses	28
Macro Lenses	30
Close-Up Lenses	32
Teleconverters and Extension Tubes	34
Reversing Rings and Coupling Rings	36
Bellows	38
Altering Depth of Field	40
Lighting for Close-Up and Macro Photography	42
Colors of Light and Color Reproduction	46
Shutter Release Accessories	52
Remote Control via Smartphone or Tablet	54
Remote Control with Triggertrap	56
Optical Filters	58
Tripods and Mounts	60
Transportation and Safety	64
Additional Macro Accessories	66
03 Shooting Techniques	71
Strategies for Dealing with Blur	72
Holding a Camera Properly	80
04 Macro Photography in the Studio	85
Studio Light	86
Lighting Compared	92
Building a Small Macro Studio	94
Bringing Nature Indoors	96
The Glowing Snail Shell	100
Tabletop Photography	102
Smoke, Steam, and Fog	108

VIII



05 Macro Photography in Nature Backyards and Balconies Into the Wild	113 114 118
Stefan Dittmann Fungal Photography Photography in the Fungal Kingdom	<b>129</b>
O6 Special Shooting Techniques  Multiple Exposures Focus Stacking Light Painting Interval Shooting, Time-Lapse, and Stop-Motion High-Speed Photography High-Speed Studio Photography without Light Barriers High Dynamic Range—HDR Macro Panoramas Creative Experiments Infrared Macro Photography	139 140 144 152 154 156 158 160 164 170
Jan Metzler Focus Stacking Advanced Focus Stacking	<b>179</b> 184
Hans Christian Steeg High-Speed Photography Caught in Flight	<b>191</b> 192
<b>07 Searching for Subjects</b> Discovering, Searching for, and Collecting Subjects Variations on a Theme Abstract Subjects	201 202 208 210
O8 A Day at the Zoo Zoos Botanical Gardens Butterfly Gardens Aguaria and Terraria	213 214 216 226

## **Table of Contents**

09 Image Editing	239
Post-processing Photos	240
Black & White Conversion	244
10 Working with Light	249
Exposure Metering	250
Lighting on the Go	254
A Comparison of Portable Lighting Options	258
11 Composition	263
Image Design	264
Creative Camera Angles	278
Setting the Scene with Light	280
Focus as a Design Tool	286
Accents of Color	292
Limiting Colors	294
Bernd Schloemer Miniature Street Art	299
The Colognies Project	300
12 Do It Yourself	309
Using a Macro Lens as a Microscope	310
Guide Rails for Macro Panoramas	312
Beanbag Camera Stands	316
System Flash Reflectors	317
Acknowledgments	318
Index	320