

Contents

Auxin and the Communication Between Plant Cells	1
Peter Nick	
Integrated Calcium Signaling in Plants	29
Narendra Tuteja	
MAPK Signaling	51
Miroslav Ovečka and Irene K. Lichtscheidl	
Integrated Nod Factor Signaling in Plants	71
Sibylle Hirsch and Giles Oldroyd	
Physiological Roles of Cyclic Nucleotide Gated Channels in Plants	91
Tal Sherman and Hillel Fromm	
Signaling in Vesicle Traffic: Protein-Lipid Interface in Regulation of Plant Endomembrane Dynamics	107
V. Žárský and M. Potocký	
Signaling to the Actin Cytoskeleton During Cell Morphogenesis and Patterning	135
Alison Sinclair, Mike Schenkel, and Jaideep Mathur	
Signaling via Plant Peroxidases	155
Claude Penel and Christophe Dunand	
Signaling and Cell Walls	173
Ewelina Rodakowska, Marta Derba-Maceluch, Anna Kasprowicz, Paweł Zawadzki, Agnieszka Szuba, Daniel Kierzkowski, and Przemysław Wojtaszek	

Ionic Loops and Rebounds: Oxygen-Deprivation Signaling in Plants 195
Chalivendra C. Subbaiah

Signaling in Plant Gravitropism 209
Patrick H. Masson, John Stanga, Carolyn Neal, Laura Vaughn
Katherine Baldwin, and Gengxiang Jia

Signaling in Phototropism 239
R. Brandon Celaya, Ullas V. Pedmale, and Emmanuel Liscum

Signaling in the Circadian Clock 261
Eleni Boikoglou and Seth J. Davis

Vesicle Trafficking in Plant Pathogen Defence 287
Hans Thordal-Christensen

Index. 303