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Titolo	Symplasmic transport in vascular plants // Katarzyna Sokolowska, Pawel Sowinski, editors
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Characteristics of Symplasmic Transport Pawe Sowiski -- 2. Developmental Control of Plasmodesmata Frequency, Structure, and Function Katrin Ehlers and Maike Große Westerloh -- 3. Regulation of Intercellular Transport through Plasmodesmata under Abiotic Stresses Anna Bilska -- 4. Symplasmic Transport in Wood: the Importance of Living Xylem Cells Katarzyna Sokoowska -- 5. Symplasmic Transport in Phloem Loading and Unloading Johannes Liesche and Alexander Schulz -- 6. Mechanism of Long-distance Solute Transport in Phloem Elements Craig Atkins -- 7. Plasmodesmata and Phloem-based Trafficking of Macromolecules Dhinesh Kumar, Ritesh Kumar, Tae Kyung Hyun and Jae-Yean Kim -- 8. Plasmodesmata: New Perspectives on Old Questions Robyn L. Overall, Danny Y.T. Liu and Deborah A. Barton.
Sommario/riassunto	Emphasizes the important, often marginalized role symplasmic communication performs in plants. This book characterizes the efficiency of symplasmic transport, mechanisms of molecule passage via plasmodesmata, and the external and internal factors that regulate plasmodesmatal conductivity. In this context, the book focuses on the role of symplasmic domains in plant development, as well as the influence of environmental stresses on the plasmodesmata. Besides cell-to-cell symplasmic transport, the significance of long-distance

symplasmic transport of solutes in phloem elements is also reviewed. Symplasmic Transport in Vascular Plants presents the mechanism of phloem transport, the processes of symplasmic loading and unloading, as well as the role of pre- and post-phloem transport, with special attention paid to symplasmic transport in wood. Finally, the relevance of the spread of both macromolecules and viruses, via plasmodesmata, is presented.
