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Titolo	Spiderwebs and silk : tracing evolution from molecules to genes to phenotypes / / Catherine L. Craig
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Descrizione fisica	1 online resource (257 p.)
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents; 1 Silk Proteins: Breakdown and Evolutionary Pathways; 2 The Comparative Architecture of Silks, Fibrous Proteins, and Their Encoding Genes in Insects and Spiders; 3 The Mechanical Functions of Silks and Their Correlated Structural Properties; 4 Insect Spatial Vision Is a Potential Selective Factor on the Evolution of Silk Achromatic Properties and Web Architecture; 5 Insect Color Vision Is a Potential Selective Factor on the Evolution of Silk Chromatic Properties and Web Design 6 Insect Learning Capacity Is a Potential Selective Factor in the Evolution of Silk Color and the Decorative Silk Patterns Spun by Spiders7 Inter-Gland Competition for Amino Acids and the ATP Costs of Silk Synthesis; 8 A One-Dimensional Developmental System and Life-Long Silk Synthesis May Preclude the Evolution of Higher Eusociality in Spiders; 9 Conclusions and Looking Forward; References; Index
Sommario/riassunto	Links the molecular evolution of silk proteins to the evolution and behavioral ecology of web-spinning spiders and other arthropods. This

book presents an integrated understanding of an interesting biological system at the molecular and organizational levels.