Record Nr.	UNINA9910786138103321
Autore	Brunetta Leslie <1960->
Titolo	Spider silk [[electronic resource] ] : evolution and 400 million years of spinning, waiting, snagging, and mating / / Leslie Brunetta, Catherine L. Craig
Pubbl/distr/stampa	New Haven, : Yale University Press, c2010
ISBN	1-299-46386-X 0-300-16315-0
Descrizione fisica	1 online resource (320 p.)
Altri autori (Persone)	CraigCatherine Lee
Disciplina	595.4/4
Soggetti	Spider webs Spiders - Anatomy Spiders, Fossil Spiders - Evolution Evolution (Biology)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references (p. [205]-218) and index.
Nota di contenuto	Front matter Contents Preface Acknowledgments A Timeline of the Spider Fossil Record One. Fossils Two. Living Fossils Three. Chance and Change Four. Outward and Upward Five. Triumph over Thin Air Six. Small Changes, Big Benefits Seven. Spinning, Running, Jumping, Swimming Eight. Going Vertical Nine. Links Ten. Now You See It, Now You Don't Eleven. Beyond "Perfect" Twelve. Endless Forms Notes Glossary Bibliography Index
Sommario/riassunto	Spiders, objects of eternal human fascination, are found in many places: on the ground, in the air, and even under water. Leslie Brunetta and Catherine Craig have teamed up to produce a substantive yet entertaining book for anyone who has ever wondered, as a spider rappelled out of reach on a line of silk, "How do they do that? "The orb web, that iconic wheel-shaped web most of us associate with spiders, contains at least four different silk proteins, each performing a different function and all meshing together to create a fly-catching machine that has amazed and inspired humans through the ages.

1.

Brunetta and Craig tell the intriguing story of how spiders evolved over 400 million years to add new silks and new uses for silk to their survival "toolkit" and, in the telling, take readers far beyond the orb. The authors describe the trials and triumphs of spiders as they use silk to negotiate an ever-changing environment, and they show how natural selection acts at the genetic level and as individuals struggle for survival.