

Paperback Re-issue

This book was originally published in 2002. Elastomeric proteins occur in a wide range of biological systems where they have evolved to fulfil precise biological roles. The best-known include proteins in vertebrate muscles and connective tissues, such as titin, elastin and fibrillin, and spider silks. However, other examples include byssus and abductin from bivalve mollusks, resilin from arthropods, and gluten from wheat. Interest in elastomeric proteins has been high for several reasons – first, because of their biological and medical significance, particularly in human diseases. Second, the unusual properties of proteins, such as spider silks, provide opportunities to develop materials. Third, the development of scanning probe microscopy makes it possible to study structures and biomechanical properties of these proteins at the single molecule level. This book will be of value to anyone with an interest in the various aspects of elastomeric proteins.

Cover illustration: SEM of *Loxosceles laeta* showing highly modified comb-like hairs found only on the apex of the posterior lateral spinneret.

Cover design by David Levy



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