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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	1.Exploring the sialomes of ticks -- 2. Qualitative and quantitative proteomics methods for the analysis of the Anopheles gambiae mosquito proteome -- 3. Lepidopteran peritrophic matrix composition, function, and formation -- 4. Cold adaptation responses in insects and other arthropods: An "omics" approach -- 5. Selenocysteine extinctions in insects -- 6. Lepidopteran antimicrobial peptides (AMPs): Overview, regulation, modes of action, and therapeutic potentials of insect-derived AMPs -- 7. Advanced protein expression using Bombyx mori nucleopolyhedrovirus (BmNPV) bacmid in silkworm -- 8. Insect biotechnology -- 9. Spider silks and their biotechnological applications -- 10. Nano-insecticides for the control of human and crop pests .
Sommario/riassunto	Volume 2 comprises 10 chapters emphasizing proteomics and other "omics" approaches for gaining fundamental knowledge of ticks, malaria mosquitoes, caterpillar larvae, spiders, and other arthropods, and practical applications for the specialized substances they produce.

Included are comprehensive reviews of the tick salivary gland proteome, the lepidopteran larval peritrophic matrix, and circadian changes in the malaria mosquito proteome, the biochemistry of insect cold adaptation, and the evolutionary loss of selenocysteine from insect lineages. Surveyed are antimicrobial peptides for medical therapeutics, advanced insect systems for expressing biologically active proteins, properties and uses for spider silks, and novel nano-insecticides from bio-active plant extracts. The editors have assembled top-quality scientists from diverse fields of insect genomics, proteomics and biotechnology to produce a major new work. The chapters of this series (Volumes 1 & 2) present many experts' contributions, providing a concise overview of recent advances by highlighting their current research. The chapters are accessible to wide audience, helping students, postdocs, and researchers to broaden their knowledge and gain an understanding of the challenges and opportunities in each field. Emphasis is on innovative effective and ecologically sound approaches based on the knowledge of insect science to improve public health and agriculture.
