1. Record Nr. UNINA9910783668603321

Titolo	Documenting domestication [[electronic resource]] : new genetic and archaeological paradigms / / edited by Melinda A. Zeder ... [et al.]
Pubbl/distr/stampa	Berkeley, Calif., : University of California Press, c2006
ISBN	1-282-35893-6 1-4237-8965-2 9786612358937 0-520-93242-0 1-60129-382-8
Descrizione fisica	1 online resource (377 p.)
Classificazione	WG 9300
Altri autori (Persone)	ZederMelinda A
Disciplina	631.5/233
Soggetti	Plants, Cultivated - Genetics Plant remains (Archaeology) Domestic animals - Genetics Animal remains (Archaeology)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front matter -- Contents -- List Of Contributors -- List Of Tables -- List Of Figures -- 1. Documenting Domestication: Bringing Together Plants, Animals, Archaeology, And Genetics -- 2. Documenting Domesticated Plants In The Archaeological Record -- 3. Seed Size Increase As A Marker Of Domestication In Squash (Cucurbita Pepo) -- 4. A Morphological Approach To Documenting The Domestication Of Chenopodium In The Andes -- 5. Identifying Manioc (Manihot Esculenta Crantz) And Other Crops In Pre-Columbian Tropical America Through Starch Grain Analysis: A Case Study From Central Panama -- 6. Phytolith Evidence For The Early Presence Of Domesticated Banana (Musa) In Africa -- 7. Documenting The Presence Of Maize In Central And South America Through Phytolith Analysis Of Food Residues -- 8. Genetic Data And Plant Domestication -- 9. DNA Sequence Data And Inferences On Cassava's Origin Of Domestication -- 10. Relationship Between Chinese Chive (Allium Tuberosum) And Its Putative Progenitor A. Ramosum As Assessed By Random Amplified Polymorphic DNA

(RAPD) -- 11. Using Multiple Types Of Molecular Markers To Understand Olive Phylogeography -- 12. Origins Of Polyploid Crops: The Example Of The Octoploid Tuber Crop Oxalis Tuberosa -- 13. Archaeological Approaches To Documenting Animal Domestication -- 14. A Critical Assessment Of Markers Of Initial Domestication In Goats (Capra Hircus) -- 15. The Domestication Of The Pig (Sus Scrofa): New Challenges And Approaches -- 16. The Domestication Of South American Camelids: A View From The South-Central Andes -- 17. Early Horse Domestication On The Eurasian Steppe -- 18. Documenting Domestication: Reading Animal Genetic Texts -- 19. Genetic Analysis Of Dog Domestication -- 20. Origins And Diffusion Of Domestic Goats Inferred From DNA Markers: Example Analyses Of mtDNA, Y Chromosome, And Microsatellites -- 21. Mitochondrial DNA Diversity In Modern Sheep: Implications For Domestication -- 22. Genetics And Origins Of Domestic Cattle -- 23. Genetic Analysis Of The Origins Of Domestic South American Camelids -- 24. Genetic Documentation Of Horse And Donkey Domestication -- Index

Sommario/riassunto

Agriculture is the lever with which humans transformed the earth over the last 10,000 years and created new forms of plant and animal species that have forever altered the face of the planet. In the last decade, significant technological and methodological advances in both molecular biology and archaeology have revolutionized the study of plant and animal domestication and are reshaping our understanding of the transition from foraging to farming, one of the major turning points in human history. This groundbreaking volume for the first time brings together leading archaeologists and biologists working on the domestication of both plants and animals to consider a wide variety of archaeological and genetic approaches to tracing the origin and dispersal of domesticates. It provides a comprehensive overview of the state of the art in this quickly changing field as well as reviews of recent findings on specific crop and livestock species in the Americas, Eurasia, and Africa. Offering a unique global perspective, it explores common challenges and potential avenues for future progress in documenting domestication.

2.

Record Nr.	UNINA9910299755403321
Autore	Pourfath Mahdi
Titolo	The non-equilibrium Green's function method for nanoscale device simulation / / Mahdi Pourfath
Pubbl/distr/stampa	Wien : , : Springer, , [2014] ©2014
ISBN	3-7091-1800-X 9783709118009
Descrizione fisica	1 online resource (xvii, 256 pages) : illustrations
Collana	Computational Microelectronics
Disciplina	515.35
Soggetti	Green's functions Nanoelectronics - Mathematical models Many-body problem Electronics Microelectronics Nanoscience Nanostructures Nanotechnology Computer-aided engineering Electronics and Microelectronics, Instrumentation Nanoscale Science and Technology Nanotechnology and Microengineering Computer-Aided Engineering (CAD, CAE) and Design
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Review of quantum mechanics -- Review of statistical mechanics -- Green's function formalism -- Implementation -- Applications -- Non-interacting Green's functions -- Feynman diagrams -- Variational derivation of self-energies.
Sommario/riassunto	For modeling the transport of carriers in nanoscale devices, a Green-function formalism is the most accurate approach. Due to the complexity of the formalism, one should have a deep understanding of

the underlying principles and use smart approximations and numerical methods for solving the kinetic equations at a reasonable computational time. In this book the required concepts from quantum and statistical mechanics and numerical methods for calculating Green functions are presented. The Green function is studied in detail for systems both under equilibrium and under nonequilibrium conditions. Because the formalism enables rigorous modeling of different scattering mechanisms in terms of self-energies, but an exact evaluation of self-energies for realistic systems is not possible, their approximation and inclusion in the quantum kinetic equations of the Green functions are elaborated. All the elements of the kinetic equations, which are the device Hamiltonian, contact self-energies, and scattering self-energies, are examined and efficient methods for their evaluation are explained. Finally, the application of these methods to study novel electronic devices such as nanotubes, graphene, Si-nanowires, and low-dimensional thermoelectric devices and photodetectors are discussed.