Record Nr. UNINA9910817149903321 Autore Buatois Luis A. **Titolo** Ichnology: organism-substrate interactions in space and time / / Luis A. Buatois, M. Gabriela Mangano [[electronic resource]] Cambridge:,: Cambridge University Press,, 2011 Pubbl/distr/stampa 1-107-21844-6 **ISBN** 1-139-12400-5 1-283-29553-9 9786613295538 1-139-12204-5 1-139-11630-4 1-139-11194-9 1-139-12696-2 0-511-97562-7 1-139-11413-1 Descrizione fisica 1 online resource (xii, 358 pages) : digital, PDF file(s) SCI054000 Classificazione Disciplina 560/.43 Soggetti Ichnology Paleoecology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Title from publisher's bibliographic system (viewed on 05 Oct 2015). Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Machine generated contents note: Part I. Conceptual Tools and Methods: 1. The basics of ichnology; 2. Taxonomy of trace fossils; 3. Paleobiology of trace fossils; 4. The ichnofacies model; 5. The ichnofabric approach; Part II. Spatial Trends: 6. Trace fossils and paleoecology; 7. Ichnology of shallow-marine clastic environments; 8. Ichnology of marginal-marine environments; 9. Ichnology of deepmarine clastic environments; 10. Ichnology of continental environments; 11. Ichnology of carbonate environments, rocky shorelines and volcanic terrains: Part III. A Matter of Time: 12. Trace fossils in sequence stratigraphy; 13. Trace fossils in biostratigraphy; 14. Trace fossils in evolutionary paleoecology; 15. Trace fossils in paleoanthropology and archeology; References; Index.

Sommario/riassunto

Ichnology is the study of traces created in the substrate by living organisms. This is the first book to systematically cover basic concepts and applications in both paleobiology and sedimentology, bridging the gap between the two main facets of the field. It emphasizes the importance of understanding ecologic controls on benthic fauna distribution and the role of burrowing organisms in changing their environments. A detailed analysis of the ichnology of a range of depositional environments is presented using examples from the Precambrian to the recent, and the use of trace fossils in facies analysis and sequence stratigraphy is discussed. The potential for biogenic structures to provide valuable information and solve problems in a wide range of fields is also highlighted. An invaluable resource for researchers and graduate students in paleontology, sedimentology and sequence stratigraphy, this book will also be of interest to industry professionals working in petroleum geoscience.