Record Nr. UNINA9910299425403321 Ammonoid Paleobiology: From macroevolution to paleogeography / / **Titolo** edited by Christian Klug, Dieter Korn, Kenneth De Baets, Isabelle Kruta, Royal H. Mapes Dordrecht:,: Springer Netherlands:,: Imprint: Springer,, 2015 Pubbl/distr/stampa **ISBN** 94-017-9633-5 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (615 p.) Topics in Geobiology, . 0275-0120 : : 44 Collana Disciplina 564.53 Soggetti Paleontology **Evolutionary biology** Invertebrates Zoology Paleontology **Evolutionary Biology** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Part I. Macroevolution -- Part II. Paleobiogeography of ammonoids --Nota di contenuto Part III. Ammonoids through time. Sommario/riassunto This two-volume work is a testament to the abiding interest and human fascination with ammonites. We offer a new model to explain the morphogenesis of septa and the shell, we explore their habitats by the content of stable isotopes in their shells, we discuss the origin and later evolution of this important clade, and we deliver hypotheses on its demise. The Ammonoidea produced a great number of species that can be used in biostratigraphy and possibly, this is the macrofossil group. which has been used the most for that purpose. Nevertheless, many aspects of their anatomy, mode of life, development or paleobiogeographic distribution are still poorly known. Themes

treated are biostratigraphy, paleoecology, paleoenvironment,

paleobiogeography, evolution, phylogeny, and ontogeny. Advances such as an explosion of new information about ammonites, new technologies such as isotopic analysis, tomography and virtual

paleontology in general, as well as continuous discovery of new fossil finds have given us the opportunity to present a comprehensive and timely "state of the art" compilation. Moreover, it also points the way for future studies to further enhance our understanding of this endlessly fascinating group of organisms.