1. Record Nr. UNINA9910484086203321 Autore Ikehara Kenji Titolo Towards revealing the origin of life: presenting the GADV hypothesis / / Kenji Ikehara Cham, Switzerland: ,: Springer, , [2021] Pubbl/distr/stampa ©2021 **ISBN** 3-030-71087-4 Edizione [1st ed. 2021.] Descrizione fisica 1 online resource (XXIII, 240 p. 105 illus., 76 illus. in color.) Disciplina 577 Life - Origin Soggetti Genes Genetic code Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Introduction -- Modern Fundamental Life System -- The Origin of Protein -- The Origin of Cell Structure -- The Origin of Metabolism --The Origin of tRNA -- The Origin of the Genetic code -- The Origin of Gene -- The Origin of Life -- General Discussion. The origin of life has been investigated by many researchers from Sommario/riassunto various research fields, such as Geology, Geochemistry, Physics, Chemistry, Molecular Biology, Astronomy and so on. Nevertheless, the origin of life remains unsolved. One of the reasons for this could be attributed to the different approaches that researchers have used to understand the events that happened on the primitive Earth. The origins of the main three members of the fundamental life system, as gene, genetic code and protein, could be only separately understood with these approaches. Therefore, it is necessary to understand the origins of gene, the genetic code, tRNA, metabolism, cell structure and protein not separately but comprehensively under a common concept

in order to understand the origin of life, because the six members are intimately related to each other. In this monograph, the author offers a comprehensive hypothesis to explain the origin of life under a common concept. At the same time, the author offers the [GADV] hypothesis contrasting it with other current hypotheses and discusses the results

of analyses of genes/proteins and the experimental data available in the exploration of the current knowledge in the field. This book is of interest for science students, researchers and the general public interested in the origin of life.