

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Record Nr.           | UNINA9910299429903321                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Titolo                  | Geology and Resource Potential of the Congo Basin // edited by Maarten J. de Wit, François Guillocheau, Michiel C. J. de Wit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Pubbl/distr/stampa      | Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| ISBN                    | 3-642-29482-0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Edizione                | [1st ed. 2015.]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Descrizione fisica      | 1 online resource (445 p.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Collana                 | Regional Geology Reviews, , 2364-6438                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Disciplina              | 938.1092368                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Soggetti                | Geology<br>Economic geography<br>Environmental management<br>Economic Geography<br>Environmental Management                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 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       | Regional Lithosphere Framework: Crust and Mantle: The upper mantle seismic velocity structure of south-central Africa and the seismic architecture of Precambrian lithosphere beneath the Congo basin (CB) -- Precambrian basement of the Congo basin and flanking terranes -- Basin Sedimentology and Stratigraphy: Neoproterozoic-Cambrian; Paleozoic-Early Mesozoic; Mesozoic; Cenozoic: An overview of the Neoproterozoic sedimentary series in DRC and neighbouring countries -- Sedimentology and sequence stratigraphy of late Precambrian carbonates of the Mbuji-Mayi Supergroup in the Sankuru-Mbuji-Maji-Lomami-Lovoy basin (DRC) -- Probable fungal colonization and carbonate diagenesis of Neoproterozoic stromatolites from South Gabon -- Neoproterozoic to Cambrian evolution of the Congo basin -- Carboniferous-Triassic stratigraphy and paleogeography of Karoo-like sequences of the CB -- Facies analysis, chronostratigraphy and paleo-environmental reconstructions of the Jurassic-Cretaceous sequences of the CB -- Mesozoic sedimentary cover sequences of the Congo basin in the Kasai Region, DRC -- Formation and collapse of the African surface (Kalahari duricrust) across the CB, with implications for changes in the rates of Cenozoic off-shore sedimentation -- Geodynamics, Tectonic |

Evolution and Basin Models: Multiphase Phanerozoic subsidence and uplift history -- Thermal regime and evolution of the CB as an intracratonic basin -- New regional correlations between the CB and the Paraná basin of central West Gondwana -- Neotectonics, Geomorphology and River Systems: Cenozoic landscape evolution in and around the Congo basin -- Present day drainage patterns of the Congo river system and their Neogene evolution -- Resources: Economic and Potential Deposits: Diamond-bearing gravels along the Kwango river, DRC -- A review of the kimberlites in the DRC -- Petroleum potential of the Congo basin -- Metallogenic fingerprints of the Congo shield with predictions for mineral endowment beneath the Congo basin.

---

Sommario/riassunto

This book summarizes the geomorphology, geology, geochronology, geophysics and mineral resources of the Congo Basin, one of the world's most enigmatic and poorly understood major intra-continental sedimentary basins, and its flanking areas of Central Africa. It provides an up to date analysis of the large region's origin and evolution. The book's nineteen chapters take the reader through the entire basement history, as well as the Basin's ca. 700 million years of cover sequences. Starting from its Archean cratons and Proterozoic mobile belts, and proceeding through the Phanerozoic sequences, including the most recent Cenozoic successions, the book also explores the present drainage systems and the subtle but complex topography of the Congo Basin. It also presents and evaluates new basin models and related dynamic processes, as well as revised correlation schemes with its Gondwana counterparts in South America, all of which provide key insights into its rich diamond deposits and other mineral wealth, which are documented in the final chapters. A specific feature of this book is its synthesis, performed by teams of active experts, of a vast amount of geoscientific data previously only recorded in research reports, company reports, survey bulletins, and scattered journal articles and books. The sheer size of the Congo Basin (ca. 1.8 million km<sup>2</sup>, or just under half the area of the EU) and Central Africa (some 7 million km<sup>2</sup>, or more than 70% of the area of the USA) will make this a sought-after source of information and inspiration on this unique region. .

---