Record Nr. UNINA9910300559603321 Autore Stevenson David S Titolo Granite Skyscrapers: How Rock Shaped Earth and Other Worlds / / by David S. Stevenson Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-319-91503-7 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (386 pages): illustrations Collana Popular Astronomy, , 2626-8760 Disciplina 552.3 Soggetti Astronomy **Planetology** Astrobiology Geobiology Cosmology Popular Science in Astronomy Biogeosciences Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Preface -- Chapter 1 - Our Planet's Torrid Heart -- Chapter 2: The Nota di contenuto Formation of Granite -- Chapter 3: The Evolution of Modern Continents -- Chapter 4: Plate Tectonics, Planetary Magnetism and Life -- Chapter 5: Jotunheim: In The Realm of Giants -- Chapter 6: Mountains, Atmosphere and Long-Term Habitability -- Chapter 7: Our Island Earth: Granite Here, Granite Everywhere? -- Conclusions -- References -- Glossary -- Index. In this book, David Stevenson offers us a look at the evolution of Sommario/riassunto planets as they move from balls of mixed molten rock to vibrant worlds capable of hosting life. Embedded in our everyday architecture and in the literal ground beneath our feet, granite and its kin lie at the heart of many features of the Earth that we take for granted. From volcanism and mountain building to shifting water levels and local weather patterns, these rocks are closely intertwined with the complex

processes that continue to shape and reshape our world. This book serves as a wonderful primer for anybody interested in our planet's

geological past and that of other planets in our Solar System and beyond. It illustrates not only how our planet's surface evolved, but also how granite played a pivotal role in the creation of complex, intelligent life on Earth. There has long been a missing element in popular astronomy, which Stevenson now aims to fill: how geological and biological evolution work in a complex partnership, and what our planet's own diversity can teach us about other rocky worlds.