Record Nr. UNINA9910822815703321 **Titolo** Geothermal systems and energy resources: Turkey and Greece // editors, Alper Baba, Geothermal Energy Research and Application Center, Izmir Institute of Technology, Izmir, Turkey, Jochen Bundschuh, University of Southern Queensland (USQ), Toowoomba, Australia, Royal Institute of Technology (KTH), Stockholm, Sweden, D. Chandrasekaram, Department of Earth Sciences, Indian Institute of Technology, Bombay, India Leiden, The Netherlands:,: CRC Press/Balkema,, [2014] Pubbl/distr/stampa ©2014 **ISBN** 0-429-22735-3 1-315-77502-6 Descrizione fisica 1 online resource (324 p.) Collana Sustainable Energy Developments, , 2164-0645;; Volume 7 Disciplina 333.88 Soggetti Geothermal resources - Greece Geothermal resources - Turkey Geothermal engineering - Greece Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali A Balkema book. Nota di bibliografia Includes bibliographical references at the end of each chapters. Front Cover; About the book series; Editorial board; Table of contents: Nota di contenuto Contributors; Preface by Ladislaus Rybach; Editors' foreword; About the editors; Acknowledgements; 1. Chemical and isotopic constraints on the origin of thermal waters in Anatolia, Turkey: fluid-mineral equilibria approach; 2. Gas geochemistry of Turkish geothermal fluids: He-CO2 systematics in relation to active tectonics and volcanism; 3. Geothermal fields and thermal waters of Greece: an overview: 4. Geological setting, geothermal conditions and hydrochemistry of south and southeastern Aegean geothermal systems 5. Application of hydrogeochemical techniques in geothermal systems

examples from the eastern Mediterranean region; 6. Hydrochemical investigations of thermal and mineral waters in the Turgutlu-Salihli-Ala sehir plain (Gediz graben), western Turkey; 7. Electrically conductive structures and geothermal model in Sakarya-Goynuk area in eastern

Marmara region inferred from magnetotelluric data; 8. Use of sulfur isotopes on low-enthalpy geothermal systems in Ayas-Beypazari (Ankara), central Anatolia, Turkey

- 9. Geochemistry of thermal waters in eastern Anatolia: a case study from Diyadin (Agri) and Ercis-Zilan (Van)10. Balcova geothermal field district heating system: lessons learned from 16 years of application;
- 11. Rapid development of geothermal power generation in Turkey; 12. Scaling problem of the geothermal system in Turkey; 13. Exergetic and exergoeconomic aspects of ground-source (geothermal) heat pumps in Turkey; 14. Application of geophysical methods in Gulbahce geothermal site, Urla-Izmir, western Anatolia
- 15. Palaeoenvironmental and palynological study of the geothermal area in the Gulbahce Bay (Aegean Sea, western Turkey)Book series page In the region comprised by Turkey and Greece, people have been using water from geothermal sources for bathing and washing of clothes since ancient times. This region falls within the Alpine-Himalayan orogenic belt and hence is locus of active volcanism and tectonism and experiences frequent seismic events. This volcanic and tectonic activity has given rise to over 1500 geothermal springs. Its importance has been recognized decades ago and the geothermal water is being utilized now for district heating, industrial processing, domestic water supply, balneology and electric power generation.

## Sommario/riassunto