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Sommario/riassunto

In the 21st century, the importance of earth sciences in the pursuit of knowledge and understanding of the planet on which we live, has increased tremendously. Above all, they address the challenge of enriching human lives with the bounties of nature, while preserving the planet for future generations. The chief goals of Solid Earth Geophysics are to define and quantify the internal structure and processes of the Earth in terms of physical principles, and to provide an essential framework that allied disciplines can employ for more focused investigations. The earliest version of The Encyclopedia of Solid Earth Geophysics was released by the Van Nostrand Reinhold publishing company in 1989. More than two decades later, a completely revised and updated version, edited by Prof. Harsh K. Gupta, was published in 2011. Including over 200 articles authored by specialists from all over the world, it was very well received. Reflecting the rapid advances in Solid Earth Geophysics over the past decade and the global need for an authentic update, this new edition of the Encyclopedia presents over 250 articles covering established and new concepts in Geophysics across various sub-disciplines such as Gravity, Geodesy, Geomagnetism, Seismology, Seismics, Deep Earth Processes, Plate Tectonics, Thermal Domains, Computational Methods, etc. in a systematic and consistent format. Offering an authoritative and current up-to-date reference source with extraordinary scope and gathering expert contributions by more than 300 authors around the globe, the new edition will serve as a valuable and cherished source of information for current and future generations of professionals. Review from the first edition: "The Encyclopedia of Solid Earth Geophysics ... nicely brings together numerous geophysical topics and presents this sometimes dry, mathematical and abstract field in a language comprehensible to researchers, teachers, students, and professional geophysicists. ... the new encyclopedia should be of great interest to petroleum explorers, researchers and educators as well. ... A list of references at the end of each article directs the interested reader for further research." (Rasoul Sorkhabi, GEO ExPro, September, 2013).
