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Descrizione fisica	1 online resource (905 pages)
Collana	Advances in Volcanology, An Official Book Series of the International Association of Volcanology and Chemistry of the Earth's Interior, , 2364-3285
Altri autori (Persone)	CaudronCorentin
Disciplina	551.21
Soggetti	Geophysics Fiber optics Geochemistry Natural disasters Fiber Optics Natural Hazards
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	1. Time-Variable Volcano Gravimetry -- 2. Monitoring volcanoes deformation based on Synthetic Aperture Radar (SAR) data -- 3. Detection and Location of Volcano-Tectonic Earthquakes -- 4. Monitoring LP & VLP seismicity -- 5. Network-based analysis of seismo-volcanic tremors -- 6. Coda wave interferometry for volcano monitoring -- 7. On the use of Infrasound in volcano monitoring and early warning -- 8. Geochemical monitoring of volcanic fluids in the 21st century -- 9. Remote monitoring of volcanic gases -- 10. Monitoring lava flows -- 11. Thermal monitoring of volcanoes from space -- 12. From eruptive histories to volcano monitoring: probabilistic eruption forecasting and volcanic hazard assessment at varying temporal and spatial scales -- 13. Prospects for forecasting volcanic eruptions after long repose -- 14. Machine learning for volcano monitoring -- 15. Monitoring Lightning and Electrification in Volcanic Plumes -- 16. Muography of Volcanoes -- 17. Fiber optic sensing for volcano monitoring and imaging volcanic processes.
Sommario/riassunto	This book describes the different tools that have been developed

during the last decades to explain how scientists study volcanoes. It takes into consideration volcanology as being a complex field at the interface between geology, geochemistry and geophysics and provides information about these aspects to embrace the diversity of a volcanic system. The book also provides an outlook to which direction this research is leading. It offers a hands-on experience directly useful if the reader wants to start applying the principles exposed.
