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Sommario/riassunto

This volume is aimed at providing a comprehensive overview of the state of art of research related to geo-related hazards in the Caucasus and other orogenic regions; it is also devoted to shedding light on a broad array of geological phenomena as well as discussing innovative tools and strategies for geohazard assessment. Additional emphasis is placed on preventive and mitigation measures, which might be helpful in tackling seismic, volcanic and landslide risks affecting major lifelines and infrastructures. The innovative, multidisciplinary methodologies illustrated in this volume may be successfully applied to other orogenic regions across the globe. The book features major scientific contributions from experts working on different Earth Science topics, such as seismology, structural geology, applied geology and volcanology. Its chapters describe a wide gamut of cutting-edge research methodologies and are thus intended to be read and shared by the worldwide Earth Science community. Inparticular, the readers will have a chance to gain a thorough knowledge of a number of key geological features that can be observed across both the Greater and Lesser Caucasus. Moreover, the volume provides a thorough description of the techniques employed to assess seismic hazard in major cities - such as microzonation - and an overview of the efforts taken to monitor and prevent seismic and landslide hazard posed to vital energy infrastructures in the Caucasus region.