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	Nota di contenuto	General introduction of the Suizhou meteorite Micro-mineralogical investigative techniques Mineralogy of unmelted chondritic rock Distinct morphological and petrological features of the Suizhou shock veins Mineralogy of Suizhou shock veins Shock-induced redistribution of trace elements Evaluation of shock stage for Suizhou meteorite P-T history of the Suizhou meteorite.
	Sommario/riassunto	This book introduces the unusual shock-related mineralogical features of the shocked Suizhou L6 (S5) meteorite. The olivine and pyroxene in Suizhou display a mosaic shock feature, while most of plagioclase grains have transformed to glassy maskelynite. A few of the shock- induced melt veins in the meteorite are the simplest, straightest and thinnest ones among all shock-vein-bearing meteorites, and contain the most abundant high-pressure mineral species. Among the 11 identified species, tuite, xieite, and the post-spinel CF-phase of chromite are new minerals. The meteorite experienced a peak shock pressure up to 24 GPa and temperatures of up to 1000° C. Locally developed shock veins were formed at the same pressure, but at an elevated temperature of about 2000° C that was produced by localized shear-friction stress. The rapid cooling of the extremely thin shock

veins is the main reason why 11 shock-induced high-pressure mineral phases could be preserved in them so well. This book offers a helpful guide for meteoritics researchers and mineralogists and invaluable resource for specialists working in high-pressure and hightemperature mineralophysics.