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| Altri autori (Persone)  | JerramDougal<br>CaddickMark  |
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| Sommario/riassunto      | <p>"Metamorphic rocks form a substantial proportion of the material that makes up the Earth's crust, and metamorphic processes have been almost continually occurring throughout geological time since the origin of that crust. Metamorphism can be defined simply as the process by which sedimentary or igneous rocks are transformed (metamorphosed) by re-crystallisation due to changes in pressure, temperature, or fluid conditions. To complicate matters somewhat, metamorphism can of course also act on rocks that have already been metamorphosed previously, building layer upon layer of complexity into those rocks that record field evidence of some of Earth's most dynamic processes. Our understanding of metamorphism is somewhat limited by the fact that we are unable to directly observe it happening to the rocks. As you read this, metamorphism is in action all around the planet, in all aspects of the Earth's plate tectonic system (e.g. Figure 1.1), but we cannot directly see it (generally because it happens at depth and very slowly). In order to understand the processes and products of metamorphism and alteration in rocks, detailed fieldwork, petrography, experimental studies, and numerical modelling are required. It is important to note, however, that the very origin of metamorphic petrology (the science of understanding the distribution, structure, and origin of metamorphic rocks) is rooted in a tradition of</p> |

careful and systematic field observation, and that this remains an absolute cornerstone of the discipline today"--

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