

Contents

1	Physical Principles of Cathodoluminescence (CL) and its Applications in Geosciences	1
	Jens Götze and Ulf Kempe	
2	Shock Metamorphism of Terrestrial Impact Structures and its Application in the Earth and Planetary Sciences	23
	Arnold Gucsik	
3	Petrological Modifications in Continental Target Rocks from Terrestrial Impact Structures: Evidence from Cathodoluminescence	45
	Thomas Götte	
4	Impact Diamonds: Formation, Mineralogical Features and Cathodoluminescence Properties	61
	Giovanni Pratesi	
5	Cathodoluminescence Microscopy and Spectroscopy of Lunar Rocks and Minerals	87
	Jens Götze	
6	Cathodoluminescence Instrumentation for Analysis of Martian Sediments	111
	Roger Thomas, Vincent Barbin, Claire Ramboz, Laurent Thirkell, Paul Gille, Richard Leveille and Karl Ramseyer	
7	Astrobiological Aspect of Chemolithoautotrophic Bacterial Activity in the Role of Black Shale-Hosted Mn Mineralization and Cathodoluminescence Study of High Mn-Bearing Carbonates	127
	Márta Polgári, Arnold Gucsik, Bernadett Bajnóczi, Jens Götze, Kazue Tazaki, Hiroaki Watanabe and Tamás Vigh	
	Index	157

