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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Introduction -- 2. The Irregularity Strength of a Graph -- 3. Modular Sum-Defined Irregular Colorings -- 4. Set-Defined Irregular Colorings -- 5. Multiset-Defined Irregular Colorings -- 6. Sum-Defined Neighbor-Distinguishing Colorings -- 7. Modular Sum-Defined Neighbor-Distinguishing Colorings -- 8. Strong Edge Colorings of Graphs -- 9. Sum-Defined Chromatic Indices -- References -- Index.
Sommario/riassunto	A comprehensive treatment of color-induced graph colorings is presented in this book, emphasizing vertex colorings induced by edge colorings. The coloring concepts described in this book depend not only on the property required of the initial edge coloring and the kind of objects serving as colors, but also on the property demanded of the vertex coloring produced. For each edge coloring introduced, background for the concept is provided, followed by a presentation of results and open questions dealing with this topic. While the edge colorings discussed can be either proper or unrestricted, the resulting vertex colorings are either proper colorings or rainbow colorings. This gives rise to a discussion of irregular colorings, strong colorings, modular colorings, edge-graceful colorings, twin edge colorings and binomial colorings. Since many of the concepts described in this book are relatively recent, the audience for this book is primarily

mathematicians interested in learning some new areas of graph colorings as well as researchers and graduate students in the mathematics community, especially the graph theory community.
