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Titolo	Handbook of Geometry and Topology of Singularities I // edited by José Luis Cisneros Molina, Dng Tráng Lê, José Seade
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Descrizione fisica	1 online resource (XVIII, 601 p. 128 illus., 54 illus. in color.)
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Soggetti	Algebraic geometry Topological groups Lie groups Functions of complex variables Projective geometry Topology Algebraic Geometry Topological Groups and Lie Groups Several Complex Variables and Analytic Spaces Projective Geometry
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Foreword -- Preface -- 1 The Combinatorics of Plane Curve Singularities -- 2 The Topology of Surface Singularities -- 3 Resolution of Singularities: an Introduction -- 4 Stratification Theory -- 5 Morse Theory, Stratification and Sheaves -- 6 The Topology of the Milnor Fibration -- 7 Deformation and Smoothing of Singularities -- 8 Distinguished Bases and Monodromy of Complex Hypersurface Singularities -- 9 The Lefschetz Theorem for Hyperplane Sections -- 10 Finite Dimensional Lie Algebras in Singularities. -Index.
Sommario/riassunto	This volume consists of ten articles which provide an in-depth and reader-friendly survey of some of the foundational aspects of singularity theory. Authored by world experts, the various contributions deal with both classical material and modern developments, covering a wide range of topics which are linked to each other in fundamental

ways. Singularities are ubiquitous in mathematics and science in general. Singularity theory interacts energetically with the rest of mathematics, acting as a crucible where different types of mathematical problems interact, surprising connections are born and simple questions lead to ideas which resonate in other parts of the subject. This is the first volume in a series which aims to provide an accessible account of the state-of-the-art of the subject, its frontiers, and its interactions with other areas of research. The book is addressed to graduate students and newcomers to the theory, as well as to specialists who can use it as a guidebook.
