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Soggetti	Geometry, Algebraic Geometry, Projective Computer science - Mathematics Commutative algebra Commutative rings Algebraic Geometry Projective Geometry Symbolic and Algebraic Manipulation Commutative Rings and Algebras Geometria algebraica Geometria projectiva Llibres electrònics
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Nota di contenuto	Hadamard products -- Linear spaces -- Not generic cases in P2 -- Grids and rulings -- Degenerate varieties -- Hypersurfaces -- Binomial varieties -- Hilbert functions -- Star configurations -- Gorenstein sets of points in P3 -- Pure Commutative Algebra -- Open questions.
Sommario/riassunto	This monograph deals with the Hadamard products of algebraic varieties. A typical subject of study in Algebraic Geometry are varieties constructed from other geometrical objects. The most well-known example is constituted by the secant varieties, which are obtained through the construction of the join of two algebraic varieties, which, in turn, is based on the operation of summing two vectors. However,

other constructions are possible through a change of the basic operation. One remarkable case is based on the Hadamard product of two vectors. While secant varieties of algebraic varieties have been studied extensively and systematically, the same is not yet true for the Hadamard products of algebraic varieties. This monograph aims to bridge this gap in the literature. The topic is presented in a self-contained manner, and it is accessible to all readers with sound knowledge of Commutative Algebra and Algebraic Geometry. Both experienced researchers and students can profit from this monograph, which will guide them through the subject. The foundational aspects of the Hadamard products of algebraic varieties are covered and some connections both within and outside Algebraic Geometry are presented. The theoretical and algorithmic aspects of the subject are considered to demonstrate the effectiveness of the results presented. Thus, this monograph will also be useful to researchers in other fields, such as Algebraic Statistics, since it provides several algebraic and geometric results on such products.
