Publisher’s description: This book addresses the fundamental concepts in the theory and practice of visual cryptography. The design, construction, analysis, and application of visual cryptography schemes (VCSs) are discussed in detail. Original, cutting-edge research is presented on probabilistic, size invariant, threshold, conolorous, and cheating immune VCS. This updated second edition has also been expanded with new content on braille and 2D barcode authentication of visual cryptography shares. Features: contains review exercises at the end of each chapter, as well as a helpful glossary; examines various common problems in visual cryptography, including the alignment, flipping, cheating, distortion, and thin line problems; reviews a range of VCSs, including XOR-based visual cryptography and security enriched VCS; describes different methods for presenting color content using visual cryptographic techniques; covers such applications of visual cryptography as watermarking, resolution variant VCS, and multiple resolution VCS.

For the review of the first edition see [Zbl 1308.68007].

**MSC:**

- 68-02 Research exposition (monographs, survey articles) pertaining to computer science
- 94-02 Research exposition (monographs, survey articles) pertaining to information and communication theory
- 68P25 Data encryption (aspects in computer science)
- 68U10 Computing methodologies for image processing
- 94A60 Cryptography
- 94A62 Authentication, digital signatures and secret sharing

**Full Text:** DOI