Research in electronic materials and devices in electrical engineering at Princeton covers a very broad range of topics. We are creating nanotechnologies for Electrical, Optical & Magnetic Materials and Devices. Apr 4, 2012. With information on the subject of dielectric materials, this volume brings important updates to electronic device engineers and researchers in
The Journal of Electronic Materials (JEM) reports monthly on the science and technology of electronic materials, while examining new applications for semiconductors, magnetic alloys, dielectrics, nanoscale materials, and photonic ... Specifically, the report should make substantial advancement in understanding properties of electronic materials and closely related disciplines. It is equally important that any submission should adhere to the highest principles of scientific ethics. Review papers on current topics enable individuals in the field of electronics to keep abreast of activities in areas peripheral to their own. This outstanding textbook provides an introduction to electronic materials and device concepts for the major areas of current and future information technology. On about 1,000 pages, it collects the fundamental concepts and key technologies related to advanced electronic materials and devices. The obvious strength of the book is its encyclopedic character, providing adequate background material instead of just reviewing current trends. His research group is focused on fundamental aspects of electronic materials and on such integrated devices as non-volatile memories, specifically ferroelectric memories, logic devices, sensors and actuators. Throughout, he has been collaborating with major semiconductor industries in Europe, the US, and the Far East.