During the past decades, understanding of the science and technology powering electronic materials has played a major role in satisfying social needs by developing electronic devices for automotive, telecommunications, military, and medical applications. This volume contains a collection of selected papers from the international symposia on Advanced Dielectric Materials and Electronic Devices and Ferroelectrics and Multiferroics presented during the Material Science and Technology conference held in Pittsburgh in October 2009. It is a one-stop resource for academics on the most important issue Electroceramic materials, as the name suggests, conduct electric currents obeying various physical mechanisms of current transport. These materials can exhibit a host of physical properties including high temperature superconductivity, magnetism, semiconductor, electro-optic, acousto-optic and nonlinear dielectrics. I offer my apologies to the readers in advance. I encourage them to point out the shortcomings of the book to me so that I can correct them in future. November 04, 2018 Austin, Texas. K. M. Nair, D. Suvorov, R. W. Schwartz, R. Guo. John Wiley & Sons, 2009