## **Preface**

As a relatively recent phenomenon, Electroceramics have had a profound impact on the so called "electronics revolution". Ceramic materials that have been specially formulated for specific electrical, electromagnetic and optical properties can be tailored for their use as insulators, ferroelectric materials, highly conductive ceramics, electrodes, MEMS, energy convertors, sensors and actuators, etc. The quest to push performance boundaries through further study into the fundamental aspects of electroceramics and their commercial applications is essential for the advancement of this science and technology.

The International Conference on Electroceramics (ICE) is a biennial event created to provide a platform for researchers and engineers to exchange knowledge and advances related to this emerging field of science. This series of conferences, initiated in Cambridge/Boston, with successive meetings held in Seoul, Tanzania, New Delhi, and then in Sydney, Australia from 12 - 16 December 2011.

This volume of Key Engineering Materials publishes a part of the works presented in ICE 2011. All manuscripts were peer-reviewed by two independent referees. We believe these works will bring some new insights to the development of electrocaermics. We would like to thank the indispensible support from the organizing committee members and specially thank Professor Weiguang Zhu from Nanyang Technological University, Singapore and Professor Yun Liu from Australia National University. The organizing committee would also like to acknowledge the financial supports from the sponsors.

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