PREFACE



E-MRS spring meeting 2016 symposium AA: solution processing and properties of functional oxide thin films and nanostructures II

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The European Materials Research Society (E-MRS) Spring Meeting 2016 was held on 2–6 May in the Congress Center in Lille, France. The conference included the second edition of the successful symposium on *Solution Processing and Properties of Functional Oxide Thin Films and Nanostructures II* (Symposium AA), organized to provide an overview of the current state of research on the synthesis and processing of solution-derived oxide and nanocomposite thin films and nanostructures, including their properties and applications, and offered a forum for the interchange of information and expertise.

The use of solution-based chemical synthesis methodologies for growing functional oxide thin films and nanostructures has become a tremendous expanding field in recent years. The flexibility in designing chemical precursors, using different types of solvents and shaping processes has become a great advantage as compared to physical methods. Many different synthetic approaches have been explored to achieve oxide materials with very diverse functionalities: ferroelectrics, ferromagnetics, semiconductors, catalysts, ionic conductors, superconductors, etc. The symposium attracted a large number of participants, showing the great

interest among materials scientists inside and outside Europe in a dedicated platform on solution processing of inorganic (nano) materials. There was a high involvement of young researchers, in particular graduate students in the symposium. In total, more than 150 accepted abstracts were presented. There were 21 invited and 63 contributed oral presentations distributed over 15 oral sessions and 75 posters in two evening poster sessions. The symposium addressed all aspects of solution processing of oxide materials with specific functionalities, ranging from materials synthesis, microstructural and functional characterization, low temperature processing, nanoparticles, colloidal dispersions, nanowires, nanosheets, thin films, hybrid materials, printing, and patterning of materials, to issues of large scale processing and scale-up. Special sessions were dedicated to electronic, optoelectronic, ferroelectric, photovoltaic, and other types of electronic and energy materials.

We would like to thank the European Materials Research Society for hosting the Symposium and help in organizing it. We wish to thank all the invited speakers, contributors, and participants who ensured the success of the Symposium with their presentations and fruitful discussions. We are also grateful to the members of the scientific committee, the reviewers of the submitted abstracts, the session chairs, and the two symposium assistants, Alexandr Momot (University of Hasselt, Belgium) and Can Fu (ICMAB-CSIC, Barcelona, Spain).

Two graduate students Jonathan de Roo (Ghent University, Belgium) and Zhang Xiao (Nanyang Technological University, Singapore) received the Graduate Student Awards for their scientific achievements. The Best Poster Awards were assigned to Katrien de Keukeleere and Jonathan de Roo (Ghent University, Belgium) and Emanuel Carlos (Universidade Nova de Lisboa, Portugal). We



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Finally, we would like to acknowledge all the authors of papers collected in this special issue, the reviewers of the submitted manuscripts, and the editorial staff of *Journal of Sol-Gel Science and Technology* for his effort in putting together this Themed Issue. We hope you will enjoy the papers assembled here and that they will be useful in your future research.

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