

Acknowledgements

I would like to thank my supervisor, Prof. Dr. I. V. Hertel, for giving me the opportunity to work at Max Born Institute on this interesting project, as well as for his interest in these studies.

I would also like to thank Prof. Dr. G. Kaindl for accepting to be my second supervisor and for his helpful suggestions concerning the interpretation and analysis of the data.

I acknowledge Prof. Dr. W. Raith for his interest in my activity at MBI, for the kind advise, and for the constructive suggestions he made to the manuscript.

I am grateful to Prof. Dr. W. Widdra for the very fruitful discussions concerning my work, which helped me significantly in understanding the results, as well as for the support of my scientific activity in the Institute.

Very special thanks go to Dr. B. Winter for helping me to gain insights in the field of photoemission, for the consistent support, encouragement and careful guidance through all the time I spent in MBI. I am also indebted to him for being receptive to my ideas and for the nice and friendly work atmosphere he created in the group.

I highly acknowledge the help that Dr. W. Freyer offered me in accomplishing these studies, as well as our scientific discussions. He took care of the synthesis of materials and ex-situ preparation of films, so that I always got them in time for the experiments. I also want to thank him for the analysis of the optical absorption spectra.

I am grateful to Mrs. K. Hermann for the optical absorption measurements and for the involvement in the materials preparation.

For the NEXAFS measurements shown in the thesis I thank Dr. D. Batchelor.

I am grateful to Dr. C. Schüßler-Langeheine and Dr. Zhiwei Hu for reading parts of the thesis and for their suggestions.

Acknowledgements

I am very appreciative to Prof. E. Burzo, Conf. V. Pop, and Prof. O. Isnard for the support they offered me in my professional accomplishments.

A special 'Thank you' goes to Ramona for her friendship but also for the help she gave me in doing certain measurements, sometimes even during long nights at BESSY II. Being with her at BESSY II made those experiments not only more efficient but also more enjoyable. I was glad to have her as a group and office colleague, and also as a friend.

I very much appreciate the support that Reinhard Grosser gave me for the measurements by taking care of the UHV chamber and many other technical aspects of the work, and moreover for his engagement in the activity at BESSY.

I want to thank Roman Peslin for assisting me in constructing the ovens and for repairing the manipulator for so many times. I am grateful to Roman also for nice conversations that helped me improving my German.

I thank Rainer Schumann for 'fighting' with my computer, quite often in the last time, in order to make it run properly. I would also like to thank Kathrein Baurich for her constant kindness and encouragement. I am grateful to Mr. Kinski, Mrs. Lekve and Mrs. Winter for the help I got from them in solving the administrative problems.

I would like to take this opportunity to thank my other department colleagues, David, Tanja, Karin, Burkhard, Cynthia, Philip, and Helena for their friendly attitude and the support they gave me when I needed it. I am thankful to Cynthia also for reading parts of this thesis and for the helpful suggestions concerning the language. Many thanks go also to Mark for his constant friendship.

My very special thank go to my parents and my brother for all their love and support as well as for the understanding they show it to me in every circumstance.

I would also like to deeply thank my husband, Razvan, for the great help, support, and encouragement he gave me during my PhD studies and for always standing by me. I am glad that we were together not only at home but also in the office.