

ACKNOWLEDGMENTS

The author wishes to express his sincere gratitude to Professor Hiroyuki Matsunami for his kind guidance and hearty encouragement. He is grateful to Professor Akio Sasaki for his useful suggestions and constructive criticism of the manuscript. He also acknowledges Professor Sigeo Fujita for a critical reading of the manuscript and valuable comments.

This work has been done at the Non-Equilibrium Materials Section of the Materials Science Division in Electrotechnical Laboratory (ETL), and has been supported by the Sunshine project under the Agency of Industrial Science and Technology, Ministry of International Trade and Industry.

The author would like to express his deep gratitude to Dr. Kazunobu Tanaka, chief senior researcher of the National Institute for Advanced Interdisciplinary Research for his guidance and encouragement. He wishes to acknowledge his gratitude to Dr. Akihisa Matsuda, chief of the Non-Equilibrium Materials Section in ETL for his valuable insights and advice specially on the deposition of amorphous materials. He wishes to express his thanks to Dr. Hideyo Okushi, chief of the Material Fundamentals Section in ETL for his fruitful discussions and comments. He also wishes to thank Dr. Hidetoshi Oheda, Dr. Satoshi Yamasaki, Dr. Nobuhiro Hata, and other members of the Non-Equilibrium Materials Section in ETL for their valuable insights and comments. He would like to thank Mr. Tetsuhiro Okuno from Sharp Corporation for co-work of his early research. He would like to express his gratitude to Dr. Z E. Smith in Xerox Palo Alto Research Center for his fruitful discussion and also for carrying out CPM measurements. He is grateful to Mr. Seiichiro Yokoyama for measurements of ESR and to Mr. Mitsuhiro Tanaka and Mr. Masashi Ueda for helping with sample preparations.

The author would like to thank to Associate Professor Takashi Fuyuki, Dr. Masahiro Yoshimoto, Dr. Tsunenobu Kimoto, and the other members of Matsunami's Laboratory in Kyoto University for helping with drafting the manuscript.