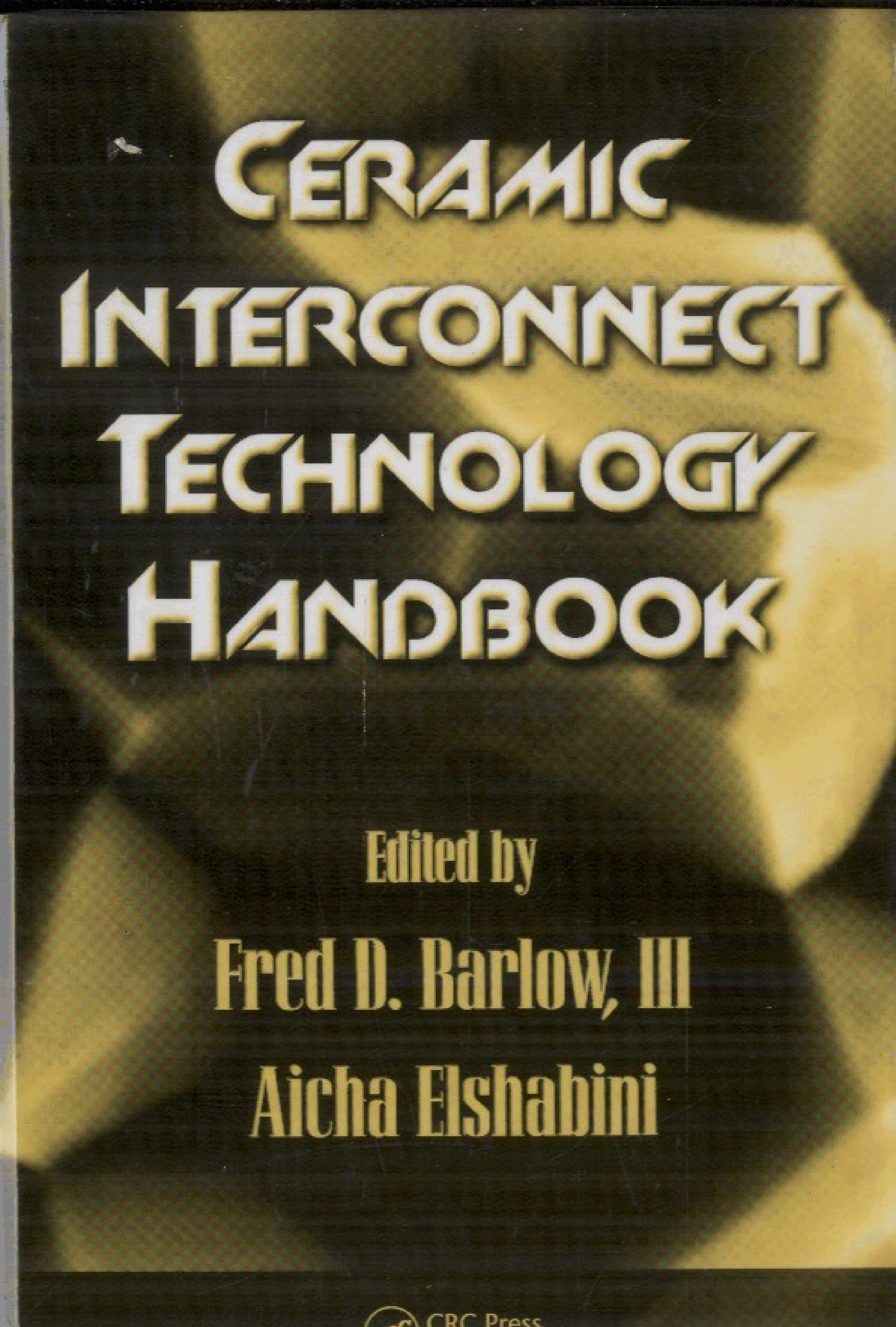

CERAMIC INTERCONNECT TECHNOLOGY HANDBOOK

Edited by

Fred D. Barlow, III

Aicha Elshabini

CRC Press
Taylor & Francis Group

Contents

1 **Overview of Ceramic Interconnect Technolgy** 1
Aicha Elshabini, Gangqiang Wang, and Dan Amey

2 **Electrical Design, Simulation, and Testing** 61
Daniel I. Amey and Kuldeep Saxena

3 **ThermoMechanical Design** 105
Al Krum

4 **Ceramic Materials** 163
Jerry E. Sergent

5 **Screen Printing** 199
Jerry E. Sergent

6 **Multilayer Ceramics** 235
Fred Barlow, Aicha Elshabini, and Arne K. Knudsen

7 **Photo-Defined and Photo-Imaged Films** 289
William J. Nebe and Terry R. Suess

8 **Copper Interconnects for Ceramic Substrates and Packages** 327
Al Krum

9 **Integrated Passives in Ceramic Substrates** 361
Heiko Thust and Jens Müller

Index 427