

PREFACE

Laminated composites have played an important role in achieving overall performance improvements in advanced structures. However, these are often limited by premature damage in the form of interlaminar fracture.

This book provides an overview of the major aspects associated with interlaminar fracture of laminated composites. In the first section, basic analytical modeling approaches are developed. This is followed by experimental assessment and characterization of damage growth. In section III the influence of matrix materials and environmental conditions are investigated. The effects of delamination on the buckling and post-buckling behavior are addressed in section IV. Finally some design considerations are discussed in section V and delamination resistance concepts are provided.

Appreciation is expressed to the authors who have contributed to the quality and breadth of this book. It is hoped that engineers and material scientists will find this book useful in understanding the primary damage modes of laminated composites and means of designing against them.

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