

Preface

It is now very well established that mass transport or diffusion has quite profound effects on the apparent properties of engineering materials, how materials are made, and how they degrade. Accordingly, the study of mass transport in engineering materials has long attracted the close attention of researchers in materials science and engineering as well as related disciplines. This special topic volume is entitled “Recent Trends in Mass Transport in Solids and Liquids”. It focuses on mass transport in its broadest sense spanning the atomic scale right up to the macro scale. There is also a special focus on real engineering applications of mass transport.

The present volume is a snap shot of the many active mass transport research topics currently under investigation worldwide. The large breadth of the area of mass transport is reflected in the very wide range of topics covered in this volume. Topics include processing and coatings on various steels, diffusion bonding, moisture removal from ceramic bricks and sisal fibres, synthesis of powders, helium transport in quartz, segregation in aluminium alloys, phase transformations, roasting of ores, and enhancement of oil recovery, to name a few.

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