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Collana	Ellis Horwood series in pharmaceutical technology
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part 1 Mathematical treatment of diffusion: the plane dosage forms; cylinder of finite length; spherical dosage forms. Part 2 Numerical analysis for diffusion: plane dosage forms; cylinder of finite length; spherical dosage forms; other shapes; one or two matter transfers; models taking into account the swelling of the polymer matrix. Part 3 Description of various oral dosage forms: drug dispersed in a non-erodible polymer matrix, plane, spherical; drug dispersed in an erodible polymer matrix; dosage forms made of a core and shell, with an erodible shell; dosage forms made of a core and shell, with a non-erodible shell; dosage forms able to deliver the drug when the solubility of the drug is very low; problem of drying dosage forms made of drug and polymer.
Sommario/riassunto	"Numerical analysis of matter transfer is an area that pharmacists find difficult, but which is a technique frequently used in preparing controlled drug release and oral dosage forms. This book provides clear and straightforward information enabling the reader to carry out numerical analysis of matter transfer - a vital processs when looking at the formulation of oral dosage forms with controlled drug release. The drug is dispersed in a polymeric matrix either biodegradable or not, the basis of which is the transfer of the liquid and the drug through dosage

form. Information on this diffusion is found either through mathematical treatment when the problem is simple, or through numerical analysis for more complex problems. Professor Vergnaud demonstrates and clarifies these, modelling the process of drug delivery by using numerical analysis and computerization. A simulation of the process is provided, together with a determination of the effects of all parameters, and the author uses both mathematical and numerical models to predict the preparation of new dosage forms able to fulfil specific conditions."--Provided by publisher.