


[DOWNLOAD](#)


Radiotherapy Treatment Planning

By Haas, Olivier C.

Book Condition: New. Publisher/Verlag: Springer, Berlin | New System Approaches | An in depth examination of many of the complex issues associated with planning and optimisation of intensity modulated radiotherapy treatment. It includes: a presentation of current practice, techniques and equipment used by medical physicists and others to deliver radiotherapy treatment; a systems modelling approach in the formulation of a beam model for optimisation, describing the effect of X-rays on human body tissues; a deterministic approach to the inverse problem in radiotherapy, based on weighted iterative least squares is modified to allow an adaptive scaling of the error to improve the performance of a general least squares algorithm; a guided random search methodology, based on genetic algorithms which is aimed at solving multi-objective optimisation problems is developed to optimise beam weight/wedge angle as well as coplanar beam orientation; the overall approach developed is demonstrated practically using both traditional and modern measurement techniques. | 1. Introduction and Brief Review of Developments in Radiotherapy.- 1.1 Introduction.- 1.2 Historical Review of Developments in Radiotherapy.- 1.2.1 The Early Workers.- 1.2.2 Effect of Radiation on Human Tissues.- 1.2.3 Improving the Physical Selectivity of Treatments.- 1.2.4 Developments of Megavoltage X-ray Machines.- 1.3 Radiotherapy Treatment Planning...



READ ONLINE
[1010.98 KB

Reviews

The most effective ebook i at any time study. It can be writter in easy words and phrases and not difficult to understand. I am just pleased to let you know that this is the finest publication i have read within my individual lifestyle and could be he finest publication for at any time.

-- **Tania Mosciski**

Simply no phrases to describe. It is amongst the most awesome pdf we have read through. Your life period will probably be transform as soon as you complete looking over this publication.

-- **Torrance Skiles**