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| 1. Record Nr. | UNINA9910483024703321 |
| Autore | Padmanabhan Regina |
| Titolo | Mathematical models of cancer and different therapies : unified framework / / Regina Padmanabhan, Nader Meskin, Ala-Eddin Al Moustafa |
| Pubbl/distr/stampa | Gateway East, Singapore : , : Springer, , [2021] Â©2021 |
| ISBN | 981-15-8640-3 |
| Edizione | [1st ed. 2021.] |
| Descrizione fisica | 1 online resource (XVI, 256 p. 35 illus., 29 illus. in color.) |
| Collana | Series in BioEngineering, , 2196-8861 |
| Disciplina | 616.99400113 |
| Soggetti | Cancer - Mathematical models |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di contenuto | Background -- Time series data to mathematical model -- Chemotherapy models -- Immunotherapy models -- Anti-angiogenic therapy models -- Radiotherapy Models -- Hormone therapy models -- Miscellaneous therapy models -- Combination therapy models -- Control strategies used for cancer therapy -- Conclusions. |
| Sommario/riassunto | This book provides a unified framework for various currently available mathematical models that are used to analyze progression and regression in cancer development, and to predict its dynamics with respect to therapeutic interventions. Accurate and reliable model representations of cancer dynamics are milestones in the field of cancer research. Mathematical modeling approaches are becoming increasingly common in cancer research, as these quantitative approaches can help to validate hypotheses concerning cancer dynamics and thus elucidate the complexly interlaced mechanisms involved. Even though the related conceptual and technical information is growing at an exponential rate, the application of said information and realization of useful healthcare devices are lagging behind. In order to remedy this discrepancy, more interdisciplinary research works and course curricula need to be introduced in academic, industrial, and clinical organizations alike. To that end, this book reformulates most of the existing mathematical models as special cases of a general model, allowing readers to easily get an overall idea of cancer dynamics and its |

modeling. Moreover, the book will help bridge the gap between biologists and engineers, as it brings together cancer dynamics, the main steps involved in mathematical modeling, and control strategies developed for cancer management. This also allows readers in both medical and engineering fields to compare and contrast all the therapy-based models developed to date using a single source, and to identify unexplored research directions.

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| 2. Record Nr. | UNISA996251321703316 |
| Titolo | Hispanic journal of behavioral sciences |
| Pubbl/distr/stampa | [Thousand Oaks, Calif.], : Sage Publications |
| ISSN | 1552-6364 |
| Descrizione fisica | 1 online resource |
| Disciplina | 362 |
| Soggetti | Hispanic Americans - Mental health Hispanic Americans - Psychology Latin Americans - Mental health - United States Latin Americans - United States - Psychology Anthropology Hispanic or Latino Hispanic or Latino - psychology Socioeconomic Factors Sociology Américains d'origine latino-américaine - Santé mentale Américains d'origine latino-américaine - Psychologie Latino-Américains - Santé mentale - États-Unis Latino-Américains - États-Unis - Psychologie Latin Americans - Mental health Latin Americans - Psychology Américain d'origine latino-américaine Behaviorisme Latino-américain Psychosociologie Santé mentale Science du comportement Periodicals Periodicals. |

Périodique électronique (Descripteur de forme)

Ressource Internet (Descripteur de forme)

United States

Lingua di pubblicazione

Inglese

Formato

Materiale a stampa

Livello bibliografico

Periodico

Note generali

Refereed/Peer-reviewed