

Nanomedicine's Most Cited – Volume 1



# Nanomedicine in Cancer

edited by **Lajos P. Balogh**





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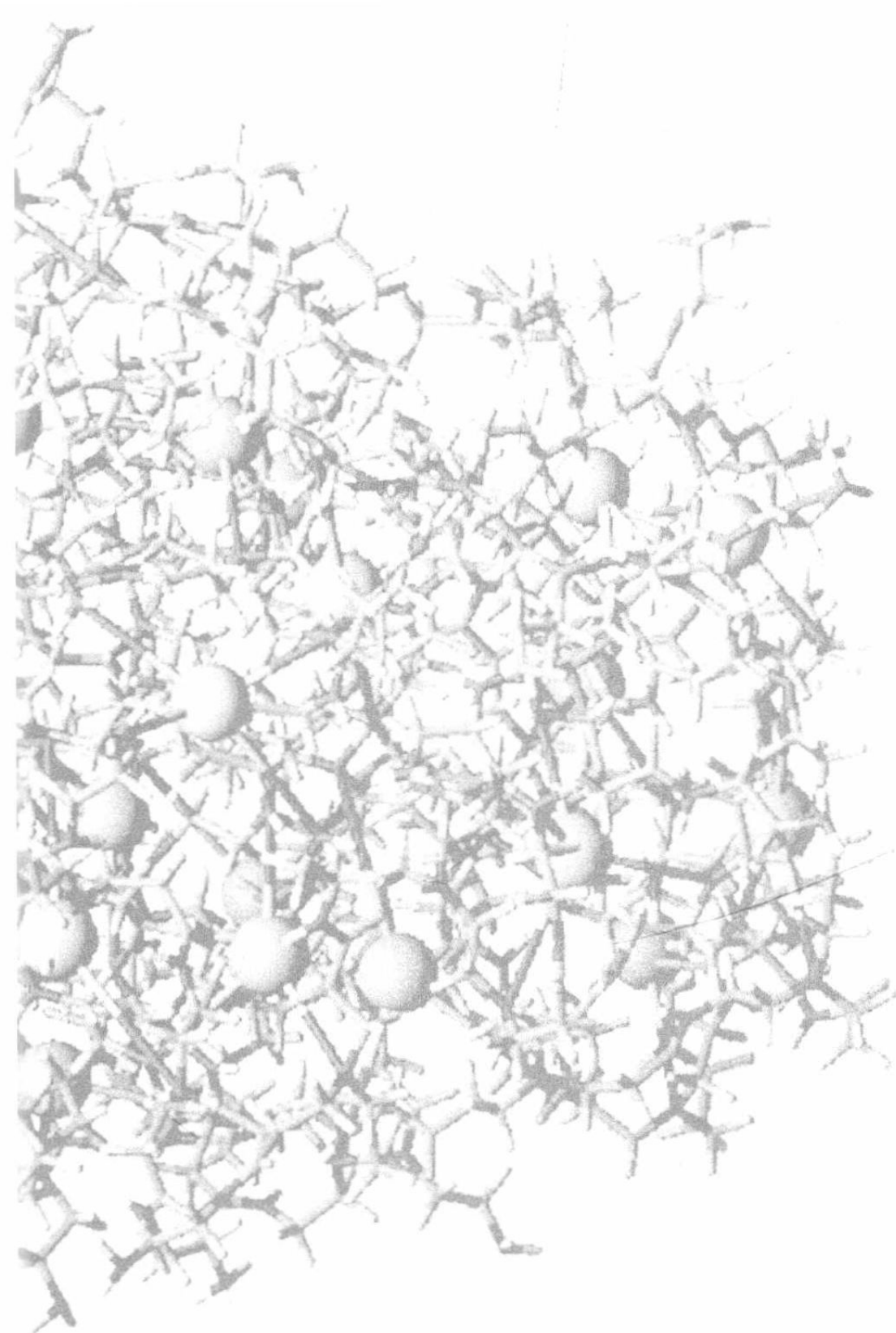
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# Nanomedicine in Cancer

## Preface

In our age of computers and smartphones, we are constantly barraged with unbelievable amount of information. Our main challenge is now not how to get it, rather how to determine what is necessary and what is reliable. The same is true for scientific information. Scientific publication is undergoing major changes because of the ever-increasing accessibility, mobility, technology improvements, and globalization. This also exposes a general difficulty: Gathering information is easy today, but identifying carefully evaluated and useful information to improve common knowledge is getting harder and harder.

A scientific article should be exciting, precise, and useful. Scientific knowledge is not consistent all the time—we are always halfway into the unknown. However, scientific data and conclusions are expected to be valid for at least 5–10 years and provide the kind of knowledge a researcher or a student can rely on. Editors and peer reviewers are the gatekeepers: They evaluate whether the experimental plan was right, the methods selected were proper, observations and measurements were complete, and finally, the conclusions drawn are justified by measurements. In the old times, when the editor of *Beilstein*, a fundamental journal of synthetic chemistry, received a manuscript with a new synthesis, they sent it out to two more laboratories to reproduce the results as a condition of publishing. Unfortunately, we do not have time for these processes anymore, even though reproducibility is one of the fundamental parts of data reliability. (A further complication is that all research articles and communications reflect the actual state of rapidly evolving techniques, methods, and knowledge that existed when they have been written.) Thus, we have to rely on collective knowledge and judgment. People download what is free, read what

is interesting, but cite only relevant articles. Therefore, number of citations over a period of a few years is a good indicator of the quality and reliability of articles (even though paradigm-changing ideas have initially low citation numbers).

Life sciences are an incredibly broad area and application of nanotechnology makes it even more complicated. As we keep digging deeper and deeper into more and more complex topics, we find that these must be attacked by new methods and often have to be approached by multidisciplinary and interdisciplinary research groups. A further challenge of nanomedicine is the rapidly evolving knowledge: We find out again and again that truth is always more complex than expected.

This anthology is the first book in a series compiling nanomedicine articles that highlight up-to-date and relevant articles with contemporary knowledge. The goal of upcoming volumes is to identify and publish reliable and seminal information in various segments of nanomedicine in one place, saving time and effort in identifying pivotal research results. The first volume contains over thirty articles about nanotechnology in cancer research that have already acquired more than 3500 citations (i.e., over a hundred per article on average) highlighting their importance recognized by scientists working on this field. The content includes a wide variety of essential topics that will appeal to any researcher involved in nanomedicine, macromolecular science, cancer therapy, and drug delivery research. Enjoy!

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