Advances in Nanotechnology Research and Application: 2011 Edition provides a concise compilation of approved key information on methods of research, general principles, and functional relationships in physics and engineering. The world's leading experts in the fields of physics and engineering will be assigned by one or several renowned editors to write the chapters comprising each volume. We have completely rewritten the book to cover nanotechnology basics plus recent advances in the field. Drawing on our experience in writing easy to understand information about nano on our website, UnderstandingNano.com, we authored this entry in the popular For Dummies series for those who want to learn nanotechnology basics and beyond. We start with an overview of the history of nanotechnology along with some basic definitions and concepts. We then look at applications of nano in a variety of industries ranging from medicine to aerospace and defense.