DESCRIPTION

The choice of a material for a certain application is made taking into account its properties. If, for example one would like to produce a table, a hard material is needed to guarantee the stability of the product, but the material should not be too hard so that manufacturing is still as easy as possible - in this simple example wood might be the material of choice. When coming to more advanced applications the required properties are becoming more complex and the manufacturer’s desire is to tailor the properties of the material to fit the needs. To let this dream come true, insights into the microstructure of materials is crucial to finally control the properties of the materials because the microstructure determines its properties.

Written by leading scientists in the field of microstructural design of engineering materials, this book focuses on the evolution and behavior of granular microstructures of various advanced materials during plastic deformation and treatment at elevated temperatures. These topics provide essential background and practical information for materials scientists, metallurgists and solid state physicists.

ABOUT THE AUTHOR

Dmitri A. Molodov is a Professor at the Institute of Physical Metallurgy and Metal Physics at the RWTH Aachen University. He earned his Doctorate at the Institute of Solid State Physics of the Russian Academy of Sciences in 1985. After several years of postdoctoral research positions, he came to the Institute of Physical Metallurgy and Metal Physics at the RWTH Aachen as an Alexander-von-Humboldt fellow and became full Professor in 2006. He has so far published over 100 publications in
international scientific journals and contributed to about 70 conferences. His research interests include characterization and control of microstructure and texture evolution in metal and alloys, as well as dynamics of interfaces in solids.

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