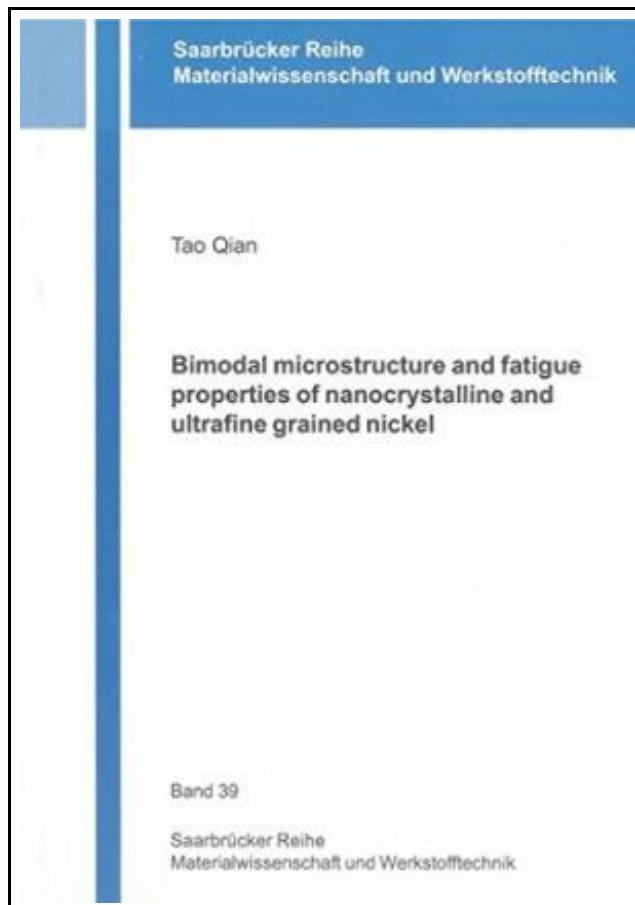


Bimodal microstructure and fatigue properties of nanocrystalline and ultrafine grained nickel



Filesize: 6.36 MB

Reviews

*Extensive guide! Its this sort of very good study. It is actually full of knowledge and wisdom I found out this pdf from my i and dad suggested this ebook to understand.
(Melany Bogisich)*

BIMODAL MICROSTRUCTURE AND FATIGUE PROPERTIES OF NANOCRYSTALLINE AND ULTRAFINE GRAINED NICKEL

[DOWNLOAD](#)

To save **Bimodal microstructure and fatigue properties of nanocrystalline and ultrafine grained nickel** eBook, please click the button below and download the file or get access to other information that are related to BIMODAL MICROSTRUCTURE AND FATIGUE PROPERTIES OF NANOCRYSTALLINE AND ULTRAFINE GRAINED NICKEL book.

Shaker Verlag Mrz 2014, 2014. Taschenbuch. Condition: Neu. Neuware - The nanocrystalline (NC) and ultrafine grained (UFG) materials show very high strength but low ductility. In this work bimodal microstructures are developed by introducing larger grains into the finer grained matrix, to combine high strength and considerably high ductility at the same time. Different bimodal microstructures are developed by heat treatment of the PED NC nickel and the ECAP UFG nickel. The grain growth kinetics is quantitatively analyzed using the JMAK model and the Burke and Turnbull model for the PED nickel. However, the annealing phenomena for the ECAP UFG nickel are difficult to be described quantitatively due to the initial severe plastic deformed state and are only qualitatively analyzed. Microhardness measurement and tensile tests show that the finer grains provide the strength and the coarser grains ensure the ductility in the bimodal microstructures. The fatigue behavior and crack growth resistance is systematically investigated for the different microstructures. The microcracks introduced by focus ion beam propagate during the fatigue experiments and induce the ultimate fracture for the PED NC, NC/UFG and UFG nickel. Among them the bimodal NC/UFG nickel shows the best fatigue performance. However, the ECAP nickel is not sensitive to the microcracks, and therefore the macro-notches are introduced to investigate the crack growth behavior. Dynamic recrystallization is found to be the main mechanism for the plastic deformation in the ECAP nickel. 228 pp. Englisch.

- [Read Bimodal microstructure and fatigue properties of nanocrystalline and ultrafine grained nickel Online](#)
- [Download PDF Bimodal microstructure and fatigue properties of nanocrystalline and ultrafine grained nickel](#)
- [Download ePUB Bimodal microstructure and fatigue properties of nanocrystalline and ultrafine grained nickel](#)

See Also



[PDF] Chakras: Comment Eveiller Et Reequilibrer Vos Chakras, Creer de L Energie Positive Et Comment Vous Guerir Grace a la Puissance Des Chakras, Mise a Jour Enrichie. (Paperback)

Follow the web link beneath to download "Chakras: Comment Eveiller Et Reequilibrer Vos Chakras, Creer de L Energie Positive Et Comment Vous Guerir Grace a la Puissance Des Chakras, Mise a Jour Enrichie. (Paperback)" document.

[Download eBook »](#)



[PDF] Student Workbook for Physics for Scientists and Engineers with Modern Physics: A Strategic Approach, Chapters 1-42, 1st

Follow the web link beneath to download "Student Workbook for Physics for Scientists and Engineers with Modern Physics: A Strategic Approach, Chapters 1-42, 1st" document.

[Download eBook »](#)



[PDF] Dancing the Digital Tune: The 5 Principles of Competing in a Digital World (Paperback)

Follow the web link beneath to download "Dancing the Digital Tune: The 5 Principles of Competing in a Digital World (Paperback)" document.

[Download eBook »](#)



[PDF] Getting to Know ArcGIS Pro: A Platform Workbook (Paperback)

Follow the web link beneath to download "Getting to Know ArcGIS Pro: A Platform Workbook (Paperback)" document.

[Download eBook »](#)



[PDF] MURACH'S JAVA SERVLETS & JSP, 2/ED

Follow the web link beneath to download "MURACH'S JAVA SERVLETS & JSP, 2/ED" document.

[Download eBook »](#)



[PDF] The Investor's Guide to Emerging Markets (Financial Times)

Follow the web link beneath to download "The Investor's Guide to Emerging Markets (Financial Times)" document.

[Download eBook »](#)



[PDF] Prendergast: 16 Art Stickers: 16 Art Stickers (Paperback)

Click the hyperlink under to download and read "Prendergast: 16 Art Stickers: 16 Art Stickers (Paperback)" document.

[Download eBook »](#)



[PDF] IGCSE English as a Second Language: Focus on Writing: Focus on Writing (Paperback)

Click the hyperlink under to download and read "IGCSE English as a Second Language: Focus on Writing: Focus on Writing (Paperback)" document.

[Download eBook »](#)



[PDF] Etes-vous toujours de gauche ou vraiment de droite ?

Click the hyperlink under to download and read "Etes-vous toujours de gauche ou vraiment de droite ?" document.

[Download eBook »](#)



[PDF] LEGO (R) Star Wars Heroes Ultimate Sticker Book

Click the hyperlink under to download and read "LEGO (R) Star Wars Heroes Ultimate Sticker Book" document.

[Download eBook »](#)



[PDF] INTERNATIONAL EDITION Marketing Research 8th

Click the hyperlink under to download and read "INTERNATIONAL EDITION Marketing Research 8th" document.

[Download eBook »](#)



[PDF] The Web: The Survivalist

Click the hyperlink under to download and read "The Web: The Survivalist" document.

[Download eBook »](#)