

Microstructure Modeling of 3rd Generation Disk Alloy

NASA Technical Reports Server (NTRS), Herng-Jeng Jou



### Microstructure Modeling of 3rd Generation Disk Alloy

By Herng-Jeng Jou

Bibliogov, United States, 2013. Paperback. Book Condition: New.  $246 \times 189 \text{ mm}$ . Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. The objective of this initiative, funded by NASA s Aviation Safety Program, is to model, validate, and predict, with high fidelity, the microstructural evolution of third-generation high-refractory Ni-based disc superalloys during heat treating and service conditions. This initiative is a natural extension of the DARPA-AIM (Accelerated Insertion of Materials) initiative with GE/Pratt-Whitney and with other process simulation tools. Strong collaboration with the NASA Glenn Research Center (GRC) is a key component of this initiative and the focus of this program is on industrially relevant disk alloys and heat treatment processes identified by GRC. Employing QuesTek's Computational Materials Dynamics technology and PrecipiCalc precipitation simulator, physics-based models are being used to achieve high predictive accuracy and precision. Combining these models with experimental data and probabilistic analysis, virtual alloy design can be performed. The predicted microstructures can be optimized to promote desirable features and concurrently eliminate nondesirable phases that can limit the reliability and durability of the alloys. The well-calibrated and well-integrated software tools that are being applied under the proposed program will help gas turbine disk alloy manufacturers, processing...



### Reviews

Thorough manual for ebook fans. it had been writtern quite properly and valuable. It is extremely difficult to leave it before concluding, once you begin to read the book.

#### -- Dr. Catherine Wehner

Absolutely among the best book I have possibly go through. I have go through and that i am certain that i am going to gonna read through once again again in the future. I am just delighted to tell you that this is basically the finest book i have got go through within my personal existence and could be he finest book for ever.

-- Brian Bauch

### You May Also Like



## Symphony No.2 Little Russian (1880 Version), Op.17: Study Score

Petrucci Library Press, United States, 2015. Paperback. Book Condition: New. 246 x 189 mm. Language: English. Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*\*. Composed in 1872 and first performed in Moscow at the Russian Musica Society on February 7, 1873, Tchaikovsky...



#### Ohio Court Rules 2012, Government of Bench

#### Bar

Createspace, United States, 2011. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. Superseded by 2013 Edition. This title is available, but should be relied upon solely for purposes of historical reference or...



## Ohio Court Rules 2012, Practice Procedure

Createspace, United States, 2011. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. Superseded by 2013 Edition. This title is available, but should be relied upon solely for purposes of historical reference or...



# Ohio Court Rules 2013, Practice Procedure

Createspace, United States, 2012. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. Superseded by 2014 Edition. This title is available, but should be relied upon solely for purposes of historical reference...



Kindergarten Culture in the Family and Kindergarten; A Complete Sketch of Froebel's System of Early Education, Adapted to American Institutions. for the Use of Mothers and Teachers

Rarebooksclub.com, United States, 2012. Paperback. Book Condition: New. 246 x 189 mm. Language: English. Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. This historic book may have numerous typos and missing text. Purchasers can download a free scanned copy of the original...



Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselues By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. (1624-1625)

Proquest, Eebo Editions, United States, 2010. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book
\*\*\*\*\* Print on Demand \*\*\*\*\*\*.EARLY HISTORY OF RELIGION. Imagine holding history in your hands. Now you can. Digitally preserved
and previously accessible...