Alloy development I: Ni base

***0010* Development of Advanced P/M Ni-Base Superalloys for Turbine Disks**
Gerhikh Garibov, Nina Grits, Alexey Vostrikov, Elizaveta Fedorenko, Alexander Volkov
All-Russia Institute of Light Alloys Stock Co., Moscow, RU

***0037* New Single Crystal Superalloys - Overview and Update**
Jacqueline Wahl, Ken Harris
Cannon-Muskegon Corporation, Muskegon, USA

***0089* Electronic Properties and Diffusion Behavior of Refractory Elements in Ni-Base Superalloys: a Combined DFT + kMC Approach.**
Sergej Schuwalow, Jutta Rogal, Ralf Drautz
Ruhr University Bochum, Bochum, DE

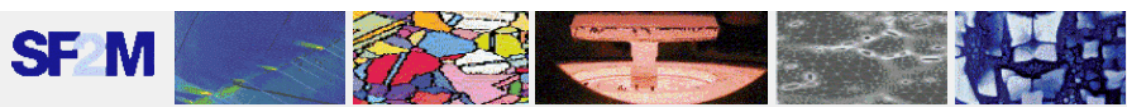
***0094* The Effect of Boron on the Mechanical Properties of a New Polycrystalline Superalloy**
Paraskevas Kontis[1], Fredrik Karlsson[2], Roger Reed[1]
[1]University of Oxford, Oxford, GB, [2]Siemens Industrial Turbomachinery AB, Finspong, SE

***0101* The Technology for Automated Development of Economically Doped Heat-Resistant Nickel Superalloys**
Yuriy Shmotin, Aleksander Logunov, Denis Danilov, Igor Leshchenko
JSC "NPO SATURN", Ryibinsk, RU

***0130* Relationship between Growth Rate and Creep Properties of Directional Solidified Eutectic NiAl-Cr(Mo)**
Ioannis Sprenger, Christoph Seemüller, Antje Krüger, Anton Möslang, Martin Heilmaier
Karlsruhe Institute of Technology, Karlsruhe, DE

***0131* Development of Low-Cost Single Crystal Superalloys**
Jiarong Li, Shizhong Liu, Zhenxue Shi, Xiaoguang Wang, Dingzhong Tang
Beijing Institute of Aeronautical Materials, Beijing, CN

***0147* Solid Solution Hardening of the Matrix Phase of Nickel-Based Superalloys**
Ernst Fleischmann[1], Rainer Völkl[1], Ernst Affeldt[2], Uwe Glatzel[1]
[1]University Bayreuth, Bayreuth, DE, [2]MTU Aero Engines GmbH, Munich, DE

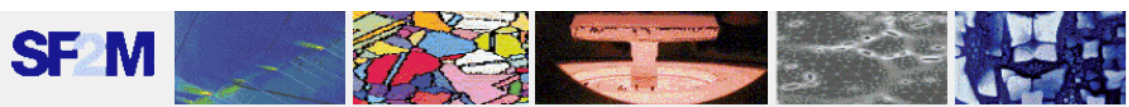


Alloy development I: Ni base (continued)

***0164* Microstructure Stability Optimization of 263 Ni-Based Superalloy**
Coraline Crozet, Alexandre Devaux, Denis Béchet
Aubert & Duval, Les Ancizes, FR

***0182* Computational Design of Re/Ru Bearing Ni- Base Superalloys**
K V Vamsi[1], K N Goswami[1], R Balamuralikrishnan[2], Niranjan Das[2], D Banerjee[1], S Karthikeyan[1]
[1]Indian Institute of Science, Bangalore, IN, [2]Defence Metallurgical Research Laboratory, Hyderabad, IN

***0214* HAYNES 244 alloy - a New 760°C Capable Low Thermal Expansion Alloy**
Michael Fahrmann, Lee Pike
Haynes International Inc., Kokomo, USA



Alloy development II: Co base

***0021* Atomistic Simulations of the Deformation Behavior of Cubic Ni_3Al Nanoparticles**
Erik Bitzek, Jonathan Amodeo, Aruna Prakash
Universität Erlangen-Nürnberg, Erlangen, DE

***0115* In situ High Temperature Studies of CoRe Alloys at the New Small-Angle Neutron Scattering Instrument SANS-1 at Maier-Leibnitz Zentrum**
Ralph Gilles[1], Debashis Mukherji[2], Pavel Strunz[3], Lukas Karge[1], Joachim Rösler[2]
[1]TU Muenchen, Garching, DE, [2]TU Braunschweig, Braunschweig, DE, [3]Nuclear Physics Institute, Rez, CZ

***0165* The influence of Boron and Carbon on Grain Boundary Strength of γ'-Hardened Co-Base Superalloys**
Lisa Freund, Steffen Neumeier, Alexander Bauer, Mathias Göken
University of Erlangen-Nuremberg, Erlangen, DE

***0184* First Principles Study of Alloying Affects on $Co_3(Al,W)$ Precipitates with $L1_2$ Structure**
Sri Raghunath Joshi, K.V Vamsi, S Karthikeyan
Indian Institute of Science, Bangalore, IN

***0189* Physical Metallurgy and Creep Behaviour of Some Candidate Co-Base Superalloys**
Matthias Knop[1], Vassili A. Vorontsov[1], Mark C. Hardy[2], David Dye[1]
[1]Imperial College, London, GB, [2]Rolls-Royce plc, Derby, GB

***0191* Investigation of Ternary Subsystems of Superalloys by Thin-Film Combinatorial Synthesis and High-Throughput Analysis**
Alfred Ludwig, Amin Janghorban, Janine Pfetzing-Micklich, Jan Frenzel
Ruhr-Universität Bochum, Bochum, DE

***0223* Characterisation of P/M Manufactured Niobium Silicide Based Materials**
Stefan Drawin *ONERA - The French Aerospace Lab, Châtillon, FR*