

### **AFM characterization of the surface morphology of the severe plastic deformed copper [Electronic resource]**

**Hussainova, Irina;** Lõhmus, Rünno; **Kommel, Lembit;** Siimon, H. Proceedings of Material Research Society Spring Meeting : March 28 - April 1, 2005, San Francisco, CA, USA 2005 / [CD-ROM]

### **Characterization of the viscoplastic behavior of nanocrystalline metals at HCV deformation**

**Kommel, Lembit; Hussainova, Irina; Traksmäa, Rainer** Reviews on advanced materials science 2005 / p. 447-453

[https://www.researchgate.net/publication/250143614\\_Characterization\\_of\\_the\\_Viscoplastic\\_Behavior\\_of\\_Nanocrystalline\\_Metals\\_at\\_HCV\\_Deformation](https://www.researchgate.net/publication/250143614_Characterization_of_the_Viscoplastic_Behavior_of_Nanocrystalline_Metals_at_HCV_Deformation)

### **Enhancement of hydrogen storage in metals by using a new technique in Severe Plastic Deformations**

**Omranpour Shahreza, Babak; Kommel, Lembit;** Sanchez, E. Garcia Modern Materials and Manufacturing 2019 : 12th

International DAAAM Baltic Conference and 27th International Baltic Conference BALTMATTRIB 2019. Selected, peer reviewed papers from the conference Modern Materials and Manufacturing 2019 (MMM 2019), April 24-26, 2019, Tallinn, Estonia 2019 / p.

173-178 : ill <https://doi.org/10.4028/www.scientific.net/KEM.799.173> <https://www.scientific.net/KEM.799.173>

[https://www.ester.ee/record=b5235278\\*est](https://www.ester.ee/record=b5235278*est) Conference proceeding at Scopus Article at Scopus

### **Formation of property gradient in coarse-grained niobium using a wedge tool : experiment and analysis**

**Tarasov, Oleksandr; Kübarsepp, Jakob; Viljus, Mart; Saarna, Mart; Sergejev, Fjodor** International journal of refractory metals and hard materials 2024 / art. 106905 <https://doi.org/10.1016/j.jirmhm.2024.106905>

### **The impact of microstructural refinement on the tribological behavior of niobium processed by Indirect Extrusion Angular Pressing**

**Omranpour Shahreza, Babak;** Hernandez-Rodriguez, Marco A. L.; Hernandez-Rodriguez, Edgar; **Kommel, Lembit; Sergejev, Fjodor** Tribology international 2022 / art. 107412 <https://doi.org/10.1016/j.triboint.2021.107412> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### **Influence of SPD on structure and properties of copper**

**Kommel, Lembit; Kenk, Kalju; Veinthal, Renno** Proceedings of the 3rd International Conference Industrial Engineering - New Challenges to SME : 25-27 April 2002, Tallinn, Estonia 2002 / p. 161-164 : ill

### **Influence of the SPD processing features on the nanostructure and properties of a pure niobium**

**Kommel, Lembit; Mikli, Valdek; Traksmäa, Rainer; Saarna, Mart;** Pokatilov, Andrei; Pikker, Siim; Kommel, Igor Materials science forum Nanomaterials by Severe Plastic Deformation: NanoSPD5 : Selected, peer reviewed papers from the 5th International Conference on Nanomaterials by Severe Plastic Deformation, NanoSPD5, held in Nanjing, China, on March 21-25, 2011 2011 / p.

785-790 : ill <https://doi.org/10.4028/www.scientific.net/MSF.667-669.785>

### **Limit load on screws strengthened by plastic deformations**

**Penkov, Igor; Strizhak, Viktor; Arjassov, Gennadi** Machines, technologies, materials 2007 / 6/7, p. 22-24

### **Mechanical properties and fracture developed in nanocopper by severe plastic deformations**

**Besterci, Michal; Kvackaj, Tibor; Kovac, Ladislav; Sülleiova, Katarina; Kulu, Priit** 15th International Baltic Conference "Engineering Materials & Tribology. Baltattrib - 2006" : October 5-6, 2006, Tallinn, Estonia : abstracts 2006 / p. 22

### **Mechanical properties and fracture of nanocopper by severe plastic deformations**

**Besterci, Michal; Kvackaj, Tibor; Kovac, Ladislav; Sülleiova, Katarina; Kulu, Priit** Proceedings of the Estonian Academy of Sciences. Engineering 2006 / 4, p. 340-348 : ill

### **Mechanism for single crystal refinement in high purity niobium during equal-channel angular pressing**

**Kommel, Lembit; Laev, Natalja** Materials science 2008 / p. 319-323 : ill <https://matsc.ktu.lt/index.php/MatSc/article/view/26198>

### **Mechanism for single crystal refinement in high purity niobium during equal-channel angular pressing**

**Kommel, Lembit; Laev, Natalja** 17th International Baltic Conference : Materials Engineering 2008 : November 6-7, Kaunas, Lithuania : abstracts of papers 2008 / p. 12 <https://matsc.ktu.lt/index.php/MatSc/article/view/26198>

### **Microstructural and mechanical behaviour of friction welded SS316L components fabricated by selective laser melting**

**Dinesh, Lanka; Damodaram, R.; Sivaprasad, Katakam; Prashanth, Konda Gokuldoss** Materials today communications 2023 / art. 107430 <https://doi.org/10.1016/j.mtcomm.2023.107430> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### **Microstructure and properties development of copper during severe plastic deformation [Electronic resource]**

**Hussainova, Irina; Kommel, Lembit** Nanotechnology in Northern Europe : Congress : Finland, 2005 2005 / p. 54 [CD-ROM]

### **Microstructure evolution in Ti-alloys during severe plastic deformation by electric upset forging**

**Kommel, Lembit;** Teterin, G. Proceedings of NATO Advanced Research Workshop : Investigations and Applications of Severe Plastic Deformation : August 2-6, 1999, Moscow, Russia 1999 / p. 78

**Microstructure, properties and atomic level strain in severely deformed rare metal niobium**

**Kommel, Lembit; Saarna, Mart; Traksmäa, Rainer; Kommel, Igor** Materials science = Medžiagotyra 2012 / p. 330-335 : ill  
[https://www.researchgate.net/publication/272702114\\_Microstructure\\_Properties\\_and\\_Atomic\\_Level\\_Strain\\_in\\_Severely\\_Deformed\\_Rare\\_Metal\\_Niobium](https://www.researchgate.net/publication/272702114_Microstructure_Properties_and_Atomic_Level_Strain_in_Severely_Deformed_Rare_Metal_Niobium)

**Nanostructured copper manufacturing features and mechanical/physical properties forming**

**Kommel, Lembit** Nanopowders, Nanostructured Materials and Coatings : Network for Nanostructured Materials of ACC : March 17, 2005, Tallinn, Estonia : book of abstracts 2005 / p. 22-24 : ill

**New advanced technologies for nanocrystalline metals manufacturing**

**Kommel, Lembit** Proceedings of the 4th International Conference Industrial Engineering - New Challenges to SME : 29-30 April 2004, Tallinn, Estonia 2004 / p. 195-198 : ill

**On the describing of cyclic deformation process in plasticity**

**Kenk, Kalju** BEM & FEM : 19th International Conference Mathematical Modelling in Solid Mechanics. Boundary and Finite Elements Methods, 30 May - 2 June 2001, Saint Petersburg, Russia : proceedings. Vol. 1 2001 / p. 76

**On the describing of cyclic deformation process in plasticity**

**Kenk, Kalju** BEM & FEM : 19th International Conference Mathematical Modelling in Solid Mechanics. Boundary and Finite Elements Methods, 30 May - 2 June 2001, Saint Petersburg, Russia : proceedings. Vol. 2 2001 / p. 199-203 : ill

**Severe plastic deformation of metals by using high pressure torsion extrusion = Metallide süvoplastne deformeerimine kõrgsurve-väändeekstrusiooni meetodil**

**Omranpour Shahreza, Babak** 2019 <https://digikogu.taltech.ee/et/Item/e74f8a8e-4021-4cd2-b1f0-cb91d05b9a56>

**Structural behaviour of NC copper at hard cyclic viscoplastic deformation**

**Kommel, Lembit; Hussainova, Irina; Nisumaa, Reet; Volobujeva, Olga** Ultrafine Grained Materials - from Basics to Applications : UFG-2006 : September 25-27, 2006, Kloster Irsee, Germany 2006 / p. 6-16 - 6-17

**Wheel-rail wear simulation**

**Telliskivi, Tanel; Olofsson, Ulf** Wear 2004 / 11, p. 1145-1153 : ill <https://www.sciencedirect.com/science/article/abs/pii/S0043164804001577>

**Влияние состояния поверхности металла на начальную стадию процесса окисления**

**Hunt, A.; Prikk, Arvi** XXX студенческая научно-техническая конференция вузов Прибалтийских республик, Белорусской ССР и Молдавской ССР, 8-10 апреля 1986 года : тезисы докладов. Том II, Автоматика. Энергетика. Механика. Химия 1986 / с. 65 : илл [https://www.ester.ee/record=b1305565\\*est](https://www.ester.ee/record=b1305565*est)

**Исследование методом наноиндентирования микромеханических свойств полос сдвига в нанокристаллическом чистом ниобии, полученном при интенсивной пластической деформации**

**Kommel, Lembit** НАНО 2013 : v Всероссийская конференция по наноматериалам : сборник материалов : 23-27 сентября 2013 г., г. Звенигород 2013 / с. 414-416

**Стохастическая модель процессов поверхностного пластического деформирования (ППД)**

**Papstel, Jüri** Сборник статей по машиностроению. 14 1976 / с. 3-9 : илл [https://www.ester.ee/record=b2190772\\*est](https://www.ester.ee/record=b2190772*est)  
<https://digikogu.taltech.ee/et/Item/19a7abb0-e96a-49e5-bc18-3d1b1f0b3218>