

### **Calcium-aluminothermal production of niobium and mineral composition of the slag**

**Gorkunov, Valeri; Munter, Rein** Proceedings of the Estonian Academy of Sciences. Chemistry 2007 / 3, p. 142-156 : ill

### **Calcium-aluminothermal production of niobium and utilization of wastes = Niobiumi tootmine kaltsium-alumotermilisel meetodil ja jäätmete utiliseerimine**

**Gorkunov, Valeri** 2008 <https://digi.lib.ttu.ee/i/?295> [https://www.ester.ee/record=b2449478\\*est](https://www.ester.ee/record=b2449478*est)

### **The effect of niobium on in situ synthesis of titanium carbide in composite hardfacings**

**Yöyler, Sibel; Surzhenkov, Andrei; Viljus, Mart; Traskmaa, Rainer; Juhani, Kristjan** Materials Engineering and Modern Manufacturing, MeMM 2023 : Selected peer-reviewed extended articles based on abstracts presented at the 30th International Baltic Conference "Materials Engineering and Modern Manufacturing 2023", MeMM 2023 Materials science forum 2023 / p. 55-60  
<https://doi.org/10.4028/p-A5WzJl>

### **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.ijrmhm.2024.106905> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Heat conductive plates from recycled niobium slag**

**Kulu, Priit; Goljandin, Dmitri; Viljus, Mart; Traskmaa, Rainer; Gregor, Andre** Solid State Phenomena ; 320 2021 / p. 169-175  
<https://doi.org/10.4028/www.scientific.net/SSP.320.169> [Conference proceedings at Scopus](#) [Article at Scopus](#)

### **In situ production of low-modulus Ti-Nb alloys by selective laser melting and their functional assessment toward orthopedic applications**

**Singh, Neera; Srikanth, K. P.; Gopal, Vasanth; Rajput, Monika; Manivasagam, Geetha; Prashanth, Konda Gokuldoss** Journal of Materials Chemistry B 2024 / p. 5982-5993 : ill <https://doi.org/10.1039/D4TB00379A> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

**Kommel, Lembit; Mikli, Valdek; Traskmaa, 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>

### **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://matssc.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://matssc.ktu.lt/index.php/MatSc/article/view/26198>

### **Microstructure and properties that change during hard cyclic visco-plastic deformation of bulk high purity niobium**

**Kommel, Lembit** International journal of refractory metals and hard materials 2019 / p. 10-17 : ill  
<https://doi.org/10.1016/j.ijrmhm.2018.10.009> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

**Kommel, Lembit; Saarna, Mart; Traskmaa, 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)

### **Nanostructure and properties study of advanced high purity rare metals**

**Kommel, Lembit; Saarna, Mart; Laev, Natalja** 18th International Baltic Conference : Engineering Materials & Tribology : BALTMATTRIB-2009 : October 22-23, 2009, Tallinn, Estonia : abstracts 2009 / p. 43

### **Nanostructure development in refractory metals : ECAP processing of Niobium and Tantalum using indirect-extrusion technique**

**Omranpour Shahreza, Babak; Kommel, Lembit; Mikli, Valdek; Garcia, Edgar; Huot, Jacques** International journal of refractory metals and hard materials 2019 / p. 1-9 : ill <https://doi.org/10.1016/j.ijrmhm.2018.10.018> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Niobium doped TiO2 films by chemical spray pyrolysis [Online resource]**

**Dündar, Ibrahim; Oja Acik, Ilona; Mere, Arvo; Katerski, Atanas; Krunk, Malle; Mikli, Valdek** Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märts 2017, Tartu : teesid] 2017 / [1] p <http://fntdk.ut.ee/teesid/>

### **Plasmochemical process for the production of niobium and tantalum nanopowders**

**Grabis, Janis; Munter, Rein; Blagoveshchenskiy, Yuri; Gorkunov, Valeri; Yamshchikov, Leonid** Proceedings of the Estonian

**Possibilities of utilization of waste slags from niobium production**

**Gorkunov, Valeri; Munter, Rein** Eco-Balt 2007 : Riga, May 10-11, 2007 : proceedings of International Conference 2007 / ? p

**Processing and properties of bulk ultrafine-grained pure niobium**

**Kommel, Lembit; Kimmari, Eduard; Saarna, Mart; Viljus, Mart** Journal of materials science 2013 / p. 4723-4729 : ill

<https://doi.org/10.1007/s10853-013-7210-3> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Processing route effects on NbC-Fe-Ni cermets: Improving mechanical properties via mechanical alloying**

**Basit, Abdul; Ali, Sadaqat; Umer, Malik Adeel; Anwar, Furqan** International journal of refractory metals and hard materials 2025 / art.

107372 <https://doi.org/10.1016/j.ijrmhm.2025.107372>

**Removal of mechanical additives from the surface of cast niobium**

**Gorkunov, Valeri; Kogtev, Mihhail; Munter, Rein** Proceedings of the Estonian Academy of Sciences 2008 / 4, p. 241-246 : ill

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

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

**Silmet haarab tükki haruldaste muldmetallide turust, mida valitseb Hiina [Võrguväljaanne]**

Ehand, Epp err.ee 2021 "[Silmet haarab tükki haruldaste muldmetallide turust, mida valitseb Hiina](#)"

**Structuration of refractory metals tantalum and niobium using modified equal channel angular pressing technique**

**Omranpour Shahreza, Babak** 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. 103-108 : ill

<https://www.scientific.net/KEM.799.103> [https://www.ester.ee/record=b5235278\\*est](https://www.ester.ee/record=b5235278*est) <https://doi.org/10.4028/www.scientific.net/KEM.799.103> [Conference proceeding at Scopus](#) [Article at Scopus](#)

**The investigation of structure and properties of TiAl-Nb alloy**

**Kommel, Lembit** Proceedings of the International Symposium-Exhibition on Advanced Materials, Technologies, Equipment and Tools in Mechanical Engineering : April 20-23, 1999, Kiev, Ukraine 1999 / p. 67

**UFG microstructure processing by ECAP from double electron-beam melted rare metal**

**Kommel, Lembit** Nanomaterials by severe plastic deformation IV. Part 1 2008 / p. 349-354 : ill <https://www.scientific.net/MSF.584-586.349>

**X-ray diffraction studies of nanocrystalline niobium**

**Kommel, Lembit; Traksmäa, Rainer; Kommel, Igor; Saarna, Mart** Materials engineering & Baltrib 2010 : materials of the XIX-th International Baltic Conference : October 28-29, 2010, Riga, Latvia 2010 / p. 20

**Исследование методом наноиндетирования 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

**О растворимости гидроокиси ниобия в лимонной кислоте при различном значении pH**

**Pets, Lidia** Процессы и аппараты химической технологии и технология неорганических веществ. 2 1971 / с. 105-110 : илл

[https://www.ester.ee/record=b1531303\\*est](https://www.ester.ee/record=b1531303*est) <https://digikogu.taltech.ee/et/Item/ae6e2dd0-3320-48ce-b2bc-5254c0336474/>