

AC magnetic loss reduction of SLM processed Fe-Si for additive manufacturing of electrical machines

Tiismus, Hans; Kallaste, Ants; Belahcen, Anouar; Tarraste, Marek; Vaimann, Toomas; Rassõlkin, Anton; Asad, Bilal; Ghahfarokhi, Payam Shams *Energies* 2021 / 13 p. : ill <https://doi.org/10.3390/en14051241> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Additively manufactured mesostructured MoSi₂-Si₃N₄ ceramic lattice

Minasyan, Tatevik; Liu, Le; Holovenko, Yaroslav; Aydinyan, Sofiya; Hussainova, Irina *Ceramics international* 2019 / p. 9926-9933 <https://doi.org/10.1016/j.ceramint.2019.02.035> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Bio-inspired TiB₂-TiB-TiN lattices by selective laser melting

Liu, Le; Minasyan, Tatevik; Kamboj, Nikhil; Aydinyan, Sofiya; Hussainova, Irina *Materials Letters* 2020 / art. 128337 <https://doi.org/10.1016/j.matlet.2020.128337> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Competition between densification and microstructure of functional materials by Selective Laser Melting

Singh, Neera; Ummethala, Raghunandan; Hameed, Pearl; Sokkalingam, Rathinavelu; Prashanth, Konda Gokuldoss *Material design & processing communications* 2020 / art. e146, 7 p. : ill <https://doi.org/10.1002/mdp2.146> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Competition between immiscibility GAP and supercooling during non-equilibrium processing of metallic materials

Aftab, Rabia; Antonov, Maksim *GSFMT Scientific Conference 2020 : Tallinn, February 4-5, 2020 : abstracts 2020* / p. 11 <http://fmdk.ut.ee/wp-content/uploads/2020/01/GSFMT2020.pdf>

Cu-Ni-Sn alloy fabricated by melt spinning and selective laser melting: a comparative study on the microstructure and formation kinetics

Zhao, Chao; Wang, Zhi; Li, Daoxi; Kollo, Lauri; Luo, Zongqiang; Zhang, Weiwen; Prashanth, Konda Gokuldoss *Journal of materials research and technology* 2020 / p. 13097-13105 <https://doi.org/10.1016/j.jmrt.2020.09.047> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Densification of the eggshell powder by spark plasma sintering

Shukla, Riddhi; Sokkalingam, Rathinavelu; Prashanth, Konda Gokuldoss *Journal of alloys and compounds* 2023 / art. 171079 <https://doi.org/10.1016/j.jallcom.2023.171079>

Development of Cu-based shape memory alloy through selective laser melting from elemental powder mixture: Processing and characterization

Singh, Shalini; Palani, I. A.; Dehgahi, Shirin; Qureshi, A. J.; Jinoop, A. N.; Paul, C. P.; Prashanth, Konda Gokuldoss *Journal of alloys and compounds* 2023 / art. 171029 <https://doi.org/10.1016/j.jallcom.2023.171029>

Duplex treatment of steel surface = Terasse pinna duplekstöötlus

Surženkov, Andrei 2011

Effect of hot isostatic pressing on cellular lattice structures obtained by selective laser melting [Electronic resource]

Holovenko, Yaroslav; Kollo, Lauri; Jõelet, Marek; Pohlak, Meelis; Veinthal, Renno *World PM2016 proceedings 2016* / [USB]

Effect of lattice surface treatment on performance of hardmetal - titanium interpenetrating phase composites

Holovenko, Yaroslav; Kollo, Lauri; Saarna, Mart; Rahmani Ahranjani, Ramin; Soloviova, Tetiana; Antonov, Maksim; Prashanth, Konda Gokuldoss; Cygan, Slawomir; Veinthal, Renno *International journal of refractory metals and hard materials* 2020 / art. 105087, 10 p. : ill <https://doi.org/10.1016/j.ijrmhm.2019.105087> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of nanoparticles on morphology and size of primary silicon and property of selective laser melted Al-high Si content alloys

Xi, Lixia; Guo, Shuang; Prashanth, Konda Gokuldoss; Sarac, Baran; Eckert, Jürgen *Vacuum* 2021 / art. 110405 <https://doi.org/10.1016/j.vacuum.2021.110405> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of process parameters on the properties of β -Ti-Nb-based alloys fabricated by selective laser melting: A review

Subramanian, Shangavi; Mohanty, Shalini; Prashanth, Konda Gokuldoss *Materials today: proceedings* 2023 <https://doi.org/10.1016/j.matpr.2023.03.461>

Effect of selective laser melting process parameters on microstructural and mechanical properties of TiC–NiCr cermet

Aramian, Atefeh; Sadeghian, Zohreh; Razavi, Seyed Mohammad J.; Prashanth, Konda Gokuldoss; Berto, Filippo *Ceramics international* 2020 / p. 28749-28757 <https://doi.org/10.1016/j.ceramint.2020.08.037> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of the laser processing parameters on the selective laser melting of TiC–Fe-based cermets

Maurya, Himanshu Singh; Kollo, Lauri; Tarraste, Marek; Juhani, Kristjan; Sergejev, Fjodor; Prashanth, Konda Gokuldoss *Journal of manufacturing and materials processing* 2022 / art. 35, 11 p. : ill <https://doi.org/10.3390/jmmp6020035> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

[Scopus Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Fragmentation of poly(amidoamine) dendrimers in matrix-assisted laser desorption

Subbi, Juhan; Aguraiuja, Reet; Tanner, Risto; **Allikmaa, Veiko; Lopp, Margus** European polymer journal 2005 / p. 2552-2558 : ill <https://www.sciencedirect.com/science/article/abs/pii/S0014305705002326>

Grain refinement in laser manufactured Al-based composites with TiB₂ ceramic

Xi, Lixia; Guo, Shuang; Wang, Ruiqi; Ding, Kai; **Prashanth, Konda Gokuldoss** Journal of materials research and technology 2020 / p. 2611–2622 <https://doi.org/10.1016/j.jmrt.2020.04.059> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Hysteresis measurements and numerical losses segregation of additively manufactured silicon steel for 3D printing electrical machines

Tiismus, Hans; Kallaste, Ants; Belahcen, Anouar; Vaimann, Toomas; Rassõlkin, Anton; Lukichev, Dmitry Applied sciences 2020 / art. 6515, 15 p <https://doi.org/10.3390/app10186515> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

In situ Mo(Si,Al)₂-based composite through selective laser melting of a MoSi₂-30 wt.% AlSi10Mg mixture

Minasyan, Tatevik; Aydinyan, Sofiya; Toyserkani, Ehsan; **Hussainova, Irina** Materials 2020 / art. 3720 ; 13 p <https://doi.org/10.3390/ma13173720> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Influence of powder characteristics on processability of AlSi12 alloy fabricated by selective laser melting

Baitimerov, Rustam; Lykov, Pavel; Zherebtsov, Dmitry; Radionova, Ludmila; Shults, Alexey; **Prashanth, Konda Gokuldoss** Materials 2018 / art. 742, 14 p. : ill <https://doi.org/10.3390/ma11050742> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Investigation of the tribological behavior of the additively manufactured TiC-based cermets by scratch testing

Maurya, Himanshu Singh; Jayaraj, Jayamani; Wang, Z.; **Juhani, Kristjan; Sergejev, Fjodor; Prashanth, Konda Gokuldoss** Journal of alloys and compounds 2023 / art. 170496, 9 p. : ill <https://doi.org/10.1016/j.jallcom.2023.170496>

Laser ablation deposition

Podgurski, Vitali Proceedings of the First National DAAAM Conference in Estonia : Science '95 1996 / p. 76-79: ill

Laser ablation deposition of NbFeB and CuInSe

Podgurski, Vitali Junior EUROMAT '96 : European Conference : August 26-30, Lausanne, Switzerland : [abstracts] 1996

Laser ablation of Nd-Fe-B magnets

Kruusing, Arvi; Podgurski, Vitali; Mikli, Valdek Proceedings of the Estonian Academy of Sciences. Engineering 1996 / 1, p. 137-142: ill

Laser cutting of NdFeB

Kruusing, Arvi; Uusimäki, Antti; Leppävuori, Seppo Materials Engineering - 98 : materials of the VII-th International Baltic Conference, September 24-25, Jurmala, Latvia 1998 / p. 105-108: ill

Laser processing of liquid feedstock plasma-sprayed lithium titanium oxide solid-state-battery electrode

Hasani, Arman; Luya, Mathis; **Kamboj, Nikhil Kumar;** Nayak, Chinmayee; Joshi, Shrikant V.; Salminen, Antti; Goel, Sneha; Ganvir, Ashish Coatings 2024 / art. 224 <https://doi.org/10.3390/coatings14020224>

Laser treatment of PVD coated carbon steels and powder steels

Surženkov, Andrei; Kulu, Priit; Gregor, Andre; Vuoristo, Petri; Latokartano, Jyrki; Rupponen, Mikko 17th International Baltic Conference : Materials Engineering 2008 : November 6-7, Kaunas, Lithuania : abstracts of papers 2008 / p. 58

Laser treatment of PVD coated carbon steels and powder steels

Surženkov, Andrei; Kulu, Priit; Gregor, Andre; Vuoristo, Petri; Latokartano, Jyrki; Rupponen, Mikko Materials science 2008 / p. 301-305 : ill

Lattice of MoSi₂/Si₃N₄ by selective laser melting

Minasyan, Tatevik; Liu, Le; Aydinyan, Sofiya; Kollo, Lauri; Aghayan, Marina; Hussainova, Irina European Powder Metallurgy Association : proceedings : 14 – 18 October 2018, Bilbao, Spain 2018 / art. 3993050 [USB] <https://www.epma.com/publications/euro-pm-proceedings/product/euro-pm2018-proceedings-usb>

Lightweight 3D printed Ti6Al4V-AlSi10Mg hybrid composite for impact resistance and armor piercing shielding

Rahmani Ahranjani, Ramin; Antonov, Maksim; Brojan, Miha Journal of materials research and technology 2020 / p. 13842-13854 : ill <https://doi.org/10.1016/j.jmrt.2020.09.108> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Machine learning assisted design of high-entropy alloys with ultra-high microhardness and unexpected low density

Zhao, Shunli; Jiang, Bin; Song, Kaikai; Liu, Xiaoming; Wang, Wenyu; Si, Dekun; Zhang, Jilei; Chen, Xiangyan; Zhou, Changshan; Liu, Pingping; Chen, Dong; Zhang, Zequn; Ramasamy, Parthiban; Tang, Junlei; Lv, Wenquan; **Prashanth, Konda Gokuldoss**; Soppu, Daniel; Eckert, Jürgen Materials & design 2024 / art. 112634 <https://doi.org/10.1016/j.matdes.2024.112634>

Manufacturing of silicon – Bioactive glass scaffolds by selective laser melting for bone tissue engineering

Rodrigo-Vazquez, C. Sara; **Kamboj, Nikhil Kumar**; Aghayan, Marina; Saez, Ada; De Aza, Antonio de; Rodriguez, Miguel Angel; **Hussainova, Irina** Ceramics international 2020 / p. 26936-26944 : ill <https://doi.org/10.1016/j.ceramint.2020.07.171> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Microstructural homogenisation of selective laser melted Ti6Al4V and CoCrFeMnNi high-entropy alloys = Selektiivse lasersulatuse teel valmistatud Ti6Al4V ja kõrgentroopse CoCrFeMnNi sulamite mikrostruktuuri homogeniseerimine

Karimi, Javad 2022 <https://doi.org/10.23658/taltech.52/2022> <https://digikogu.taltech.ee/et/Item/96573682-77a0-4fcb-b5df-b53cc9a3bfeb> https://www.ester.ee/record=b5511815*est

Microstructure and texture evolution during the manufacturing of in situ TiC-NiCr cermet through selective laser melting process

Aramian, Atefeh; Sadeghian, Zohreh; Wan, Di; **Holovenko, Yaroslav**; Razavi, Nima; Berto, Filippo Materials Characterization 2021 / art. 111289, 14 p. : ill <https://doi.org/10.1016/j.matchar.2021.111289> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Microstructure and wear resistance of the laser hardened PM tool steel Vanadis 6

Surženkov, Andrei; Kulu, Priit; Viljus, Mart; **Vallikivi, Ahto**; Latokartano, Jyrki Proceedings of the 7th International Conference of DAAAM Baltic Industrial Engineering : 22-24th April 2010, Tallinn, Estonia. [II] 2010 / p. 486-491 : ill

Microstructure formation and mechanical performance of micro-nanoscale ceramic reinforced aluminum matrix composites manufactured by laser powder bed fusion

Xi, Lixia; Feng, Lili; Gu, Dongdong; **Prashanth, Konda Gokuldoss**; Kaban, Ivan; Wang, Ruiqi; Xiong, Ke; Sarac, Baran; Eckert, Jürgen Journal of alloys and compounds 2023 / art. 168803 <https://doi.org/10.1016/j.jallcom.2023.168803>

Mo(Si1-x,Alx)2-based composite by reactive laser powder-bed fusion

Minasyan, Tatevik; Aydinyan, Sofiya; Liu, Le; Volobujeva, Olga; Toyserkani, Ehsan; **Hussainova, Irina** Materials letters 2020 / art. 128776, 5 p. : ill <https://doi.org/10.1016/j.matlet.2020.128776> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Parametric optimization of selective laser melted 13Ni400 maraging steel by Taguchi method

Patil, Viraj Vishwas; Mohanty, Chinmaya P.; **Prashanth, Konda Gokuldoss** Journal of manufacturing and materials processing 2024 / art. 52 <https://doi.org/10.3390/jmmp8020052>

Parametric study on in situ Laser powder bed fusion of Mo(Si1-x,Alx)2

Minasyan, Tatevik; Aydinyan, Sofiya; Toyserkani, Ehsan; **Hussainova, Irina** Materials 2020 / art. 4849, 17 p. : ill <https://doi.org/10.3390/ma13214849> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A review of particulate-reinforced aluminum matrix composites fabricated by selective laser melting

Wang, Pei; Eckert, Jürgen; **Prashanth, Konda Gokuldoss**; Kaban, Ivan; Xi, L.; Scudino, Sergio Transactions of nonferrous metals society of China 2020 / p. 2001-2034 [https://doi.org/10.1016/S1003-6326\(20\)65357-2](https://doi.org/10.1016/S1003-6326(20)65357-2) http://tnmsc.csu.edu.cn/paper/paperView.aspx?id=paper_321576 [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Role of impinging powder particles on melt pool hydrodynamics, thermal behaviour and microstructure in laser-assisted DED process : A particle-scale DEM – CFD – CA approach

Aggarwal, Akash; Chouhan, Arvind; Patel, Sushil; **Prashanth, Konda Gokuldoss** International journal of heat and mass transfer 2020 / art. 119989, 19 p. : ill <https://doi.org/10.1016/j.ijheatmasstransfer.2020.119989> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Selective laser melting of high-strength, low-modulus Ti–35Nb–7Zr–5Ta alloy

Ummethala, Raghunandan; Karamched, Phani S.; Rathinavelu, Sokkalingam; Singh, Neera; Aggarwal, Akash; Sun, Kang; Ivanov, Eugene; **Kollo, Lauri**; Okulov, Ilya; Eckert, Jürgen; **Prashanth, Konda Gokuldoss** Materialia 2020 / art. 100941 <https://doi.org/10.1016/j.mtla.2020.100941> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Selective laser melting of nanostructured Al-Y-Ni-Co alloy

Wang, Zhi; Scudino, Sergio; Eckert, Jürgen; **Prashanth, Konda Gokuldoss** Manufacturing letters 2020 / p. 21–25 <https://doi.org/10.1016/j.mfglet.2020.06.005> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Selective laser melting of Ti/cBN composite

Minasyan, Tatevik; Liu, Le; Aydinyan, Sofiya; **Antonov, Maksim**; **Hussainova, Irina** 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.

257-262 : ill <https://www.scientific.net/KEM.799.257> https://www.ester.ee/record=b5235278*est
<https://doi.org/10.4028/www.scientific.net/KEM.799.257> Conference proceeding at Scopus Article at Scopus

Selective laser melting of TiB₂-Ti composite with high content of ceramic phase

Liu, Le; Minasyan, Tatevik; Ivanov, Roman; Aydinyan, Sofiya; Hussainova, Irina Ceramics international 2020 / p. 21128-21135
<https://doi.org/10.1016/j.ceramint.2020.05.189> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Selective laser sintering of combustion synthesized titanium diboride based composites

Liu, Le; Minasyan, Tatevik; Aydinyan, Sofiya; Hussainova, Irina European Powder Metallurgy Association : proceedings : 14 – 18 October 2018, Bilbao, Spain 2018 / art. 3987459 [USB] <https://www.epma.com/publications/euro-pm-proceedings/product/euro-pm2018-proceedings-usb>

Spark plasma sintering of 13Ni-400 maraging steel: Enhancement of mechanical properties through surface modification

Patil, Viraj Vishwas; Prashanth, Konda Gokuldoss; Mohanty, Chinmaya P. Journal of alloys and compounds 2023 / art. 170734 : ill
<https://doi.org/10.1016/j.jallcom.2023.170734>

Strong and ductile titanium via additive manufacturing under a reactive atmosphere

Dong, Yangping; Wang, Dawei; Li, Qizhen; Luo, Xiaoping; Zhang, Jian; Prashanth, Konda Gokuldoss; Wang, Pei; Eckert, Jürgen; Mädler, Lutz; Okulov, Ilya V.; Yan, Ming Materials today advances 2023 / art. 100347 <https://doi.org/10.1016/j.mtadv.2023.100347>

Synergistic strengthening mechanisms of dual-phase (TiN+AlN) reinforced aluminum matrix composites prepared by laser powder bed fusion

Wang, Ruiqi; Xi, Lixia; Feng, Lili; Sarac, Baran; Prashanth, Konda Gokuldoss; Eckert, Jürgen; Gu, Dongdong 3D printing and additive manufacturing 2023 / p. ? <https://doi.org/10.1089/3dp.2023.0004>

Tailoring anisotropy and heterogeneity of selective laser melted Ti6Al4V alloys

Karimi, Javad; Kollo, Lauri; Prashanth, Konda Gokuldoss Transactions of the Indian National Academy of Engineering 2023 / p. 245-251 <https://doi.org/10.1007/s41403-023-00393-z>

The impact resistance of highly densified metal alloys manufactured from gas-atomized pre-alloyed powders

Rahmani Ahranjani, Ramin; Antonov, Maksim; Prashanth, Konda Gokuldoss Coatings 2021 / art. 216, 14 p. : ill
<https://doi.org/10.3390/coatings11020216> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

The study of the laser hardening parameters on the structure and the mechanical properties of the PM steel Vanadis 6

Surženkov, Andrei; Latokartano, Jyrki; Vuoristo, Petri; Kulu, Priit; Viljus, Mart; Vallikivi, Ahto 18th International Baltic Conference : Engineering Materials & Tribology : BALTMATTRIB-2009 : October 22-23, 2009, Tallinn, Estonia : abstracts 2009 / p. 67

Use of selective laser melting for manufacturing the porous stack of a thermoacoustic engine

Auriemma, Fabio; Holovenko, Yaroslav 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. 246-251 : ill
<https://www.scientific.net/KEM.799.246> https://www.ester.ee/record=b5235278*est <https://doi.org/10.4028/www.scientific.net/KEM.799.246> Conference proceeding at Scopus Article at Scopus

Wear resistance of laser remelted thermally sprayed coatings

Surženkov, Andrei; Kulu, Priit; Tarbe, Riho; Mikli, Valdek; Sarjas, Heikki; Latokartano, Jyrki Estonian journal of engineering 2009 / 4, p. 318-328 : ill