

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; Shams Ghahfarokhi, Payam 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](#)

Additive Manufacturing and Performance of E-Type Transformer Core

Tiismus, Hans; Kallaste, Ants; Belahcen, Anouar; Rassõlkin, Anton; Vaimann, Toomas; Shams Ghahfarokhi, Payam Energies 2021 / art. 3278 <https://doi.org/10.3390/en14113278> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Additive manufacturing of electrical machines - towards the industrial use of a novel technology

Vaimann, Toomas; Kallaste, Ants Energies 2023 / art. 544 <https://doi.org/10.3390/en16010544> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Additive manufacturing of TiC-based cermet with stainless steel as a binder material

Maurya, Himanshu Singh; Juhani, Kristjan; Sergejev, Fjodor; Prashanth, Konda Gokuldoss Materials today: proceedings 2022 / p. 824-828 <https://doi.org/10.1016/j.matpr.2022.02.428> [Conference proceeding at Scopus](#) [Article at Scopus](#) [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](#)

Analysis of advanced passive heatsinks for electrical machines enabled by additive manufacturing

Sarap, Martin; Kallaste, Ants; Shams Ghahfarokhi, Payam; Vaimann, Toomas 2023 IEEE Workshop on Electrical Machines Design, Control and Diagnosis (WEMDCD) : proceedings 2023 / 6 p. : ill <https://doi.org/10.1109/WEMDCD55819.2023.10110940>

Application issues of additive manufacturing in plaster mold casting of metals

Pohlak, Meelis; Sergejev, Fjodor; Tähemaa, Toivo; Saarna, Mart; Viljus, Mart; Hermaste, Aigar Proceedings of the Estonian Academy of Sciences 2025 / p. 181-185 <https://doi.org/10.3176/proc.2025.2.18>

Application of active thermography for the study of losses in components produced by laser powder Bed fusion

Quercio, Michele; Poskovic, Emir; Franchini, Fausto; Fracchia, Elisa; Ferraris, Luca; Canova, Aldo; Tenconi, Alberto; Tiismus, Hans; Kallaste, Ants Journal of magnetism and magnetic materials 2024 / art. 171796 <https://doi.org/10.1016/j.jmmm.2024.171796> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Assessment of 3D printed steels and composites intended for wear applications in abrasive, dry or slurry erosive conditions

Kumar, Rahul, 1993-; Antonov, Maksim; Beste, U.; Goljandin, Dmitri International journal of refractory metals and hard materials 2020 / art. 105126, 9 p. : ill <https://doi.org/10.1016/j.ijrmhm.2019.105126> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Axial synchronous magnetic coupling modeling and printing with selective laser melting

Tiismus, Hans; Kallaste, Ants; Vaimann, Toomas; Rassõlkin, Anton; Belahcen, Anouar 2019 IEEE 60th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 7-9 October 2019 : conference proceedings 2019 / 4 p. : ill <https://doi.org/10.1109/RTUCON48111.2019.8982344>

Bioactive ceramic scaffolds for bone tissue engineering by powder bed selective laser processing : a review

Kamboj, Nikhil Kumar; Ressler, Antonia; Hussainova, Irina Materials 2021 / art. 5338 <https://doi.org/10.3390/ma14185338> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Biomimetics

2024 https://www.mdpi.com/journal/biomimetics/special_issues/0K2292JW30

Challenges of additive manufacturing of electrical machines

Tiismus, Hans; Kallaste, Ants; Belahcen, Anouar; Rassõlkin, Anton; Vaimann, Toomas 2019 IEEE 12th International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED), 27-30 Aug. 2019, Toulouse, France : proceedings 2019 / p. 44-48 : ill <https://doi.org/10.1109/DEMPED.2019.8864850>

Combustion synthesis of MoSi₂ based composite and selective laser sintering thereof

Minasyan, Tatevik; Aghayan, Marina; Liu, Le; Aydinyan, Sofiya; Kollo, Lauri; Hussainova, Irina; Rodriguez, Miguel Angel Journal of the European Ceramic Society 2018 / p. 3814-3821 : ill <https://doi.org/10.1016/j.jeurceramsoc.2018.04.043> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparison of additively manufacturing samples fabricated from pre-alloyed and mechanically mixed powders

Zhao, Chao; Wang, Zhi; Li, Daoxi; Xie, Meishen; Kollo, Lauri; Luo, Zongqiang; Zhang, Weiwen; Prashanth, Konda Gokuldoss Journal of alloys and compounds 2020 / art. 154603, 5 p. : ill <https://doi.org/10.1016/j.jallcom.2020.154603> [Journal metrics at Scopus](#)

Comparison of mechanical and antibacterial properties of TiO₂/Ag ceramics and Ti6Al4V-TiO₂/Ag composite materials using combined SLM-SPS techniques

Rahmani Ahranjani, Ramin; Rosenberg, Merilin; Ivask, Angela; Kollo, Lauri Metals 2019 / art. 874, 13 p. : ill <https://doi.org/10.3390/met9080874> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Concepts of additively manufactured electrical machines and components

Vaimann, Toomas; Tiismus, Hans; Kallaste, Ants 2023 23rd International Scientific Conference on Electric Power Engineering (EPE) 2023 / 6 p <https://doi.org/10.1109/EPE58302.2023.10149252>

Creep and high temperature fatigue performance of as build selective laser melted Ti-based 6Al-4V titanium alloy

Viespoli, Luigi Mario; Bressan, Stefano; Itoh, Takamoto; Hiyoshi, Noritake; Prashanth, Konda Gokuldoss; Berto, Filippo Engineering failure analysis 2020 / art. 104477, 9 p. : ill <https://doi.org/10.1016/j.engfailanal.2020.104477> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Deformation behavior of metallic lattice structures with symmetrical gradients of porosity manufactured by metal additive manufacturing

Jagadeesh, B.; Duraiselvam, Muthukannan; Prashanth, Konda Gokuldoss Vacuum 2023 / art. 111955 <https://doi.org/10.1016/j.vacuum.2023.111955> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Design and performance of laser additively manufactured core induction motor

Tiismus, Hans; Kallaste, Ants; Naseer, Muhammad Usman; Vaimann, Toomas; Rassõlkin, Anton IEEE Access 2022 / p. 50137-50152 <https://doi.org/10.1109/ACCESS.2022.3173317> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Design of an additively manufactured polymer composite electrical machine

Sarap, Martin; Kallaste, Ants; Naseer, Muhammad Usman; Tiismus, Hans; Rjabtšikov, Viktor; Shams Ghahfarokhi, Payam; Vaimann, Toomas; Aman, Alexander; Kutia, Mykhailo 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 5 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227413>

Design of an additively manufactured thermal solution for an axial flux switched reluctance motor

Sarap, Martin; Singh, Shalini; Kallaste, Ants; Jawad Qureshi, Ahmed Jawad; Tiismus, Hans; Vaimann, Toomas; Shams Ghahfarokhi, Payam Case studies in thermal engineering 2025 / art. 105805 <https://doi.org/10.1016/j.csite.2025.105805>

Design of next generation alloys for additive manufacturing

Prashanth, Konda Gokuldoss Material design & processing communications 2019 / art. 1e50, 4 p. : ill <https://doi.org/10.1002/mdp2.50>

Design optimization of permanent magnet clutch with Ārtap framework

Andriushchenko, Ekaterina; Kaska, Jan; Kallaste, Ants; Belahcen, Anouar; Vaimann, Toomas; Rassõlkin, Anton Periodica polytechnica electrical engineering and computer science 2021 / p. 106-112 <https://doi.org/10.3311/PPee.17007> [Journal metrics at Scopus](#) [Article at Scopus](#)

Design procedure and preliminary analysis for the introduction of axial asymmetry in the synchronous reluctance machines : [proceedings]

Naseer, Muhammad Usman; Kallaste, Ants; Asad, Bilal; Vaimann, Toomas; Rassõlkin, Anton 2023 IEEE Workshop on Electrical Machines Design, Control and Diagnosis (WEMDCD) : proceedings 2023 / 6 p. : ill <https://doi.org/10.1109/WEMDCD55819.2023.10110903>

Direct conductor cooling of outer-rotor machine enabled by additive manufacturing

Sarap, Martin; Kallaste, Ants; Shams Ghahfarokhi, Payam; Tiismus, Hans; Vaimann, Toomas 2023 IEEE International Conference on Electric Machines and Drives (IEMDC) 2023 / 4 p <https://doi.org/10.1109/IEMDC55163.2023.10238858>

Eddy current loss reduction prospects in laser additively manufactured soft magnetic cores

Tiismus, Hans; Kallaste, Ants; Vaimann, Toomas; Rassõlkin, Anton 2022 International Conference on Electrical Machines (ICEM) 2022 / p. 1511-1516 <https://doi.org/10.1109/ICEM51905.2022.9910679>

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

Holovenko, Yaroslav; Kollo, Lauri; Saarna, Mart; Rahmani Ahranjani, Ramin; Solovieva, 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 NiCoFeAlTi high entropy intermetallic reinforcement particle size on the microstructure and mechanical properties of CoCrFeMnNi high-entropy alloy composites fabricated by selective laser melting

Zhang, Zhiyu; Ma, Pan; Fang, Yacheng; Yang, Zhilu; Zhang, Nan; **Prashanth, Konda Gokuldoss**; Jia, Yandong Journal of alloys and compounds 2023 / art. 169417 <https://doi.org/10.1016/j.jallcom.2023.169417> [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> [Journal metrics at Scopus](#) [Article at Scopus](#)

Effect of scanning strategy on microstructure and texture evolution in a selective laser melted Al-33Cu eutectic alloy
Vikram, R. J.; Gokulnath, S. A.; **Prashanth, Konda Gokuldoss**; Suwas, Satyam Journal of alloys and compounds 2023 / art. 168098, 10 p. : ill <https://doi.org/10.1016/j.jallcom.2022.168098> [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](#)

Electrical and thermal anisotropy in additively manufactured AlSi10Mg and Fe-Si samples
Sarap, Martin; Tiismus, Hans; Kallaste, Ants; Saarna, Mart; Kolnes, Märt; Shams Ghahfarokhi, Payam; Vaimann, Toomas
Machines 2025 / art. 1 <https://doi.org/10.3390/machines13010001>

Electrical resistivity of additively manufactured silicon steel for electrical machine fabrication
Tiismus, Hans; Kallaste, Ants; Vaimann, Toomas; Rassõlkin, Anton; Belahcen, Anouar 2019 Electric Power Quality and Supply Reliability Conference (PQ) & 2019 Symposium on Electrical Engineering and Mechatronics (SEEM), Kärda, Estonia, June 12-15, 2019 : proceedings 2019 / 4 p. : ill <https://doi.org/10.1109/PQ.2019.8818252>

Evaluation of 3D-printed magnetic materials for additively-manufactured electrical machines
Selema, Ahmed; Beretta, Margherita; Van Coppenolle, Matty; **Tiismus, Hans; Kallaste, Ants;** Ibrahim, Mohamed N.; Rombouts, Marleen; Vleugels, Jozef; Kestens, Leo A.I.; Sergeant, Peter Journal of magnetism and magnetic materials 2023 / art. 170426, 12 p. : ill <https://doi.org/10.1016/j.jmmm.2023.170426> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Experimental measurements and numerical modelling of additively manufactured Fe-Si cores
Stella, Marco; Faba, Antonio; Fulginei, F. Riganti; Quercio, Michele; Scorretti, Riccardo; Bertolini, Vittorio; Sabino, Luis Gustavo; **Tiismus, Hans; Kallaste, Ants;** Cardelli, Ermanno Journal of magnetism and magnetic materials 2024 / art. 171752
<https://doi.org/10.1016/j.jmmm.2024.171752> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Fabrication of localized diamond-filled copper structures via selective laser melting and spark plasma sintering
Rahmani Ahranjani, Ramin; Karimi, Javad; Kamboj, Nikhil; Kumar, Rahul, 1993-; Brojan, Miha; Tchórz, Adam; Skrabalak, Grzegorz; Lopes, Sergio Ivan Diamond and related materials 2023 / art. 109916 <https://doi.org/10.1016/j.diamond.2023.109916> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High temperature dry sliding wear behaviour of selective laser melted Ti-6Al-4V alloy surfaces
Praveenkumar, Kesavan; Vishnu, Jithin; Samuel, Calvin; Gopal, Vasanth; Arivarasu, Moganraj; Lackner, Jürgen M.; Meier, Benjamin; Karthik, D.; **Prashanth, Konda Gokuldoss; Yadav, Mayank Kumar** Journal of materials processing technology 2024 / art. 118439, 12 p. : ill <https://doi.org/10.1016/j.jmatprotec.2024.118439> [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](#)

Importance of the micro-lattice structure of selective laser melting processed Mo/Mo(x)S(x+1) composite: Corrosion studies on the electrochemical performance in aqueous solutions
Alinejadian, Navid; Kazemi, Sayed Habib; **Grossberg-Kuusk, Maarja; Kollo, Lauri;** Odnevall, Inger Charlotta; **Prashanth, Konda Gokuldoss** Materials today chemistry 2022 / art. 101219 <https://doi.org/10.1016/j.mtchem.2022.101219> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

In situ fabrication of TiC-NiCr cermets by selective laser melting
Aramian, Atefeh; Sadeghian, Zohreh; **Prashanth, Konda Gokuldoss;** Berto, Filippo International journal of refractory metals and hard materials 2020 / art. 105171, 8 p. : ill <https://doi.org/10.1016/j.ijrmhm.2019.105171> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

In vitro corrosion behavior of selective laser melted Ti-35Nb-7Zr-5Ta

Ummethala, Raghunandan; Jayaraj, Jayamani; Karamched, Phani S.; Rathinavelu, Sokkalingam; Singh, Neera; Surreddi, Kumar Babu; **Prashanth, Konda Gokuldoss** Journal of Materials Engineering and Performance 2021 / p. 7967-7978
<https://doi.org/10.1007/s11665-021-05940-9> [Journal metric at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Influence of powder characteristics on processability of AISi12 alloy fabricated by selective laser melting

Baitimerov, Rustam; Lykov, Pavel; Zherebtsov, Dmitry; Radionova, Ludmila; Shultc, 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](#)

The influence of process parameters on the microstructure and properties of the TiC/Ti-alloy composites fabricated by the directed energy deposition process

Wang, Yongxia; Fan, Wei; Zhou, Fan; **Prashanth, Konda Gokuldoss**; Feng, Zhe; Zhang, Siyu; Tan, Hua; Lin, Xin Journal of materials research and technology 2025 / p. 164-174 <https://doi.org/10.1016/j.jmrt.2024.12.043>

Influence of substrate plate heating on the fabrication of Al-12Si produced by selective laser melting

Xi, L. X.; Ma, Pan; Jia, Yandong; Chaubey, A. K.; Wang, Z.; **Prashanth, Konda Gokuldoss** Transactions of the Indian National Academy of Engineering 2021 / p. 1027-1036 <https://doi.org/10.1007/s41403-021-00240-z>

Laser additively manufactured magnetic core design and process for electrical machine applications

Tiismus, Hans; Kallaste, Ants; Vaimann, Toomas; Lind, Liina; Virro, Indrek; **Rassõlkin, Anton; Dedova, Tatjana** Energies 2022 / art. 3665 <https://doi.org/10.3390/en15103665> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Laser powder-bed fusion of ceramic particulate reinforced aluminum alloys: a review

Minasyan, Tatevik; Hussainova, Irina Materials 2022 / art. 2467 <https://doi.org/10.3390/ma15072467> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Linear patterning of high entropy alloy by additive manufacturing

Karimi, Javad; Ma, P.; Ji, Y.D.; **Prashanth, Konda Gokuldoss** Manufacturing letters 2020 / p. 9-13 : ill <https://doi.org/10.1016/j.mfglet.2020.03.003> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Massive transformation in dual-laser powder bed fusion of Ti6Al4V alloys

Karimi, Javad; Zhao, Chao; **Prashanth, Konda Gokuldoss** Journal of Manufacturing Processes 2024 / p. 282-292 : ill <https://doi.org/10.1016/j.jmapro.2024.03.083> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Material recycling and improvement issues in additive manufacturing

Mägi, Piret; Krumme, Andres; Pohlak, Meelis Proceedings of the 10th International Conference of DAAAM Baltic Industrial Engineering, 12-13th May 2015, Tallinn, Estonia 2015 / p. 63-68 : ill

Mechanical behavior of Ti6Al4V scaffolds filled with CaSiO3 for implant applications

Rahmani Ahranjani, Ramin; Antonov, Maksim; Kollo, Lauri; Holovenko, Yaroslav; Prashanth, Konda Gokuldoss Applied sciences 2019 / art. 3844, 11 p. : ill <https://doi.org/10.3390/app9183844> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Mechanisms controlling fracture toughness of additively manufactured stainless steel 316L

Kumar, Deepak; Jhavar, Suyog; Arya, Abhinav; **Prashanth, Konda Gokuldoss;** Suwas, Satyam International journal of fracture 2022 / p. 61-78 <https://doi.org/10.1007/s10704-021-00574-3> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Metallic coatings through additive manufacturing: a review

Mohanty, Shalini; Prashanth, Konda Gokuldoss Materials 2023 / art. 2325 : ill <https://doi.org/10.3390/ma16062325> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Modelling of impact-abrasive wear of ceramic, metallic, and composite materials

Rahmani Ahranjani, Ramin; Antonov, Maksim; Kamboj, Nikhil Kumar Proceedings of the Estonian Academy of Sciences 2019 / p. 191–197 : ill <https://doi.org/10.3176/proc.2019.2.11> http://www.kirj.ee/public/proceedings_pdf/2019/issue_2/proc-2019-2-191-197.pdf [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Mo(Si,Al)2 by laser powder bed fusion of AISi10Mg and combustion synthesized MoSi2

Minasyan, Tatevik; Ivanov, Roman; Toyserkani, Ehsan; Hussainova, Irina Materials letters 2022 / art. 131041 <https://doi.org/10.1016/j.matlet.2021.131041> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A novel crack-free and refined 2195-Ti/CeB6 composites prepared by laser powder bed fusion

Xi, Lixia; Xu, Juncan; Gu, Dongdong; Feng, Lili; Lu, Qiuyang; **Prashanth, Konda Gokuldoss** Materials letters 2023 / art. 133572 <https://doi.org/10.1016/j.matlet.2022.133572> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Novel silicon-wollastonite based scaffolds for bone tissue engineering produced by selective laser melting

Kamboj, Nikhil Kumar; Aghayan, Marina; Rodrigo-Vazquez, Sara; Rodriguez, Miguel Angel; **Hussainova, Irina** Ceramics International 2019 / p. 24691-24701 : ill <https://doi.org/10.1016/j.ceramint.2019.08.208> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Opportunities and challenges of utilizing additive manufacturing approaches in thermal management of electrical machines

Shams Ghahfarokhi, Payam; Podgornovs, Andrejs; **Kallaste, Ants;** Cardoso, Antonio J. Marques; **Belahcen, Anouar; Vaimann, Toomas; Tiismus, Hans; Asad, Bilal** IEEE Access 2021 / art. 9364970, p. 36368-36381 : ill <https://doi.org/10.1109/ACCESS.2021.3062618> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optimization of a 3D-printed permanent magnet coupling using genetic algorithm and Taguchi method

Andriushchenko, Ekaterina; Kallaste, Ants; Belahcen, Anouar; Vaimann, Toomas; Rassõlkin, Anton; Heidari, Hamidreza; Tiismus, Hans Electronics 2021 / art. 494, 16 p. : ill <https://doi.org/10.3390/electronics10040494> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Parametric study on in situ Laser powder bed fusion of Mo(Si_{1-x}Al_x)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](#)

Performance evaluation of additive manufacturing based test samples for studies of defects in electrical insulation

Shafiq, Muhammad; Taklaja, Paul; Kiitam, Ivar; Tiismus, Hans; Palu, Ivo; Kütt, Lauri 2021 International Conference on Electrical, Computer and Energy Technologies (ICECET) 2021 / 6 : ill <https://doi.org/10.1109/ICECET52533.2021.9698476>

Preliminary analysis of soft magnetic material properties for additive manufacturing of electrical machines

Tiismus, Hans; Kallaste, Ants; Rassõlkin, Anton; Vaimann, Toomas 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. 270-275 : ill <https://www.scientific.net/KEM.799.270> https://www.ester.ee/record=b5235278*est <https://doi.org/10.4028/www.scientific.net/KEM.799.270> [Conference proceeding at Scopus](#) [Article at Scopus](#)

Processing of Al-based composite material by selective laser melting: A perspective

Prashanth, Konda Gokuldoss Materials today: proceedings 2022 / p. 498-504 <https://doi.org/10.1016/j.matpr.2022.01.391> [Conference proceeding at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Progress in additive manufacturing of MoS₂-based structures for energy storage applications – a review

Alinejadian, Navid; Kollo, Lauri; Odneval Wallinder, Inger Materials science in semiconductor processing 2022 / 21 p. : ill <https://doi.org/10.1016/j.mssp.2021.106331> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Quasicrystalline composites by additive manufacturing

Prashanth, Konda Gokuldoss; Scudino, Sergio Applied Engineering, Materials and Mechanics III : 4th International Conference on Applied Engineering, Materials and Mechanics (4th ICAEMM 2019) 2019 / p. 72-76 <https://doi.org/10.4028/www.scientific.net/KEM.818.72> [Conference proceeding at Scopus](#) [Article at Scopus](#)

Recent trends in additive manufacturing and topology optimization of reluctance machines

Hussain, Shahid; Kallaste, Ants; Vaimann, Toomas Energies 2023 / art. 3840 <https://doi.org/10.3390/en16093840> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Recycling of PA-12 in additive manufacturing and the improvement of its mechanical properties

Mägi, Piret; Krumme, Andres; Pohlak, Meelis Engineering materials and tribology : selected, peer reviewed papers from the 24th International Baltic Conference on Engineering Materials & Tribology (BALTMATTRIB & IFHTSE 2015), November 5-6, 2015, Tallinn, Estonia 2016 / p. 9-14 : ill <https://doi.org/10.4028/www.scientific.net/KEM.674.9> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

A review on additive manufacturing possibilities for electrical machines

Naseer, Muhammad Usman; Kallaste, Ants; Asad, Bilal; Vaimann, Toomas; Rassõlkin, Anton Energies 2021 / art. 1940 <https://doi.org/10.3390/en14071940> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A review on development of bio-inspired implants using 3D printing

Raheem, Ansheed A.; Hameed, Pearlin; Prashanth, Konda Gokuldoss; Manivasagam, Geetha Biomimetics 2021 / art. 65 <https://doi.org/10.3390/biomimetics6040065> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Selective laser manufacturing of Ti-based alloys and composites : impact of process parameters, application trends, and future prospects

Singh, Nirmal Kumar; Hameed, Pearlin; **Ummethala, Raghunandan;** Manivasagam, Geetha; **Prashanth, Konda Gokuldoss;** Eckert, Juergen H. Materials Today Advances 2020 / Art. 100097 <https://doi.org/10.1016/j.mtadv.2020.100097> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Selective laser melting of AlSi10Mg : corrosion behavior

Sellamuthu, Prabhukumar; Sivaprasad, Katakam; **Prashanth, Konda Gokuldoss** Journal of Mines, Metals and Fuels 2024 / p. 93-102 <https://doi.org/10.18311/jmmf/2024/36429> [Journal metrics at Scopus](#) [Article at Scopus](#)

Selective laser melting of aluminum and its alloys

Wang, Zhi; **Ummethala, Raghunandan; Singh, Neera; Prashanth, Konda Gokuldoss** Materials 2020 / art. 4564 : ill <https://doi.org/10.3390/ma13204564> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Selective laser melting of commercially pure silicon

Lai, Zhouyi; Guo, Ting; Zhang, Shengting; Kollo, Lauri; Attar, Hooyar; Wang, Zhi; **Prashanth, Konda Gokuldoss** Journal Wuhan University of Technology, Materials Science Edition 2022 / p. 1155 - 1165 <https://doi.org/10.1007/s11595-022-2647-3> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Selective laser melting of Cu-Ni-Sn : a comprehensive study on the microstructure, mechanical properties, and deformation behavior

Zhao, Chao; Wang, Zhi; Li, Daoxi; **Kollo, Lauri; Luo, Zongqiang; Zhang, Weiwen; Prashanth, Konda Gokuldoss** International journal of plasticity 2021 / art. 102926 <https://doi.org/10.1016/j.iplas.2021.102926> [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 Ti6Al4V : effect of laser re-melting

Karimi, Javad; Suryanarayana, Challapalli; Okulov, Ilya; Prashanth, Konda Gokuldoss Materials Science and Engineering : A 2021 / art. 140558 <https://doi.org/10.1016/j.msea.2020.140558> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Selective laser melting of TiC-based cermet : HIP studies

Maurya, Himanshu Singh; Kollo, Lauri; Tarraste, Marek; Juhani, Kristjan; Sergejev, Fjodor; Prashanth, Konda Gokuldoss Transactions of the Indian Institute of Metals 2023 / p. 565–570 : ill <https://doi.org/10.1007/s12666-022-02684-5> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Selective laser melting of TiC-Fe via laser pulse shaping : microstructure and mechanical properties

Maurya, Himanshu Singh; Kollo, Lauri; Tarraste, Marek; Juhani, Kristjan; Sergejev, Fjodor; Prashanth, Konda Gokuldoss 3D Printing and Additive Manufacturing 2023 / p. 640-649 <https://doi.org/10.1089/3dp.2021.0221> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Selective laser sintered bio-inspired silicon-wollastonite scaffolds for bone tissue engineering

Kamboj, Nikhil Kumar; Kazantseva, Jekaterina; Rahmani Ahranjani, Ramin; Rodriguez, Miguel Angel; Hussainova, Irina Materials Science and Engineering : C 2020 / art. 111223 <https://doi.org/10.1016/j.msec.2020.111223>

Sliding mean value subtraction-based DC drift correction of B-H curve for 3D-printed magnetic materials

Asad, Bilal; Tiismus, Hans; Vaimann, Toomas; Belahcen, Anouar; Kallaste, Ants; Rassõlkin, Anton; Shams Ghahfarokhi, Payam Energies 2021 / art. 284, 10 p <https://doi.org/10.3390/en14020284> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

State of the art of additively manufactured electromagnetic materials for topology optimized electrical machines

Tiismus, Hans; Kallaste, Ants; Vaimann, Toomas; Rassõlkin, Anton Additive manufacturing 2022 / art. 102778, 19 p. : ill <https://doi.org/10.1016/j.addma.2022.102778> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Structural analysis of selective laser melted copper-tin alloy

Rahmani Ahranjani, Ramin; Resende, Pedro R.; Couto, Ruben; Lopes, Sérgio Ivan; Kumar, Rahul, 1993-; **Maurya, Himanshu Singh; Karimi, Javad; Afonso, Alexandre M.; Hussain, Abrar; Abrantes, Joao C. C.** Journal of alloys and metallurgical systems 2024 / art. 100097 <https://doi.org/10.1016/j.jalms.2024.100097> [Journal metrics at Scopus](#) [Article at Scopus](#)

Superior wear resistance in EBM-Processed TC4 alloy compared with SLM and forged samples

Zhang, Weiwen; Qin, Peiting; Wang, Zhi; Yang, Chao; **Kollo, Lauri; Grzesiak, Dariusz; Prashanth, Konda Gokuldoss** Materials 2019 / art. 782 <https://doi.org/10.3390/ma12050782> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Sustainable additive manufacturing : an overview on life cycle impacts and cost efficiency of laser powder bed fusion
Rahmani, Ramin; **Bashiri, Bashir**; Lopes, Sergio Ivan; **Hussain, Abrar**; Maurya, Himanshu Singh; **Vilu, Raivo** Journal of manufacturing and materials processing 2025 / art. 18 <https://doi.org/10.3390/jmmp9010018>

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>

Temperature-induced wear micro-mechanism transition in additively deposited nickel alloys with different solid lubricants

Kumar, Rahul, 1993-; **Hussainova, Irina**; **Antonov, Maksim**; Maurya, Himanshu Singh; Rodríguez Ripoll, Manel Wear 2024 / art. 205452 <https://doi.org/10.1016/j.wear.2024.205452> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The effect of Zinc Oxide on DLP hybrid composite manufacturability and mechanical-chemical resistance

Baroninš, Janis; **Antonov, Maksim**; Abramovskis, Vitalijs; Rautmane, Aija; Lapkovskis, Vjaceslavs; Bockovs, Ivans; Goel, Saurav; Kumar Thakur, Vijay; Shishkin, Andrei Polymers 2023 / art. 4679, p. 1–19 <https://doi.org/10.3390/polym15244679> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 technology for low-volume manufacturing of fenders for an advanced light electric vehicle

Pääsuke, Kaarel; **Pohlak, Meelis** Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 1 2012 / p. 210-215 : ill

Topology optimization and additive manufacturing of a loudspeaker soft magnetic core

Sarap, Martin; **Pärtel, Marcus**; **Kallaste, Ants**; **Tiismus, Hans**; **Vaimann, Toomas** 2024 International Conference on Electrical and Computer Engineering Researches (ICECER) 2024 / 5 p <https://doi.org/10.1109/ICECER62944.2024.10920438>

Tribological properties of selective laser melted Al12Si alloy

Rathod, H.J.; Nagaraju, T.; **Prashanth, Konda Gokuldoss**; Ramamurty, U. Tribology international 2019 / p. 94-101 : ill <https://doi.org/10.1016/j.triboint.2019.04.038> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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](#)

Using functional requirements to determine optimal additive manufacturing technology

Sonk, Kaimo; **Hermaste, Aigar**; **Sarkans, Martinš**; **Paavel, Marko** Proceedings of the 11th International Conference of DAAAM Baltic Industrial Engineering : 20-22th April 2016, Tallinn, Estonia 2016 / p. 79-84 : ill <http://innomet.ttu.ee/daaam/>

Utilization of additive manufacturing in the thermal design of electrical machines : a review

Sarap, Martin; **Kallaste, Ants**; **Shams Ghahfarokhi, Payam**; **Tiismus, Hans**; **Vaimann, Toomas** Machines 2022 / art. 251 <https://doi.org/10.3390/machines10040251> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)