

Additive manufacturing of cryogenic chemically complex alloys with sponge bone-like reticular nanoscale superstructure
Xie, Kaiqiang; Ma, Pan; Fang, Yacheng; Yang, Hong; Wan, Shiguang; Wu, Zhibin; **Shi, Jinqiang; Prashanth, Konda Gokuldoss;** Gargarella, Piter; Zhang, Lunyong Composites Part B : Engineering 2025 / art. 112786
<https://doi.org/10.1016/j.compositesb.2025.112786>

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>

AR/VR Digital Twin for simulation and data collection of robotic environments
Martins, João G.; **Nutonen, Karle;** Costa, Paulo; **Kuts, Vladimir; Otto, Tauno;** Sousa, Armando; Petry, Marcelo R. 2025 IEEE International Conference on Autonomous Robot Systems and Competitions (ICARSC) 2025 / 6 p
<https://doi.org/10.1109/ICARSC65809.2025.10970158>

Assessment of tribological performance of 3D printed macro features on the metallic surface
Antonov, Maksim; Pohlak, Meelis; Ivanov, Roman; Kariminejad, Arash; Hussainova, Irina Wear 2026 / art. 206398
<https://doi.org/10.1016/j.wear.2025.206398>

Autonomous vehicle for industry 5.0 : Digital twin for system safety validation
Sell, Raivo; Malayjerdi, Mohsen; Malayjerdi, Ehsan; **Bellone, Mauro; Pikner, Heiko** Proceedings of the 11th International Conference on Vehicle Technology and Intelligent Transport Systems VEHITS ; Vol. 1 2025 / p. 660-667
<https://doi.org/10.5220/0013476600003941>

Binder jetting 3D printing of green TiC-FeCr based cermets- Effect of sintering temperature and systematic comparison study with Laser powder bed fusion fabricated parts
Maurya, Himanshu Singh; Marczyk, J.; **Juhani, Kristjan; Sergejev, Fjodor;** Kumar, R.; **Hussain, Abrar;** Akhtar, F.; Hebda, M.; **Prashanth, Konda Gokuldoss** Materials Today Advances 2025 / art. 100562 <https://doi.org/10.1016/j.mtadv.2025.100562>

Collaboration Between Industrial, Collaborative, Humanoid Robots and Humans
Kekšin, Vjatšeslav; Ponomar, Sergei; Sarkans, Martinš; Kuts, Vladimir; Pavlov, Sergei Journal of Machine Engineering 2025 / p. 100-110 : ill <https://doi.org/10.36897/jme/203790>

Combustion synthesis of silicon carbide by magnesio-carbothermic reduction of amorphous and crystalline silica
Kirakosyan, Hasmik; Nazaretyan, Khachik; Beglaryan, Hayk; Ivanov, Roman; **Hussainova, Irina; Aydinyan, Sofiya** Proceedings of the Estonian Academy of Sciences 2025 / p. 260-265 <https://doi.org/10.3176/proc.2025.2.31>

Development of a sustainability-oriented KPI selection model for manufacturing processes
Karjust, Kristo; Mehrparvar, Marmar; Kaganski, Sergei; Raamets, Tõnis Sustainability 2025 / art. 6374
<https://doi.org/10.3390/su17146374>

Development of experimental set-up for the investigation of photoelectric response of the pyroelectric crystal to short pulses of the Hg(Xe) lamp
Podgurski, Vitali; Land, Raul; Bogatov, Andrei; Vlasov, A.; Nagorny, A.; Tiik, K. Journal of optoelectronics and advanced materials 2024 / p. 243 - 245 <https://joam.inoe.ro/articles/development-of-experimental-set-up-for-the-investigation-of-photoelectric-response-of-the-pyroelectric-crystal-to-short-pulses-of-the-hgxe-lamp/fulltext> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Development, implementation and field trial of 5G integrated GNSS-RTK positioning in cross-border settings
Elgarhy, Osama; Rohtla, Margus; Ait, Indur; Roosipuu, Priit; Kõrbe Kaare, Kati; Sadam, Arvi; Kallaspoolik, Toomas; **Alam, Muhammad Mahtab** 2024 IEEE Future Networks World Forum (FNWF) 2025 / p. 791-796
<https://doi.org/10.1109/FNWF63303.2024.11028789>

Dynamics of axially graded nanobeams with follower force effect
Arda, Mustafa; **Mehrparvar, Marmar; Karjust, Kristo** International Conference of Numerical Analysis and Applied Mathematics ICNAAM2022 : Heraklion, Freece, 19-25 September 2022 2024 / art. 230005 <https://pubs.aip.org/aip/acp/article-abstract/3094/1/230005/3297087/Dynamics-of-axially-graded-nanobeams-with-follower> <https://doi.org/10.1063/5.0210131> Conference proceedings at Scopus Article at Scopus Article at WOS

Effect of Grain Size Distribution on Frictional Wear and Corrosion Properties of (FeCoNi)₈₆Al₇Ti₇ High-Entropy Alloys
Sun, Qinhui; Ma, Pan; Yang, Hong; Xie, Kaiqiang; Wan, Shiguang; Sheng, Chunqi; Chen, Zhibo; Yang, Hongji; Jia, Yandong; **Prashanth, Konda Gokuldoss** Entropy 2025 / art. 747 <https://doi.org/10.3390/e27070747>

Effect of laser surface texturing and fabrication methods on tribological properties of Ti6Al4V/HAp biocomposites
Sadlik, Julia; Kosinska, Edyta; Tomala, Agnieszka; Bankosz, Magdalena; Polajnar, Marko; **Kumar, Rahul;** Kalin, Mitjan; **Kravanja, Gaia;** Hribar, Luka; **Hussainova, Irina** Materials 2025 / art.2468 <https://doi.org/10.3390/ma18112468>

Effect of milling activation of dry components on properties of foamed cement mortar in a two-stage manufacturing process

Baroninš, Janis; Shishkin, Andrei; Lusi, Vitalijs; Giosue, Chiara; **Goljandin, Dmitri**; Novakova, Iveta; Kekez, Sofija; Korjakins, Aleksandrs; Gorelikovs, Dmitrijs; Gavrilovs, Pavels Case studies in construction materials 2025 / art. e04465
<https://doi.org/10.1016/j.cscm.2025.e04465>

Effect of pulsed deuterium plasma irradiation on dual-phase tungsten medium-entropy alloys

Laas, Tõnu; Tõkke, Siim; Paju-Hamburg, Jana; Tarraste, Marek; Mikli, Valdek; **Antonov, Maksim**; Priimets, Jaanis; Czarkowski, Piotr; Miklaszewski, Ryszard; Paduch, Marian Fusion engineering and design 2025 / art. 115229
<https://doi.org/10.1016/j.fusengdes.2025.115229>

Effect of Si addition on microstructure and mechanical properties of SiC ceramic fabricated by direct LPBF with CVI technology

Wang, Yipu; Wang, Pei; Li, Liqun; Zhang, Jian; Zhang, Yulei; Peng, Jin; Wang, Xingxing; Kang, Nan; El Mansori, Mohamed; **Prashanth, Konda Gokuldoss** Applied sciences 2025 / art. 8585 <https://doi.org/10.3390/app15158585>

Effect of silica precursor on the synthesis of Zn₂SiO₄-based material

Rojas Hernandez, Rocio Estefania; Hussainova, Irina; Necib, Jallouli Proceedings of the Estonian Academy of Sciences 2025 / p. 217-221 <https://doi.org/10.3176/proc.2025.2.24>

Enhanced Crack Detection in Composite Plates : Integrating Haar Wavelet Transform with Convolutional Neural Networks

Mehrpavar, Marmar; Majak, Jüri; Karjust, Kristo 6th International Conference on Multidisciplinary Design Optimization and Applications (MDOA 2024) 2025 / art. 01008 https://www.e3s-conferences.org/articles/e3sconf/abs/2025/31/e3sconf_mdoa2025_01008/e3sconf_mdoa2025_01008.html
<https://doi.org/10.1051/e3sconf/202563101008>

Erosive and impact-abrasive wear of hardmetals with Fe-based binders

Tarraste, Marek; Antonov, Maksim; Kolnes, Märt; Viljus, Mart; Ormus, Andres-Hardi Journal of the Japan Society of Powder and Powder Metallurgy 2025 / p. S1437-S1444 <https://doi.org/10.2497/jjspm.16F-T15-05>

Erosive wear of spark plasma sintered Al₂O₃ - cBN ceramic composites

Kariminejad, Arash; Kumar, Rahul; Antonov, Maksim; Hussainova, Irina; Klimczyk, Piotr Diamond and Related Materials 2025 / art. 112328 <https://doi.org/10.1016/j.diamond.2025.112328>

Erosive Wear of Stainless Steel-Based Hardfacings with Ex-Situ and In-Situ Synthesized TiC

Yöyler, Sibel; Surženkov, Andrei; Tarraste, Marek; Kolnes, Mart; Juhani, Kristjan Coatings 2025 / art. 658
<https://doi.org/10.3390/coatings15060658>

Evaluation of fatigue crack growth rates and fracture toughness in a selective laser-melted Ti-5.6Al-3.8V alloy with optimized microstructure after heat treatment

He, Yuqi; Zhao, Kexin; Zhang, Ying; Prashanth, Konda Gokuldoss; Ye, Zimeng; Yu, Zerong; Zhang, Fengying Materials science and engineering : A 2025 / art. 147822 <https://doi.org/10.1016/j.msea.2025.147822>

Exploitability of Maritime Fleet-Based 5G Network Extension

Pilvik, Riivo; Jaiurus, Tanel; Sadam, Arvi; Nõmmela, Kaidi; Kõrbe Kaare, Kati; Scholliers, Johan Electronics 2025 / art. 2210
<https://doi.org/10.3390/electronics14112210>

Exploring microstructural properties, phase transformations, and wettability in high-chromium content iron-bonded Ti(C,N)-based cermet

Pampori, Tabeen Halawat; Kolnes, Märt; Juhani, Kristjan; Tarraste, Marek; Maurya, Himanshu Singh; Kübarsepp, Jakob Journal of the Japan Society of Powder and Powder Metallurgy 2025 / p. S1533-S1540 <https://doi.org/10.2497/jjspm.16P-T14-06>

Forming ability of the WC-based ceramic metal composites with different Fe-based binders by unique laser beam modulation

Maurya, Himanshu Singh; Juhani, Kristjan; Sergejev, Fjodor; Kumar Yadav, Mayank; Hussain, Abrar; Prashanth, Konda Gokuldoss Next Materials 2025 / art. 100524 <https://doi.org/10.1016/j.nxmate.2025.100524>

From scrap to product : the effect of recycled tungsten carbide and alumina content on the mechanical properties of oxide-carbide duplex ceramic composite

Kariminejad, Arash; Klimczyk, Piotr; Antonov, Maksim; Hussainova, Irina Proceedings of the Estonian Academy of Sciences 2025 / p. 192-197 <https://doi.org/10.3176/proc.2025.2.20>

Futureproofing Engineering Education for Global Responsibility : Proceedings of the 27th International Conference on Interactive Collaborative Learning (ICL 2024) ; vol. 1

2025 <https://doi.org/10.1007/978-3-031-85652-5>

Generating curricula: A human-centred perspective in the era of artificial intelligence

Rüütmann, Tiia; Läänemets, Urve Science and Technology Education : Expectations and Experiences : Proceedings of the 6th International Baltic Symposium on Science and Technology Education (BalticSTE2025) 2025 / p. 180-196
<https://doi.org/10.33225/BalticSTE/2025.180>

Glass-box Automated Driving : Insights and Future Trends

Bellone, Mauro; Sell, Raivo; Soe, Ralf-Martin Proceedings of the 17th International Conference on Agents and Artificial Intelligence - (Volume 1) 2025 / p. 880-885 <https://doi.org/10.5220/0013384300003890>

Haar wavelet based analysis of dynamics of flight of the fragments

Mehrpavar, Marmar; Kivistik, Lenart; Eerme, Martin; Karjust, Kristo International Conference Of Numerical Analysis And Applied Mathematics : ICNAAM2023 2025 / art. 240001 <http://pubs.aip.org/aip/acp/article/3315/1/240001/3363142/Haar-wavelet-based-analysis-of-dynamics-of-flight> <https://doi.org/10.1063/5.0287481>

Human-robot interaction : a conceptual framework for safety/risk analysis

Matsulevitš, Johannes; Majak, Jüri; Eerme, Martin; Sarkans, Martinš; Dunajeva, Olga; Kristjuhan-Ling, Kadri; Raamets, Tõnis; Kekšin, Vjatseslav Proceedings of the Estonian Academy of Sciences 2025 / p. 137-142
<https://doi.org/10.3176/proc.2025.2.09>

Implementing an AI-based digital twin analysis system for real-time decision support in a custom-made sportswear SME

Raamets, Tõnis; Karjust, Kristo; Majak, Jüri; Hermaste, Aigar Applied sciences 2025 / art. 7952
<https://doi.org/10.3390/app15147952>

In situ Al3BC/Al composite fabricated via solid-solid reaction: An investigation on microstructure and mechanical behavior

Maity, Tapabrata; Prakash, Aditya; Roy, Debdas; Prashanth, Konda Gokuldoss Applied sciences 2025 / art. 5189
<https://doi.org/10.3390/app15095189>

Inseneriõppe väljakutsetest ja pingutuse väärtusest: rahvusvahelised praktikad

Rüütmann, Tiia Mente et Manu 2025 / lk. 44-47 <https://taltech.ee/uudised/inseneriõppe-valjakutsetest-ja-pingutuse-vaartusest-rahvusvahelised-praktikad> https://www.ester.ee/record=b1242496*est

Integrating Digital Twin Software Solutions with Collaborative Industrial Systems : A Comprehensive Review for Operational Efficiency

Guerra-Zubiaga, David; Aksu, Murat; Richards, Gershom; Kuts, Vladimir Applied Sciences 2025 / art. 7049
<https://doi.org/10.3390/app15137049>

Interpenetrating composites : A nomenclature dilemma

Prashanth, Konda Gokuldoss Materials 2025 / art. 273 <https://doi.org/10.3390/ma18020273>

An Investigation into the Thermomechanical Processing and Dynamic Recrystallization Mechanisms of High-Magnesium Aluminum Alloys

Ye, Zili; Zhou, Zixiao; Ye, Zhaolin; Wang, Zhi; Zhao, Qizhong; Prashanth, Konda Gokuldoss Materials 2025 / art. 2734
<https://doi.org/10.3390/ma18122734>

Irradiation-induced atomic migration and its effect on the surface and mechanical properties of laser additive manufactured MWCNTs/Al–Mg–Sc–Zr composites

Xi, Lixia; Zhang, Yuting; Geng, Xiaofeng; Gu, Dongdong; Shi, Keyu; Ramasamy, Parthiban; Prashanth, Konda Gokuldoss; Eckert, Jürgen Journal of materials research and technology 2025 / p. 4043-4054 <https://doi.org/10.1016/j.jmrt.2025.02.109>

Laser powder bed fusion of WC-Ni cermets : microstructural, phase and mechanical studies

Singh, Shalini; Meszaros, Kimberley; Narayanan, Jinoop Arackal; Dehgahi, Shirin; Prashanth, Konda Gokuldoss; Qureshi, Ahmed Jawad Tungsten 2025 <https://doi.org/10.1007/s42864-025-00329-w>

Lean in universities: assessing practicality across university functions

Kristjuhan-Ling, Kadri; Mahmood, Kashif Proceedings of the Estonian Academy of Sciences 2025 / p. 160-164
<https://doi.org/10.3176/proc.2025.2.14> <http://https://kirj.ee/proceedings-of-the-estonian-academy-of-sciences-publications/?filter%5Byear%5D=2025&filter%5Bissue%5D=1821&filter%5Bpublication%5D=16483&v=a57b8491d1d8>

Load and temperature dependent sliding wear performance of Binder Jet 3D printed stainless-steel bonded cermet

Maurya, Himanshu Singh; Akhtar, F.; Prashanth, Konda Gokuldoss Journal of materials research and technology 2025 / p. 1199-1212 <https://doi.org/10.1016/j.jmrt.2025.06.095>

Materjalikriis kui innovatsiooni mootor

Kübarsepp, Jakob Postimees 2025 / lk. 8 <https://arvamus.postimees.ee/8318150/jakob-kubarsepp-materjalikriis-kui-innovatsiooni-mootor>
<https://dea.digar.ee/article/postimees/2025/09/06/9.3>

Mechanical analysis of multi-surface TPMS lattices for bone applications

Hussainova, I.; Rezapourian, M. Proceedings of the Estonian Academy of Sciences 2025 / p. 222-227
<https://doi.org/10.3176/proc.2025.2.25>

Metallic multimaterials fabricated by combining additive manufacturing and powder metallurgy

Yadav, Mayank Kumar; Shukla, Riddhi Hirenkumar; Xi, Lixia; Wang, Zhi; Prashanth, Konda Gokuldoss Journal of composites science 2025 / art. 80 <https://doi.org/10.3390/jcs9020080>

Microstructural Characterization and Hydrothermal Ageing Resistance of Rice Husk Silica-Doped Alumina Toughened Zirconia Biocomposite

Gupta, Ashutosh; Pandey, Vaibhav; Singh, Satyendra Kumar; Yadav, Mayank Kumar; Majhi, Manas Ranjan Silicon 2025 / 11 p
<https://doi.org/10.1007/s12633-025-03353-0>

Microstructural homogenization through laser remelting in an additively manufactured Ti-40Nb sample from elemental feedstock powders

Subramanian, Shangavi; Yadav, Mayank Kumar; Jayaraj, J.; Yangyang, Fan; Xi, Lixia; Prashanth, Konda Gokuldoss Journal of materials research and technology 2025 / p. 4305-4320 <https://doi.org/10.1016/j.jmrt.2025.08.203>

Microstructure and metastable phase formation of Mo-added Ti6Al4V alloys under laser micro-alloying

Ye, Zimeng; Yu, Zerong; Zhao, Kexin; Prashanth, Konda Gokuldoss; Sun, Zhiping; Zeng, Dejun; Zhang, Hengxin; Liu, Sizhe; Zhang, Fengying Journal of materials research and technology 2025 / p. 785-795 <https://doi.org/10.1016/j.jmrt.2025.06.072>

Microstructure–property evaluation and equiaxed regulation of novel Ti-6Al-4V-2Cr-xMo alloys fabricated by directed energy deposition

Zhao, Kexin; Ye, Zimeng; Huang, Kaihu; Prashanth, Konda Gokuldoss; Yu, Zerong; Wu, Wenlu; Su, Wei; Zhang, Fengying; Tan, Hua Materials science and engineering : A 2025 / art. 149131 <https://doi.org/10.1016/j.msea.2025.149131>

Multi-objective machine learning optimization of cylindrical TPMS lattices for bone implants

Rezapourianghahfarokhi, Mansoureh; Cheloe Darabi, Ali; Khoshbin, Mohammadreza; Hussainova, Irina Biomimetics 2025 / art. 475 <http://doi.org/10.3390/biomimetics10070475>

A novel approach for synthesizing silver nanoparticles with antibacterial and cytotoxic activities using the leaf extract of hydroponically grown Moringa oleifera

Aghajanyan, Anush; Timotina, Marina; Manutsyan, Tatevik; Harutyunyan, Ani; Ginovyan, Mikayel; Schubert, Robin; Aydinyan, Sofiya; Trchounian, Karen; Gabrielyan, Lilit; Gabrielyan, Liana Scientific Reports 2025 / art. 16637 <https://doi.org/10.1038/s41598-025-01023-0>

A Novel Vision Transformer for Camera-LiDAR Fusion based Traffic Object Segmentation

Tahves, Toomas; Gu, Junyi; Bellone, Mauro; Sell, Raivo Proceedings of the 17th International Conference on Agents and Artificial Intelligence : Volume 2 2025 / p. 566-573 <https://doi.org/10.5220/0013239000003890>

Numerical modeling of fragment flight dynamics

Kivistik, Lenart; Mehrparvar, Marmar; Eerme, Martin; Dieves, Veiko; Majak, Jüri Proceedings of the Estonian Academy of Sciences 2025 / p. 120-125 <https://doi.org/10.3176/proc.2025.2.06>

An overview of smart workplace solutions and potential improvement areas

Kelpman, Karolin; Karjust, Kristo; Majak, Jüri Proceedings of the Estonian Academy of Sciences 2025 / p. 155-159
<https://doi.org/10.3176/proc.2025.2.13>

Overview of the development of cybersecurity in data transmission protocols used in industry

Ponomar, Sergei; Sarkans, Martinš Proceedings of the Estonian Academy of Sciences 2025 / 6, p. 143-148
<https://doi.org/10.3176/proc.2025.2.11>

Performance optimization of a high-speed permanent magnet synchronous motor drive system for formula electric vehicle application

Ibrahim, Mahmoud; Järg, Oskar; Seppago, Raigo; Rassõlkin, Anton Sensors 2025 / art. 3156 <https://doi.org/10.3390/s25103156>
<https://www.mdpi.com/1424-8220/25/10/3156>

Phase and microstructure evolution patterns at combustion synthesis of high-entropy M2AlC (M=Ti/Ta/V/Nb/Cr) MAX phase

Melkonyan, Syuzanna; Zakaryan, Marieta; Grigoryan, Yeva; Kharatyan, Suren; Hussainova, Irina; Chabanais, Florian; Shamshirgar, Ali Saffar; Persson, Per O. A.; Rosen, Johanna; Aydinyan, Sofiya Journal of materials research and technology 2025 / p. 5800-5807
<https://doi.org/10.1016/j.jmrt.2025.10.186>

Plasma-transferred arc-welded composite hardfacings with ZrB₂ and TiC reinforcements

Melakh, Liudmyla; Surzhenkov, Andrei; Juhani, Kristjan; Viljus, Mart; Traksmäa, Rainer; Vedel, Dmytro Proceedings of the Estonian Academy of Sciences 2025 / p. 165-169 <https://doi.org/10.3176/proc.2025.2.15>

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.jirmhm.2025.107372>

Product Assurance in the Age of Artificial Intelligence

2025 <https://doi.org/10.4271/EPR2025011> <https://saemobilus.sae.org/reports/product-assurance-age-artificial-intelligence-epr2025011>

Rapid and scalable combustion synthesis of (Mo₂/3Y₁/3)2AlC i-MAX as the precursor for vacancy-ordered MXene

Saffarshamshirgar, Ali; **Ivanov, Roman; Aydinyan, Sofiya**; Ghosh, Sohan; Chabanais, Florian; Ronchi, Rodrigo M.; Halim, Joseph; Elskova, Anna; Qin, Leiqiang; Nazaretyan, Khachik; **Hussainova, Irina** Journal of Material Science and Technology 2026 / p. 157-169 <https://doi.org/10.1016/j.jmst.2025.09.014>

Response of stress relieving and solution annealing treatment on tensile properties and fracture toughness of additively manufactured stainless steel 316L

Kumar, Deepak; Arya, Abhinav; Dutta, Shubhendu Anupam; Jhavar, Suyog; **Prashanth, Konda Gokuldoss**; Suwas, Satyam Journal of Materials Engineering and Performance 2025 / art. 145021 <https://doi.org/10.1007/s11665-025-11334-y>

Review on nature-inspired interfaces and mechanical interlocking techniques in additively manufactured adhesively bonded joints

Hari Krishna, P.H.; DhilipKumar, Thulasidhas; Shankar, Karthik V.; Hariprasad, M.P.; Murali, Arun Prasad; El-Rayyes, Ali; **Prashanth, Konda Gokuldoss** Journal of materials research and technology 2025 / p. 998-1016 <https://doi.org/10.1016/j.jmrt.2025.09.150>

The Role of AI Chatbots in Engineering Education: Experimental Findings and Implementation Strategies

Sell, Raivo; Razdan, Rahul; Kase, Kart; Rüttnann, Tiia International Journal of Engineering Pedagogy 2025 / p. 4-19 <https://doi.org/10.3991/ijep.v15i5.56681> <https://online-journals.org/index.php/i-jep/article/view/56681>

Situational awareness in autonomous shuttle buses

Kalda, Krister; Koskinen, Kari M.; **Sarv, Lill; Sell, Raivo** Proceedings of the Estonian Academy of Sciences 2025 / p. 212-216 <https://doi.org/10.3176/proc.2025.2.23> https://kirj.ee/wp-content/plugins/kirj/pub/proc-2-2025-212-216_20250519131011.pdf?v=a57b8491d1d8

Sliding Wear and Debris Evolution in LPBFed Ceramic-Reinforced Steel Composites Under Variable Loads and Temperatures

Maurya, Himanshu Singh; Kumar, Rahul, 1993-; Subramaniam, Anand Kumar; **Tarraste, Marek; Hussain, Abrar**; Rahmani Ahranjani, Ramin; **Juhani, Kristjan; Sergejev, Fjodor; Prashanth, Konda Gokuldoss** Materials Chemistry and Physics 2025 / art. 131195 <https://doi.org/10.1016/j.matchemphys.2025.131195>

Synthesis of best practices in curriculum design for engineering educators' pedagogical training

Rüttnann, Tiia; Läänemets, Urve Futureproofing Engineering Education for Global Responsibility : Proceedings of the 27th International Conference on Interactive Collaborative Learning (ICL 2024) ; vol. 2 2025 / p. 288-299 https://doi.org/10.1007/978-3-031-85649-5_35

06Cr15Ni4CuMo selective laser melted additive manufacturing technology steel : mechanical and tribological properties

Jayaraman, Maya; Sivaprasad, Katakam; Ravisankar, B.; **Prashanth, Konda Gokuldoss** Transactions of the Indian Institute of Metals 2025 / art. 208 <https://doi.org/10.1007/s12666-025-03658-z>

Testing platforms augmented with artificial intelligence and educational templates

Bondarenko, Tetiana; **Rüttnann, Tiia**; Kupriyanov, Oleksandr; Yahupov, Vasyi; Rostoka, Marina; Poliakov, Maksym Futureproofing Engineering Education for Global Responsibility : Proceedings of the 27th International Conference on Interactive Collaborative Learning (ICL 2024) ; vol. 1 2025 / p. 1305-1312 https://doi.org/10.1007/978-3-031-85652-5_47

Unusual deformation substructure and strain hardening in an additively manufactured CoCrFeMnNi high entropy alloy under high-velocity impact loading

Chen, Hongyu; Yang, Xiaofeng; Gu, Dongdong; Liu, Yang; Yang, Shengze; Chen, Xiyu; Kosiba, Konrad; Chen, Yufei; Du, Junhang; **Prashanth, Konda Gokuldoss** Journal of Material Science and Technology 2025 / p. 35-51 <https://doi.org/10.1016/j.jmst.2025.02.087>

Wear and corrosion resistance of a laser powder bed fused AZ91D magnesium matrix composite with TiC reinforcement

Xi, Lixia; Tian, Songmao; Zhang, Dong; Gu, Dongdong; Ramasamy, Parthiban; **Prashanth, Konda Gokuldoss**; Eckert, Jürgen Materials & Design 2025 / art. 114263 <https://doi.org/10.1016/j.matdes.2025.114263>

Wear resistance analysis of duplex interpenetrating ceramic composites via in-situ vibration monitoring

Kariminejad, Arash; Auriemma, Fabio; Antonov, Maksim; Klimczyk, Piotr; Hussainova, Irina International journal of refractory metals and hard materials 2026 / art. 107454 <https://doi.org/10.1016/j.jirmhm.2025.107454>

Virtual factory model development for AI-driven optimization in manufacturing

Raamets, Tõnis; Karjust, Kristo; Hermaste, Aigar; Kelpman, Karolin Proceedings of the Estonian Academy of Sciences 2025 /

p. 228-233 <https://doi.org/10.3176/proc.2025.2.26>

A workflow for extended reality-based learning in engineering education

Kuts, Vladimir; Otto, Tauno; Boychuk, Rostyslav; Mahmood, Kashif; Pizzagalli, Simone Luca Proceedings of the Estonian Academy of Sciences 2025 / p. 103-108 <https://doi.org/10.3176/proc.2025.2.03>