

### **Cooling rate control combined with refractory Mo and/or V addition to enhance the mechanical properties of CoCrFeMnNi alloy**

Gonzalez, Sergio; Garay-Reyes, Carlos Gamaliel; Martinez-Garcia, Alfredo; **Prashanth, Konda Gokuldoss**; Ruiz-Esparza-Rodriguez, Marco Antonio; Hurtado-Macias, Abel; Eckert, Juergen H.; Martinez-Sanchez, Roberto Journal of materials research and technology 2025 / p. 459-469 <https://doi.org/10.1016/j.jmrt.2025.03.074>

### **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](#)

### **Dissimilar welding of Al0.1CoCrFeNi high-entropy alloy and AISI304 stainless steel**

Sokkalingam, Rathinavelu; Muthupandi, Veerappan; Sivaprasad, Katakam; **Prashanth, Konda Gokuldoss** Journal of materials research and technology 2019 / p. 2683-2694 : ill <https://doi.org/10.1557/jmr.2019.186> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Electric properties of anorthite ceramics prepared from illitic clay and oil shale ash**

Csaki, Štefan; Štubna, Igor; **Kaljuvee, Tiit**; Dobron, Patrik; Lukač, František; Trnik, Anton Journal of materials research and technology 2022 / p. 4164-4173 <https://doi.org/10.1016/j.jmrt.2022.11.030> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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](#)

### **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>

### **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>

### **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](#)

### **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>

### **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 mechanical performances of NiCoFeAlTi high-entropy intermetallic reinforced CoCrFeMnNi high-entropy alloy composites manufactured by selective laser melting**

Yang, Hong; Ma, Pan; Zhang, Zhiyu; Xie, Xiaochang; Yang, Ping; Zhang, Han; Jia, Yandong; **Prashanth, Konda Gokuldoss** Journal of materials research and technology 2024 / p. 6275-6287 <https://doi.org/10.1016/j.jmrt.2024.11.022> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Microstructure and mechanical properties of AlCoCrFeMnNi HEAs fabricated by selective laser melting**

Ma, Pan; Fang, Yacheng; Wei, Shuimiao; Zhang, Zhiyu; Yang, Hong; Wan, Shiguang; **Prashanth, Konda Gokuldoss**; Jia, Yandong Journal of materials research and technology 2023 / p. 7090-7100 <https://doi.org/10.1016/j.jmrt.2023.07.124> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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 and tribological behavior of Al-12Si – Nano graphene composite fabricated by laser metal deposition**

## process

Yang, Zhilu; Ma, Pan; Zhang, Nan; Yang, Dongye; **Prashanth, Konda Gokuldoss**; Jia, Yandong Journal of materials research and technology 2023 / p. 2311-2322 <https://doi.org/10.1016/j.jmrt.2023.10.095> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## Microwave synthesis of B4C nanopowder for subsequent spark plasma sintering

Davtyan, D.; Mnatsakanyan, R.A.; Liu, Le; **Aydinyan, Sofiya**; **Hussainova, Irina** Journal of materials research and technology 2019 / p. 5823-5832 : ill <https://doi.org/10.1016/j.jmrt.2019.09.052> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## Obtaining strength-ductility combination in a laser additive manufactured (FeCoNi)<sub>86</sub>Al<sub>7</sub>Ti<sub>7</sub> high-entropy alloy at cryogenic temperature

Xie, K.; Fang, Y.; Ma, P.; Yang, H.; Wan, S.; **Prashanth, Konda Gokuldoss**; Gargarella, P.; Mu, Y.; Wang, G.; Jia, Y. Journal of materials research and technology 2025 / p. 819-831 <https://doi.org/10.1016/j.jmrt.2024.12.125>

## Phase and microstructure evolution patterns at combustion synthesis of high-entropy M<sub>2</sub>AlC (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>

## 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>

## Selective laser melting of a novel 13Ni400 maraging steel : material characterization and process optimization

Patil, Viraj Vishwas; Mohanty, Chinmaya P.; **Prashanth, Konda Gokuldoss** Journal of materials research and technology 2023 / p. 3979-3995 <https://doi.org/10.1016/j.jmrt.2023.10.193> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## Selective laser melting of AlCoCrFeMnNi high entropy alloy : effect of heat treatment

Fang, Yacheng; Ma, Pan; Wei, Shuimiao; Zhang, Zhiyu; Yang, Dongye; Yang, Hong; Wan, Shiguang; **Prashanth, Konda Gokuldoss**; Jia, Yandong Journal of materials research and technology 2023 / p. 7845-7856 <https://doi.org/10.1016/j.jmrt.2023.09.121> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## Solidification of Al-xCu alloy under high pressures

Liu, Xiao; Ma, Pan; Jia, Yandong; **Prashanth, Konda Gokuldoss** Journal of materials research and technology 2020 / p. 2983-2991 : ill <https://doi.org/10.1016/j.jmrt.2020.01.049> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## Specific energy modeling of abrasive cut off operation based on sliding, plowing, and cutting

Awan, Muhammad Rizwan; Gonzalez-Rojas, Hernan Alberto; Perat Benavides, Jose I.; Hameed, Saqib; **Hussain, Abrar**; Sanchez Egea, Antonio J. Journal of materials research and technology 2022 / p. 3302-3310 <https://doi.org/10.1016/j.jmrt.2022.03.185> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## Synthesis of Ni@SiO<sub>2</sub> and Co@SiO<sub>2</sub> nanomagnets after formation of NiO and Co<sub>2</sub>O<sub>3</sub> nanoparticles at low temperatures using CaH<sub>2</sub>

**Volokhova, Maria**; Boldin, Aleksei; Link, Joosep; Tsujimoto, Masahiko; Stern, Raivo; Seinberg, Liis Journal of materials research and technology 2022 / p. 988-992 : ill <https://doi.org/10.1016/j.jmrt.2021.12.042> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## ZrC+TiC synergically reinforced metal matrix composites with micro/nanoscale reinforcements prepared by laser powder bed fusion

Xi, Lixia; Feng, Lili; Gu, Dongdong; Wang, Ruiqi; Sarac, Baran; **Prashanth, Konda Gokuldoss**; Eckert, Jürgen Journal of materials research and technology 2022 / p. 4645-4657 <https://doi.org/10.1016/j.jmrt.2022.06.149> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## Thermal deformation behavior and microstructural evolution of the rapidly-solidified Al–Zn–Mg–Cu alloy in hot isostatic pressing state

Zhang, Z.; Cong, H.; Yin, Z.; Qi, B.; Dong, Y.; Kong, L.; Li, H.; **Prashanth, Konda Gokuldoss** Journal of materials research and technology 2024 / p. 5927-5939 <https://doi.org/10.1016/j.jmrt.2024.04.235> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## Wear behaviour of Cr<sub>3</sub>C<sub>2</sub>-Ni cermet reinforced hardfacings

Bendikiene, Regita; Ciuplys, Antanas; Sertvytis, Rolandas; **Surženkov, Andrei**; **Tkachivskyi, Dmytro**; **Viljus, Mart**; **Traksmas, Rainer**; **Antonov, Maksim**; **Kulu, Priit** Journal of materials research and technology 2020 / p. 7068-7078 : ill

**Wear mechanisms of PM-HIP tool steels under low and high-stress abrasion : role of carbide type and content**

**Kumar, Rahul, 1993-; Antonov, Maksim; Berglund, Tomas; Pampori, Tabeen Halawat; Maurya, Himanshu Singh; Viljus, Mart**  
Journal of materials research and technology 2025 / p. 7016-7025 <https://doi.org/10.1016/j.jmrt.2025.04.317>