

Bioinspired and multifunctional tribological materials for sliding, erosive, machining, and energy-absorbing conditions : A review

Kumar, Rahul, 1993-; Rezapourianghahfarokhi, Mansoureh; Rahmani Ahranjani, Ramin; **Maurya, Himanshu Singh; Kamboj, Nikhil Kumar; Hussainova, Irina** Biomimetics 2024 / art. 209 <https://doi.org/10.3390/biomimetics9040209> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Biomimetic design of implants for long bone critical-sized defects

Rezapourianghahfarokhi, Mansoureh; Kamboj, Nikhil Kumar; Jasiuk, Iwona; **Hussainova, Irina** Journal of the mechanical behavior of biomedical materials 2022 / art. 105370 <https://doi.org/10.1016/j.jmbbm.2022.105370> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Biomimicry and novel structures : advancing the design paradigm of bone implants = Biomimikri ja uudsed struktuurid : luuimplantaatide disainiparadigma edendamine

Rezapourianghahfarokhi, Mansoureh 2024 <https://doi.org/10.23658/taltech.9/2024> https://www.ester.ee/record=b5667691*est <https://digikogu.taltech.ee/et/Item/7c3aec59-9566-41cb-b59d-b896fa72100e>

Effect of unit cell rotation on mechanical performance of selective laser melted Gyroid structures for bone tissue engineering

Rezapourianghahfarokhi, Mansoureh; Kumar, Rahul, 1993-; Hussainova, Irina Progress in engineering science 2024 / art. 100011 <https://doi.org/10.1016/j.pes.2024.100011>

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>

Numerical study on the effect of geometry on mechanical behavior of triply periodic minimal surfaces

Rezapourianghahfarokhi, Mansoureh; Kamboj, Nikhil Kumar; Hussainova, Irina IOP conference series : materials science and engineering 2021 / art. 012038 <https://doi.org/10.1088/1757-899X/1140/1/012038>

Optimal mechanical properties of Hydroxyapatite gradient Voronoi porous scaffolds for bone applications — a numerical study

Rezapourianghahfarokhi, Mansoureh; Hussainova, Irina Journal of the mechanical behavior of biomedical materials 2023 / art. 106232 <https://doi.org/10.1016/j.jmbbm.2023.106232> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Selective laser melted Ti6Al4V split-P TPMS lattices for bone tissue engineering

Rezapourianghahfarokhi, Mansoureh; Jasiuk, Iwona; **Saarna, Mart; Hussainova, Irina** International journal of mechanical sciences 2023 / art. 108353 <https://doi.org/10.1016/j.ijmecsci.2023.108353> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)