

AC losses analysis approaches for electric vehicle motors with hairpin winding configuration

Shams Ghahfarokhi, Payam; Podgornovs, Andrejs; Marques Cardoso, Antonio J.; **Kallaste, Ants; Belahcen, Anouar; Vaimann, Toomas** IECON 2021 - 47th Annual Conference of the IEEE Industrial Electronics Society, 2021 2021 / p. 1-4 : ill <https://doi.org/10.1109/IECON48115.2021.9589339> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Considerations regarding the concept of cost-effective power-assist wheelchair subsystems (case study and initial evaluation)

Galkin, Ilja; Podgornovs, Andrejs; **Blinov, Andrei; Kosenko, Roman** Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2018 / p. 71-80 : ill <https://doi.org/10.2478/ecce-2018-0008>

Corrections to “Opportunities and Challenges of Utilizing Additive Manufacturing Approaches in Thermal Management of Electrical Machines”

Shams Ghahfarokhi, Payam; Podgornovs, Andrejs; **Kallaste, Ants**; Marques Cardoso, Antonio J.; **Belahcen, Anouar; Vaimann, Toomas; Tiismus, Hans; Asad, Bilal** IEEE Access 2021 / p. 62532 <https://doi.org/10.1109/ACCESS.2021.3074827> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Determination of heat transfer coefficient from housing surface of a totally enclosed fan-cooled machine during passive cooling

Shams Ghahfarokhi, Payam; Podgornovs, Andrejs; **Kallaste, Ants**; Cardoso, Antonio J. Marques; **Belahcen, Anouar; Vaimann, Toomas; Asad, Bilal; Tiismus, Hans** Machines 2021 / art. 120 <https://doi.org/10.3390/machines9060120> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Determination of heat transfer coefficient of finned housing of a TEFC variable speed motor

Shams Ghahfarokhi, Payam; **Kallaste, Ants**; Podgornovs, Andrejs; **Belahcen, Anouar; Vaimann, Toomas; Asad, Bilal** Electrical Engineering 2021 / p. 1009–1017 : ill <https://doi.org/10.1007/s00202-020-01132-1> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Development of analytical thermal analysis tool for synchronous reluctance motors

Shams Ghahfarokhi, Payam; **Kallaste, Ants; Podgornovs, Andrejs; Belahcen, Anouar; Vaimann, Toomas** IET electric power applications 2020 / p. 1828-1836 <https://doi.org/10.1049/iet-epa.2020.0237> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Experimental investigation of high viscosity on oil spray cooling system with hairpin winding

Shams Ghahfarokhi, Payam; **Kallaste, Ants**; Podgornovs, Andrejs; Cardoso, Antonio J. Marques; **Vaimann, Toomas; Sarap, Martin; Rjabtšikov, Viktor** 2023 IEEE 14th International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED) 2023 / p. 234-238 <https://doi.org/10.1109/SDEMPED54949.2023.10271484>

Hairpin windings for electric vehicle motors : modeling and investigation of AC loss-mitigating approaches

Shams Ghahfarokhi, Payam; Podgornovs, Andrejs; Cardoso, Antonio J. Marques; **Kallaste, Ants; Belahcen, Anouar; Vaimann, Toomas** Machines 2022 / art. 1029 <https://doi.org/10.3390/machines10111029> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Hairpin windings manufacturing, design, and AC losses analysis approaches for electric vehicle motors

Shams Ghahfarokhi, Payam; Podgornovs, Andrejs; Cardoso, Antonio J. Marques; **Kallaste, Ants; Belahcen, Anouar; Vaimann, Toomas** 2021 11th International Electric Drives Production Conference (EDPC) : 7-9 Dec. 2021 2021 / p. 1-7 <https://doi.org/10.1109/EDPC53547.2021.9684208>

The oil spray cooling system of automotive traction motors : the state of the art

Shams Ghahfarokhi, Payam; Podgornovs, Andrejs; **Kallaste, Ants**; Cardoso, Antonio J. Marques; Belahcen, Anouar; **Vaimann, Toomas** IEEE Transactions on Transportation Electrification 2023 / p. 428-451 <https://doi.org/10.1109/TTE.2022.3189596> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Oil spray cooling with hairpin windings in high-performance electric vehicle motors

Shams Ghahfarokhi, Payam; Podgornovs, Andrejs; **Kallaste, Ants; Vaimann, Toomas; Belahcen, Anouar**; Cardoso, Antonio J. Marques 2021 28th International Workshop on Electric Drives : Improving Reliability of Electric Drives (IWED) 2021 / 5 p <https://doi.org/10.1109/IWED52055.2021.9376390>

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](#)

Steady-state thermal modeling of salient pole synchronous generator

Shams Ghahfarokhi, Payam; Podgornovs, Andrejs; **Kallaste, Ants**; Cardoso, Antonio J. Marques; **Belahcen, Anouar; Vaimann, Toomas**; Kudrjavitsev, Oleg; **Asad, Bilal; Iqbal, Muhammad Naveed** Energies 2022 / art. 9460 <https://doi.org/10.3390/en15249460>

Thermal analysis of salient pole synchronous machines by multiple model planes approach

Shams Ghahfarokhi, Payam; Kallaste, Ants; Podgornovs, Andrejs; **Belahcen, Anouar; Vaimann, Toomas;** Kudrjavitsev, Oleg
2020 International Conference on Electrical Machines (ICEM), 23-26 august 2020, Gothenburg, Sweden : online : proceedings 2020 /
p. 1511–1517 <https://doi.org/10.1109/ICEM49940.2020.9270753>

Thermal modeling of a TEFC synchronous reluctance motor

Shams Ghahfarokhi, Payam; Podgornovs, Andrejs; Marques Cardoso, Antonio J.; **Kallaste, Ants; Belahcen, Anouar; Vaimann, Toomas** 2021 IEEE 62nd International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 15-17 Nov. 2021 : conference proceedings 2021 / 4 p. : ill <https://doi.org/10.1109/RTUCON53541.2021.9711740>