

**Comparison of flux-switching and interior permanent magnet synchronous generators for direct-driven wind applications based on nelder–mead optimal designing**

Prakht, Vladimir; Dmitrievskii, Vladimir; Kazakbaev, Vadim; **Andriushchenko, Ekaterina** Mathematics 2021 / art. 732  
<https://doi.org/10.3390/math9070732> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Comparison of synchronous reluctance machine and permanent magnet-assisted synchronous reluctance machine performance characteristics**

**Heidari, Hamidreza; Andriushchenko, Ekaterina; Rassölkin, Anton; Kallaste, Ants; Vaimann, Toomas; Demidova, Galina** 2020 27th International Workshop on Electric Drives: MPEI Department of Electric Drives 90th Anniversary (IWED), Moscow, Russia, January 27-30, 2020 2020 / 5 p. : ill <https://doi.org/10.1109/IWED48848.2020.9069583>

**A comparison of the vector control of synchronous reluctance motor and permanent magnet-assisted synchronous reluctance motor**

**Heidari, Hamidreza; Rassölkin, Anton; Kallaste, Ants; Vaimann, Toomas; Andriushchenko, Ekaterina; Belahcen, Anouar;** Razzaghi, Arash 2021 XVIII International Scientific Technical Conference Alternating Current Electric Drives (ACED) : proceedings 2021 / 6 p. : ill <https://doi.org/10.1109/ACED50605.2021.9462265>

**Design of a research laboratory drive system for a synchronous reluctance motor for vector control and performance analysis**

**Heidari, Hamidreza; Rassölkin, Anton; Kallaste, Ants; Vaimann, Toomas; Andriushchenko, Ekaterina; Belahcen, Anouar** Inventions 2021 / art. 64, 21 p. : ill <https://doi.org/10.3390/inventions6040064> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Design optimization methods of additively manufactured Switched Reluctance Motor = Kihltisandustehnoloogia abil toodetud samm-mootori optimeerimise meetodid**

**Andriushchenko, Ekaterina** 2023 <https://doi.org/10.23658/taltech.16/2023> <https://digikogu.taltech.ee/et/Item/382b9eea-7bd1-4140-b124-9f0b580e81bc> [https://www.ester.ee/record=b5558664\\*est](https://www.ester.ee/record=b5558664*est)

**Design optimization of 3D-printed permanent magnet clutch**

**Andriushchenko, Ekaterina** 20th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tallinn, Estonia, September 8-10, 2021 2022 / p. 31-32 : ill [https://www.ester.ee/record=b5457278\\*est](https://www.ester.ee/record=b5457278*est)

**Design optimization of permanent magnet clutch**

**Andriushchenko, Ekaterina; Kallaste, Ants; Belahcen, Anouar; Heidari, Hamidreza; Vaimann, Toomas; Rassölkin, Anton** 2020 International Conference on Electrical Machines (ICEM), 23-26 August 2020, Gothenburg, Sweden : online : proceedings 2020 / p. 436-440 <https://doi.org/10.1109/ICEM49940.2020.9270726>

**Design optimization of permanent magnet clutch with Ārtap framework**

**Andriushchenko, Ekaterina;** Kaska, Jan; **Kallaste, Ants; Belahcen, Anouar; Vaimann, Toomas; Rassölkin, 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](#)

**Investigation of tribological characteristics of polymers used in medicine**

**Andriushchenko, Ekaterina;** Semenova, Vlada; Yuan, Pan New Materials and Technologies in Mechanical Engineering : International Scientific Conference "New Materials and Technologies in Mechanical Engineering" (NMTME 2019) 2019 / p. 656-661 <https://doi.org/10.4028/www.scientific.net/KEM.822.656>

**A modified dynamic model of single-sided linear induction motors considering longitudinal and transversal effects**

**Heidari, Hamidreza; Rassölkin, Anton; Razzaghi, Arash; Vaimann, Toomas; Kallaste, Ants; Andriushchenko, Ekaterina; Belahcen, Anouar;** Lukichev, Dmitry Electronics 2021 / art. 933, 14 p. : ill <https://doi.org/10.3390/electronics10080933> [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; Rassölkin, 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](#)

**A review of optimization methods for electrical machines design**

**Andriushchenko, Ekaterina** 19th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tartu, Estonia, January 14-17, 2020 2020 / p. 101-102 : ill [https://www.ester.ee/record=b5291755\\*est](https://www.ester.ee/record=b5291755*est)

**A review of synchronous reluctance motor-drive advancements**

**Heidari, Hamidreza; Rassölkin, Anton; Kallaste, Ants; Vaimann, Toomas; Andriushchenko, Ekaterina; Belahcen, Anouar;** Lukichev, Dmitry Sustainability 2021 / art. 729, p. 1-37 <https://doi.org/10.3390/su13020729> [Journal metrics at Scopus](#) [Article at Scopus](#)

**Sensitivity analysis for multi-objective optimization of switched reluctance motors**

**Andriushchenko, Ekaterina; Kallaste, Ants;** Mohammadi, M. Hossain; Lowther, David Alister; **Heidari, Hamidreza** Machines 2022 / art. 559, 16 p. : ill <https://doi.org/10.3390/machines10070559> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Simulation of wind turbine vibrations**

**Andriushchenko, Ekaterina; Kallaste, Ants; Vaimann, Toomas; Rassõlkin, Anton; Meshkov, Aleksandr; Heidari, Hamidreza; Demidova, Galina** 2020 27th International Workshop on Electric Drives: MPEI Department of Electric Drives 90th Anniversary (IWED), Moscow, Russia, January 27-30, 2020 2020 / 4 p <https://doi.org/10.1109/IWED48848.2020.9069567>

**Three-dimensional vibrations of wind turbines**

**Andriushchenko, Ekaterina;** Meshkov, Aleksandr IOP conference series : materials science and engineering 2019 / art. 012006, 6 p <https://doi.org/10.1088/1757-899X/666/1/012006>

**Topology optimization of a 3D-printed switched reluctance motor**

**Andriushchenko, Ekaterina;** Mohammadi, M. Hossain; Lowther, David Alister; **Heidari, Hamidreza; Kallaste, Ants;** Khan, Arbaaz 2022 International Conference on Electrical Machines (ICEM) 2022 / p. 1976-1980 <https://doi.org/10.1109/ICEM51905.2022.9910829>

**Vector control of synchronous reluctance motor with reduced torque ripples**

**Heidari, Hamidreza; Rassõlkin, Anton; Kallaste, Ants; Vaimann, Toomas; Andriushchenko, Ekaterina** 2020 XI International Conference on Electrical Power Drive Systems (ICEPDS), Saint-Petersburg, Russia, October 4-7, 2020 2021 / p. 223-227 : ill <https://doi.org/10.1109/ICEPDS47235.2020.9249309>