

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](#)

Adhesion measuring method optimization in reinforced composites

Karjust, Kristo; Pohlak, Meelis; Majak, Jüri Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 2 2012 / p. 633-638 : ill

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](#)

Changing of magnetic flux density distribution in a squirrel-cage induction motor with broken rotor bars

Vaimann, Toomas; Belahcen, Anouar; Kallaste, Ants Elektronika ir elektrotehnika = Electronics and electrical engineering 2014 / p. 11-14 : ill <https://doi.org/10.5755/j01.eee.20.7.8018> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Computation of hysteresis torque and losses in a bearingless synchronous reluctance machine

Belahcen, Anouar; Mukherjee, Victor; Martin, Florian; Rasilo, Paavo 21st International Conference on the Computation of Electromagnetic Fields (Compumag 2017) : Daejeon, South Korea, 18-22 June 2017 2017 / p. 214-215 : ill
[http://www.compumag.org/CMAG2017/\[PA-A5-10\]_129.pdf](http://www.compumag.org/CMAG2017/[PA-A5-10]_129.pdf)

Computation of magnetic forces using degenerated air-gap element

Sathyan, Sabin; **Belahcen, Anouar; Kataja, Juhani; Henrotte, Francois; Benabou, Abdelkader; Le Menach, Yvonnick** IEEE transactions on magnetics 2017 / 7401304, 4 p. : ill <https://doi.org/10.1109/TMAG.2017.2656239>

Computation of stator vibration of an induction motor using nodal magnetic forces [Online resource]

Sathyan, Sabin; **Belahcen, Anouar; Kataja, Juhani; Vaimann, Toomas; Sobra, Jan** 2016 XXII International Conference on Electrical Machines (ICEM) : SwissTech Convention Center, Lausanne, Switzerland, 04-07 September, 2016 : proceedings 2016 / p. 2198-2203 : ill <https://doi.org/10.1109/ICELMACH.2016.7732827>

Condition monitoring of electrical machines and its relation to industrial internet

Belahcen, Anouar; Gyftakis, Konstantinos N.; Martinez, Javier; Climente-Alarcon, Vicente; Vaimann, Toomas 2015 IEEE Workshop on Electrical Machines Design, Control and Diagnosis (WEMDCD) : proceedings : Castello del Valentino, Torino, Italy, 26-27 March, 2015 2015 / p. 233-241 : ill <http://dx.doi.org/10.1109/WEMDCD.2015.7194535>

Constrained algorithm for the selection of uneven snapshots in model order reduction of a bearingless motor

Mukherjee, Victor; Far, Mehrnaz Farzam; Martin, Florian; **Belahcen, Anouar** IEEE transactions on magnetics 2017 / art. 7205304, 4 p. : ill <http://dx.doi.org/10.1109/TMAG.2017.2664505>

Cylindrical blades Magnus wind turbine optimization and control system

Alassaf, Omar; Lukin, Aleksandr; **Demidova, Galina; Kozlov, Gleb; Volkhontsev, Andrey; Poliakov, Nikolai** 29th International Workshop on Electric Drives: Advances in Power Electronics for Electric Drives (IWED) 2022 / p. 1-5
<https://doi.org/10.1109/IWED54598.2022.9722582>

Design and prototyping of directly driven outer rotor permanent magnet generator for small scale wind turbines [Online resource]

Vaimann, Toomas; Kudrjavitsev, Oleg; Kilk, Aleksander; Kallaste, Ants; Rassõlkin, Anton Advances in electrical and electronic engineering 2018 / p. 271-278 : ill <https://doi.org/10.15598/aeer.v16i3.2698> [Journal metrics at Scopus](#) [Article at Scopus](#)

Emerging challenges for numerical simulations of quasi-static collision experiments on laser-welded thin-walled steel structures

Romanoff, Jani; **Körgešaar, Mihkel; Remes, Heikki** Journal of marine science and application 2020 / p. 567-583 : ill
<https://doi.org/10.1007/s11804-020-00174-y> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

FEA wear simulation of a conical spinning contact

Põdra, Priit OST-97 Symposium on Machine Design, Tallinn, Estonia, May 22-23, 1997 : proceedings 1997 / p. 135-145: ill
https://www.eester.ee/record=b1083704*est

High-frequency split-bobbin transformer design with adjustable leakage inductance

Rahman, Showrov; Sidorov, Vadim; Chub, Andrii; Vinnikov, Dmitri 2021 IEEE 62nd International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 15-17 Nov. 2021 : conference proceedings 2021 / p. 1-5 : ill <https://doi.org/10.1109/RTUCON53541.2021.9711708>

A High-performance open-source finite element analysis library for magnetics in MATLAB

Lehikoinen, Antti; Davidsson, T.; Arkkio, Antero; **Belahcen, Anouar** 2018 XIII International Conference on Electrical Machines (ICEM 2018) : Alexandroupoli, Greece, 3-6 September 2018 2018 / p. 486–492 : ill <http://doi.org/10.1109/ICELMACH.2018.8507235>

Hilbert transform, an effective replacement of Park's vector modulus for the detection of rotor faults

Asad, Bilal; Vaimann, Toomas; Kallaste, Ants; Rassõlkin, Anton; Belahcen, Anouar 2019 Electric Power Quality and Supply Reliability Conference (PQ) & 2019 Symposium on Electrical Engineering and Mechatronics (SEEM), Kärdla, Estonia, June 12-15, 2019 : proceedings 2019 / 4 p. : ill <https://doi.org/10.1109/PQ.2019.8818227>

Hybrid metal-ceramic biomaterials fabricated through powder bed fusion and powder metallurgy for improved impact resistance of craniofacial implants

Rahmani Ahranjani, Ramin; Kamboj, Nikhil Kumar; Brojan, Miha; Antonov, Maksim; Prashanth, Konda Gokuldoss Materialia 2022 / art. 101465 <https://doi.org/10.1016/j.mtla.2022.101465> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Influence of choice of permanent magnet electromagnetic parameters in the research of electrical devices

Ose-Zala, Baiba; Kallaste, Ants; Vaimann, Toomas PQ2016 : the 10th International Conference 2016 Electric Power Quality and Supply Reliability Conference (PQ) : August 29-31, 2016, Tallinn, Estonia : proceedings 2016 / p. 225-228 : ill <https://doi.org/10.1109/PQ.2016.7724117>

Influence of magnetic forces and magnetostriction on the vibration behavior of an induction motor

Sathyan, Sabin; Aydin, Ugur; Lehikoinen, Antti; **Belahcen, Anouar; Vaimann, Toomas**; Kataja, Juhani International journal of applied electromagnetics and mechanics 2019 / p. 825-834 <https://doi.org/10.3233/JAE-171045> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Investigation of molten metal mixing in a DC electric arc furnace with added AC component on different frequencies

Mölder, Heigo; Järvik, Jaan; Vaimann, Toomas; Gordon, Rauno PQ2012 : 8th International Conference : 2012 Electric Power Quality and Supply Reliability : June 11-13, 2012, Tartu, Estonia : conference proceedings 2012 / p. 33-36 : ill <https://www.semanticscholar.org/paper/Investigation-of-molten-metal-mixing-in-a-DC-arc-AC-M%C3%B5lder-Jarvik/38848bbd53c7d118a0077072daa0ffb86f649657>

Investigation of the causes behind the vibrations of a high-speed solid-rotor induction motor

Sathyan, Sabin; **Belahcen, Anouar**; Lehikoinen, Antti; Aydin, Ugur; Boxberg, Fredrik Journal of sound and vibration 2019 / art. 114976, 14 p <https://doi.org/10.1016/j.jsv.2019.114976> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

MARSTRUCT benchmark study on nonlinear FE simulation of an experiment of an indenter impact with a ship side-shell structure

Ringsberg, Jonas W.; Amdahl, Jörgen; Chen, Bai Qiao; Cho, Sang-Rai; **Körgeaar, Mihkel; Tabri, Kristjan** Marine structures 2018 / p. 142-157 <https://doi.org/10.1016/j.marstruc.2018.01.010> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Mechanical behavior of Ti6Al4V scaffolds filled with CaSiO3 for implant applications

Rahmani Ahranjani, Ramin; Antonov, Maksim; Kollo, Lauri; Holovenko, Yaroslav; Prashanth, Konda Gokuldoss Applied sciences 2019 / art. 3844, 11 p. : ill <https://doi.org/10.3390/app9183844> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Model order reduction of bearingless reluctance motor including eccentricity

Far, Mehrnaz Farzam; Mukherjee, Victor; **Belahcen, Anouar** 2018 XIII International Conference on Electrical Machines (ICEM 2018) : Alexandroupoli, Greece, 3-6 September 2018 2018 / p. 2243–2249 : ill <http://doi.org/10.1109/ICELMACH.2018.8506758>

Model validation and structural analysis of a small wind turbine blade

Pabut, Ott; Allikas, Georg; Herranen, Henrik; Vene, Karl-Kristo; Talalaev, Robert Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 1 2012 / p. 74-79 : ill

Multi-criteria design optimization of ultra large diameter permanent magnet generator

Pabut, Ott; Eerme, Martin; Kallaste, Ants; Vaimann, Toomas Elektronika ir elektrotehnika = Electronics and electrical engineering 2015 / p. 42-48 : ill <https://doi.org/10.5755/j01.eee.21.3.10278> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Multi-electrode arc furnace technology with improved metal processing capability using current driven mixing

Mölder, Heigo; Järvik, Jaan; Vaimann, Toomas; Gordon, Rauno Conference proceedings : 2012 11th International Conference on Environment and Electrical Engineering : Venice, Italy, 18-25 May 2012 2012 / p. 313-316 : ill

Necessity for implementation of inverse problem theory in electric machine fault diagnosis

Vaimann, Toomas; Belahcen, Anouar; Kallaste, Ants SDEMPED 2015 : 10th IEEE International Symposium on Diagnostics for Electric Machines, Power Electronics and Drives : Guarda, Portugal, September 1-4, 2015 : proceedings 2015 / p. 380-385 : ill

Optimization study of composite bathtub

Pohlak, Meelis; Majak, Jüri; Karjust, Kristo; Küttner, Rein Proceedings of Second International Conference on Multidisciplinary Design Optimization and Applications : Gijon, Spain, 3-5 September 2008 2008 / p. 1-10 : ill

Selective laser sintered bio-inspired silicon-wollastonite scaffolds for bone tissue engineering

Kamboj, Nikhil Kumar; Kazantseva, Jekaterina; Rahmani Ahranjani, Ramin; Rodriguez, Miguel Angel; **Hussainova, Irina** Materials Science and Engineering : C 2020 / art. 111223 <https://doi.org/10.1016/j.msec.2020.111223>

Simulation of the behavior of a ship hull under grounding : effect of applied element size on structural crashworthiness

Prabowo, Aditya Rio; **Putranto, Teguh;** Sohn, Jung Min Journal of Marine Science and Engineering 2019 / Art. 270
<https://doi.org/10.3390/jmse7080270> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The cluster computation-based hybrid FEM–analytical model of induction motor for fault diagnostics

Asad, Bilal; Vaimann, Toomas; Belahcen, Anouar; Kallaste, Ants; Rassõlkin, Anton; Iqbal, Muhammad Naveed Applied sciences 2020 / art. 7572, 15 p. : ill <https://doi.org/10.3390/app10217572> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The ISSC 2022 committee III.1-Ultimate strength benchmark study on the ultimate limit state analysis of a stiffened plate structure subjected to uniaxial compressive loads

Ringsberg, Jonas W.; Darie, Ionel; Nahshon, Ken; Shilling, Gillian; **Tabri, Kristjan** Marine structures 2021 / art. 103026, 25 p. : ill
<https://doi.org/10.1016/j.marstruc.2021.103026> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Thermal analysis of a SynRM using a thermal network and a hybrid model

Shams Ghahfarokhi, Payam; Belahcen, Anouar; Kallaste, Ants; Vaimann, Toomas; Gevorkov, Levon; Rassõlkin, Anton 2018 XIII International Conference on Electrical Machines (ICEM 2018) : Alexandroupoli, Greece, 3-6 September 2018 2018 / p. 2682-2688 : ill <https://doi.org/10.1109/ICELMACH.2018.8507002>