

Analysis of electromagnetic force ripple in a bearingless synchronous reluctance motor

Mukherjee, Victor; Rasilo, Paavo; Martin, Florian; **Belahcen, Anouar** IEEE transactions on magnetics 2021 / art. 9277612, 8 p. : ill <https://doi.org/10.1109/TMAG.2020.3041703> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Analytical solution of the magnetic field and EMF calculation in ironless BLDC motor

Liu, Xiangdong; Hu, Hengzai; Zhao, Jing; **Belahcen, Anouar**; Tang, Liang; Yang, Lei IEEE transactions on magnetics 2016 / art. 8100510, [10] p. : ill <https://doi.org/10.1109/TMAG.2015.2481862>

Anisotropic and strain-dependent model of magnetostriction in electrical steel sheets

Belahcen, Anouar; Singh, Deepak; Rasilo, Paavo; Martin, Florian; Ghalemestani, Setareh Gorji; Vandeveld, Lieven IEEE transactions on magnetics 2015 / p. 200-204 : ill <https://doi.org/10.1109/TMAG.2014.2361681> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Armature reaction field and inductance calculation of ironless BLDC motor

Liu, Xiangdong; Hu, Hengzai; Zhao, Jing; **Belahcen, Anouar**; Tang, Liang IEEE transactions on magnetics 2016 / art. 8200214, [14] p. : ill <https://doi.org/10.1109/TMAG.2015.2489605>

Comparison of model order reduction methods for a switched reluctance machine characterization

Boumesbah, Allaa Eddine; Martin, Florian; Krebs, Guillaume; **Belahcen, Anouar**; Marchand, Claude IEEE transactions on magnetics 2021 / art. 9355193, 7 p. : ill <https://doi.org/10.1109/TMAG.2021.3059969> [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 IEEE transactions on magnetics 2018 / art. 7300804, 4 p. : ill <https://doi.org/10.1109/TMAG.2017.2765080> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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>

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

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

Coupled magneto-mechanical analysis of iron sheets under biaxial stress

Aydin, U.; Rasilo, Paavo; Singh, Deepak; Lehikoinen, Antti; **Belahcen, Anouar**; Arkkio, Antero IEEE transactions on magnetics 2016 / art. 2000804, [4] p. : ill <https://doi.org/10.1109/TMAG.2015.2496207>

Domain decomposition approach for efficient time-domain finite-element computation of winding losses in electrical machines

Lehikoinen, Antti; Ikäheimo, Jouni; Arkkio, Antero; **Belahcen, Anouar** IEEE transactions on magnetics 2017 / art. 7400609, 9 p. : ill <https://doi.org/10.1109/TMAG.2017.2681045>

Effect of Magnetic Forces and Magnetostriction on the Stator Vibrations of a Bearingless Synchronous Reluctance Motor

Mukherjee, Victor; Rasilo, Paavo; Martin, Florian; **Belahcen, Anouar** IEEE transactions on magnetics 2019 / 4 p. : ill <https://doi.org/10.1109/TMAG.2019.2894739> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of mechanical stress on excess loss of electrical steel sheets

Singh, Deepak; Rasilo, Paavo; Martin, Florian; **Belahcen, Anouar**; Arkkio, Antero IEEE transactions on magnetics 2015 / [4] p. : ill <http://dx.doi.org/10.1109/TMAG.2015.2449779>

Effect of punching the electrical sheets on optimal design of a permanent magnet synchronous motor

Martin, Florian; Aydin, Ugur; Sundaria, Ravi; Rasilo, Paavo; **Belahcen, Anouar**; Arkkio, Antero IEEE Transactions on Magnetism 2018 / art. 8102004 <https://doi.org/10.1109/TMAG.2017.2768399> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

EMSA 2016 publications chairs preface

Manzin, Alessandra; Asenjo, Agustina; **Belahcen, Anouar**; Butta, Mattia IEEE transactions on magnetics 2017 / 0200603, p. 1-3 : fot <https://doi.org/10.1109/TMAG.2017.2670446>

Equivalent strain and stress models for the effect of mechanical loading on the permeability of ferromagnetic materials

Rasilo, Paavo; Aydin, Ugur; Martin, Florian; **Belahcen, Anouar**; Kouhia, Reijo; Daniel, Laurent IEEE transactions on magnetics 2019 / art. 2002104, <https://doi.org/10.1109/TMAG.2018.2890407>

Generation of unmeasured loading levels data for condition monitoring of induction machine using machine learning

Billah, Md Masum; Saberi, Alireza Nemat; Hemeida, Ahmed; Martin, Florian; **Kudelina, Karolina**; **Asad, Bilal**; **Naseer, Muhammad**

Usman; Mukherjee, Victor; Belahcen, Anouar IEEE transactions on magnetics 2023 <https://doi.org/10.1109/TMAG.2023.3312267>

Homogenization of multiscale eddy current problem by localized orthogonal decomposition method

Ren, Xiaotao; Hannukainen, Antti; **Belahcen, Anouar** IEEE transactions on magnetics 2019 / art. 7500204, 4 p
<https://doi.org/10.1109/TMAG.2019.2917400>

Homogenization technique for axially laminated rotors of synchronous reluctance machines

Martin, Floran; **Belahcen, Anouar**; Lehikoinen, Antti; Rasilo, Paavo IEEE transactions on magnetics 2015 / [6] p. : ill
<http://dx.doi.org/10.1109/TMAG.2015.2463262>

Identification of synchronous machine magnetization characteristics from calorimetric core-loss and no-load curve measurements

Rasilo, Paavo; Abdallah, Ahmed Abou-Elyazied; **Belahcen, Anouar**; Arkkio, Antero; Dupré, Luc IEEE transactions on magnetics 2015 / [4] p. : ill <http://dx.doi.org/10.1109/TMAG.2014.2354055>

Importance of iron-loss modeling in simulation of wound-field synchronous machines

Rasilo, Paavo; **Belahcen, Anouar**; Arkkio, Antero IEEE transactions on magnetics 2012 / p. 2495-2504 : ill
<https://ieeexplore.ieee.org/document/6186824>

Iron losses, magnetoelasticity and magnetostriction in ferromagnetic steel laminations

Rasilo, Paavo; Singh, Deepak; **Belahcen, Anouar**; Arkkio, Antero IEEE transactions on magnetics 2013 / p. 2041-2044 : ill

Magnetic equivalent circuit and Lagrange interpolation function modeling of induction machines under broken bar faults

Hemeida, Ahmed; Billah, Md Masum; **Kudelina, Karolina**; **Asad, Bilal**; **Naseer, Muhammad Usman**; Guo, Baocheng; Martin, Floran; Rasilo, Paavo; Belahcen, Anouar IEEE transactions on magnetics 2024 / art. 8200704
<https://doi.org/10.1109/TMAG.2023.3306207>

Mixed-order finite-element modeling of magnetic material degradation due to cutting

Sundaria, Ravi; Lehikoinen, Antti; Hannukainen, Antti; Arkkio, Antero; **Belahcen, Anouar** IEEE transactions on magnetics 2018 / art. 7402008, 8 p. : ill <http://dx.doi.org/10.1109/TMAG.2018.2811385>

Model for stress-dependent hysteresis in electrical steel sheets including orthotropic anisotropy

Rasilo, Paavo; Steentjes, S.; **Belahcen, Anouar**; Kouhia, Reijo; Hameyer, Kay IEEE transactions on magnetics 2017 / art. 2001004, 4 p. : ill <http://dx.doi.org/10.1109/TMAG.2017.2659784>

Model of magnetic anisotropy of non-oriented steel sheets for finite-element method

Martin, Floran; Singh, Deepak; Rasilo, Paavo; **Belahcen, Anouar**; Arkkio, Antero IEEE transactions on magnetics 2016 / [4] p. : ill
<http://dx.doi.org/10.1109/TMAG.2015.2488100>

Modeling of hysteresis losses in ferromagnetic laminations under mechanical stress

Rasilo, Paavo; Singh, Deepak; Aydin, U.; Martin, Floran; Kouhia, Reijo; **Belahcen, Anouar**; Arkkio, Antero IEEE transactions on magnetics 2016 / art. 7300204, [4] p. : ill <http://dx.doi.org/10.1109/TMAG.2015.2468599>

Modeling the Effect of Multiaxial Stress on Magnetic Hysteresis of Electrical Steel Sheets : A Comparison

Aydin, Ugur; Rasilo, Paavo; Martin, Floran; Singh, Deepak; **Belahcen, Anouar** IEEE transactions on magnetics 2017 / art. 2000904, 4 p. : ill <http://dx.doi.org/10.1109/TMAG.2017.2658676>

Modified winding function analysis of synchronous reluctance motor for design iteration purposes

Naseer, Muhammad Usman; **Kallaste, Ants**; **Asad, Bilal**; **Vaimann, Toomas**; **Rassõlkin, Anton** IEEE transactions on magnetics 2022 / art. 7500704 <https://doi.org/10.1109/TMAG.2022.3164189> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Orthogonal interpolation method for order reduction of a synchronous machine model

Far, Mehrnaz Farzam; Martin, Floran; **Belahcen, Anouar**; Montier, Laurent; Henneron, Thomas IEEE transactions on magnetics 2018 / 8100506, p. 1-6 : ill <https://doi.org/10.1109/TMAG.2017.2768328> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Rotational single sheet tester for multiaxial magneto-mechanical effects in steel sheets

Aydin, Ugur; Martin, Floran; Rasilo, Paavo; **Belahcen, Anouar** IEEE transactions on magnetics 2019 / art. 2001810, 10 p. : ill
<https://doi.org/10.1109/TMAG.2018.2889238>

Segregation of iron losses from rotational field measurements and application to electrical machine

Belahcen, Anouar; Rasilo, Paavo; Arkkio, Antero IEEE transactions on magnetics 2014 / p. 893-896 : ill
<https://doi.org/10.1109/TMAG.2013.2284606> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Uncertainty quantification of input parameters in a 2D finite-element model for broken rotor bar in an induction machine

Billah, Md Masum; Martin, Florian; **Belahcen, Anouar**; Balasubramanian, Aswin; **Vaimann, Toomas**; Sobra, Jan IEEE transactions on magnetics 2022 / art. 8205804 <https://doi.org/10.1109/TMAG.2022.3173663> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)