

### **Air-gap eccentricity analysis of slow-speed slotless permanent magnet synchronous generator**

**Kangro, Rait; Kallaste, Ants; Vaimann, Toomas; Belahcen, Anouar** PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 225-228 : ill

### **Analysis and prototyping of a low-speed small scale permanent magnet generator for wind power applications**

**Lepa, Erko; Kilk, Aleksander** PQ2012 : 8th International Conference : 2012 Electric Power Quality and Supply Reliability : June 11-13, 2012, Tartu, Estonia : conference proceedings 2012 / p. 41-46 : ill <https://ieeexplore.ieee.org/document/6256193>

### **Analysis of a slow-speed slotless permanent magnet synchronous generator**

**Tuttelberg, Kaur; Vaimann, Toomas; Kallaste, Ants** 4th International Youth Conference on Energy 2013 : [proceedings] 2013 / p. 1-5 : ill

### **Analysis of mechanical vibrations caused by eccentricity in a slow-speed slotless permanent magnet generator**

**Tiirats, Tauno; Pabut, Ott; Kallaste, Ants; Herranen, Henrik; Naar, Hendrik; Vaimann, Toomas** PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 237-241 : ill

### **Analysis of the eccentricity in a low-speed slotless permanent-magnet wind generator**

**Kallaste, Ants; Belahcen, Anouar; Kilk, Aleksander; Vaimann, Toomas** PQ2012 : 8th International Conference : 2012 Electric Power Quality and Supply Reliability : June 11-13, 2012, Tartu, Estonia : conference proceedings 2012 / p. 47-52 : ill <https://ieeexplore.ieee.org/document/6256199>

### **Cogging torque reduction methods**

**Kudrjavitsev, Oleg; Kilk, Aleksander** PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 251-254 : ill

### **Cogging torque reduction methods**

**Kudrjavitsev, Oleg; Kilk, Aleksander** 13th International Symposium "Topical Problems in the Field of Electrical and Power Engineering." Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 14-19, 2013 2013 / p. 212-214 : ill

### **Combined FE and particle swarm algorithm for optimization of high speed PM synchronous machine**

**Belahcen, Anouar; Martin, Florian; El Hadi Zaim, Mohammed; Dlala, Emad; Kolondzovski, Zlatko** COMPEL : the international journal for computation and mathematics in electrical and electronic engineering 2015 / p. 475-484 : ill <http://dx.doi.org/10.1108/COMPEL-07-2014-0168>

### **Comparative study of field-oriented control model in application for induction and synchronous reluctance motors for life-cycle analysis**

**Autsou, Siarhei; Saroka, Viktor; Karpovich, Dzmitry; Rassõlkin, Anton; Gevorkov, Levon; Vaimann, Toomas; Kallaste, Ants; Belahcen, Anouar; Rassõlkin, Anton** 2018 25th International Workshop on Electric Drives: Optimization in Control of Electric Drives (IWED) 2018 / p. 1-5 : ill <https://doi.org/10.1109/IWED.2018.8321371>

### **Comparative study of slow-speed slotless synchronous generator using SmCo and NdFeB permanent magnets**

**Korn, Norman; Vaimann, Toomas; Kallaste, Ants; Belahcen, Anouar** PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 247-250 : ill

### **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](#)

### **Cost efficiency analysis of slow-speed slotless permanent magnet synchronous generator using different magnetic materials**

**Laurit, Sten; Kallaste, Ants; Vaimann, Toomas; Belahcen, Anouar** PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 221-224 : ill

### **Demagnetization on permanent magnet machine with Halbach array**

**Kallaste, Ants; Belahcen, Anouar; Kilk, Aleksander** 13th International Symposium "Topical Problems in the Field of Electrical and Power Engineering." Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 14-19, 2013 2013 / p. 81-84 : ill

### **Design and experimental verification of a multipole directly driven interior PM synchronous generator for wind power applications**

**Kilk, Aleksander** The 4th International Conference Electric Power Quality and Supply Reliability : August 29...31, 2004, Pedase, Estonia : proceedings 2004 / p. 87-89 : ill

### **Design of permanent magnet assisted synchronous reluctance machine**

**Kallaste, Ants; Vaimann, Toomas; Belahcen, Anouar** Proceedings : 2014 15th International Scientific Conference on Electric

Power Engineering (EPE) 2014 / p. 579-582 : ill

**Design of slow-speed slotless SmCo permanent magnet synchronous generator for wind applications**

**Vaimann, Toomas; Kallaste, Ants; Korn, Norman; Laurit, Sten; Belahcen, Anouar** Proceedings : 2014 15th International Scientific Conference on Electric Power Engineering (EPE) 2014 / p. 339-342 : ill

**Design of the exterior-rotor PM synchronous motor for an electric powered paraglider**

**Nukki, Rene; Lehtla, Tõnu; Kilk, Aleksander;** Kangru, Tavo 2015 56th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2015 / p. 245-248 : ill

**Determination of thermal convection coefficient from coil's flat plate side**

**Ghahfarokhi, Payam Shams; Kallaste, Ants; Belahcen, Anouar** 16th International Symposium "Topical Problems in the Field of Electrical and Power Engineering. Doctoral School of Energy and Geotechnology III" : Pärnu, Estonia, January 16-21, 2017 2017 / p. 130-132 : ill [http://www.ester.ee/record=b4650094\\*est](http://www.ester.ee/record=b4650094*est)

**Direct liquid cooling in low-power electrical machines : proof-of-concept**

Lindh, Pia; Petrov, Ilya; Semken, R. Scott; **Vaimann, Toomas; Kallaste, Ants** IEEE transactions on energy conversion 2016 / p. 1257-1266 : ill <https://doi.org/10.1109/TEC.2016.2597059> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Dynamic modeling of the demagnetization in Halbach array permanent magnet machines**

**Kallaste, Ants; Belahcen, Anouar; Vaimann, Toomas** COMPUMAG 2013 : [proceedings] 2013 / p. 1-2 : ill

**Effect of PM parameters variability on the operation quantities of a wind generator**

**Kallaste, Ants; Belahcen, Anouar; 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. 242-247 : ill <http://dx.doi.org/10.1109/WEMDCD.2015.7194536>

**Evaluation of control solution for grid inverter of low power wind turbine for implementation with inexpensive hardware**

Galkin, Ilja; **Zakis, Janis** PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 297-302 : ill

**Exterior-rotor permanent magnet synchronous machine with toroidal windings for unmanned aerial vehicles**

**Nukki, Rene; Kilk, Aleksander; Kallaste, Ants; Vaimann, Toomas; Tiimus, Kristjan** PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 215-220 : ill

**Generator mode analysis of exterior-rotor PM synchronous machine with Gramme's winding**

**Nukki, Rene; Kilk, Aleksander; Kallaste, Ants; Vaimann, Toomas; Tiimus, Kristjan** 2015 IEEE 5th International Conference on Power Engineering, Energy and Electrical Drives (POWERENG) : proceedings : May 11-13, 2015, Riga, Latvia 2015 / p. 347-352 : ill <http://dx.doi.org/10.1109/PowerEng.2015.7266341>

**Grid integration issues of PMSG-based residential wind turbines**

**Chub, Andrii; Jalakas, Tanel;** Milczarek, Adam; **Kallaste, Ants; Malinowski, Mariusz** PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 147-154 : ill

**Hybrid FEA-Simulink modelling of permanent magnet assisted synchronous reluctance motor with unbalanced magnet flux**

Pando-Acedo, Jaime; **Rassõlkin, Anton;** Lehtikainen, Antti; **Vaimann, Toomas; Kallaste, Ants;** Romero-Cadaval, Enrique; **Belahcen, Anouar** 2019 IEEE 12th International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED), 27-30 Aug. 2019, Toulouse, France : proceedings 2019 / p. : 174-180 : ill <https://doi.org/10.1109/DEMPED.2019.8864925>

**Implementation of different magnetic materials in outer rotor PM generator**

**Kudrjavitsev, Oleg; Kilk, Aleksander; Vaimann, Toomas; Belahcen, Anouar; Kallaste, Ants** 2015 IEEE 5th International Conference on Power Engineering, Energy and Electrical Drives (POWERENG) : proceedings : May 11-13, 2015, Riga, Latvia 2015 / p. 74-78 : ill <http://dx.doi.org/10.1109/PowerEng.2015.7266298>

**Influence of magnet material selection on the design of slow-speed permanent magnet synchronous generators for wind applications**

**Kallaste, Ants; Vaimann, Toomas; Belahcen, Anouar** Elektronika ir elektrotehnika = Electronics and electrical engineering 2017 / p. 31-38 : ill <http://dx.doi.org/10.5755/j01.eie.23.1.17581>

**Influence of permanent magnet characteristic variability on the wind generator operation**

**Kudrjavitsev, Oleg; Kallaste, Ants; Kilk, Aleksander; Vaimann, Toomas; Orlova, Svetlana** Latvian journal of physics and technical sciences 2017 / p. 3-11 : ill <https://doi.org/10.1515/lpts-2017-0001>

**Influence of slot wedge material on permanent magnet losses in a traction motor with tooth coil windings**



**Possible manufacturing tolerance faults in design and construction of low speed slotless permanent magnet generator**  
**Kallaste, Ants; Vaimann, Toomas; Belahcen, Anouar** 2014 16th European Conference on Power Electronics and Applications (EPE'14-ECCE Europe) : Lappeenranta, Finland, 26-28 August 2014. Vol. 4 2014 / p. 3073-3082 : ill

**Review of loss calculation reduction control methods of permanent magnet assisted reluctance drive**  
**Melentjev, Sergei; Belahcen, Anouar; Kallaste, Ants; Rassõlkin, Anton; 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. 199-206 : ill <https://doi.org/10.1109/PQ.2016.7724113>

**Review of thermal analysis of permanent magnet assisted synchronous reluctance machines**  
**Ghahfarokhi, Payam Shams; Kallaste, Ants; Belahcen, Anouar; Vaimann, Toomas; Rassõlkin, Anton** PQ2016 : the 10th International Conference 2016 Electric Power Quality and Supply Reliability Conference (PQ) : August 29-31, 2016, Tallinn, Estonia : proceedings 2016 / p. 219-224 <https://doi.org/10.1109/PQ.2016.7724116>

**Study of low-speed permanent-magnet synchronous generator for wind power turbine applications**  
Sidon, Mohamed D.; **Järvik, Jaan; Kilk, Aleksander** 5th International Conference : Electric Power Quality and Supply Reliability : August 23-26, 2006, Viimsi, Estonia : conference proceedings 2006 / p. 161-165 : ill

**Technology and properties of fine-grained Nd-Fe-B magnets = Nd-Fe-B peenteramagnetite tehnoloogia ja omadused**  
**Mural, Zorjana** 2017 <https://digi.lib.ttu.ee/i/?7275> [https://www.ester.ee/record=b4665012\\*est](https://www.ester.ee/record=b4665012*est)

**The effect of nano-TiC addition on sintered Nd-Fe-B permanent magnets**  
**Mural, Zorjana; Kollo, Lauri; Xia, Manlong; Veinthal, Renno** Journal of magnetism and magnetic materials 2017 / p. 23-28 : ill  
<https://doi.org/10.1016/j.jmmm.2016.12.115> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Thermal analysis of the PM generator with outer rotor for wind turbine application**  
**Kudrjavitsev, Oleg; Kilk, Aleksander; 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. 229-232 : ill  
<https://doi.org/10.1109/PQ.2016.7724118>

**О некоторых факторах, имеющих значение при намагничивании тела переменным током**  
**Oru, Heino** 1958 [https://www.ester.ee/record=b1382043\\*est](https://www.ester.ee/record=b1382043*est) <https://digikogu.taltech.ee/et/Item/66a94644-7aa0-48ec-b151-b499c0f6aa50/>

**Обзор низкоскоростных генераторов с постоянными магнитами для ветряных установок**  
**Rassõlkin, Anton; Kallaste, Ants; Vaimann, Toomas; Savrajev, Igor** Вестник Псковского государственного университета. Технические науки 2016 / с. 58-68