

Publications of Department of Technology and Engineering

2009-2020

Year 2020

1. Khanh Huyen Nguyen, Ngoc Huong Giang Vu, Xuan Truong Nguyen*, “The Status and Potential Assessment of Solar Power Energy Development in Vietnam”, International Journal of Energy and Power Engineering. Volume 9, Issue 5, September 2020, pp. 69-80. ISSN Print: 2326-957X
2. Pham X.T, Okuma M., Bur M., and Abidin Z., An estimation method for pavement weigh-in-motion system with preliminary experiment, JSME Mechanical Engineering Journal, ISSN: 2187-9745, Vol.7, No.6, 2020.
3. Trung-Kien Hoang, L. Vido, Dinh-Quang Nguyen “A simple approach for air-gap permeance calculations in double excitation synchronous motor modelling with reluctance network”, Vietnam Journal of Science, Technology and Engineering, vol. 63, no. 2, pp. 25 – 31, 2020.
4. Dam Hoang Phuc, Le Van Nghia, Le Hue Tai Minh, Energy consumption model for vehicles using different energy sources, Vietnam Mechanical magazine, 2020
5. Xuan Truong Nguyen, Thi Minh Nguyet Nguyen, Duc Tho Trinh, “A Low-Cost Battery Monitoring System for Batteries Performance Assessment with Internet of Things”, The 3rd International Conference on Smart City Innovation (ICSCI), 27 – 28 October 2020, Indonesia, (online conference).
6. Lê Huệ Tài Minh, Lê Văn Nghĩa, Đàm Hoàng Phúc, bài báo “Xây dựng mô hình tính toán năng lượng tiêu thụ cho các loại xe sử dụng nguồn năng lượng khác nhau”, Tạp chí Cơ khí Việt Nam, số 9, 2020.

Year 2019

1. Trung-Kien Hoang, Lionel Vido, Frederic Gillon, and Mohamed Gabsi “Structural optimization to maximize the flux control range of a double excitation synchronous machine”, Mathematics and Computers in Simulation, vol. 158, pp. 235-247, 2019
2. Vu, T.T.N., Teyssèdre, G., Roy, S.L., Anh, T.T., Trần, T.S., Nguyen, X.T., Nguyễn, Q.V. “The challenges and opportunities for the power transmission grid of Vietnam”. European Journal of Electrical Engineering”, Vol. 21, No. 6, pp. 489-497, Dec-2019. ISSN Print: 2103-3641
3. Phan Anh Tuấn, Vũ Thị Tuyết Hồng, Nguyễn Đình Quang, Nguyễn Thị Diệu Linh. Mô hình trạng thái mới của hệ thống điện ba pha: Ứng dụng trong ước lượng thành phần thứ tự thuận và thành phần thứ tự nghịch, Tạp chí Khoa học và Công nghệ, số 50, 2019
4. Thi Thu Nga VU, Gilbert TEYSSÈDRE, Séverine LE ROY, Tùng Trần ANH, Thanh Sơn TRẦN; Xuan Truong NGUYEN; Quang Vinh NGUYEN, “Prospects for HVDC links in electricity network of Vietnam”, 10th International Conference on Insulated Power Cables, Jicable 19 – Paris – Versailles 23-27 June, 2019

5. Dung V Nguyen, Benoit Delinchant, Binh V Dinh and Truong X Nguyen, “Irradiance forecast model for PV generation based on cloudiness web service”. IOP Conf. Series: Earth and Environmental Science 307 (2019) 012008 (Scopus-indexed Conference Proceedings)
6. M. Chung Nguyen, H. Viet Nguyen, V. Hung Nguyen, and P. Dollfus “Conduction gap in graphene strain junctions: direction dependence”, The ICTP Asian Network School and Workshop on Complex Condensed Matter Systems, University of the Philippines Diliman, Quezon City, Philippines, November, (2019)

Year 2018

1. Hoang, L. Queval, L. Vido, and C. Berriaud “Design of a 20 MW fully superconducting wind turbine generator to minimize the levelized cost of energy”, IEEE Transactions on Applied Superconductivity, vol. 28, no. 4, pp.1-5, Jun. 2018. Art. no. 5206705
2. Le Thi Thuy Hang, Cu Thi Thanh Huyen, Bui Bao Hung, Pham Van Duy, Nguyen Xuan Truong, “Business Models of a Solar Powered Charging Station for Electric Two-Wheelers in Hanoi-Vietnam”, IOSR Journal of Engineering (IOSRJEN), Vol. 08, Issue 7 (July. 2018), V (III), PP 51-56. ISSN (e): 2250-3021
3. V.T Bui, M. Cr    , C. Rosset, J.G. Bartlett, J.-B Melin. The angular two-point correlation function of the Planck Sunyaev-Zel’dovich cluster catalog, 53rd Rencontres de Moriond on Cosmology (La Thuile, Italy), ISBN: 9791096879076

Year 2017

1. K. Hoang, L. Vido, M. Gabsi, and F. Gillon “Flux control range broadening and torque ripple minimization of a double excitation synchronous motor”, IEEE Transactions on Magnetics, vol. 53, no. 1, pp.1-10, Jan. 2017. Art. no. 8100510.
2. Viet Anh Duong, and Yao-Wen Tsai, A Novel Interpretation of the Invariance Condition of Mismatched Uncertain Large-Scale Systems, International Journal of Control, Automation and Systems, vol. 15, no. 4, pp. 1577-1591, 2017.
3. Yao-Wen Tsai, and Viet Anh Duong, Necessary and Sufficient Invariance Conditions in Mismatched Uncertain Variable Structure Systems, Journal of the Chinese Institute of Engineers, vol. 40, no. 5, pp. 411-420, 2017.
4. Anh Tuan Phan, Patrice Wira, and Gilles Hermann. A dedicated state space for power system modeling and frequency and unbalance estimation, Evolving Systems, 2017
5. K. Hoang, L. Vido, F. Gillon, and M. Gabsi “Thermal analysis of a double excitation synchronous machine”, Electrimacs international conference, Toulouse, France, Jul. 2017
6. K. Hoang, L. Vido, F. Gillon, and M. Gabsi “Geometry optimization to increase the flux control range of a double excitation synchronous motor”, Electrimacs international conference, Toulouse, France, Jul. 2017.

7. Trung-Kien Hoang, Loic Queval, Lionel Vido, and Christophe Berriaud “Impact of the rotor blade technology on the levelized cost of energy of an offshore wind turbine”, International Conference on Optimization of Electrical and Electronic Equipment & International Aegean Conference on Electrical Machines and Power Electronics (OPTIM-ACEMP) Proceeding, pp.623-629, Brasov, Romania, May 2017.
8. K. Hoang, M. Gabsi, L. Vido, and F. Gillon “Comparison between a double excitation synchronous machine and a permanent magnet synchronous machine according to various constant power speed ranges”, Twelfth International Conference on Ecological Vehicles and Renewable Energies (EVER), pp.1-7, Monaco, Apr. 2017
9. Xuan Truong Nguyen, Viet Dung Nguyen, Dinh Quang Nguyen, Lang Tung Nguyen, Duc Quang Nguyen, “Performance comparison between tracking and fixed photovoltaic system: a case study of Hoa Lac Hi-tech Park, Hanoi”, 18th International Seminar on Intelligent Technology and Its Application 2017, 28 -29 August 2017, Surabaya, Indonesia. Electronic ISBN: 978-1-5386-2708-2
10. Duc Quang Nguyen, Xuan Truong Nguyen, Hoang Tung Nguyen, “A Hybrid Method to Determine the Short-Circuit Location on Medium-Voltage Network: Simulation and Measurement”, 18th International Seminar on Intelligent Technology and Its Application 2017, 28 -29 August 2017, Surabaya, Indonesia. E-ISBN: 978-1-5386-2708-2

Year 2016

1. Nguyen Xuan Truong, Nguyen Lang Tung, Nguyen Quang Hung, Benoit Delinchant “Grid-connected PV system design option for nearly Zero Energy Building in reference building in Hanoi”, 4th IEEE International Conference on Sustainable Energy Technologies (ICSET 2016), 14-16 November 2016, Hanoi, Vietnam, pp.310- 315. E-ISBN: 978-1-5090-5200-4
2. Nguyen Xuan Truong, Nguyen Quang Hung, Nguyen Dinh Quang, “Performance analysis of roof-mounted photovoltaic systems on the office building in Hanoi, 4th AUN/SEED-Net Regional Conference on Energy Engineering”, 24-25 November 2016, Phnom Penh, Cambodia (JICA Project)
3. Yao-Wen Tsai, Viet Anh Duong, and Van Duc Phan, Two Sets of Switching Surfaces for a Class of Mismatched Uncertain Systems: An LMI approach, Proceedings of IEEE International Conference on Control and Robotics Engineering, Singapore, 2016.
4. Yao-Wen Tsai, Van Duc Phan, and Viet Anh Duong, Sliding Mode Control for Active Magnetic Bearings of a Flywheel Energy Storage System, Proceedings of IEEE International Conference on Control and Robotics Engineering, Singapore, 2016.
5. Dollfus, V. Hung Nguyen, V. Truong Tran, M. Chung Nguyen, A. Bournel, J. Saint-Martin “Thermoelectric effects in graphene and graphene-based nanostructures using atomistic simulation”, 26th International Workshop on Power and Timing Modeling, Optimization and Simulation (PATMOS), Bremen, Germany, September, (2016)

6. Lương Quang Huân, Phạm Xuân Tùng, Ngô Văn Hiền, Vũ Quốc Huy, Research and development of stabilization and obstacle avoidance system for quadrotor, Proc. of National Fluid Mechanics Conference, 2016.
7. Anh Tuan Phan, Gilles Hermann, and Patrice Wira. A new state-space for unbalanced three-phase systems: Application to fundamental frequency tracking with kalman filtering. In 18th IEEE Mediterranean Electrotechnical Conference (MELECON 2016), Limassol Cyprus, 2016

Year 2015

1. Chung Nguyen, V. Hung Nguyen, H. Viet Nguyen, and P. Dollfus “Strong negative differential conductance in strained graphene devices”, *Journal of Applied Physics*, No. 118, Vol. 234306 (2015)
2. Chung Nguyen, V. Hung Nguyen, H. Viet Nguyen, J. Saint-Martin and P. Dollfus “Enhanced Seebeck effect in graphene devices by strain and doping engineering”, *Physica E*, 73, 207212 (2015)
3. Dang Hoang Anh, Nguyen Dinh Quang, Dinh Van Binh, Benoit Delinchant, Frederic Wurtz, Nguyen Xuan Truong, “Renewable energy supply (PV) integration with building energy management: modeling and intelligent control of electrical storage”, *Journal of Science and Technology-Vietnam Academy of Science and Technology*, vol. 53 (N°. 6A), pp.173- 187, 2015. ISSN 0866-708X
4. Nguyen Xuan Truong, Nguyen Dinh Quang, Tran Tung, “Power control of a photovoltaic system connected to a distribution grid in Vietnam”, *Journal of Science and Technology-Vietnam Academy of Science and Technology*, vol. 53 (N°. 3A), pp.331- 336, 2015. ISSN: 0866 708X
5. Hoang, L. Vido, F. Gillon, and M. Gabsi “Modeling of double excitation synchronous motors using nodal based – generalized equivalent magnetic circuit”, *Symposium on Electromagnetic Fields (ISEF) Proceeding*, Valencia, Spain, Sep. 2015.
6. Nguyen Xuan Truong, Nguyen Quang Hung, “Service issues: overview of electric vehicles used in Vietnam”, *Armand Peugeot Chair International Conference: 3rd Electromobility Challenging Issues*, December 1 – 4, 2015, Singapore.
7. Yao-Wen Tsai, Van Duc Phan, Viet Anh Duong, Nguyen Cong Trang, and Trung Dung Chu, *Model Predictive Control Nonlinear System of Active Magnetic Bearings for a Flywheel Energy Storage System*, *Lecture Notes in Electrical Engineering*, Springer link, Vol. 371, pp. 541-551, 2015.
8. Hung Nguyen, J. Saint-Martin, P. Dollfus, M. Chung Nguyen, H.-Viet. Nguyen “High thermoelectric figure of merit in vertical devices made of stacked graphene layers”, *20th International Conference on Simulation of Semiconductor Processes and Devices (SISPAD)*, Washington DC, USA, September, (2015)
9. Chung Nguyen, H. Viet Nguyen, V. Hung Nguyen, J. Saint-Martin and P. Dollfus “Strong negative differential resistance in graphene devices with local strain”, *18th International*

- Workshop on Computational Electronics (IWCE), West Lafayette, USA, September, (2015)
10. Chung Nguyen, H. Viet Nguyen, V. Hung Nguyen and P. Dollfus “Theoretical study of electronic and thermoelectric nano-devices based on graphene heterostructures”, University of Science and Technology of Hanoi conference, Reims-France, September, (2015)
 11. Chung Nguyen, H. Viet Nguyen, V. Hung Nguyen and P. Dollfus “Transport gap in graphene strain heterochannels”, the 3rd International Workshop on Theoretical and Computational Physics, Dalat-Vietnam, July, (2015)
 12. Chung Nguyen, H. Viet Nguyen, V. Hung Nguyen, J. Saint-Martin and P. Dollfus “Enhancement of Seebeck effect in strained graphene PN junctions”, 19th International Conference on Electron Dynamics in Semiconductors, Optoelectronics and Nanostructures, Salamanca-Spain, July, (2015)
 13. Chung Nguyen, H. Viet Nguyen, V. Hung Nguyen and P. Dollfus “Strain engineering to enhance conduction gap and Seebeck effect in graphene devices”, Journées Nationales du Réseau Doctoral en Micro-nanoélectronique, Bordeaux-France, May, (2015)
 14. Anh Tuan Phan, Duc Du Ho, Gilles Hermann, and Patrice Wira. A new state-space model for three-phase systems for kalman filtering with application to power quality estimation. In 11th International Conference of Computational Methods in Sciences and Engineering (ICCMSE 2015), Athens-Greece, 2015
 15. Anh Tuan Phan, Gilles Hermann, and Patrice Wira. Kalman filtering with a new state-space model for three-phase systems: Application to the identification of symmetrical components. In IEEE Conference on Evolving and Adaptive Intelligent Systems (EAIS 2015), Douai-France, pages 216–221, 2015

Year 2014

1. Hung Nguyen, M. Chung Nguyen, H. Viet Nguyen, J. Saint-Martin and P. Dollfus “Enhanced thermoelectric figure of merit in vertical graphene junctions”, Applied Physics Letters 105, 133105 (2014)
2. Chung Nguyen, V. Hung Nguyen, H. Viet Nguyen, and P. Dollfus “Conduction gap in graphene strain junctions: direction dependence”, Semicond. Sci. Technol. 29, 115024 (2014)
3. Hung Nguyen, M. Chung Nguyen, H. Viet Nguyen and P. Dollfus “Disorder effects on energy band gap and electronic transport in graphene-nanomesh-based structures”, Journal of Applied Physics 113, 013702 (2013)
4. Hoang, L. Vido, M. Gabsi, and F. Gillon “3D modeling of double excitation synchronous motor with reluctance network”, The International Conference on Electrical Machines (ICEM) Proceeding, pp.2598-2604, Berlin, Germany, Sep. 2014.
5. Nguyen Xuan Truong, Nguyen Dinh Quang, Tran Tung, “Grid Synchronization for Photovoltaic generation systems, case of study: a low-voltage distribution grid in Hanoi”,

- Proceedings of the International Conference on Green Growth and Energy for ASEAN (GGEA2014), December 15 -18, 2014, Hanoi., pp. 170 – 178, ISBN: 978-604-913-389-3
6. V. Hung Nguyen, M. Chung Nguyen, H. Viet Nguyen, J. Saint-Martin and P. Dollfus, “Enhanced thermoelectric figure of merit in vertical graphene junctions”, *Applied Physics Letters*, Vol. 133105, No. 105, 2014
 7. Chung Nguyen, H. Viet Nguyen, V. Hung Nguyen and P. Dollfus “Theoretical study of electronic and thermoelectric nano-devices based on graphene heterostructures”, University of Science and Technology of Hanoi conference, Montpellier-France, September, (2014)
 8. Chung Nguyen, V. Hung Nguyen, Huy-Viet Nguyen and P. Dollfus “Conduction gap in unstrained/strained graphene junctions: direction dependence” 17th International Workshop of Computational Electronics, ISBN: 978-2-9547858-0-6 (2014) 223-224; IEEE Xplore, Paris-France, June, (2014)
 9. Chung Nguyen, H. Viet Nguyen, V. Hung Nguyen and P. Dollfus “Conduction gap in unstrained/strained graphene junctions: direction dependence”, Journées Nationales du Réseau Doctoral en Micro-nanoélectronique, Lille-France, May, (2014)
 10. M. Chung Nguyen, V. Hung Nguyen, H. Viet Nguyen, and P. Dollfus, “Conduction gap in graphene strain junctions: direction dependence”, *Semicond. Sci. Technol.*, Vol. 115024, No. 29, 2014
 11. Hung Nguyen, M. Chung Nguyen, H. Viet Nguyen, P. Dollfus “Strategy of strain engineering to improve performance of graphene transistors” Graphene 2014, Toulouse-France, May, (2014)
 12. Tung P.X., Diem P.G., Huy V.Q., Hien N.V., A Capsule- Based Model to Implement Controllers for Quadrotor UAVs, International Conference on Engineering Mechanics and Automation (ICEMA 3), ISBN: 978-604-913-367-1, 2014, pp. 179-186.
 13. Tung P.X., Hung N.P., Hien N.V., Huy V.Q., An automatic stabilization of control system for indoor quadrotor, AUSEED-Net Regional Conference on Mechanical and Manufacturing Engineering 2014 (RCMME-2014), ISSN: 978-604-911-942-2, 2014, pp. 353-357.
 14. Vu Quoc Huy, Pham Xuan Tung, Design and simulation tiltrotor aircraft, Proc. of National Fluid Mechanics Conference, Ninh Thuan, Vietnam, 2014
 15. Vu Dinh Quy, Pham Xuan Tung, Dinh Tan Hung. Design, fabrication and testing of UAV rescue system using parachute, Proc. of National Fluid Mechanics Conference, Ninh Thuan, Vietnam, 2014.
 16. Anh Tuan Phan, Gilles Hermann, and Patrice Wira. “Online Frequency Estimation in Power Systems: A Comparative Study of Adaptive Methods”. In: 40th Annual Conference of the IEEE Industrial Electronics Society (IECON 2014), Dallas, TX – USA, pages 4352–4357, 2014

Year 2013

1. Griseri, X. T. Nguyen, L. Berquez, “Analysis of the Pulsed Electro-Acoustic signal treatment recorded on electron beam irradiated dielectrics”, *Journal of Electrostatics*, Volume 71, Issue 3, pp. 422-428, 2013. ISSN 0304-3886
2. T. Nguyen, V. Griseri, L. Berquez 2013, “In-situ charge measurements on dielectrics during electronic irradiation by PEA”, *IEEE Conference International on Electrical Insulation and Dielectric Phenomena (CEIDP)*, pp. 226 – 269, Annual Report 2013, Shenzhen-China, October 2013. E-ISBN: 978-1-4799-2597-1
3. Chung Nguyen, H. Viet Nguyen, V. Hung Nguyen and P. Dollfus “A numerical study on electronic bandgap and transport in graphene-nanomesh-based structures”. *The 38th National Conference on Theoretical Physics*, Danang-Vietnam, August, 2013
4. V. Hung Nguyen, M. Chung Nguyen, H. Viet Nguyen and P. Dollfus, “Disorder effects on energy bandgap and electronic transport in graphene-nanomesh-based structures”, *Journal of Applied Physics*, Vol.013702, No. 113, 2013
5. Ta Dinh Giap, Vu Dinh Quy, Pham Xuan Tung, Vu Quoc Huy, “Numerical simulation of resin flow in resin transfer molding process”, *AUSEED-Net Regional Conference on Mechanical and Manufacturing Engineering 2013 (RCMME-2013)*, ISBN: 978-983-2408-14-7, 2013, pp.164-171

Year 2012

1. Berrada, M. Chung Nguyen, V. Hung Nguyen, H. Viet Nguyen, D. Querlitz, J. Saint-Martin, A. Bournel, C. Chassat and P. Dollfus “A new route towards high-performance graphene transistors”. *The 3rd International Symposium on Graphene Devices*, Saint Aubin-France, November, (2012)
2. Chung Nguyen, H. Viet Nguyen and V. Hung Nguyen “Electronic properties and transport in graphene nanomesh based on structures”. *The 37th National Conference on Theoretical Physics*, Nghean-Vietnam, August, (2012)

Year 2011

1. T. Nguyen, S. Bouchareb, V. Griseri, L. Berquez, “Post-Electronic Irradiation Measurements by PEA and FLIMM Methods on Dielectric Films”, *IEEE Conference International on Electrical Insulation and Dielectric Phenomena (CEIDP)*, pp. 812 – 815, Annual Report, Cancun, Canada, November 2011
2. Le Anh Tuan, Phan Anh Tuan, Nguyen Viet Truong, Nguyen Phung Quang: Modeling of directly generated linear motions and a proposal control structure . *Vietnam International Conference and Exhibition on Control and Automation, VCCA-2011*, Hanoi-Vietnam, 2011

Year 2010

1. Trung-Kien Hoang, Do-Hyun Kang and Ji-Young Lee, "Comparison between various designs of transverse flux linear motor", IEEE Transactions on Magnetics, vol.46, pp.3975-3801, Oct. 2010
2. Trung-Kien Hoang, Ji-Young Lee, Ji-Won Kim, Do-Kwan Hong, Shi-Uk Chung and Byung-Chul Woo, "Magnetic sensor design for linear machine", the Korean Institute of Electrical Engineers (KIEE) Proceeding, Busan, South Korea, Jul. 2010.
3. Trung-Kien Hoang, Ji-Young Lee, Ji-Won Kim, Seung-Ryul Moon, Do-Kwan Hong and Byung-Chul Woo, "Transverse flux rotary machine with orthogonal lamination stator core", the Korean Institute of Electrical Engineers (KIEE) Proceeding, Busan, South Korea, Jul. 2010
4. Chung Nguyen, "Quasi- bound state of Dirac Fermion in magnetic Graphene Quantum Dot". The Proceedings of the conference for Students' scientific research, Hanoi National University of Education, May, (2010)

Year 2009

1. Trung-Kien Hoang and Do-Hyun Kang, "Designing of transverse flux machine considering magnetic saturation", LDIA Proceeding, pp.377-380, Seoul, South Korea, Sep. 2009.
2. Ji-Young Lee, Ji-Won Kim, Byung-Chul Woo, Do-Hyun Kang, Kwang-Woon Kim and Trung-Kien Hoang, "Characteristic analysis of permanent magnet transverse flux linear motor spiral core", Japanese-Mediterranean Workshop on Applied Electromagnetics Engineering for Magnetic, Superconducting Multifunctional and Nanomaterials (JAPMED) Proceeding, pp.177-178, Bucharest, Romania, Jul. 2009.
3. S. Choi, Hoang Trung-Kien, G.H. Rim and C.S. Kim, "Promotion policy for popularization and economic evaluation of electric vehicles", the Korean Institute of Electrical Engineers (KIEE) Proceeding, pp.949-950, Muju, South Korea, 2009.
4. Ji-Young Lee, Ji-Won Kim, Byung-Chul Woo and Trung-Kien Hoang, "Characteristic analysis using equivalent magnetic circuit network method for permanent magnet excited transverse flux linear motor with spiral core in a mover", the Korean Institute of Electrical Engineers (KIEE) Proceeding, pp.794-795, Muju, South Korea, 2009.