

## Сведения об официальном оппоненте

(согласие на оппонирование)

Я, Лопаткин Николай Николаевич, согласен быть официальным оппонентом диссертационной работы Токарева Вадима Геннадьевича «Способы повышения энергетической эффективности активных силовых фильтров», представленной на соискание ученой степени кандидата технических наук по специальности 05.09.12 – «Силовая электроника»

Ученая степень – кандидат технических наук

Научная специальность – 05.09.03 – «Электротехнические комплексы и системы», технические науки

Должность – доцент кафедры математики, физики, информатики Федерального государственного бюджетного образовательного учреждения высшего образования «Алтайский государственный гуманитарно-педагогический университет имени В.М. Шукшина»

Адрес: 659333, Россия, Алтайский край, г. Бийск, ул. Владимира Короленко, 53.

E-mail (оппонента) nikolay\_lopatkin@mail.ru

Список основных публикаций по теме оппонируемой диссертации в рецензируемых научных изданиях за последние 5 лет *(не более 15 публикаций)*:

1. Lopatkin N.N., “New implementation of common-mode-voltage-eliminating nearest-vector-selecting space vector control for three-phase multilevel inverter,” 2021 International Ural Conference on Electrical Power Engineering (UralCon), Russia, Magnitogorsk, September 24-26, 2021. Proceedings, pp. 519-524. DOI: 10.1109/UralCon52005.2021.9559495
2. Lopatkin N.N., “Weighted THD factors evaluation of multilevel voltage source inverter with space vector control under common-mode voltage elimination,” 2021 International Ural Conference on Electrical Power Engineering (UralCon), Russia, Magnitogorsk, September 24-26, 2021. Proceedings, pp. 496-501. DOI: 10.1109/UralCon52005.2021.9559505
3. Lopatkin N. (2022) Common-mode voltage elimination of three-phase multilevel voltage source inverter by means of quarter-wave-symmetric space vector PWM approach. In: Ronzhin A., Shishlakov V. (eds) Electromechanics and Robotics. Smart Innovation, Systems and Technologies, vol 232, pp. 299-310. Springer, Singapore. DOI: 10.1007/978-981-16-2814-6\_26
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5. Lopatkin N. (2021) Quarter-wave symmetric space vector PWM with low values of frequency modulation index in control of three-phase multilevel voltage source inverter. In: Ronzhin A., Shishlakov V. (eds) Proceedings of 15th International Conference on Electromechanics and Robotics “Zavalishin’s Readings”. Smart Innovation, Systems and Technologies, vol. 187, pp. 445-457. Springer, Singapore. DOI: 10.1007/978-981-15-5580-

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9. Lopatkin N.N. Assessment of output voltage quality of three-phase multilevel inverter with nearest vector selecting space vector control // 2018 14th International Scientific-Technical Conference on Actual Problems of Electronics Instrument Engineering (APEIE), IEEE Conference # 44894, Russia, Novosibirsk, October 2-6, 2018, Proceedings. In 8 Volumes. Volume 1, part 6, pp. 158-163. DOI: 10.1109/APEIE.2018.8545194
10. Lopatkin N.N., Lucenko I.S., Chernov Y.A. Virtual instrument for assessment of simulated signal integrated harmonics factors // 2018 14th International Scientific-Technical Conference on Actual Problems of Electronics Instrument Engineering (APEIE), IEEE Conference # 44894, Russia, Novosibirsk, October 2-6, 2018, Proceedings. In 8 Volumes. Volume 1, part 6, pp. 152-157. DOI: 10.1109/APEIE.2018.8546280
11. Lopatkin N.N. Voltage THD and integrated voltage harmonics factors of three-phase multilevel voltage source inverter with nearest vector selecting space vector control // 2018 International Conference on Industrial Engineering, Applications and Manufacturing (ICIEAM), IEEE Conference # 43496, Russia, Moscow, May 15-18, 2018, Proceedings, pp. 1-6. DOI: 10.1109/ICIEAM.2018.8728711
12. Lopatkin N.N. New implementation of nearest vector selecting space vector control for three-phase multilevel voltage source inverter // 2018 International Conference on Industrial Engineering, Applications and Manufacturing (ICIEAM), IEEE Conference # 43496, Russia, Moscow, May 15-18, 2018, Proceedings, pp. 1-7. DOI: 10.1109/ICIEAM.2018.8729136
13. Lopatkin N.N., "Voltage source multilevel inverter voltage quality comparison under multicarrier sinusoidal PWM and space vector PWM of two delta voltages," SIBIRCON-2017, 2017 International Multi-Conference on Engineering, Computer and Information Sciences (SIBIRCON). Novosibirsk Akademgorodok. Russia, Novosibirsk, September 18-22, 2017. Proceedings, pp. 439-444. DOI: 10.1109/SIBIRCON.2017.8109923
14. Lopatkin N.N., "Simple space vector PWM scheme with quarter-wave symmetric output voltage waveform for three-phase multilevel inverter," SIBIRCON-2017, 2017 International Multi-Conference on Engineering, Computer and Information Sciences (SIBIRCON). Novosibirsk Akademgorodok. Russia, Novosibirsk, September 18-22, 2017. Proceedings, pp. 433-438. DOI: 10.1109/SIBIRCON.2017.8109922

15. Lopatkin N.N., "Voltage quality comparison of space vector PWM voltage source multilevel inverter under symmetric and nonsymmetric switching sequence variants: voltage waveforms, spectra and THD," ICIEAM-2017, 2017 3rd International Conference on Industrial Engineering, Applications and Manufacturing (ICIEAM). IEEE Conference # 40534. Peter the Great Saint-Petersburg Polytechnic University. Russia, St. Petersburg, May 16-19, 2017. Proceedings. Paper 3.4.58 (pp. 1-8). DOI: 10.1109/ICIEAM.2017.8076329

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Лопаткин Н.Н.

Сведения (подпись) Лопаткина Н.Н. заверяю.

Начальник отдела кадров

  
Грузова Ю.И.

«28» октября 2021 г.



### Сведения об официальном оппоненте

по диссертации Токарева Вадима Геннадьевича

на тему: «Способы повышения энергетической эффективности активных силовых фильтров»

по специальности 05.09.12 – «Силовая электроника», на соискание ученой степени кандидата технических наук

Ф.И.О. полностью	Лопаткин Николай Николаевич
Гражданство	Россия
Ученая степень	Кандидат технических наук
Шифр и название специальности по которой защищена диссертация оппонента, отрасль науки	05.09.03 – «Электротехнические комплексы и системы», технические науки
Ученое звание	Нет
Основное место работы:	
Полное наименование организации в соответствии с уставом	Федеральное государственное бюджетное образовательное учреждение высшего образования «Алтайский государственный гуманитарно-педагогический университет имени В.М. Шукшина»
Сокращенное наименование организации	ФГБОУ ВО АГПУ им. В.М. Шукшина
Ведомственная принадлежность организации	Министерство просвещения Российской Федерации (Минпросвещения России)
Почтовый адрес организации	659333, Россия, Алтайский край, г. Бийск, ул. Владимира Короленко, 53.
Телефон организации	+7 (3854) 41 64 56
Наименование подразделения организации	Кафедра математики, физики, информатики
Должность в организации	Доцент кафедры

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