

Analysis and static mode optimization of simultaneous inductive and capacitive coupled wireless power transfer system

Shevchenko, Viktor; Pakhaliuk, Bohdan; Husev, Oleksandr; Vinnikov, Dmitri; Strzelecki, Ryszard; Khomenko, Maksym 2023 IEEE 64th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), Riga, Latvia, October 9-10, 2023 : conference proceedings 2023 / 5 p <https://doi.org/10.1109/RTUCON60080.2023.10413112>

Automatic position detection and transmitting activation of dynamic wireless power transfer system with air capacitor

Pakhaliuk, Bohdan; Husev, Oleksandr; Shevchenko, Viktor; Kroics, Kaspars; Stepins, Deniss; Strzelecki, Ryszard Wireless Power Week (WPW) : Proceedings 2022 / p. 487-491 <https://doi.org/10.1109/WPW54272.2022.9853972>

Closed-loop control system design for wireless charging of low-voltage EV batteries with time-delay constraints

Shevchenko, Viktor; Pakhaliuk, Bohdan; Zakis, Janis; Veligorskyi, Oleksandr; Luszcz, Jaroslaw; Husev, Oleksandr; Lytvyn, Oksana; Matiushkin, Oleksandr Energies 2021 / art. 3934, 21 p. : ill <https://doi.org/10.3390/en14133934> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Coil design for wireless power transfer with series-parallel compensation

Shevchenko, Viktor; Husev, Oleksandr; Pakhaliuk, Bohdan; Karlov, Olexii; Kondratenko, Igor 2019 IEEE 2nd Ukraine Conference on Electrical and Computer Engineering (UKRCON) 2019 / p. 401-407 <https://doi.org/10.1109/UKRCON.2019.8879877>

Comparative evaluation of multicoil inductive power transfer approaches based on Z-source network

Pakhaliuk, Bohdan; Husev, Oleksandr; Strzelecki, Ryszard; Shevchenko, Viktor; Maksym, Khomenko 2019 IEEE 2nd Ukraine Conference on Electrical and Computer Engineering (UKRCON) 2019 / 5 p <https://doi.org/10.1109/UKRCON.2019.8880002>

Comparative evaluation of the air core magnetic design for MHz+ switching frequency

Matiushkin, Oleksandr; Pakhaliuk, Bohdan; Gutierrez-Escalona, Javier; Romero-Cadaval, Enrique; Husev, Oleksandr; Zakis, Janis Applied sciences 2025 / art. 8820 <https://doi.org/10.3390/app15168820>

Concept of wireless low-voltage DC socket for the residential house application

Shevchenko, Viktor; Husev, Oleksandr; Pakhaliuk, Bohdan; Vinnikov, Dmitri; Strzelecki, Ryszard IEEE Access 2024 / p. 143226-143236 <https://doi.org/10.1109/ACCESS.2024.3471691> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Design and simulation verification of low power wireless charging battery system for electric bicycle

Shevchenko, Viktor; Husev, Oleksandr; Pakhaliuk, Bohdan; Kondratenko, Igor 2018 IEEE 3rd International Conference on Intelligent Energy and Power Systems (IEPS) 2018 / p. 22-27 <https://doi.org/10.1109/IEPS.2018.8559531>

Effect of double-slope modulation signals on conducted emissions and efficiency of strongly coupled magnetic resonance WPT systems

Stepins, Deniss; Zakis, Janis; Audze, Janis; Husev, Oleksandr; Shevchenko, Viktor; Pakhaliuk, Bohdan 2019 IEEE 60th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2019 / 4 p <https://doi.org/10.1109/RTUCON48111.2019.8982351>

Effect of hybrid modulation on performance of wireless battery charger operating in CC/CV mode

Stepins, Deniss; Kathari, N.; Zakis, Janis; Husev, Oleksandr; Pakhaliuk, Bohdan; Shevchenko, Viktor IECON 2021 – 47th Annual Conference of the IEEE Industrial Electronics Society 2021 / 6 p <https://doi.org/10.1109/IECON48115.2021.9589544>

Feasibility study GaN transistors application in the novel split-coils inductive power transfer system with T-type inverter

Shevchenko, Viktor; Pakhaliuk, Bohdan; Husev, Oleksandr; Veligorskyi, Oleksandr; Stepins, Deniss; Strzelecki, Ryszard Industrial and Technological Applications of Power Electronics Systems 2021 / p. 315-330 <https://doi.org/10.3390/en13174535>

Feasibility study GaN transistors application in the novel split-coils inductive power transfer system with T-Type inverter

Shevchenko, Viktor; Pakhaliuk, Bohdan; Husev, Oleksandr; Veligorskyi, Oleksandr; Stepins, Deniss; Strzelecki, Ryszard Energies 2020 / art. 4535, 16 p. : ill <https://doi.org/10.3390/en13174535> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Inductive bifilar coil based wireless charging system for autonomous electric boat

Pakhaliuk, Bohdan; Husev, Oleksandr; Shevchenko, Viktor; Kroics, Kaspars; Stepins, Deniss; Strzelecki, Ryszard IEEE 31st International Symposium on Industrial Electronics (ISIE) 2022 / p. 758-761 <https://doi.org/10.1109/ISIE51582.2022.9831731>

Modified inductive multi-coil wireless power transfer approach based on Z-source network

Pakhaliuk, Bohdan; Husev, Oleksandr; Shevchenko, Viktor; Zakis, Janis; Khomenko, Maksym; Strzelecki, Ryszard IEEE journal of emerging and selected topics in power electronics 2021 / p. 4906-4917: ill <https://doi.org/10.1109/JESTPE.2020.3041565> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Multivariable optimal control of wireless power transfer systems with series-parallel compensation

Pakhaliuk, Bohdan; Husev, Oleksandr; Shevchenko, Viktor; Zakis, Janis; Stepins, Deniss 2019 IEEE 60th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2019 / 5 p

<https://doi.org/10.1109/RTUCON48111.2019.8982314>

Novel inductive power transfer approach based on Z-source network with compensation circuit

Pakhaliuk, Bohdan; **Husev, Oleksandr**; Shevchenko, Viktor; Veligorskyi, Oleksandr; Kroics, Kaspars 2018 IEEE 38th International Conference on Electronics and Nanotechnology (ELNANO 2018) : Kyiv, Ukraine, 24-26 April 2018 / p. 699-704 : ill <http://dx.doi.org/10.1109/ELNANO.2018.8477455>

Optimal rotating receiver angles estimation for multicoil dynamic wireless power transfer

Pakhaliuk, Bohdan; Shevchenko, Viktor; Mućko, Jan; **Husev, Oleksandr**; Lukianov, Mykola; Kołodziejek, Pjotr; Strzelecka, Natalia; Strzelecki, Ryszard Energies 2021 / art. 6144, 15 p. : ill <https://doi.org/10.3390/en14196144> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Power converter solutions for industrial PV applications — a review

Verbytskyi, Ievgen; Lukianov, Mykola; Nassereddine, Kawsar; Pakhaliuk, Bohdan; **Husev, Oleksandr**; Strzelecki, Ryszard Energies 2022 / art. 3295 <https://doi.org/10.3390/en15093295> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Single switch multi-winding wireless power transfer system based on Z-source network

Kroics, Kaspars; **Husev, Oleksandr**; Pakhaliuk, Bohdan 2018 20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe) : Riga, Latvia, 17-21 September 2018 / p. 2465-2474 : ill <https://ieeexplore.ieee.org/document/8515602>

Wireless charging station design for electric scooters : case study analysis

Shevchenko, Viktor; Pakhaliuk, Bohdan; **Husev, Oleksandr**; Vinnikov, Dmitri; Strzelecki, Ryszard Energies 2024 / art. 2472 <https://doi.org/10.3390/en17112472> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)