

An interleaved ZVS high step-up converter for renewable energy systems applications

Nouri, Tohid; Branch, Sari; Shانه, Mahdi; Benbouzid, Mohamed; **Vosoughi Kurdkandi, Naser** IEEE Transactions on Industrial Electronics 2022 / p. 4786-4800 <https://doi.org/10.1109/TIE.2021.3080211> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparative analysis of buck-boost inverters based on unfolding circuit versus H5, H6, HERIC topologies

Matiushkin, Oleksandr; Husev, Oleksandr; Vinnikov, Dmitri; Vosoughi Kurdkandi, Naser 2022 International Symposium on Power Electronics, Electrical Drives, Automation and Motion (SPEEDAM) 2022 / p. 547-552 <https://doi.org/10.1109/SPEEDAM53979.2022.9842282>

Comparative evaluation of common-ground converters for dual-purpose application

Hemmati Shahsavari, Tala; Rahimpour, Saeed; Vosoughi Kurdkandi, Naser; Fesenko, Artem; Matiushkin, Oleksandr; Husev, Oleksandr; Vinnikov, Dmitri Energies 2023 / art. 2977 <https://doi.org/10.3390/en16072977> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparative evaluation of dual-purpose converters suitable for application in dc and ac grids

Husev, Oleksandr; Matiushkin, Oleksandr; Jalakas, Tanel; Vinnikov, Dmitri; Vosoughi Kurdkandi, Naser IEEE journal of emerging and selected topics in power electronics 2024 / p. 1337-1347 <https://doi.org/10.1109/JESTPE.2023.3243857> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparative study of the phase-integrated converter as universal power converter

Husev, Oleksandr; Matiushkin, Oleksandr; Vinnikov, Dmitri; Vosoughi Kurdkandi, Naser; Kouro, Samir Annual IEEE Conference on Applied Power Electronics Conference and Exposition (APEC) 2022 / p. 58-63 <https://doi.org/10.1109/APEC43599.2022.9773553> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Comparison of grid-connected flyback-based microinverter with primary and secondary side decoupling approach

Afshari, Hossein; Husev, Oleksandr; Vinnikov, Dmitri; Matiushkin, Oleksandr; Vosoughi Kurdkandi, Naser 2022 IEEE 63th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON): conference proceedings 2022 / p. 1-6 <https://doi.org/10.1109/RTUCON56726.2022.9978855>

Control of a three-input DC-DC converter suitable for DC motors

Alizadeh Asl, Amin; Hosseini, Seyed Hossein; **Vosoughi Kurdkandi, Naser**; Alizadeh Asl, Ramin International transactions on electrical energy systems 2022 / art. 4264649, 20 p. : ill <https://doi.org/10.1155/2022/4264649> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A dual-buck-boost DC-DC/AC universal converter

Ong, Yao Rong; Cao, Shuyu; Lee, Sze Sing; Lim, Chee Shen; Chen, Max M.; **Vosoughi Kurdkandi, Naser**; Barzegarkhoo, Reza; Siwakoti, Yam P. Electronics (Switzerland) 2022 / art. 1973 <https://doi.org/10.3390/electronics11131973> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Fault management techniques to enhance the reliability of power electronic converters : an overview

Rahimpour, Saeed; Husev, Oleksandr; Vinnikov, Dmitri; Vosoughi Kurdkandi, Naser; Tarzamni, Hadi IEEE Access 2023 / p. 13432-13446 <https://doi.org/10.1109/ACCESS.2023.3242918> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

An improved nine-level switched capacitor-based inverter with voltage boosting capability and limitation of capacitor current spikes for PV applications

Vosoughi Kurdkandi, Naser; Marangalu, Milad Ghavipanjeh; Naderi, Yahya; **Husev, Oleksandr**; Hosseini, Seyed Hossein; Siwakoti, Yam P.; Mehrizi-Sani, Ali IET renewable power generation 2023 / p. 725-749 <https://doi.org/10.1049/rpg2.12630> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

An improved ZVS high step-up converter based on coupled inductor and built-in transformer

Nouri, Tohid; **Vosoughi Kurdkandi, Naser; Husev, Oleksandr** IEEE transactions on power electronics 2021 / p. 13802-13816 : ill <https://doi.org/10.1109/TPEL.2021.3088092> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A new five-level switched capacitor-based grid-connected inverter with common grounded feature

Vosoughi Kurdkandi, Naser; Marangalu, Milad Ghavipanjeh; Islam, Md. Rabiul 2021 IEEE 6th International Conference on Computing, Communication and Automation (ICCCA) 2021 / p. 749-754 <https://doi.org/10.1109/ICCCA52192.2021.9666335>

A new flying capacitor-based buck-boost converter for dual-purpose applications

Hemmati Shahsavari, Tala; Vosoughi Kurdkandi, Naser; Husev, Oleksandr; Babaei, Ebrahim; Sabahi, Mehran; Khoshkbar-Sadigh, Arash; Vinnikov, Dmitri IEEE journal of emerging and selected topics in industrial electronics 2023 / p. 447-459 <https://doi.org/10.1109/JESTIE.2023.3238322>

A new seven-level transformer-less grid-tied inverter with leakage current limitation and voltage boosting feature

Vosoughi Kurdkandi, Naser; Marangalu, Milad Ghavipanjeh; **Husev, Oleksandr**; Aghaie, Amir; Islam, Md. Rabiul; Siwakoti, Yam

P.; Muttaqi, Kashem; Hosseini, Seyed Hossein IEEE journal of emerging and selected topics in industrial electronics 2023 / p. 228-241 <https://doi.org/10.1109/JESTIE.2022.3205546>

A new single-phase flying inductor-based common grounded converter for dual-purpose application

Husev, Oleksandr; Vosoughi Kurdkandi, Naser; Marangalu, Milad Ghavipanjeh; **Vinnikov, Dmitri;** Hosseini, Seyed Hossein IEEE transactions on industrial electronics 2023 / p. 7913-7923 <https://doi.org/10.1109/TIE.2022.3215832> [Journal metrics at Scopus](#)
[Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A new six-level transformer-less grid-connected solar photovoltaic inverter with less leakage current

Vosoughi Kurdkandi, Naser; Marangalu, Milad Ghavipanjeh; Mohammadsalehian, Shamim; Tarzamni, Hadi; Siwakoti, Yam P.; Islam, Md. Rabiul; Muttaqi, Kashem M. IEEE Access 2022 / p. 63736 - 63753: ill <https://doi.org/10.1109/ACCESS.2022.3182240> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A novel flying inductor based grid-connected inverter with buck-boost ability

Vosoughi Kurdkandi, Naser; Husev, Oleksandr; Rahimpour, Saeed; Roncero-Clemente, Carlos; **Matiushkin, Oleksandr; Vinnikov, Dmitri** IECON 2022 - 48th Annual Conference of the IEEE Industrial Electronics Society 2022 / 6 p <https://doi.org/10.1109/IECON49645.2022.9968954> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Optimal tuning of resonant and repetitive based controller for single-phase buck-boost inverter with unfolding circuit

Husev, Oleksandr; Belikov, Juri; Matiushkin, Oleksandr; Vinnikov, Dmitri; Ahmadiyahangar, Roya; Vosoughi Kurdkandi, Naser IEEE journal of emerging and selected topics in industrial electronics 2022 / p. 954-965 <https://doi.org/10.1109/JESTIE.2021.3121190>

An overview of lifetime management of power electronic converters

Rahimpour, Saeed; Tarzamni, Hadi; Vosoughi Kurdkandi, Naser; Husev, Oleksandr; Vinnikov, Dmitri; Tahami, Farzad IEEE Access 2022 / p. 109688-109711 <https://doi.org/10.1109/ACCESS.2022.3214320> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

PCB design impact on GaN-Based converter operation

Husev, Oleksandr; Jalakas, Tanel; Vinnikov, Dmitri; Vosoughi Kurdkandi, Naser; Persson, Eric 2023 IEEE Applied Power Electronics Conference and Exposition (APEC), 19-23 March 2023 : proceedings 2023 / p. 640-650 <https://doi.org/10.1109/APEC43580.2023.10131547> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

A three-phase unfolding-based PFC topology with two inductors for electric vehicles battery charging

Mohseni, Parham; Husev, Oleksandr; Vinnikov, Dmitri; Matiushkin, Oleksandr; Vosoughi Kurdkandi, Naser 2023 IEEE 64th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), Riga, Latvia, October 9-11, 2023 : conference proceedings 2023 / 6 p <https://doi.org/10.1109/RTUCON60080.2023.10413182>

Ultra-high step-up DC-DC converters based on center-tapped inductors

Tarzamni, Hadi; **Vosoughi Kurdkandi, Naser;** Gohari, Homayon Soltani; Lehtonen, Matti; **Husev, Oleksandr;** Blaabjerg, Frede IEEE Access 2021 / p. 136373-136383 : ill <https://doi.org/10.1109/ACCESS.2021.3117856> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)