

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

Nouri, Tohid; Branch, Sari; Shانه, Mahdi; Benbouzd, 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>

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

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### **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**

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

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

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### **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 Ghavipankeh; 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**

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

**Vosoughi Kurdkandi, Naser**; Marangalu, Milad Ghavipankeh; 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 Ghavipankeh; **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-

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

**Husev, Oleksandr; Vosoughi Kurdkandi, Naser;** Marangalu, Milad Ghavipankeh; **Vinnikov, Dmitri;** Hosseini, Seyed Hossein  
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**A new six-level transformer-less grid-connected solar photovoltaic inverter with less leakage current**

**Vosoughi Kurdkandi, Naser;** Marangalu, Milad Ghavipankeh; Mohammadsalehian, Shamim; Tarzamni, Hadi; Siwakoti, Yam P.;  
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**A novel flying inductor based grid-connected inverter with buck-boost ability**

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**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,**  
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**An overview of lifetime management of power electronic converters**

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**PCB design impact on GaN-Based converter operation**

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

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

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