2013–2020 Index to Feature Articles
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This index covers all feature articles that appeared in IEEE Electrification Magazine during 2013–2020. The Author Index contains the primary entry for each article, listed under the first author's name. The primary entry includes the coauthors' names, the title of the article, and its location, specified by the publication abbreviation, year, month, and year, and inclusive pagination. The Subject Index contains entries describing the article under all appropriate subject headings, plus the first author's name, the publication abbreviation, month, and year, and inclusive pages. Note that the article title is found only under the primary entry in the Author Index. (Index entries have been compiled from the 2013 through 2020 year-end indexes.)

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Rural Electrification Goes Local: Recent innovations in renewable generation, energy efficiency, and grid modernization. Yuan, G., MELEC March 2015 16-24

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Locally Manufactured Small Wind Turbines: Empowering communities for sustainable rural electrification. Latouis, K., +, MELEC March 2015 68-78
Remote Off-Grid Solutions for Greenland and Denmark: Using Smart-Grid Technologies to Ensure Secure, Reliable Energy for Island Power Systems. Wu, Q., +, MELEC June 2017 64-73

Wireless communication

Wireless power transfer

Wireless sensor networks

Wiring

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Yttrium barium copper oxide
An Electric Roadway System Leveraging Dynamic Capacitive Wireless Charging: Furthering the Continuous Charging of Electric Vehicles. Zhang, H., +,
*MELEC June 2020 52-60*

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