

Wireless, Aerospace & Satellite Communications

April 15-16, 2019 | Amsterdam, Netherlands

Recent PAPR Reduction Techniques for OFDM Systems

Orthogonal frequency division multiplexing (OFDM) is a promising multi-carrier modulation technique and has been widely used for wireless communications systems. OFDM is inherently high-bandwidth efficient, but we cannot avoid bandwidth inefficiency to remedy the increased peak-to-average power (PAPR) issue in OFDM systems. In this talk, we consider the bandwidth inefficiency issue of some PAPR reduction techniques for OFDM systems. Two schemes are introduced to cope with the issue. One is null-subcarrier's switching approach and the other is subcarrier group modulation (SGM) approach. Especially, the latter one accomplishes bandwidth efficient communications. Some simulations results are shown and it is unveiled that both approaches are interesting and play an important role for OFDM systems.

Biography

Tetsuya Shimamura has completed his PhD from Keio University in 1991. He was Dean of Information Technology Centre at Saitama University and is a full professor currently there. He has published over 90 refereed journal articles and 220 international conference proceedings papers. He is an author or co-author of eight books, and a member of the organizing committee of several international conferences. He has received IEEE PACRIM, Gold Paper Award, in 2012, WSEAS MUSP, Best Paper Award, in 2013, and IEEE IFOST, Best Paper Award, in 2014. Also, he is a recipient of Journal of Signal Processing, Best Paper Award, in 2013, 2015, and 2016.

shima@sie.ics.saitama-u.ac.jp



Tetsuya Shimamura

Saitama University, JAPAN