Retraction

Retracted: Modeling, Real-Time Estimation, and Identification of UWB Indoor Wireless Channels

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International Journal of Antennas and Propagation has retracted the article titled “Modeling, Real-Time Estimation, and Identification of UWB Indoor Wireless Channels” [1]. The article was found to contain a substantial amount of material from the following published article: Yanyan Li, Mohammed Olama, Seddik Djouadi, Aly Fathy, Teja Kuruganti: "Stochastic UWB wireless channel modeling and estimation from received signal measurements." Radio and Wireless Symposium, pp. 195–198. IEEE, 2009.

The reuse includes most of the introduction, some of the methods and results, and all the conclusion. The authors do not agree with this retraction as Li et al. were cited as "Some preliminary results using SDEs to model UWB channels were presented initially in [19]."

The authors believe that the approximation of the time-varying wireless channel impulse response is more general and harder to prove and solve (providing the arbitrary order approximation while Li et al. provided the fixed order approximation). The proof of Theorem 2 is different and required additional steps. New stochastic models for indoor wireless channels and their statistics are provided (eq. (26)–(28)), as well as new stochastic models for UWB indoor wireless channels and their statistics (eq. (30)–(32)) and generalized forms of the models in Li et al.’s study. The received signal $y(t)$ has triple summations and a phase term, while the received signal in Li et al.’s study (eq. (14)) has only double summations without a phase term.

References