



# Research Letters in Communications

[About this Journal](#) [Submit a Manuscript](#) [Table of Contents](#)



## Journal Menu

- Abstracting and Indexing
- Aims and Scope
- Article Processing Charges
- Articles in Press
- Author Guidelines
- Bibliographic Information
- Contact Information
- Conference Sponsorships
- Editorial Board
- Editorial Workflow
- Reviewers Acknowledgment
- Subscription Information

[Call for Proposals for Special Issues](#)

Research Letters in Communications  
Volume 2008 (2008), Article ID 291858, 3 pages  
doi:10.1155/2008/291858

## Research Letter

### A Low-Overhead Cooperative Retransmission Scheme for IR-UWB Networks

Ghasem Naddafzadeh Shirazi,<sup>1,2</sup> Peng-Yong Kong,<sup>1,2</sup> and Chen-Khong Tham<sup>1,2</sup>

<sup>1</sup>Department of Electrical & Computer Engineering, Faculty of Engineering, National University of Singapore, 117576, Singapore

<sup>2</sup>Institute for Infocomm Research, Agency for Science, Technology, and Research (A\*STAR), 138632, Singapore

Received 29 September 2008; Accepted 3 December 2008

Academic Editor: Luca De Nardis

## Abstract

The UWB unique properties such as fine ranging and immunity to small scale fading are utilized in order to exploit the multiuser diversity in UWB networks. The optimal cooperation strategies in the absence of control packet overhead are analyzed in the proactive and reactive settings. It is shown that the proposed method achieves a considerable diversity gain while minimizing the overhead of control packet exchange that is required for coordination among the relays.

- Abstract
- Full-Text PDF
- Full-Text HTML
- Linked References
- How to Cite this Article