

LIST OF PUBLICATIONS

Dr. Markku Juntti

10 January 2018

A. Peer-Reviewed Scientific Articles

A.1 International Journal Articles

1990s

1. **M. J. Juntti** & B. Aazhang, "Finite memory-length linear multiuser detection for asynchronous CDMA communications". IEEE Transactions on Communications, vol. 45, no. 5, pp. 611–622, May 1997.
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=592564>
2. **M. J. Juntti**, B. Aazhang & J. O. Lilleberg, "Iterative implementation of linear multiuser detectors for dynamic CDMA systems". IEEE Transactions on Communications, vol. 46, no. 4, pp. 503–508, April 1998.
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=664306>
3. **M. J. Juntti** & M. Latva-aho, "Bit error probability analysis of linear receivers for CDMA systems in frequency-selective fading channels". IEEE Transactions on Communications, vol. 47, no. 12, pp. 1788–1791, December 1999.
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=809697>
4. **M. J. Juntti**, "Performance of multiuser detection in multirate CDMA systems". Wireless Personal Communications, vol. 11, no. 3, pp. 293–311, December 1999.
<http://link.springer.com/article/10.1023/A%3A1018628807970>
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5. **M. J. Juntti**, "Performance analysis of linear multisensor multiuser receivers for CDMA in fading channels". IEEE Journal on Selected Areas in Communications – Wireless Communications Series, vol. 18, no. 7, pp. 1221–1229, July 2000.
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=857922>
6. **M. J. Juntti** & M. Latva-aho, "Multiuser receivers for CDMA systems in Rayleigh fading channels". IEEE Transactions on Vehicular Technology, vol. 49, no. 3, pp. 885–899, May 2000.
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=845107>
7. M. Latva-aho & **M. Juntti**, "LMMSE detection for DS-CDMA systems in fading channels". IEEE Transactions on Communications, vol. 48, no. 2, pp. 194–199, February 2000.
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=823551>

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8. Dj. Tujkovic, **M. Juntti** & M. Latva-aho, "Space-frequency-time turbo coded modulation". IEEE Communications Letters, vol. 5, no. 12, pp. 480–482, December 2001.
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=974492>

2002

9. K. Hooli, **M. Juntti**, M. Heikkilä, P. Komulainen, M. Latva-aho & J. Lilleberg, "Chip-level channel equalization in WCDMA downlink". EURASIP Journal on Applied Signal Processing, Special Issue on 3G Wireless Communications and Beyond, vol. 2002, no. 8, pp. 757–770, August 2002.
<http://asp.erasipjournals.com/content/pdf/1687-6180-2002-180318.pdf>
10. D. M. Novakovic, **M. J. Juntti** & M. L. Dukic, "Generalized full/partial closed loop transmit diversity". IEE Electronics Letters, vol. 38, no. 24, pp. 1588–1589, November 21, 2002.
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1106134>
11. Dj. Tujkovic, **M. Juntti** & M. Latva-aho, "Space-time turbo coded modulation: Design and applications". EURASIP Journal on Applied Signal Processing, Special Issue on Space-Time Coding, vol. 2002, no. 3, pp. 236–248, March 2002.
<http://asp.erasipjournals.com/content/pdf/1687-6180-2002-253824.pdf>

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12. D. M. Novakovic, **M. J. Juntti** & M. L. Dukic, "Generalized full/partial closed loop transmit diversity algorithm for WCDMA". European Transactions on Telecommunications, vol. 14, no. 5, pp. 471–477, September/October 2003.

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13. **M. J. Juntti**, A. Rabbachin & K. Pajukoski, "Blind spreading factor detection for DS-CDMA". IEEE Transactions on Communications, vol. 52, no. 9, pp. 1453–1458, September 2004.
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14. D. Drajić, K. Hooli & **M. Juntti**, "Turbo coding with equalization in WCDMA downlink". Wireless Personal Communications, vol. 28, no. 4, pp. 259–276, March 2004.
<http://link.springer.com/article/10.1023/B%3AWIRE.0000033599.08396.ef>
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15. S. Tsumura, M. Vehkaperä, Z. Li, Dj. Tujkovic, **M. Juntti** & S. Hara, "Performance evaluation of turbo and space-time turbo coded MC-CDMA downlink in single and multi-cell environments". IEICE Transactions on Communications, vol. E87-B, no. 10, pp. 3011–3020, Oct. 2004.
16. N. Veselinovic, T. Matsumoto & **M. Juntti**, "A PDF estimation-based iterative MIMO signal detection with unknown interference". IEEE Communications Letters, vol. 8, no. 7, pp. 422–424, July 2004.
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17. N. Veselinovic, T. Matsumoto & **M. Juntti**, "Iterative MIMO multiuser detection and equalization for STTrC coded system with unknown interference". EURASIP Journal on Wireless Communications and Networking, Special Issue on Special Issue on Multiuser MIMO Networks, vol. 2004, no. 2, pp. 309–321, December 2004.
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18. **M. Juntti**, M. Vehkaperä, J. Leinonen, S. Tsumura, Z. Li, Dj. Tujkovic, & S. Hara, "MC-CDMA MIMO communications for future cellular systems". IEEE Communications Magazine, vol. 43, no. 2, pp. 118–124, February 2005.
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19. S. Aromaa, P. Henttu & **M. Juntti**, "Transform selective interference suppression algorithm for spread spectrum communications". IEEE Signal Processing Letters, vol. 12, no. 1, pp. 49–51, January 2005.
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1369272>
20. J. Lehtomäki & **M. Juntti**, "Detection of frequency hopping signals using a sweeping channelized radiometer". Signal Processing, Elsevier, vol. 85, no. 10, pp. 2030–2043, October 2005.
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21. J. Lehtomäki, **M. Juntti**, H. Saarnisaari & S. Koivu, "Threshold setting strategies for a quantized total power radiometer". IEEE Signal Processing Letters, vol. 12, no. 11, pp. 796–799, November 2005.
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22. J. Lehtomäki, **M. Juntti** & H. Saarnisaari, "CFAR strategies for channelized radiometer". IEEE Signal Processing Letters, vol. 12, no. 1, pp. 13–16, January 2005.
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23. H. Miao & **M. Juntti**, "Space-time channel estimation and performance analysis for wireless MIMO-OFDM systems with spatial correlation". IEEE Transactions on Vehicular Technology, vol. 54, no. 6, pp. 2003–2016, November 2005.
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<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1413579>
25. M. Vehkaperä, Dj. Tujkovic, Z. Li & **M. Juntti**, "Receiver design for spatially layered downlink MC-CDMA system". IEEE Transactions on Vehicular Technology, vol. 54, no. 3, pp. 1042–1055, May 2005.
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1433249>
26. N. Veselinovic, T. Matsumoto & **M. Juntti**, "Iterative PDF estimation-based multiuser diversity detection and channel estimation with unknown interference". EURASIP Journal on Applied Signal Processing, Special Issue on Turbo Processing, vol. 2005, no. 6, pp. 872–882, May 2005.
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<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4275011>
30. J. Antikainen, P. Salmela, O. Silven, **M. Juntti**, J. Takala & M. Myllylä, "Application-specific instruction set processor implementation of list sphere detector". EURASIP Journal on Embedded Systems, vol. 2007, article 54173, 14 pages.
<http://www.hindawi.com/getarticle.aspx?doi=10.1155/2007/54173>
31. M. Codreanu, **M. Juntti** & M. Latva-aho, "Low complexity iterative algorithm for finding the MIMO-OFDM broadcast channel sum capacity". IEEE Transactions on Communications, vol. 55, no. 1, pp. 48–53, January 2007.
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4063495>
32. M. Codreanu, **M. Juntti** & M. Latva-aho, "On the dual decomposition based sum capacity maximization for vector broadcast channels". IEEE Transactions on Vehicular Technology, vol. 56, no. 6, pp. 3577–3581, November 2007.
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33. M. Codreanu, A. Tölli, **M. Juntti** & M. Latva-aho, "Joint design of Tx-Rx beamformers in MIMO downlink channel". IEEE Transactions on Signal Processing, vol. 55, no. 9, pp. 4639–4655, September 2007.
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37. J. J. Lehtomäki, J. Vartiainen, **M. Juntti** & H. Saarnisaari, "Analysis of the LAD methods". IEEE Signal Processing Letters, vol. 15, pp. 237–240, 2008.
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41. P. Komulainen, A. Tölli, M. Latva-aho & **M. Juntti**, "Downlink assisted uplink zero-forcing for TDD multiuser MIMO systems". EURASIP Journal on Wireless Communications and Networking, Special Issue on 3GPP LTE and LTE Advanced, vol. 2009, 11 pages.
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42. J. Leinonen, J. Hämäläinen & **M. Juntti**, "Performance analysis of downlink OFDMA resource allocation with limited feedback". IEEE Transactions on Wireless Communications, vol. 8, no. 6, pp. 2927–2937, June 2009.
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43. J. Ylioinas & **M. Juntti**, "Iterative joint detection, decoding, and channel estimation in turbo coded MIMO-OFDM". IEEE Transactions on Vehicular Technology, vol. 58, no. 4, pp. 1784–1796, May 2009.
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47. J. Vartiainen, J. Lehtomäki, H. Saarnisaari, **M. Juntti** & K. Umebayashi, "Two-dimensional signal localization algorithm for spectrum sensing". IEICE Transactions on Communications, vol. E93-B, no. 11, pp. 3129-3136, November 2010.
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