

John M. Cioffi
Department of Electrical Engineering

Research Publications

Conference and Symposium Publications

1. J. M. Cioffi and T. Kailath, "Fast, Fixed-order, Least-squares Algorithms for Adaptive Filtering.," in *ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings*, 1983, vol. 2, pp. 679–682. DOI: [10.1109/ICASSP.1983.1172033](https://doi.org/10.1109/ICASSP.1983.1172033)
2. J. M. Cioffi and T. Kailath, "A Classification of Fast, Fixed-Order, RLS Algorithms," in *1984 Digital Signal Processing Workshop, Boston, Massachusetts*, 1984, pp. 1.1.1, pp. 1–2.
3. J. M. Cioffi and T. Kailath, "Efficient, Recursive-Least-Squares, Fractionally Spaced Equalizer Using Intersymbol Interpolation.," in *Conference Record - International Conference on Communications*, 1984, vol. 1, pp. 369–372.
4. J. M. Cioffi and T. Kailath, "Efficient, RLS, Data-Driven Echo Canceller for Fast Initialization of Full-duplex Data Transmission.," in *Conference Record - International Conference on Communications*, 1985, pp. 1503–1507.
5. J. M. Cioffi, "Multidimensional Trellis Codes for Areal Density Gains," in *IBM Symposium on the Use of Signal Processing and Coding, Tucson, Arizona, May 1985*, 1985, pp. 32.3.1, pp. 1241–1244.
6. J. M. Cioffi, "The Block-Processing FTF Adaptive Algorithm," in *IEEE International Conference on ASSP, Tampa, Florida, March 1985*, 1985, pp. 636–639. DOI: [10.1109/ICASSP.1985.1168388](https://doi.org/10.1109/ICASSP.1985.1168388)
7. J. M. Cioffi, "When Do I Use An RLS Adaptive Filter?," in *Conference Record. Nineteenth Asilomar Conference on Circuits, Systems and Computers (Cat. No.86CH2331-7)*, 1985, pp. 636–639. DOI: [10.1109/ACSSC.1985.671538](https://doi.org/10.1109/ACSSC.1985.671538)
8. J. M. Cioffi, "Covariance RLS Lattice for Adaptive Filtering.," in *ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings*, 1986, pp. 2115–2118. DOI: [10.1109/ICASSP.1986.1169193](https://doi.org/10.1109/ICASSP.1986.1169193)
9. J. M. Cioffi and C. M. Melas, "Evaluating the Performance of Maximum Likelihood Sequence Detection for the Magnetic Recording Channel," in *Globecom '86, Houston, Texas, December 1986*, 1986, pp. 1066–1070.

10. J. M. Cioffi, "A Fast Echo Canceller Initialization Method for the CCITT V.32 Modem, invited paper," in *Asilomar '87, Pacific Grove, California*, 1987.
11. J. M. Cioffi, "A Fast Echo Canceller Initialization Method for the CCITT V.32 Modem," invited paper," in *Globecom '87, Tokyo, Japan, December 1987*, 1987, pp. 1950–1954.
12. H. Lev-Ari, J. M. Cioffi, and T. Kailath, "Continuous-Time Least-squares Fast Transversal Filters.," in *Acoustics, Speech, and Signal Processing, IEEE International Conference on ICASSP '87.*, 1987, vol. 12, pp. 415–418. DOI: [10.1109/ICASSP.1987.1169712](https://doi.org/10.1109/ICASSP.1987.1169712)
13. J. M. Cioffi, "Fast QR/frequency-domain RLS Adaptive Filter.," in *ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings*, 1987, pp. 407–410. DOI: [10.1109/ICASSP.1987.1169610](https://doi.org/10.1109/ICASSP.1987.1169610)
14. D. T. M. Slock, J. M. Cioffi, and T. Kailath, "Fast Transversal Filter for Adaptive Line Enhancement.," in *ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings*, 1987, pp. 419–422. DOI: [10.1109/ICASSP.1987.1169657](https://doi.org/10.1109/ICASSP.1987.1169657)
15. A. Ruiz and J. M. Cioffi, "Frequency Domain Approach to Combined Spectral Shaping and Coding.," in *Conference Record - International Conference on Communications*, 1987, pp. 1711–1715.
16. J. M. Cioffi, "Limited Precision Effects in Adaptive Filtering," in *Conference Record - Asilomar Conference on Circuits, Systems & Computers*, 1987, pp. 277–281.
17. J. M. Cioffi, "Pipelined Fast QR-RLS Structure for High-speed VLSI Implementation of Adaptive Filters," in *Conference Record - International Conference on Communications*, 1987, pp. 853–857.
18. J. M. Cioffi, W. L. Abbott, and K. D. Fisher, "A Survey Of Adaptive Equalization For Magnetic-disk Storage Channels," in *Signals, Systems and Computers, 1988. Twenty-Second Asilomar Conference on*, 1988, vol. 1, pp. 20–24. DOI: [10.1109/ACSSC.1988.753945](https://doi.org/10.1109/ACSSC.1988.753945)
19. K. D. Fisher, J. M. Cioffi, and C. M. Melas, "An Adaptive Decision Feedback Equalizer for Mitigating Nonlinear ISI in Thin-film Storage Channels, invited paper," in *IEEE DSP '88 Workshop, Stanford Sierra Camp, California, September 17, 1988*, 1988, pp. 6.8.1–6.8.2.
20. A. Ruiz, J. M. Cioffi, and S. Kasturia, "Frequency Designed Coset Codes for Spectrally Constrained Channels," in *IBM Corporation, US Research Centers*, 1988, p. 38 pages.

21. J. M. Cioffi, "High-Speed Systolic Implementation of Fast QR Adaptive Filters," in *ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings*, 1988, vol. 3, pp. 1584–1587. DOI: [10.1109/ICASSP.1988.196912](https://doi.org/10.1109/ICASSP.1988.196912)
22. W. L. Abbott, J. M. Cioffi, and H. K. Thapar, "Offtrack Interference and Equalization in Magnetic Recording," in *Intermag'88, Vancouver, Canada, July 1988*, 1988, pp. 2964–2966.
23. J. M. Cioffi, P. Fortier, and S. Kasturia, "Pipelining the Decision Feedback Equalizer, invited paper," in *IEEE DSP'88 Workshop, Stanford Sierra Camp, California, September 17, 1988*, 1988, pp. 6.9.1–6.9.2.
24. J. M. Cioffi, "Precision-efficient use of block adaptive algorithms in data-driven echo cancellers," in *IEEE International Conference on Communications*, 1988, pp. 355–359. DOI: [10.1109/ICC.1988.13590](https://doi.org/10.1109/ICC.1988.13590)
25. S. Kasturia, G. P. Dudevoir, J. M. Cioffi, and A. Ruiz, "Spectrally constrained codes for high rate ISDN subscriber loop.," in *IEEE International Conference on Communications, 1988.*, 1988, vol. 1, pp. 96–100. DOI: [10.1109/ICC.1988.13542](https://doi.org/10.1109/ICC.1988.13542)
26. J. T. Aslanis, S. Kasturia, G. P. Dudevoir, and J. M. Cioffi, "Vector coding for partial response channels," in *Proceedings - IEEE Military Communications Conference*, 1988, vol. 2, pp. 667–671. DOI: [10.1109/MILCOM.1988.13461](https://doi.org/10.1109/MILCOM.1988.13461)
27. S. Kasturia and J. M. Cioffi, "Vector coding with decision feedback equalization for partial response channels," in *Global Telecommunications Conference, 1988, and Exhibition.*, 1988, pp. 853–857. DOI: [10.1109/GLOCOM.1988.25959](https://doi.org/10.1109/GLOCOM.1988.25959)
28. K. D. Fisher, J. M. Cioffi, and C. M. Melas, "An Adaptive DFE for Storage Channels Suffering from Nonlinear ISI, invited paper," in *ICC'89, June 1989, Boston, Massachusetts*, 1989, Vol. 3, pp. 1638–1642. DOI: [10.1109/ICC.1989.49954](https://doi.org/10.1109/ICC.1989.49954)
29. H. K. Thapar and J. M. Cioffi, "Block processing method for designing high-speed Viterbi detectors," in *Conference Record - International Conference on Communications*, 1989, vol. 2, pp. 1096–1100. DOI: [10.1109/ICC.1989.49853](https://doi.org/10.1109/ICC.1989.49853)
30. J. T. Aslanis and J. M. Cioffi, "Capacity and cutoff rate of the digital subscriber loop with near end crosstalk noise," in *Conference Record - International Conference on Communications*, 1989, vol. 2, pp. 1075–1079. DOI: [10.1109/ICC.1989.49849](https://doi.org/10.1109/ICC.1989.49849)
31. W. L. Abbott, J. M. Cioffi, and H. K. Thapar, "Channel equalization methods for magnetic storage," in *Conference Record - International Conference on Communications*, 1989, vol. 3, pp. 1618–1622. DOI: [10.1109/ICC.1989.49950](https://doi.org/10.1109/ICC.1989.49950)

32. G. P. Dudevoir, J. S. Chow, J. M. Cioffi, and S. Kasturia, "Combined equalization and coding for T1 data rates on carrier serving area subscriber loops," in *Conference Record - International Conference on Communications*, 1989, vol. 1, pp. 536–540. DOI: [10.1109/ICC.1989.49754](https://doi.org/10.1109/ICC.1989.49754)
33. W. L. Abbott and J. M. Cioffi, "Combined equalization and coding on the binary lorentzian storage channel," in *Twenty-Third Asilomar Conference on Signals, Systems and Computers, 1989*, 1989, pp. 471–475, vol. 1. DOI: [10.1109/ACSSC.1989.1200835](https://doi.org/10.1109/ACSSC.1989.1200835)
34. R. A. Ziegler and J. M. Cioffi, "A comparison of least squares and gradient adaptive equalization for multipath fading in wideband digital mobile radio," in *IEEE Global Telecommunications Conference and Exhibition*, 1989, vol. 1, pp. 102–106. DOI: [10.1109/GLOCOM.1989.63948](https://doi.org/10.1109/GLOCOM.1989.63948)
35. J. C. Tu, J. S. Chow, G. P. Dudevoir, and J. M. Cioffi, "Crosstalk-limited performance of a computationally efficient multichannel transceiver for high rate digital subscriber lines," in *IEEE Global Telecommunications Conference and Exhibition*, 1989, vol. 3, pp. 1940–1944. DOI: [10.1109/GLOCOM.1989.64275](https://doi.org/10.1109/GLOCOM.1989.64275)
36. J. M. Cioffi and G. P. Dudevoir, "Data transmission with mean-square partial response," in *IEEE Global Telecommunications Conference and Exhibition*, 1989, vol. 3, pp. 1687–1691. DOI: [10.1109/GLOCOM.1989.64231](https://doi.org/10.1109/GLOCOM.1989.64231)
37. J. M. Cioffi, "Frequency offset tracking for the Nyquist voiceband data echo canceller," in *Conference Record - International Conference on Communications*, 1989, vol. 1, pp. 239–243. DOI: [10.1109/ICC.1989.49700](https://doi.org/10.1109/ICC.1989.49700)
38. K. D. Fisher and J. M. Cioffi, "Modelling thin-film storage channels," in *Magnetics Conference, 1989. Digests of INTERMAG '89, International*, 1989, pp. JB4–JB4. DOI: [10.1109/INTMAG.1989.690311](https://doi.org/10.1109/INTMAG.1989.690311)
39. P. Fortier, A. Ruiz, and J. M. Cioffi, "Multidimensional signal set design for transmission over parallel channels," in *1989 IEEE/CAM Information Theory Workshop at Cornell*, 1989, pp. 2.4. DOI: [10.1109/ITW.1989.761404](https://doi.org/10.1109/ITW.1989.761404)
40. J. M. Cioffi, W. L. Abbott, K. D. Fisher, and H. K. Thapar, "On the combination of equalization and coding in saturation recording," in *Conference Record - International Conference on Communications*, 1989, vol. 3, pp. 1643–1647. DOI: [10.1109/ICC.1989.49955](https://doi.org/10.1109/ICC.1989.49955)
41. S. Kasturia and J. M. Cioffi, "Precoding for block signalling and shaped signal sets," in *Conference Record - International Conference on Communications*, 1989, vol. 2, pp. 1086–1090. DOI: [10.1109/ICC.1989.49851](https://doi.org/10.1109/ICC.1989.49851)

42. W. L. Abbott and J. M. Cioffi, "Trellis Coding for the Magnetic Storage Channel," in *Conference Record - Asilomar Conference on Circuits, Systems & Computers*, 1989, vol. 1, pp. 471–475.
43. W. L. Abbott and J. M. Cioffi, "Trellis Coding for the Magnetic Storage Channel," in *1989 IEEE/CAM Information Theory Workshop at Cornell*, 1989, pp. 6.3 DOI: [10.1109/ITW.1989.761426](https://doi.org/10.1109/ITW.1989.761426)
44. H. V Bims and J. M. Cioffi, "Trellis coding with M-ary MSK constraints," in *IEEE Global Telecommunications Conference and Exhibition*, 1989, vol. 3, pp. 1546–1550. DOI: [10.1109/GLOCOM.1989.64206](https://doi.org/10.1109/GLOCOM.1989.64206)
45. N. P. Sands, H. K. Thapar, and J. M. Cioffi, "A comparison of run-length-limited codes for equalized peak detection," in *Conference Record. Twenty-Fourth Asilomar Conference on Signals, Systems and Computers (Cat. No.90CH2988-4)*, 1990, vol. 2, pp. 682–686. DOI: [10.1109/ACSSC.1990.523425](https://doi.org/10.1109/ACSSC.1990.523425)
46. J. S. Chow, J. C. Tu, and J. M. Cioffi, "A computationally efficient adaptive transceiver for high-speed digital subscriber lines," in *Conference Record - International Conference on Communications*, 1990, vol. 4, pp. 1750–1754. DOI: [10.1109/ICC.1990.117361](https://doi.org/10.1109/ICC.1990.117361)
47. J. C. Tu and J. M. Cioffi, "A landing algorithm for the concatenation of coset codes with multichannel modulation methods," in *GLOBECOM '90: IEEE Global Telecommunications Conference and Exhibition. 'Communications: Connecting the Future' (Cat. No.90CH2827-4)*, 1990, vol. 2, pp. 1183–1187. DOI: [10.1109/GLOCOM.1990.116686](https://doi.org/10.1109/GLOCOM.1990.116686)
48. H.-L. Lou and J. M. Cioffi, "A programmable parallel processor architecture for Viterbi detection," in *IEEE Global Telecommunications Conference and Exhibition*, 1990, vol. 2, pp. 1333–1337. DOI: [10.1109/GLOCOM.1990.116711](https://doi.org/10.1109/GLOCOM.1990.116711)
49. J. T. Aslanis and J. M. Cioffi, "Achieving the cutoff rate on communications channels," in *International Symposium on Information Theory*, 1990, p. 42.
50. W. L. Abbott and J. M. Cioffi, "Channel coding for binary recording with intersymbol interference," in *Conference Record - International Conference on Communications*, 1990, vol. 4, pp. 1712–1716. DOI: [10.1109/ICC.1990.117354](https://doi.org/10.1109/ICC.1990.117354)
51. N. L. Swenson and J. M. Cioffi, "Coding techniques to mitigate dispersion-induced ISI in optical data transmission," in *Conference Record - International Conference on Communications*, 1990, vol. 2, pp. 468–472. DOI: [10.1109/ICC.1990.117125](https://doi.org/10.1109/ICC.1990.117125)
52. J. M. Cioffi, P. H. Algoet, and P. S. Chow, "Combined equalization and coding with finite-length decision feedback equalization," in *IEEE Global Telecommunications*

- Conference and Exhibition*, 1990, vol. 3, pp. 1664–1668. DOI: [10.1109/GLOCOM.1990.116771](https://doi.org/10.1109/GLOCOM.1990.116771)
53. J. M. Cioffi, J. S. Chow, and J. C. Tu, “Combined equalization and coding with minimum mean square vector coding,” in *International Symposium on Information Theory*, 1990, p. 100.
54. W. L. Abbott, P. S. Bednarz, K. D. Fisher, and J. M. Cioffi, “Complexity issues in RAM-DFE design for magnetic disk drives,” in *Proceedings - IEEE International Conference on Computer Design: VLSI in Computers and Processors*, 1990, vol. 2, pp. 215–219. DOI: [10.1109/ICCD.1990.130207](https://doi.org/10.1109/ICCD.1990.130207)
55. J. M. Cioffi, “The Fast Householder Filters RLS Adaptive Filter,” in *ICASSP’90, April 1990, Albuquerque, New Mexico*, 1990, vol. 3, pp. 1619–1622. DOI: [10.1109/ICASSP.1990.115735](https://doi.org/10.1109/ICASSP.1990.115735)
56. Abbott, W.L. ; Bednarz, P.S. ; Fisher, K.D. ; Cioffi, J.M “A high-speed adaptive equalizer for magnetic disk drives,” in *1990 International Conference on Acoustics, Speech, and Signal Processing, 1990. ICASSP-90.*, vol. 2, pp. 929-932. DOI: [10.1109/ICASSP.1990.116006](https://doi.org/10.1109/ICASSP.1990.116006)
57. W. L. Abbott and J. M. Cioffi, “Timing recovery for adaptive decision feedback equalization of the magnetic storage channel,” in *IEEE Global Telecommunications Conference and Exhibition*, 1990, vol. 3, pp. 1794–1799. DOI: [10.1109/GLOCOM.1990.116792](https://doi.org/10.1109/GLOCOM.1990.116792)
58. W. L. Abbott and J. M. Cioffi, “Using Decision Feedback Equalization and Convolutional Codes to Improve Performance in Saturation Recording Channels,” in *Signals, Systems and Computers, 1990 Conference Record Twenty-Fourth Asilomar Conference on*, 1990, vol. 2, pp. 687–690. DOI: [10.1109/ACSSC.1990.523426](https://doi.org/10.1109/ACSSC.1990.523426)
59. Thapar, H.K. ; Sands, N.P. ; Abbott, W.L. ; Cioffi, J.M. “Spectral shaping for peak detection equalization,” in *Digests of INTERMAG '90. International Magnetics Conference, 1990.*, DOI: [10.1109/INTMAG.1990.734736](https://doi.org/10.1109/INTMAG.1990.734736)
60. N. P. Sands and J. M. Cioffi, “A comparison of maximum likelihood sequence detection and nonlinear decision feedback equalization on the digital magnetic recording channel,” in *IEEE Global Telecommunications Conference. GLOBECOM '91. Countdown to the New Millennium. Featuring a Mini-Theme on: Personal Communications Services (PCS). Conference Record (Cat. No.91CH2980-1)*, 1991, vol. 3, pp. 2146–2150. DOI: [10.1109/GLOCOM.1991.188735](https://doi.org/10.1109/GLOCOM.1991.188735)
61. J. M. Cioffi and J. A. C. Bingham, “A Data-Driven Multitone Echo Canceller,” in *Globecom’91, Phoenix, Arizona, December 1991*, 1991, pp. 57–61. DOI: [10.1109/GLOCOM.1991.188355](https://doi.org/10.1109/GLOCOM.1991.188355)

62. P. A. Voois and J. M. Cioffi, "A decision feedback equalizer for multiple-head digital magnetic recording," in *Conference Record - International Conference on Communications*, 1991, vol. 2, pp. 815–819. DOI: [10.1109/ICC.1991.162472](https://doi.org/10.1109/ICC.1991.162472)
63. P. S. Chow, J. C. Tu, and J. M. Cioffi, "A multichannel transceiver system for asymmetric digital subscriber line service," in *IEEE Global Telecommunications Conference and Exhibition*, 1991, vol. 3, pp. 1992–1996. DOI: [10.1109/GLOCOM.1991.188708](https://doi.org/10.1109/GLOCOM.1991.188708)
64. H.-L. Lou and J. M. Cioffi, "An instruction set for a programmable signal processor dedicated to Viterbi detection," in *VLSI Technology, Systems, and Applications, 1991. Proceedings of Technical Papers, 1991 International Symposium on*, 1991, pp. 247–251. DOI: [10.1109/VTSA.1991.246672](https://doi.org/10.1109/VTSA.1991.246672)
65. R. A. Ziegler and J. M. Cioffi, "Estimation of time-varying digital mobile radio channels," in *IEEE Global Telecommunications Conference. GLOBECOM '91. Countdown to the New Millennium. Featuring a Mini-Theme on: Personal Communications Services (PCS). Conference Record (Cat. No.91CH2980-1)*, 1991, vol. 2, pp. 1130–1134. DOI: [10.1109/GLOCOM.1991.188551](https://doi.org/10.1109/GLOCOM.1991.188551)
66. S. K. Wilson and J. M. Cioffi, "Multi-dimensional equalization for adjacent channel interference," in *Conference Record - International Conference on Communications*, 1991, vol. 3, pp. 1398–1402. DOI: [10.1109/ICC.1991.162234](https://doi.org/10.1109/ICC.1991.162234)
67. N. P. Sands and J. M. Cioffi, "Non-linear identification on the digital magnetic recording channel," in *Conference Record - Asilomar Conference on Circuits, Systems & Computers*, 1991, vol. 1, pp. 6–10. DOI: [10.1109/ACSSC.1991.186404](https://doi.org/10.1109/ACSSC.1991.186404)
68. P. Algoet and J. M. Cioffi, "The Capacity of A Channel With Gaussian Noise And Intersymbol Interference, (papers in summary form only received)," in *IEEE International Symposium on Information Theory, 1991*, 1991, p. 16–.
69. H. V Bims and J. M. Cioffi, "Trellis Coding for Partial-response CPM," in *Information Theory, 1991 (papers in summary form only received), Proceedings. 1991 IEEE International Symposium on (Cat. No.91CH3003-1)*, 1991, p. 121. DOI: [10.1109/ISIT.1991.695177](https://doi.org/10.1109/ISIT.1991.695177)
70. K. D. Fisher, P. S. Bednarz, J. Kouloheris, B. Fowler, J. M. Cioffi, and A. El Gamal, "A 54 Mhz BiCMOS Digital Equalizer For Magnetic Disk Drives," in *Proceedings of the IEEE 1992 Custom Integrated Circuits Conference, 1992.*, 1992, pp. 19.3.1–19.3.4. DOI: [10.1109/CICC.1992.591333](https://doi.org/10.1109/CICC.1992.591333)
71. J. S. Chow and J. M. Cioffi, "A cost-effective maximum likelihood receiver for multicarrier systems," in *SUPERCOMM/ICC '92. Discovering a New World of*

- Communications (Cat. No.92CH3132-8)*, 1992, vol. 2, pp. 948–952. DOI: [10.1109/ICC.1992.268072](https://doi.org/10.1109/ICC.1992.268072)
72. P. A. Voois and J. M. Cioffi, “Achievable radial information densities in magnetic recording systems,” in *GLOBECOM '92. Communication for Global Users. IEEE Global Telecommunications Conference. Conference Record. (Cat. No.92CH3130-2)*, 1992, vol. 2, pp. 1067–1071. DOI: [10.1109/GLOCOM.1992.276362](https://doi.org/10.1109/GLOCOM.1992.276362)
73. R. A. Ziegler and J. M. Cioffi, “Adaptive equalization for digital wireless data transmission,” in *Virginia Tech's Second Symposium on Wireless Personal Communications. Proceedings*, 1992, pp. 5/1–12.
74. P. S. Chow and J. M. Cioffi, “Bandwidth optimization for high speed data transmission over channels with severe intersymbol interference,” in *GLOBECOM '92. Communication for Global Users. IEEE Global Telecommunications Conference. Conference Record. (Cat. No.92CH3130-2)*, 1992, vol. 1, pp. 59–63. DOI: [10.1109/GLOCOM.1992.276519](https://doi.org/10.1109/GLOCOM.1992.276519)
75. N. Al-Dhahir and J. M. Cioffi, “Fast algorithms for the computation of the finite length decision feedback equalizer,” in *Acoustics, Speech, and Signal Processing, 1992. ICASSP-92., 1992 IEEE International Conference on*, 1992, vol. 4, pp. 533–536. DOI: [10.1109/ICASSP.1992.226393](https://doi.org/10.1109/ICASSP.1992.226393)
76. P. A. Voois and J. M. Cioffi, “Multichannel digital magnetic recording,” in *SUPERCOMM/ICC '92. Discovering a New World of Communications (Cat. No.92CH3132-8)*, 1992, vol. 1, pp. 125–130. DOI: [10.1109/ICC.1992.268276](https://doi.org/10.1109/ICC.1992.268276)
77. R. A. Ziegler, M. W. Al-Dhahir, and J. M. Cioffi, “Nonrecursive adaptive decision-feedback equalization from channel estimates,” in *Vehicular Technology Society 42nd VTS Conference. Frontiers of Technology. From Pioneers to the 21st Century (Cat. No.92CH3159-1)*, 1992, vol. 2, pp. 600–603. DOI: [10.1109/VETEC.1992.245324](https://doi.org/10.1109/VETEC.1992.245324)
78. I. Lee and J. M. Cioffi, “Performance analysis of the modified maximum likelihood sequence detector in the presence of data-dependent noise,” in *Conference Record of The Twenty-Sixth Asilomar Conference on Signals, Systems and Computers (Cat. No.92CH3245-8)*, 1992, vol. 2, pp. 961–964. DOI: [10.1109/ACSSC.1992.269078](https://doi.org/10.1109/ACSSC.1992.269078)
79. N. Al-Dhahir, A. H. Sayed, and J. M. Cioffi, “A High-Performance Cost-Effective Pole-Zero MMSE-DFE,” in *Allerton Conference on Communications, Control, and Computing, Allerton, Illinois, September 1993*, 1993, pp. 1168–1175.
80. N. Al-Dhahir and J. M. Cioffi, “Bandwidth optimization for combined equalization and coding transceivers with emphasis on the MMSE-DFE,” in *Military Communications Conference, 1993. MILCOM '93. Conference record*.

Communications on the Move., IEEE, 1993, vol. 2, pp. 471–475. DOI: [10.1109/MILCOM.1993.408623](https://doi.org/10.1109/MILCOM.1993.408623)

81. S. K. Wilson and J. M. Cioffi, “Equalization techniques for direct sequence code-division multiple access systems in multipath channels,” in *Proceedings of the 1993 IEEE International Symposium on Information Theory*, 1993, p. 47. DOI: [10.1109/ISIT.1993.748362](https://doi.org/10.1109/ISIT.1993.748362)
82. I. Lee, C. S. Modlin, and J. M. Cioffi, “Equalized maximum likelihood receiver in a magnetic recording channel,” in *IEEE in Houston. GLOBECOM '93. IEEE Global Telecommunications Conference, including a Communications Theory Mini-Conference. Technical Program Conference Record (Cat. No.93CH3250-8)*, 1993, vol. 3, pp. 1970–1973. DOI: [10.1109/GLOCOM.1993.318408](https://doi.org/10.1109/GLOCOM.1993.318408)
83. J. S. Chow, J. M. Cioffi, and J. A. C. Bingham, “Equalizer training algorithms for multicarrier modulation systems,” in *IEEE International Conference on Communications*, 1993, vol. 2, pp. 761–765. DOI: [10.1109/ICC.1993.397376](https://doi.org/10.1109/ICC.1993.397376)
84. N. Al-Dhahir and J. M. Cioffi, “Finite-length vs. infinite-length MMSE-DFE: the connection,” in *1993 Conference Record of The Twenty-Seventh Asilomar Conference on Signals, Systems and Computers*, 1993., 1993, vol. 1, pp. 677–681. DOI: [10.1109/ACSSC.1993.342605](https://doi.org/10.1109/ACSSC.1993.342605)
85. M. Ho, J. M. Cioffi, and J. A. C. Bingham, “High-speed full-duplex echo cancellation for discrete multitone modulation,” in *IEEE International Conference on Communications*, 1993, vol. 2, pp. 772–776. DOI: [10.1109/ICC.1993.397378](https://doi.org/10.1109/ICC.1993.397378)
86. T. N. Zogakis, P. S. Chow, J. T. Aslanis, and J. M. Cioffi, “Impulse noise mitigation strategies for multicarrier modulation,” in *IEEE International Conference on Communications*, 1993, vol. 2, pp. 784–788. DOI: [10.1109/ICC.1993.397380](https://doi.org/10.1109/ICC.1993.397380)
87. Sands, N.P. ; Cioffi, J.M., “Nonlinear Channel Models For Digital Magnetic Recording,” in *Digest of International Magnetics Conference*, 1993. INTERMAG '93., 1993. DOI: [10.1109/INTMAG.1993.642434](https://doi.org/10.1109/INTMAG.1993.642434)
88. P. O. Okrah and J. M. Cioffi, “Multichannel modulation as a technique for transmission in radio channels,” in *1993 43rd IEEE Vehicular Technology Conference. Personal Communication - Freedom Through Wireless Technology (Cat. No.93CH3305-0)*, 1993, pp. 29–33. DOI: [10.1109/VETEC.1993.507003](https://doi.org/10.1109/VETEC.1993.507003)
89. K. Sistanizadeh, P. S. Chow, and J. M. Cioffi, “Multi-tone transmission for asymmetric digital subscriber lines (ADSL),” in *IEEE International Conference on Communications*, 1993, vol. 2, pp. 756–760. DOI: [10.1109/ICC.1993.397375](https://doi.org/10.1109/ICC.1993.397375)

90. T. Yamauchi and J. M. Cioffi, "Nonlinear Model in Thin Film Disk Recording System," in *Magnetics Conference, 1993. INTERMAG '93., Digest of International*, 1993, p. EC-EC. DOI: [10.1109/INTMAG.1993.642433](https://doi.org/10.1109/INTMAG.1993.642433)
91. N. Al-Dhahir and J. M. Cioffi, "Optimal transmit for packet-based data transmission on dispersive channels with application to the FIR MMSE-DFE," in *Acoustics, Speech, and Signal Processing, 1993. ICASSP-93., 1993 IEEE International Conference on*, 1993, vol. 3, pp. 1-4. DOI: [10.1109/ICASSP.1993.319420](https://doi.org/10.1109/ICASSP.1993.319420)
92. S. K. Wilson, R. E. Khayata, and J. M. Cioffi, "16 QAM modulation with orthogonal frequency division multiplexing in a Rayleigh-fading environment," in *IEEE Vehicular Technology Conference*, 1994, vol. 3, pp. 1660-1664. DOI: [10.1109/VETEC.1994.345378](https://doi.org/10.1109/VETEC.1994.345378)
93. C. S. Modlin and J. M. Cioffi, "A restructured decision feedback equalizer for facilitating the LMS algorithm," in *Conference Record of the Twenty-Eighth Asilomar Conference on Signals, Systems and Computers (Cat. No.94CH34546)*, 1994, vol. 2, pp. 1525-1529. DOI: [10.1109/ACSSC.1994.471713](https://doi.org/10.1109/ACSSC.1994.471713)
94. K. S. Jacobsen and J. M. Cioffi, "An Efficient Digital Modulation Scheme for Multimedia Transmission on Cable Television Network," in *Forty-Third Annual National Cable Television Association (NCTA) Convention and Exposition, New Orleans, Louisiana, May 1994*, 1994, pp. 305-312.
95. T. N. Zogakis, J. T. Aslanis Jr., and J. M. Cioffi, "Analysis of a concatenated coding scheme for a discrete multitone modulation system," in *IEEE MILCOM*, 1994, vol. 2, pp. 433-437. DOI: [10.1109/MILCOM.1994.474003](https://doi.org/10.1109/MILCOM.1994.474003)
96. T. N. Zogakis and J. M. Cioffi, "Application of shaping to discrete multitone modulation," in *1994 IEEE GLOBECOM. Communications: The Global Bridge. Conference Record (Cat. No.94CH34025)*, 1994, vol. 3, pp. 1894-1898. DOI: [10.1109/GLOCOM.1994.513199](https://doi.org/10.1109/GLOCOM.1994.513199)
97. P. S. Bednarz, S. C. Lin, C. S. Modlin, and J. M. Cioffi, "Design, performance, and extensions of the RAM-DFE architecture," in *Digest of the Magnetic Recording Conference 1994. Signal Processing.*, 1994, vol. 31, no. 2, pp. 1196-1201. DOI: [10.1109/MRC.1994.641971](https://doi.org/10.1109/MRC.1994.641971)
98. P. S. Chow, J. M. Cioffi, and J. A. C. Bingham, "DMT-based ADSL: concept, architecture, and performance," in *IEE Colloquium on High speed Access Technology and Services, Including Video-on-Demand*, 1994, pp. 3/1 - 3/6.
99. S. K. Wilson, J. A. C. Bingham, M. Mallory, and J. M. Cioffi, "Erasure tagging in a slow Rayleigh-fading environment," in *1994 IEEE GLOBECOM. Communications: The Global Bridge. Conference Record (Cat. No.94CH34025)*, 1994, vol. 2, pp. 984-988. DOI: [10.1109/GLOCOM.1994.512805](https://doi.org/10.1109/GLOCOM.1994.512805)

100. C. S. Modlin and J. M. Cioffi, "Fast decision feedback LMS algorithm using multiple step sizes," in *Conference Record - International Conference on Communications*, 1994, vol. 2, pp. 1201–1205. DOI: [10.1109/ICC.1994.368912](https://doi.org/10.1109/ICC.1994.368912)
101. K. S. Jacobsen and J. M. Cioffi, "High-performance multimedia transmission on the cable television network," in *Conference Record - International Conference on Communications*, 1994, vol. 2, pp. 1048–1052. DOI: [10.1109/ICC.1994.368941](https://doi.org/10.1109/ICC.1994.368941)
102. N. P. Sands and J. M. Cioffi, "Improved detector for channels with nonlinear intersymbol interference," in *Conference Record - International Conference on Communications*, 1994, vol. 2, pp. 1226–1230. DOI: [10.1109/ICC.1994.368907](https://doi.org/10.1109/ICC.1994.368907)
103. I. Lee, T. Yamauchi, and J. M. Cioffi, "Modified maximum likelihood sequence estimation in a simple partial erasure model," in *Conference Record - International Conference on Communications*, 1994, vol. 1, pp. 245–249. DOI: [10.1109/ICC.1994.369051](https://doi.org/10.1109/ICC.1994.369051)
104. P. S. Chow and J. M. Cioffi, "Multi-drop in-house ADSL distribution network," in *Conference Record - International Conference on Communications*, 1994, vol. 1, pp. 456–460. DOI: [10.1109/ICC.1994.368862](https://doi.org/10.1109/ICC.1994.368862)
105. Inkyu Lee ; Cioffi, J.M., "A fast computation algorithm for the decision feedback equalizer in a magnetic recording channel," in *Global Telecommunications Conference, 1994. GLOBECOM '94. Communications: The Global Bridge.*, vol. 2, pp. 1152-1156. DOI: [10.1109/GLOCOM.1994.512838](https://doi.org/10.1109/GLOCOM.1994.512838)
106. N. Al-Dhahir and J. M. Cioffi, "Optimum Finite-Length Equalization for Multicarrier Transceivers," in *Globecom '94, San Francisco, California, November 28 - December 2, 1994*, 1994, vol. 3, pp. 1884–1888. DOI: [10.1109/GLOCOM.1994.513197](https://doi.org/10.1109/GLOCOM.1994.513197)
107. P. S. Bednarz, N. P. Sands, C. S. Modlin, S. C. Lin, I. Lee, and J. M. Cioffi, "Performance Evaluation Of An Adaptive Ram-dfe Read Channel," in *Digest of the Magnetic Recording Conference 1994. Signal Processing.*, 1994, pp. 0_44–0_45. DOI: [10.1109/MRC.1994.641960](https://doi.org/10.1109/MRC.1994.641960)
108. R. D. Wesel and J. M. Cioffi, "Precoding and the MMSE-DFE," in *Conference Record of the Twenty-Eighth Asilomar Conference on Signals, Systems and Computers (Cat. No.94CH34546)*, 1994, vol. 2, pp. 1144–1148. DOI: [10.1109/ACSSC.1994.471638](https://doi.org/10.1109/ACSSC.1994.471638)
109. C. S. Modlin and J. M. Cioffi, "Reduced-state nonlinear equalization for magnetic storage," in *1994 IEEE GLOBECOM. Communications: The Global Bridge. Conference Record (Cat. No.94CH34025)*, 1994, vol. 2, pp. 1134–1138. DOI: [10.1109/GLOCOM.1994.512834](https://doi.org/10.1109/GLOCOM.1994.512834)

110. M. Ho and J. M. Cioffi, "Timing recovery for echo-cancelled discrete multitone systems," in *Conference Record - International Conference on Communications*, 1994, vol. 1, pp. 307–310. DOI: [10.1109/ICC.1994.369040](https://doi.org/10.1109/ICC.1994.369040)
111. N. Al-Dhahir, J. M. Cioffi, and G. D. Forney Jr., "A canonical finite-length MMSE-DFE," in *Proceedings. Thirty-Third Annual Allerton Conference on Communication, Control, and Computing*, 1995, pp. 598–607.
112. K. S. Jacobsen, J. A. C. Bingham, and J. M. Cioffi, "A Discrete Multitone-based Network Protocol for Multipoint-to-Digital Communications in the CATV Reverse Channel," in *Canadian Cable Television Association Proceedings, May 28 - June 1, 1995, Halifax, Nova Scotia*, 1995, pp. 121–130.
113. R. D. Wesel and J. M. Cioffi, "Achievable rates for Tomlinson-Harashima precoding," in *IEEE International Symposium on Information Theory - Proceedings*, 1995, p. 399. DOI: [10.1109/ISIT.1995.550386](https://doi.org/10.1109/ISIT.1995.550386)
114. J. T. Mourelo, E. K. Wesel, and J. M. Cioffi, "Adaptive DFE for GMSK in indoor radio channels," in *Conference Record / IEEE Global Telecommunications Conference*, 1995, vol. 2, pp. 874–878. DOI: [10.1109/GLOCOM.1995.502529](https://doi.org/10.1109/GLOCOM.1995.502529)
115. S. K. Wilson and J. M. Cioffi, "Comparison of a single-carrier system using a DFE and a coded OFDM system in a broadcast Rayleigh-fading channel," in *IEEE International Symposium on Information Theory - Proceedings*, 1995, p. 335. DOI: [10.1109/ISIT.1995.550322](https://doi.org/10.1109/ISIT.1995.550322)
116. J. Tellado, E. Khayata, and J. M. Cioffi, "Equalizing GMSK for high data rate wireless LANs," in *IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC*, 1995, vol. 1, pp. 16–20. DOI: [10.1109/PIMRC.1995.476271](https://doi.org/10.1109/PIMRC.1995.476271)
117. R. D. Wesel and J. M. Cioffi, "Fundamentals of coding for broadcast OFDM," in *Conference Record of The Twenty-Ninth Asilomar Conference on Signals, Systems and Computers*, 1995, vol. 1, pp. 2–6. DOI: [10.1109/ACSSC.1995.540504](https://doi.org/10.1109/ACSSC.1995.540504)
118. K. S. Jacobsen, J. A. C. Bingham, and J. M. Cioffi, "Synchronized DMT for multipoint-to-point communications on HFC networks," in *Conference Record / IEEE Global Telecommunications Conference*, 1995, vol. 2, pp. 963–966. DOI: [10.1109/GLOCOM.1995.502547](https://doi.org/10.1109/GLOCOM.1995.502547)
119. K. S. Jacobsen and J. M. Cioffi, "Achievable throughput of multicarrier-based multipoint-to-point networks using a reservation-based channel access protocol," in *Conference Record / IEEE Global Telecommunications Conference*, 1996, vol. 1, pp. 708–712. DOI: [10.1109/GLOCOM.1996.594453](https://doi.org/10.1109/GLOCOM.1996.594453)

120. J. M. Cioffi and G. D. Forney Jr., "Canonical packet transmission on the ISI channel with Gaussian noise," in *Conference Record / IEEE Global Telecommunications Conference*, 1996, vol. 2, pp. 1405–1410. DOI: [10.1109/GLOCOM.1996.587677](https://doi.org/10.1109/GLOCOM.1996.587677)
121. G. G. Raleigh and J. M. Cioffi, "Spatio-temporal coding for wireless communications," in *Conference Record / IEEE Global Telecommunications Conference*, 1996, vol. 3, pp. 1809–1814. DOI: [10.1109/GLOCOM.1996.591950](https://doi.org/10.1109/GLOCOM.1996.591950)
122. A. Leke and J. M. Cioffi, "A Maximum Rate Loading Algorithm for Discrete Multitone Modulation," in *Globecom'97, Phoenix, Arizona, November 3-8, 1997*, 1997, vol. 3, pp. 1514–1518. DOI: [10.1109/GLOCOM.1997.644387](https://doi.org/10.1109/GLOCOM.1997.644387)
123. P. S. Bednarz and J. M. Cioffi, "Decision feedback equalization for channels with error correcting capabilities," in *IEEE International Conference on Communications*, 1997, vol. 3, pp. 1607–1612. DOI: [10.1109/ICC.1997.595059](https://doi.org/10.1109/ICC.1997.595059)
124. A. Leke and J. M. Cioffi, "Effects of channel estimation errors on discrete multitone modulation (DMT) systems in a Rayleigh fading environment," in *Signals, Systems and Computers, 1997. Conference Record of the Thirty-First Asilomar Conference on*, 1997, vol. 1, pp. 595–599. DOI: [10.1109/ACSSC.1997.680447](https://doi.org/10.1109/ACSSC.1997.680447)
125. R. D. Wesel and J. M. Cioffi, "Joint interleaver and trellis code design," in *Conference Record / IEEE Global Telecommunications Conference*, 1997, vol. 2, pp. 939–943. DOI: [10.1109/GLOCOM.1997.638464](https://doi.org/10.1109/GLOCOM.1997.638464)
126. Z.-N. Wu, J. M. Cioffi, and K. D. Fisher, "MMSE interpolated timing recovery scheme for the magnetic recording channel," in *IEEE International Conference on Communications*, 1997, vol. 3, pp. 1625–1629. DOI: [10.1109/ICC.1997.595062](https://doi.org/10.1109/ICC.1997.595062)
127. S. C. Lin and J. M. Cioffi, "Packet Detection for Magnetic Storage Channels," in *Globecom'97, Phoenix, Arizona, November 3-8, 1997*, 1997, vol.3, pp. 1254–1257. DOI: [10.1109/GLOCOM.1997.644336](https://doi.org/10.1109/GLOCOM.1997.644336)
128. H.-L. Lou, P. Tong, and J. M. Cioffi, "Programmable codec design for Trellis Coded Modulation," in *Conference Record / IEEE Global Telecommunications Conference*, 1997, vol. 2, pp. 944–947. DOI: [10.1109/GLOCOM.1997.638465](https://doi.org/10.1109/GLOCOM.1997.638465)
129. C.-L. Wang, C.-F. Wang, and J. M. Cioffi, "Reduced-complexity nonlinear techniques for narrowband interference suppression in spread-spectrum CDMA systems," in *GLOBECOM 97. IEEE Global Telecommunications Conference. Conference Record (Cat. No.97CH36125)*, 1997, vol. 2, pp. 659–662. DOI: [10.1109/GLOCOM.1997.638412](https://doi.org/10.1109/GLOCOM.1997.638412)

130. A. Leke and J. M. Cioffi, "Transmit Optimization for Time-Invariant Wireless Channels Utilizing a Discrete Multitone Approach," in *ICC '97, Montreal, Quebec, Canada, June 8-12, 1997*, 1997, vol. 2, pp. 954–958. DOI: [10.1109/ICC.1997.610020](https://doi.org/10.1109/ICC.1997.610020)
131. J. L. Fan and J. M. Cioffi, "A parallel architecture for detection," in *Proceedings. 1998 IEEE International Symposium on Information Theory (Cat. No.98CH36252)*, 1998, p. 263. DOI: [10.1109/ISIT.1998.708868](https://doi.org/10.1109/ISIT.1998.708868)
132. A. M. Tehrani, A. Hassibi, J. M. Cioffi, and S. Boyd, "An implementation of discrete multi-tone over slowly time-varying multiple-input/multiple-output channels," in *Global Telecommunications Conference, 1998. GLOBECOM 1998. The Bridge to Global Integration. IEEE*, 1998, vol. 5, pp. 2806–2811. DOI: [10.1109/GLOCOM.1998.776499](https://doi.org/10.1109/GLOCOM.1998.776499)
133. J. Kim, J.-T. Chen, and J. M. Cioffi, "BER analysis of MLSE equalizers for the parametric Rayleigh-fading channels," in *Conference Record / IEEE Global Telecommunications Conference*, 1998, vol. 4, pp. 2079–2084. DOI: [10.1109/GLOCOM.1998.775904](https://doi.org/10.1109/GLOCOM.1998.775904)
134. A. Leke and J. M. Cioffi, "Blind identification of channels for discrete multitone (DMT) applications," in *International Zurich Seminar on Digital Communications*, 1998, vol. 1, pp. 113–118. DOI: [10.1109/IZSBC.1998.670253](https://doi.org/10.1109/IZSBC.1998.670253)
135. J. Kim and J. M. Cioffi, "Codewords over 3-Dimensional Coding Domain: Time-Frequency- Space," in *IEEE International Symposium on Wireless Communications, Montreal, Canada, May 22-23, 1998*, 1998, p. 20.
136. K.-W. Cheong and J. M. Cioffi, "Discrete wavelet transforms in multi-carrier modulation," in *Conference Record / IEEE Global Telecommunications Conference*, 1998, vol. 5, pp. 2794–2799. DOI: [10.1109/GLOCOM.1998.776497](https://doi.org/10.1109/GLOCOM.1998.776497)
137. L. M. C. Hoo, J. Tellado, and J. M. Cioffi, "Dual QoS loading algorithms for DMT systems offering CBR and VBR services," in *Conference Record / IEEE Global Telecommunications Conference*, 1998, vol. 1, pp. 25–30. DOI: [10.1109/GLOCOM.1998.775692](https://doi.org/10.1109/GLOCOM.1998.775692)
138. R. Negi and J. M. Cioffi, "Blind OFDM symbol synchronization in ISI channels," in *Global Telecommunications Conference, 1998. GLOBECOM 1998. The Bridge to Global Integration.*, vol. 5, pp. 2812 - 2817. DOI: [10.1109/GLOCOM.1998.776501](https://doi.org/10.1109/GLOCOM.1998.776501)
139. L. M. C. Hoo, J. Tellado, and J. M. Cioffi, "Dual QoS Loading Algorithms for Multicarrier Systems Offering Different CBR Services," in *Proceedings of the 9th IEEE International Symposium on Personal, Indoor and Mobile Radio*

Communications, Boston, Massachusetts, September 8-11, 1998, 1998, Vol. 1, pp. 278–282. DOI: [10.1109/PIMRC.1998.733559](https://doi.org/10.1109/PIMRC.1998.733559)

140. A. Leke and J. M. Cioffi, “Dynamic bandwidth optimization for wireline and wireless channels,” in *Conference Record of the Asilomar Conference on Signals, Systems and Computers*, 1998, vol. 2, pp. 1753–1757. DOI: [10.1109/ACSSC.1998.751625](https://doi.org/10.1109/ACSSC.1998.751625)
141. J. Tellado and J. M. Cioffi, “Efficient algorithms for reducing PAR in multicarrier systems,” in *Proceedings. 1998 IEEE International Symposium on Information Theory (Cat. No.98CH36252)*, 1998, p. 191. DOI: [10.1109/ISIT.1998.708789](https://doi.org/10.1109/ISIT.1998.708789)
142. A. Leke and J. M. Cioffi, “Impact of Imperfect Channel Knowledge on the Performance of Multicarrier Systems,” in *GLOBECOM '98, Sydney, Australia, November 8-12, 1998*, 1998, vol. 2, pp. 951–955. DOI: [10.1109/GLOCOM.1998.776870](https://doi.org/10.1109/GLOCOM.1998.776870)
143. J. Kim, J.-T. Chen, and J. M. Cioffi, “Low complexity bit mapping algorithm for multi-carrier communication systems with fading channels,” in *Universal Personal Communications, 1998. ICUPC '98. IEEE 1998 International Conference on*, 1998, vol. 2, pp. 927–931. DOI: [10.1109/ICUPC.1998.733645](https://doi.org/10.1109/ICUPC.1998.733645)
144. A. Leke and J. M. Cioffi, “Multicarrier systems with imperfect channel knowledge,” in *IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC*, 1998, vol. 2, pp. 549–553. DOI: [10.1109/PIMRC.1998.734266](https://doi.org/10.1109/PIMRC.1998.734266)
145. D. Pal, G. N. Iyengar, and J. M. Cioffi, “A new method of channel shortening with applications to discrete multi tone (DMT) systems,” in *IEEE International Conference on Communications*, 1998, vol. 2, pp. 763–768. DOI: [10.1109/ICC.1998.685113](https://doi.org/10.1109/ICC.1998.685113)
146. Z.-N. Wu, S. C. Lin, and J. M. Cioffi, “Numerical results on capacity bounds for magnetic recording channels,” in *Conference Record / IEEE Global Telecommunications Conference*, 1998, vol. 6, pp. 3385–3390. DOI: [10.1109/GLOCOM.1998.775831](https://doi.org/10.1109/GLOCOM.1998.775831)
147. J. Tellado and J. M. Cioffi, “Peak Power Reduction for Multicarrier Transmission, Proceedings Comm Theory,” in *MiniConf (CTMC), GLOBECOM '98, Vol. 2, pp. 951-955, vol.2, Sydney, November 8-12, 1998*, 1998, pp. C1–129 (printed from CD ROM, thus no page numbers).
148. R. Negi and J. M. Cioffi, “Pilot tone selection for channel estimation in a mobile OFDM system,” in *Consumer Electronics, 1998. ICCE. 1998 Digest of Technical Papers. International Conference on*, 1998, pp. 466–467. DOI: [10.1109/ICCE.1998.678433](https://doi.org/10.1109/ICCE.1998.678433)

149. K.-W. Cheong and J. M. Cioffi, "Precoder for DMT with insufficient cyclic prefix," in *IEEE International Conference on Communications*, 1998, vol. 1, pp. 339–343. DOI: [10.1109/ICC.1998.682865](https://doi.org/10.1109/ICC.1998.682865)
150. J. Tellado and J. M. Cioffi, "Quasi-minimum-BER linear combiner equalizers," in *IEEE International Conference on Communications*, 1998, vol. 1, pp. 1–5. DOI: [10.1109/ICC.1998.682535](https://doi.org/10.1109/ICC.1998.682535)
151. A. M. Tehrani, R. Negi, and J. M. Cioffi, "Space-time coding and transmission optimization for wireless channels," in *Signals, Systems and Computers, 1998. Conference Record of the Thirty-Second Asilomar Conference on*, 1998, vol. 2, pp. 1798–1802. DOI: [10.1109/ACSSC.1998.751634](https://doi.org/10.1109/ACSSC.1998.751634)
152. R. D. Wesel, X. Liu, W. Shi, and J. M. Cioffi, "Trellis codes for compound periodic Gaussian channels," in *Proceedings. 1998 IEEE International Symposium on Information Theory (Cat. No.98CH36252)*, 1998, p. 462. DOI: [10.1109/ISIT.1998.709067](https://doi.org/10.1109/ISIT.1998.709067)
153. J. P. Lauer and J. M. Cioffi, "Turbo coding for discrete multitone transmission systems," in *Conference Record / IEEE Global Telecommunications Conference*, 1998, vol. 6, pp. 3256–3260. DOI: [10.1109/GLOCOM.1998.775807](https://doi.org/10.1109/GLOCOM.1998.775807)
154. J. M. Cioffi, "Very high-speed Digital Subscriber Lines (VDSL)," in *Proceedings - IEEE International Symposium on Circuits and Systems*, 1998, vol. 3, pp. 590–594. DOI: [10.1109/ISCAS.1998.704081](https://doi.org/10.1109/ISCAS.1998.704081)
155. R. Negi, A. Maleki-Tehrani, and J. M. Cioffi, "Adaptive Antennas for Space-Time Coding over Block-Time Invariant Multi-Path Fading Channels," in *IEEE 50th Vehicular Technology Conference, Amsterdam, The Netherlands, September 19-22, 1999*, 1999, pp. 70–74, vol.1. DOI: [10.1109/VETEC.1999.778020](https://doi.org/10.1109/VETEC.1999.778020)
156. A. Maleki-Tehrani, B. Hassibi, and J. M. Cioffi, "Adaptive equalization of Multiple-Input Multiple-Output (MIMO) frequency selective channels," in *Conference Record of the Asilomar Conference on Signals, Systems and Computers*, 1999, vol. 1, pp. 547–551. DOI: [10.1109/ACSSC.1999.832390](https://doi.org/10.1109/ACSSC.1999.832390)
157. A. A. Salvekar, C. H. Aldana, J. Tellado, and J. M. Cioffi, "Channel gain change detection and channel profile selection in a multicarrier system," in *Global Telecommunications Conference, 1999. GLOBECOM '99*, 1999, vol. 2, pp. 1133–1138. DOI: [10.1109/GLOCOM.1999.829950](https://doi.org/10.1109/GLOCOM.1999.829950)
158. J.-T. Chen, J. Kim, and J. M. Cioffi, "Comparison of multi-channel adaptive MLSE equalizers using different channel tracking strategies," in *Acoustics, Speech, and Signal Processing, 1999. Proceedings., 1999 IEEE International Conference on*, 1999, vol. 5, pp. 2721–2724. DOI: [10.1109/ICASSP.1999.761306](https://doi.org/10.1109/ICASSP.1999.761306)

159. J. L. Fan and J. M. Cioffi, "Constrained coding techniques for soft iterative decoders," in *Conference Record / IEEE Global Telecommunications Conference*, 1999, vol. 1, p. B. DOI: [10.1109/GLOCOM.1999.830157](https://doi.org/10.1109/GLOCOM.1999.830157)
160. L. M. C. Hoo, J. Tellado, and J. M. Cioffi, "Discrete dual QoS loading algorithms for multicarrier systems," in *1999 IEEE International Conference on Communications (Cat. No. 99CH36311)*, 1999, Vol. 2, pp. 796–800. DOI: [10.1109/ICC.1999.765383](https://doi.org/10.1109/ICC.1999.765383)
161. A. Maleki-Tehrani, B. Sayyarodsari, B. Hassibi, J. P. How, and J. M. Cioffi, "Estimation-based synthesis of H infin;-optimal adaptive equalizers over wireless channels," in *Seamless Interconnection for Universal Services. Global Telecommunications Conference. GLOBECOM'99. (Cat. No.99CH37042)*, 1999, vol. 1A, pp. 457–461. DOI: [10.1109/GLOCOM.1999.831681](https://doi.org/10.1109/GLOCOM.1999.831681)
162. J. Tellado, L. M. C. Hoo, and J. M. Cioffi, "Maximum likelihood detection of nonlinearly distorted multicarrier symbols by iterative decoding," in *Conference Record / IEEE Global Telecommunications Conference*, 1999, vol. 5, pp. 2493–2498. DOI: [10.1109/GLOCOM.1999.831750](https://doi.org/10.1109/GLOCOM.1999.831750)
163. W.-J. Choi and J. M. Cioffi, "Multiple input/multiple output (MIMO) equalization for space-time block coding," in *IEEE Pacific Rim Conference on Communications, Computers and Signal Processing, 1999*, 1999, pp. 341 – 344. DOI: [10.1109/PACRIM.1999.799546](https://doi.org/10.1109/PACRIM.1999.799546)
164. W.-J. Choi and J. M. Cioffi, "Space-time block codes over frequency selective Rayleigh fading channels," in *1999 Fall Vehicular Technology Conference*, 1999, vol. 5, pp. 2541-2545. DOI: [10.1109/VETECF.1999.800242](https://doi.org/10.1109/VETECF.1999.800242)
165. A. M. Tehrani, R. Negi, and J. M. Cioffi, "Space-time coding over a code division multiple access system," in *IEEE Wireless Communications and Networking Conference, 1999*, 1999, vol. 1, pp. 134-138. DOI: [10.1109/WCNC.1999.797801](https://doi.org/10.1109/WCNC.1999.797801)
166. J. Kim and J. M. Cioffi, "Transmission optimization with a space-time filter at low SNR wireless environment," in *Conference Record / IEEE Global Telecommunications Conference*, 1999, vol. 1, p. B. DOI: [10.1109/GLOCOM.1999.830209](https://doi.org/10.1109/GLOCOM.1999.830209)
167. R. Negi and J. M. Cioffi, "Transmission over fading channels with channel side information and delay constraint," in *Global Telecommunications Conference, 1999. GLOBECOM '99*, 1999, vol. 5, pp. 2550–2554 vol.5. DOI: [10.1109/GLOCOM.1999.831761](https://doi.org/10.1109/GLOCOM.1999.831761)

168. Z.-N. Wu and J. M. Cioffi, "Turbo decision aided equalization for magnetic recording channels," in *Conference Record / IEEE Global Telecommunications Conference*, 1999, vol. 1, pp. 733–8 vol.1b. DOI: [10.1109/GLOCOM.1999.830160](https://doi.org/10.1109/GLOCOM.1999.830160)
169. J. P. Lauer and J. M. Cioffi, "A turbo trellis coded discrete multitone transmission system," in *Conference Record / IEEE Global Telecommunications Conference*, 1999, vol. 5, pp. 2581–2585. DOI: [10.1109/GLOCOM.1999.831767](https://doi.org/10.1109/GLOCOM.1999.831767)
170. G. Ginis and J. M. Cioffi, "A multi-user precoding scheme achieving crosstalk cancellation with application to DSL systems," in *Conference Record of the Asilomar Conference on Signals, Systems and Computers*, 2000, vol. 2, pp. 1627–1631. DOI: [10.1109/ACSSC.2000.911265](https://doi.org/10.1109/ACSSC.2000.911265)
171. C. H. Aldana, A. A. Salvekar, J. Tellado, and J. M. Cioffi, "Accurate noise estimates in multicarrier systems," in *Vehicular Technology Conference, 2000. IEEE-VTS Fall VTC 2000. 52nd*, 2000, vol. 1, pp. 434–438. DOI: [10.1109/VETEFC.2000.886690](https://doi.org/10.1109/VETEFC.2000.886690)
172. H. J. Oh and J. M. Cioffi, "An adaptive channel estimation scheme for DS-CDMA systems," in *IEEE Vehicular Technology Conference*, 2000, vol. 6, no. 52 ND, Vol. 6, pp. 2839–2843. DOI: [10.1109/VETEFC.2000.886837](https://doi.org/10.1109/VETEFC.2000.886837)
173. A. Maleki-Tehrani, B. Hassibi, and J. M. Cioffi, "Adaptive equalization of multiple-input multiple-output (MIMO) channels," in *IEEE International Conference on Communications*, 2000, vol. 3, pp. 1670–1674. DOI: [10.1109/ICC.2000.853778](https://doi.org/10.1109/ICC.2000.853778)
174. W.-J. Choi, K.-W. Cheong, and J. M. Cioffi, "Adaptive modulation with limited peak power for fading channels," in *VTC2000-Spring. 2000 IEEE 51st Vehicular Technology Conference Proceedings (Cat. No.00CH37026)*, 2000, vol. 3, pp. 2568–2572. DOI: [10.1109/VETECS.2000.851737](https://doi.org/10.1109/VETECS.2000.851737)
175. A. M. Tehrani, B. Hassibi, and J. M. Cioffi, "An estimation-based approach to multiple-input multiple-output (MIMO) channel equalization," in *Sensor Array and Multichannel Signal Processing Workshop. 2000. Proceedings of the 2000 IEEE*, 2000, pp. 27–31. DOI: [10.1109/SAM.2000.877961](https://doi.org/10.1109/SAM.2000.877961)
176. W.-J. Choi, R. Negi, and J. M. Cioffi, "Combined ML and DFE decoding for the V-BLAST system," in *2000 IEEE International Conference on Communications. ICC 2000. Global Convergence Through Communications. Conference Record*, 2000, Vol. 3, pp. 1243–1248. DOI: [10.1109/ICC.2000.853698](https://doi.org/10.1109/ICC.2000.853698)
177. W. Yu and J. M. Cioffi, "Competitive equilibrium in the Gaussian interference channel," in *2000 IEEE International Symposium on Information Theory (Cat. No.00CH37060)*, 2000, p. 431. DOI: [10.1109/ISIT.2000.866729](https://doi.org/10.1109/ISIT.2000.866729)

178. E. De Carvalho, J. M. Cioffi, and D. Slock, "Cramer-Rao bounds for blind multichannel estimation," in *Global Telecommunications Conference, 2000. GLOBECOM '00. IEEE*, 2000, vol. 2, pp. 1036–1040. DOI: [10.1109/GLOCOM.2000.891295](https://doi.org/10.1109/GLOCOM.2000.891295)
179. C.-L. Wang, C.-H. Chang, J. L. Fan, and J. M. Cioffi, "Discrete Hartley transform based multicarrier modulation," in *2000 IEEE International Conference on Acoustics, Speech, and Signal Processing. Proceedings (Cat. No.00CH37100)*, 2000, vol. 5, pp. 2513–2516. DOI: [10.1109/ICASSP.2000.860954](https://doi.org/10.1109/ICASSP.2000.860954)
180. C. Zeng, L. M. C. Hoo, and J. M. Cioffi, "Efficient water-filling algorithms for a Gaussian multiaccess channel with ISI," in *IEEE Vehicular Technology Conference*, 2000, vol. 3, no. 52 ND, pp. 1072–1077. DOI: [10.1109/VETECS.2000.886272](https://doi.org/10.1109/VETECS.2000.886272)
181. W. Yu and J. M. Cioffi, "FDMA capacity of the Gaussian multiple access channel with ISI," in *IEEE International Conference on Communications*, 2000, vol. 3, pp. 1365–1369. DOI: [10.1109/ICC.2000.853720](https://doi.org/10.1109/ICC.2000.853720)
182. J. M. Koo, B. M. Kim, H. S. Lee, and J. M. Cioffi, "Frequency selective NEXT cancellation," in *Acoustics, Speech, and Signal Processing, 2000. ICASSP '00. Proceedings. 2000 IEEE International Conference on*, 2000, vol. 5, pp. 2841–2844. DOI: [10.1109/ICASSP.2000.861107](https://doi.org/10.1109/ICASSP.2000.861107)
183. W. Rhee and J. M. Cioffi, "Increase in capacity of multiuser OFDM system using dynamic subchannel allocation," in *IEEE Vehicular Technology Conference*, 2000, vol. 2, pp. 1085–1089. DOI: [10.1109/VETECS.2000.851292](https://doi.org/10.1109/VETECS.2000.851292)
184. W.-J. Choi, K.-W. Cheong, and J. M. Cioffi, "Iterative soft interference cancellation for multiple antenna systems," in *2000 IEEE Wireless Communications and Networking Conference*, 2000, pp. 304–309. DOI: [10.1109/WCNC.2000.904647](https://doi.org/10.1109/WCNC.2000.904647)
185. G. V Klimovitch and J. M. Cioffi, "Maximizing data rate-sum over vector multiple access channel," in *2000 IEEE Wireless Communications and Networking Conference*, 2000, pp. 287–292. DOI: [10.1109/WCNC.2000.904644](https://doi.org/10.1109/WCNC.2000.904644)
186. R. Negi, M. Charikar, and J. M. Cioffi, "Minimum outage transmission over fading channels with delay constraint," in *Communications, 2000. ICC 2000. 2000 IEEE International Conference on*, 2000, vol. 1, pp. 282–286. DOI: [10.1109/ICC.2000.853123](https://doi.org/10.1109/ICC.2000.853123)
187. W. Yu and J. M. Cioffi, "Multiuser detection for vector multiple access channels using generalized decision feedback equalization," in *Signal Processing Proceedings, 2000. WCCC-ICSP 2000. 5th International Conference on*, 2000, vol. 3, pp. 1771–1777. DOI: [10.1109/ICOSP.2000.893444](https://doi.org/10.1109/ICOSP.2000.893444)

188. L. M. C. Hoo, J. Tellado, and J. M. Cioffi, "Multiuser loading algorithms for multicarrier systems with embedded constellations," in *IEEE International Conference on Communications*, 2000, vol. 2, pp. 1115–1119. DOI: [10.1109/ICC.2000.853671](https://doi.org/10.1109/ICC.2000.853671)
189. A. A. Hutter, E. De Carvalho, and J. M. Cioffi, "On the impact of channel estimation for multiple antenna diversity reception in mobile OFDM systems," in *Conference Record of the Asilomar Conference on Signals, Systems and Computers*, 2000, vol. 2, pp. 1820–1824. DOI: [10.1109/ACSSC.2000.911302](https://doi.org/10.1109/ACSSC.2000.911302)
190. A. A. Hutter, J. S. Hammerschmidt, E. De Carvalho, and J. M. Cioffi, "Receive diversity for mobile OFDM systems," in *2000 IEEE Wireless Communications and Networking Conference. Conference Record (Cat. No.00TH8540)*, 2000, vol. 2, pp. 707–712. DOI: [10.1109/WCNC.2000.903941](https://doi.org/10.1109/WCNC.2000.903941)
191. A. A. Salvekar and J. M. Cioffi, "Robust loading in the presence of channel profile selection," in *Signal Processing Proceedings, 2000. WCCC-ICSP 2000. 5th International Conference on*, 2000, vol. 3, pp. 1786–1789. DOI: [10.1109/ICOSP.2000.893447](https://doi.org/10.1109/ICOSP.2000.893447)
192. J. Kim and J. M. Cioffi, "Spatial multiuser access OFDM with antenna diversity and power control," in *IEEE Vehicular Technology Conference*, 2000, vol. 1, no. 52 ND, pp. 273–279. DOI: [10.1109/VETECF.2000.886664](https://doi.org/10.1109/VETECF.2000.886664)
193. J. Kim and J. M. Cioffi, "Spatial multiuser access with antenna diversity using singular value decomposition," in *2000 IEEE International Conference on Communications. ICC 2000. Global Convergence Through Communications. Conference Record*, 2000, Vol. 3, pp. 1253–1257. DOI: [10.1109/ICC.2000.853700](https://doi.org/10.1109/ICC.2000.853700)
194. R. Negi and J. M. Cioffi, "Stationary schemes for optimal transmission over fading channels with delay constraint," in *Vehicular Technology Conference, 2000. IEEE-VTS Fall VTC 2000. 52nd*, 2000, vol. 1, pp. 358–361. DOI: [10.1109/VETECF.2000.886677](https://doi.org/10.1109/VETECF.2000.886677)
195. W. Rhee, W. Yu, and J. M. Cioffi, "Utilizing multiuser diversity for multiple antenna systems," in *2000 IEEE Wireless Communications and Networking Conference*, 2000, Vol. 1, pp. 420–425. DOI: [10.1109/WCNC.2000.904669](https://doi.org/10.1109/WCNC.2000.904669)
196. G. Al-Rawi and J. M. Cioffi, "A highly efficient domain-programmable parallel architecture for iterative LDPC decoding," in *Information Technology: Coding and Computing, 2001. Proceedings. International Conference on*, 2001, pp. 569–577. DOI: [10.1109/ITCC.2001.918858](https://doi.org/10.1109/ITCC.2001.918858)
197. W. Yu, G. Ginis, and J. M. Cioffi, "An adaptive multiuser power control algorithm for VDSL," in *Conference Record / IEEE Global Telecommunications Conference*, 2001, vol. 1, pp. 394–398. DOI: [10.1109/GLOCOM.2001.965146](https://doi.org/10.1109/GLOCOM.2001.965146)

198. L. M. C. Hoo, B. Halder, J. Tellado, and J. M. Cioffi, "Asymptotic FDMA capacity region for broadcast channels with ISI," in *IEEE International Conference on Communications*, 2001, vol. 6, pp. 1648–1653. DOI: [10.1109/ICC.2001.937074](https://doi.org/10.1109/ICC.2001.937074)
199. C. H. Aldana and J. M. Cioffi, "Channel tracking for multiple input, single output systems using EM algorithm," in *Communications, 2001. ICC 2001. IEEE International Conference on*, 2001, vol. 2, pp. 586–590. DOI: [10.1109/ICC.2001.937007](https://doi.org/10.1109/ICC.2001.937007)
200. C. Zeng and J. M. Cioffi, "Crosstalk cancellation in ADSL systems," in *Conference Record / IEEE Global Telecommunications Conference*, 2001, vol. 1, pp. 344–348. DOI: [10.1109/GLOCOM.2001.965136](https://doi.org/10.1109/GLOCOM.2001.965136)
201. A. A. Salvekar, C. H. Aldana, E. de Carvalho, and J. M. Cioffi, "Crosstalk profile detection for use in multiuser detection," in *Communications, 2001. ICC 2001. IEEE International Conference on*, 2001, vol. 7, pp. 2171–2175. DOI: [10.1109/ICC.2001.937041](https://doi.org/10.1109/ICC.2001.937041)
202. H.-B. Li and J. M. Cioffi, "Enhanced block coded modulation using iterative decoding based on parity check codes," in *IEEE International Conference on Communications*, 2001, vol. 1, pp. 315–319. DOI: [10.1109/ICC.2001.936324](https://doi.org/10.1109/ICC.2001.936324)
203. W. Rhee and J. M. Cioffi, "Ergodic capacity of multi-antenna Gaussian multiple-access channels," in *Conference Record of the Asilomar Conference on Signals, Systems and Computers*, 2001, vol. 1, pp. 507–512. DOI: [10.1109/ACSSC.2001.986976](https://doi.org/10.1109/ACSSC.2001.986976)
204. W. Yu, W. Rhee, S. Boyd, and J. M. Cioffi, "Iterative water-filling for Gaussian vector multiple access channels," in *IEEE International Symposium on Information Theory - Proceedings*, 2001, p. 322. DOI: [10.1109/ISIT.2001.936185](https://doi.org/10.1109/ISIT.2001.936185)
205. W. Yu and J. M. Cioffi, "On constant power water-filling," in *IEEE International Conference on Communications*, 2001, vol. 6, pp. 1665–1669. DOI: [10.1109/ICC.2001.937077](https://doi.org/10.1109/ICC.2001.937077)
206. W. Rhee and J. M. Cioffi, "On the asymptotic optimality of beam-forming in multi-antenna Gaussian multiple access channels," in *Conference Record / IEEE Global Telecommunications Conference*, 2001, vol. 2, pp. 891–895. DOI: [10.1109/GLOCOM.2001.965547](https://doi.org/10.1109/GLOCOM.2001.965547)
207. G. Ginis and J. M. Cioffi, "On the convergence of the generalized DFE to the MMSE-DFE," in *Conference Record / IEEE Global Telecommunications Conference*, 2001, vol. 2, pp. 1327–1335. DOI: [10.1109/GLOCOM.2001.965705](https://doi.org/10.1109/GLOCOM.2001.965705)

208. W. Yu, W. Rhee, and J. M. Cioffi, "Optimal power control in multiple access fading channels with multiple antennas," in *ICC 2001. IEEE International Conference on Communications. Conference Record (Cat. No.01CH37240)*, 2001, Vol. 2, pp. 575–579. DOI: [10.1109/ICC.2001.937005](https://doi.org/10.1109/ICC.2001.937005)
209. C. Zeng, L. M. C. Hoo, and J. M. Cioffi, "Optimal water-filling algorithms for a Gaussian multiaccess channel with intersymbol interference," in *IEEE International Conference on Communications*, 2001, vol. 8, pp. 2421–2427. DOI: [10.1109/ICC.2001.936577](https://doi.org/10.1109/ICC.2001.936577)
210. Wei Yu ; Cioffi, J.M., "Trellis precoding for the broadcast channel" in *Global Telecommunications Conference, 2001. GLOBECOM '01. IEEE*, 2001, vol.2, pp. 1344-1348. DOI: [10.1109/GLOCOM.2001.965707](https://doi.org/10.1109/GLOCOM.2001.965707)
211. G. Al-Rawi, J. M. Cioffi, R. Motwani, and M. Horowitz, "Optimizing iterative decoding of low-density parity check codes on programmable pipelined parallel architectures," in *Global Telecommunications Conference, 2001. GLOBECOM '01. IEEE*, 2001, vol. 5, pp. 3012–3018. DOI: [10.1109/GLOCOM.2001.965980](https://doi.org/10.1109/GLOCOM.2001.965980)
212. G. Al-Rawi, J. M. Cioffi, and M. Horowitz, "Optimizing the mapping of low-density parity check codes on parallel decoding architectures," in *Information Technology: Coding and Computing, 2001. Proceedings. International Conference on*, 2001, pp. 578–586. DOI: [10.1109/ITCC.2001.918859](https://doi.org/10.1109/ITCC.2001.918859)
213. A. A. Salvekar, C. H. Aldana, J. Tellado, and J. M. Cioffi, "Peak-to-average power ratio reduction for block transmission systems in the presence of transmit filtering," in *Communications, 2001. ICC 2001. IEEE International Conference on*, 2001, vol. 1, pp. 175–178. DOI: [10.1109/ICC.2001.936298](https://doi.org/10.1109/ICC.2001.936298)
214. R. Nilsson, F. Sjöberg, M. Isaksson, J. M. Cioffi, and S. K. Wilson, "Self-synchronizing a DMT-based VDSL system," in *IEEE International Conference on Communications*, 2001, vol. 4, pp. 1249–1253. DOI: [10.1109/ICC.2001.936892](https://doi.org/10.1109/ICC.2001.936892)
215. W. Yu and J. M. Cioffi, "Trellis precoding for the broadcast channel," in *Conference Record / IEEE Global Telecommunications Conference*, 2001, vol. 2, pp. 1344–1348. DOI: [10.1109/GLOCOM.2001.965707](https://doi.org/10.1109/GLOCOM.2001.965707)
216. G. Ginis and J. M. Cioffi, "Vectored-DMT: A FEXT canceling modulation scheme for coordinating users," in *IEEE International Conference on Communications*, 2001, vol. 1, pp. 305–309. DOI: [10.1109/ICC.2001.936322](https://doi.org/10.1109/ICC.2001.936322)
217. J. Lee, R. V Sonalkar, and J. M. Cioffi, "A multi-user rate and power control algorithm for VDSL," in *Conference Record / IEEE Global Telecommunications Conference*, 2002, vol. 2, pp. 1264–1268. DOI: [10.1109/GLOCOM.2002.1188400](https://doi.org/10.1109/GLOCOM.2002.1188400)

218. J. Andrews, A. Agrawal, T. Meng, and J. M. Cioffi, "A simple iterative power control scheme for successive interference cancellation," in *Spread Spectrum Techniques and Applications, 2002 IEEE Seventh International Symposium on*, 2002, vol. 3, pp. 761–765. DOI: [10.1109/ISSSTA.2002.1049362](https://doi.org/10.1109/ISSSTA.2002.1049362)
219. G. Ginis, Y. Bar-Ness, and J. M. Cioffi, "Blind adaptive MIMO decision feedback equalization using givens rotations," in *IEEE International Conference on Communications*, 2002, vol. 1, pp. 59–63. DOI: [10.1109/ICC.2002.996817](https://doi.org/10.1109/ICC.2002.996817)
220. Wei Yu ; Cioffi, J.M., "Sum capacity of a Gaussian vector broadcast channel" in *2002 IEEE International Symposium on Information Theory*, 2002. DOI: [10.1109/ISIT.2002.1023770](https://doi.org/10.1109/ISIT.2002.1023770)
221. A. Agrawal, G. Ginis, and J. M. Cioffi, "Channel diagonalization through orthogonal space-time coding," in *IEEE International Conference on Communications*, 2002, vol. 3, pp. 1621–1624. DOI: [10.1109/ICC.2002.997123](https://doi.org/10.1109/ICC.2002.997123)
222. L. M. C. Hoo, J. Tellado, and J. M. Cioffi, "FDMA-based multiuser transmit optimization for broadcast channels," in *2000 IEEE Wireless Communications and Networking Conference*, 2002, vol. 2, pp. 597–602. DOI: [10.1109/WCNC.2000.903919](https://doi.org/10.1109/WCNC.2000.903919)
223. J. Louveaux, A. A. Salvekar, and J. M. Cioffi, "Frame synchronization for multiuser digital subscriber line systems," in *Global Telecommunications Conference, 2002. GLOBECOM '02. IEEE*, 2002, vol. 1, pp. 264–268. DOI: [10.1109/GLOCOM.2002.1188081](https://doi.org/10.1109/GLOCOM.2002.1188081)
224. A. G. Armada and J. M. Cioffi, "Multi-user constant-energy bit loading for M-PSK-modulated orthogonal frequency division multiplexing," in *2002 IEEE Wireless Communications and Networking Conference Record. WCNC 2002 (Cat. No.02TH8609)*, 2002, Vol. 2, pp. 526–530. DOI: [10.1109/WCNC.2002.993323](https://doi.org/10.1109/WCNC.2002.993323)
225. J. Lee, R. V Sonalkar, and J. M. Cioffi, "Multi-user discrete bit-loading for DMT-based DSL systems," in *Conference Record / IEEE Global Telecommunications Conference*, 2002, vol. 2, pp. 1259–1263. DOI: [10.1109/GLOCOM.2002.1188399](https://doi.org/10.1109/GLOCOM.2002.1188399)
226. D. P. Palomar, M.-A. Lagunas, and J. M. Cioffi, "Optimum joint transmit-receive linear processing for vectored DSL transmission with QoS requirements," in *Conference Record of the Thirty-Sixth Conference on Signals, Systems and Computers (Cat. No.02CH37387)*, 2002, Vol. 1, pp. 388–392. DOI: [10.1109/ACSSC.2002.1197212](https://doi.org/10.1109/ACSSC.2002.1197212)
227. A. Agrawal, J. Andrews, J. M. Cioffi, and T. Meng, "Power control for successive interference cancellation with imperfect cancellation," in *Communications, 2002. ICC 2002. IEEE International Conference on*, 2002, vol. 1, pp. 356–360. DOI: [10.1109/ICC.2002.996875](https://doi.org/10.1109/ICC.2002.996875)

228. S. T. Chung and J. M. Cioffi, "Rate and power control in a two-user multicarrier channel with no coordination: the optimal scheme vs. suboptimal methods," in *2002 IEEE 56th Vehicular Technology Conference Proceedings (Cat. No.02CH37359)*, 2002, Vol. 3, pp. 1744–1748. DOI: [10.1109/VETECF.2002.1040515](https://doi.org/10.1109/VETECF.2002.1040515)
229. H.-B. Li and J. M. Cioffi, "Simplified decoding for orthogonally concatenated coded modulation and parity-check-code," in *Proceedings of Third International Symposium on Communication Systems Networks and Digital Signal Processing*, 2002, pp. 144–147.
230. A. Agrawal and J. M. Cioffi, "Transmit optimization for frequency division duplex multi-antenna systems," in *Vehicular Technology Conference, 2002. Proceedings. VTC 2002-Fall. 2002 IEEE 56th*, 2002, vol. 4, pp. 1968–1972. DOI: [10.1109/VETECF.2002.1040562](https://doi.org/10.1109/VETECF.2002.1040562)
231. D. Toumpakaris, W. Yu, J. M. Cioffi, D. Gardan, and M. Ouzzif, "A byte-erasure method for improved impulse immunity in DSL systems using soft information from an inner code," in *IEEE International Conference on Communications, Anchorage, Alaska, May 11-15, 2003*, 2003, Vol. 4, pp. 2431–2435. DOI: [10.1109/ICC.2003.1204370](https://doi.org/10.1109/ICC.2003.1204370)
232. Seong Taek Chung ; Cioffi, J.M., "The capacity region of frequency-selective Gaussian interference channels under strong interference" in *IEEE International Conference on Communications, Anchorage, Alaska, May 11-15, 2003*, 2003, Vol. 4, pp. 2753-2757. DOI: [10.1109/ICC.2003.1204489](https://doi.org/10.1109/ICC.2003.1204489)
233. Toumpakaris, D. ; Wei Yu ; Cioffi, J.M. ; Gardan, D. ; Ouzzif, M. , "A simple byte-erasure method for improved impulse immunity in DSL" in *IEEE International Conference on Communications, 2003. ICC '03.*, 2003, vol. 4, pp. 2426-2430 DOI: [10.1109/ICC.2003.1204369](https://doi.org/10.1109/ICC.2003.1204369)
234. S. T. Chung, S.-J. Kim, J. Lee, and J. M. Cioffi, "A game-theoretic approach to power allocation in frequency-selective Gaussian interference channels," in *IEEE International Symposium on Information Theory - Proceedings*, 2003, p. 316. DOI: [10.1109/ISIT.2003.1228331](https://doi.org/10.1109/ISIT.2003.1228331)
235. D. Toumpakaris, J. M. Cioffi, D. Gardan, M. Ouzzif, and W. Yu, "A Square Distance-Based Byte-Erasure Method for Reduced-delay Protection of DSL Systems from Non-stationary Interference," in *IEEE International Conference on Communications*, 2003, vol. 4, pp. 2114–2119. DOI: [10.1109/GLOCOM.2003.1258609](https://doi.org/10.1109/GLOCOM.2003.1258609)

236. K. B. Song, A. Ekbal, S. T. Chung, and J. M. Cioffi, "Adaptive modulation and coding for bit-interleaved coded OFDM," in *ICC 2003, Paris, France, June 20-24, 2004*, 2004, Vol. 6, pp. 3197–3201. DOI: [10.1109/ICC.2004.1313134](https://doi.org/10.1109/ICC.2004.1313134)
237. G. A. Al-Rawi, T. Y. Al-Naffouri, A. Bahai, and J. M. Cioffi, "An iterative receiver for coded OFDM systems over time-varying wireless channels," in *ICC '03. IEEE International Conference on Communications, 2003*, 2003, pp. 3371–3376. DOI: [10.1109/ICC.2003.1204080](https://doi.org/10.1109/ICC.2003.1204080)
238. Y.-C. Liang and J. M. Cioffi, "Combining transmit beamforming, space-time block coding and delay spread reduction," in *IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC, 2003*, vol. 1, pp. 105–109. DOI: [10.1109/PIMRC.2003.1264241](https://doi.org/10.1109/PIMRC.2003.1264241)
239. M. Ouzzif, D. Toumpakaris, J. M. Cioffi, and A. Zeddani, "Comparison of QAM-VDSL and DMT-VDSL in an impulse noise environment," in *Global Telecommunications Conference, 2003. GLOBECOM '03. IEEE, 2003*, vol. 4, pp. 2141–2145. DOI: [10.1109/GLOCOM.2003.1258614](https://doi.org/10.1109/GLOCOM.2003.1258614)
240. D. P. Palomar, J. M. Cioffi, M.-A. Lagunas, and A. P. Iserle, "Convex optimization theory applied to joint beamforming design in multicarrier MIMO channels," in *IEEE International Conference on Communications, 2003*, vol. 4, pp. 2974–2978. DOI: [10.1109/ICC.2003.1204611](https://doi.org/10.1109/ICC.2003.1204611)
241. A. Ekbal, K.-B. Song, and J. M. Cioffi, "Outage capacity and cutoff rate of bit-interleaved coded OFDM under quasistatic frequency selective fading," in *GLOBECOM - IEEE Global Telecommunications Conference, 2003*, vol. 2, pp. 1054–1058. DOI: [10.1109/GLOCOM.2003.1258399](https://doi.org/10.1109/GLOCOM.2003.1258399)
242. Y.-C. Liang, R. Zhang, and J. M. Cioffi, "Sub-channel grouping and statistical water-filling for MIMO-OFDM systems," in *Conference Record of the Asilomar Conference on Signals, Systems and Computers, 2003*, vol. 1, pp. 997–1001. DOI: [10.1109/ACSSC.2003.1292067](https://doi.org/10.1109/ACSSC.2003.1292067)
243. J. Lee and J. M. Cioffi, "The optimal power allocation for equal-length twisted-pair channels," in *IEEE International Conference on Communications, 2003*, vol. 4, pp. 2862–2866. DOI: [10.1109/ICC.2003.1204545](https://doi.org/10.1109/ICC.2003.1204545)
244. D. P. Palomar, J. M. Cioffi, and M.-A. Lagunas, "Uniform power allocation in mimo channels: a game-theoretic approach," in *Information Theory, 2003. Proceedings. IEEE International Symposium on*, 2003, p. 271. DOI: [10.1109/ISIT.2003.1228286](https://doi.org/10.1109/ISIT.2003.1228286)
245. J. Lee, H.-L. Lou, D. Toumpakaris, and J. M. Cioffi, "A blind frequency tracking algorithm for OFDM transmission over frequency selective channels," in *IEEE*

- Vehicular Technology Conference*, 2004, vol. 60, no. 1, pp. 578–582. DOI: [10.1109/VETECEF.2004.1400073](https://doi.org/10.1109/VETECEF.2004.1400073)
246. C.-Y. Chen, C. Heneghan, and J. M. Cioffi, “A novel decision feedback equalizer design based on generalized space translation,” in *Conference Record - Asilomar Conference on Signals, Systems and Computers*, 2004, vol. 1, pp. 727–731. DOI: [10.1109/ACSSC.2004.1399230](https://doi.org/10.1109/ACSSC.2004.1399230)
247. D. Toumpakaris, J. Lee, A. Ekbal, J. M. Cioffi, F. Gauthier, and A. Zeddou, “An outer code-assisted RFI cancellation method for DMT-DSL systems,” in *GLOBECOM - IEEE Global Telecommunications Conference*, 2004, vol. 4, pp. 2562–2567. DOI: [10.1109/GLOCOM.2004.1378468](https://doi.org/10.1109/GLOCOM.2004.1378468)
248. J. M. Cioffi and M. Mohseni, “Dynamic Spectrum Management (Winner conference best paper award),” in *International Symposium on Services and Local Access 2004, Edinburgh, Scotland, March 2004*, 2004.
249. J. Lee, H.-L. Lou, D. Toumpakaris, and J. M. Cioffi, “Effect of carrier frequency offset on OFDM systems for multipath fading channels,” in *GLOBECOM - IEEE Global Telecommunications Conference*, 2004, vol. 6, pp. 3721–3725. DOI: [10.1109/GLOCOM.2004.1379064](https://doi.org/10.1109/GLOCOM.2004.1379064)
250. J. Lee, D. Toumpakaris, H.-L. Lou, and J. M. Cioffi, “Effect of carrier frequency offset on time-domain differential demodulation in OFDM systems,” in *IEEE Vehicular Technology Conference*, 2004, vol. 60, no. 1, Vol. 1, pp. 568–572. DOI: [10.1109/VETECEF.2004.1400071](https://doi.org/10.1109/VETECEF.2004.1400071)
251. R. Zhang, Y.-C. Liang, and J. M. Cioffi, “Multi-target channel inversion power control for block-fading channels with multiple antennas,” in *IEEE International Conference on Communications*, 2004, vol. 1, pp. 593–597. DOI: [10.1109/ICC.2004.1312558](https://doi.org/10.1109/ICC.2004.1312558)
252. J. Oh, S.-J. Kim, and J. M. Cioffi, “Optimum power allocation and control for OFDM in multiple access channels,” in *2004 IEEE 60th Vehicular Technology Conference. VTC2004-Fall (IEEE Cat. No.04CH37575)*, 2004, Vol. 2, pp. 774–778. DOI: [10.1109/VETECEF.2004.1400125](https://doi.org/10.1109/VETECEF.2004.1400125)
253. A. Ekbal, K.-B. Song, and J. M. Cioffi, “QoS-constrained physical layer optimization for correlated flat-fading wireless channels,” in *IEEE International Conference on Communications*, 2004, vol. 7, pp. 4211–4215. DOI: [10.1109/ICC.2004.1313342](https://doi.org/10.1109/ICC.2004.1313342)
254. K.-B. Song, C.-S. Hwang, and J. M. Cioffi, “Rate-compatible punctured convolutionally (RCPC) space-frequency bit-interleaved coded modulation (SF-BICM),” in *IEEE International Conference on Communications*, 2004, vol. 6, pp. 3284–3288. DOI: [10.1109/ICC.2004.1313153](https://doi.org/10.1109/ICC.2004.1313153)

255. Y.-C. Liang, R. Zhang, and J. M. Cioffi, "Statistical power allocation strategy for vector block-fading channels," in *2004 IEEE 15th International Symposium on Personal, Indoor and Mobile Radio Communications (IEEE Cat. No.04TH8754)*, 2004, Vol. 1, pp. 63–67. DOI: [10.1109/PIMRC.2004.1370837](https://doi.org/10.1109/PIMRC.2004.1370837)
256. J. Oh and J. M. Cioffi, "Sub-band rate and power control for wireless OFDM systems," in *IEEE Vehicular Technology Conference*, 2004, vol. 60, no. 3, pp. 2011–2014. DOI: [10.1109/VETEFC.2004.1400391](https://doi.org/10.1109/VETEFC.2004.1400391)
257. M.-Y. Chen, C.-Y. Chen, H.-C. Li, S.-C. Pei, and J. M. Cioffi, "Deriving new quasi-orthogonal space-time block codes and relaxed designing viewpoints with full transmit diversity," in *2005 IEEE International Conference on Communications (IEEE Cat. No. 05CH37648)*, 2005, Vol. 5, pp. 2922–2926. DOI: [10.1109/ICC.2005.1494914](https://doi.org/10.1109/ICC.2005.1494914)
258. A. Ekbal and J. M. Cioffi, "Distributed transmit beamforming in cellular networks - A convex optimization perspective," in *IEEE International Conference on Communications*, 2005, vol. 4, pp. 2690–2694. DOI: [10.1109/ICC.2005.1494837](https://doi.org/10.1109/ICC.2005.1494837)
259. A. Ekbal and J. M. Cioffi, "Effect of wireless channel process on queueing delay - Approximate analysis using peakedness function," in *IEEE International Conference on Communications*, 2005, vol. 1, pp. 468–472. DOI: [10.1109/ICC.2005.1494396](https://doi.org/10.1109/ICC.2005.1494396)
260. R. Narasimhan, A. Ekbal, and J. M. Cioffi, "Finite-SNR diversity-multiplexing tradeoff of space-time codes," in *IEEE International Conference on Communications*, 2005, vol. 1, pp. 458–462. DOI: [10.1109/ICC.2005.1494394](https://doi.org/10.1109/ICC.2005.1494394)
261. C.-Y. Chen, M.-Y. Chen, and J. M. Cioffi, "Full-diversity quasi-orthogonal space-time block codes for M-PSK modulations," in *GLOBECOM - IEEE Global Telecommunications Conference*, 2005, vol. 5, pp. 3022–3026. DOI: [10.1109/GLOCOM.2005.1578312](https://doi.org/10.1109/GLOCOM.2005.1578312)
262. R. Zhang, J. M. Cioffi, and Y.-C. Liang, "MIMO broadcasting with delay-constrained and no-delay-constrained services," in *IEEE International Conference on Communications*, 2005, vol. 2, pp. 783–787. DOI: [10.1109/ICC.2005.1494459](https://doi.org/10.1109/ICC.2005.1494459)
263. Y. Kim, K.-B. Song, R. Narasimhan, and J. M. Cioffi, "Single user random beamforming in Gaussian MIMO broadcast channels," in *IEEE International Conference on Communications*, 2005, vol. 4, pp. 2695–2699. DOI: [10.1109/ICC.2005.1494838](https://doi.org/10.1109/ICC.2005.1494838)
264. M. Mohseni and J. M. Cioffi, "Sub-optimal throughput maximization schemes for Gaussian vector broadcast channels," in *IEEE International Conference on Communications*, 2005, vol. 1, pp. 709–714. DOI: [10.1109/ICC.2005.1494444](https://doi.org/10.1109/ICC.2005.1494444)

265. R. Zhang, J. M. Cioffi, and Y.-C. Liang, "Throughput comparison of wireless downlink transmission schemes with multiple antennas," in *2005 IEEE International Conference on Communications (IEEE Cat. No. 05CH37648)*, 2005, Vol.4, pp. 2700–2704 DOI: [10.1109/ICC.2005.1494839](https://doi.org/10.1109/ICC.2005.1494839)
266. Y. Kim, K.-B. Song, R. Narasimhan, J. M. Cioffi, J. Oh, and S.-J. Kim, "Transmit power optimization for Gaussian vector broadcast channels," in *IEEE International Conference on Communications*, 2005, vol. 4, pp. 2712–2716. DOI: [10.1109/ICC.2005.1494841](https://doi.org/10.1109/ICC.2005.1494841)
267. M. Mohseni and J. M. Cioffi, "A proof of the converse for the capacity of Gaussian MIMO broadcast channels," in *IEEE International Symposium on Information Theory - Proceedings*, 2006, pp. 881–885. DOI: [10.1109/ISIT.2006.261785](https://doi.org/10.1109/ISIT.2006.261785)
268. R. Zhang, J. M. Cioffi, and Y.-C. Liang, "Approaching MIMO-OFDM capacity with per antenna power and Rate Feedback," in *IEEE International Conference on Communications*, 2006, vol. 12, pp. 5348–5353. DOI: [10.1109/ICC.2006.255511](https://doi.org/10.1109/ICC.2006.255511)
269. K. Seong, R. Narasimhan, and J. M. Cioffi, "Cross-layer resource allocation via geometric programming in fading broadcast channels," in *IEEE Vehicular Technology Conference. 2006*, 2006, pp. 1605–1609. DOI: [10.1109/VETECS.2006.1683117](https://doi.org/10.1109/VETECS.2006.1683117)
270. R. Zhang and J. M. Cioffi, "CTH06-6: Approaching MIMO-OFDM Capacity with Closed-Loop V-BLAST," in *Global Telecommunications Conference, 2006. GLOBECOM '06. IEEE*, 2006, pp. 1–5. DOI: [10.1109/GLOCOM.2006.69](https://doi.org/10.1109/GLOCOM.2006.69)
271. Kibeom Seong ; Yu, D.D. ; Youngjae Kim ; Cioffi, J.M.. "CTH03-5: Optimal Resource Allocation via Geometric Programming for OFDM Broadcast and Multiple Access Channels" in *Global Telecommunications Conference, 2006. GLOBECOM '06. IEEE*, 2006, pp. 1–5. DOI: [10.1109/GLOCOM.2006.50](https://doi.org/10.1109/GLOCOM.2006.50)
272. Rui Zhang ; Cioffi, J.M., "CTH03-6: Approaching MIMO-OFDM Capacity with Closed-Loop V-BLAST" in *Global Telecommunications Conference, 2006. GLOBECOM '06. IEEE*, 2006, pp. 1–5. DOI: [10.1109/GLOCOM.2006.51](https://doi.org/10.1109/GLOCOM.2006.51)
273. S. Jagannathan and J. M. Cioffi, "CTH06-1: Optimality of FDMA in Gaussian Multiple-Access Channels with Non-zero SNR Margin and Gap," in *Global Telecommunications Conference, 2006. GLOBECOM '06. IEEE*, 2006, pp. 1–5. DOI: [10.1109/GLOCOM.2006.64](https://doi.org/10.1109/GLOCOM.2006.64)
274. R. Agarwal and J. M. Cioffi, "Fading Broadcast Channels with One-Sided Feedback," in *Signals, Systems and Computers, 2006. ACSSC '06. Fortieth Asilomar Conference on*, 2006, pp. 498–500. DOI: [10.1109/ACSSC.2006.354797](https://doi.org/10.1109/ACSSC.2006.354797)

275. E. W. Jang, S. Nam, J. Kim, and J. M. Cioffi, "Improved OSIC decoder for spatially multiplexed system," in *IEEE International Conference on Communications*, 2006, vol. 7, pp. 2963–2968. DOI: [10.1109/ICC.2006.255257](https://doi.org/10.1109/ICC.2006.255257)
276. D. D. Yu and J. M. Cioffi, "SPC10-2: Iterative water-filling for optimal resource allocation in OFDM multiple-access and broadcast channels," in *GLOBECOM - IEEE Global Telecommunications Conference*, 2006, pp. 1–5. DOI: [10.1109/GLOCOM.2006.587](https://doi.org/10.1109/GLOCOM.2006.587)
277. Jang, E.W. ; Younggeun Cho ; Cioffi, J.M. , "SPC12-4: Throughput Optimization for Continuous Flat Fading MIMO Channels with Estimation Error," in *IEEE Global Telecommunications Conference, 2006. GLOBECOM '06*. 2006. pp. 1-5. DOI: [10.1109/GLOCOM.2006.600](https://doi.org/10.1109/GLOCOM.2006.600)
278. Yu, D.D. ; Cioffi, J.M. , "SPC10-2: Iterative Water-filling for Optimal Resource Allocation in OFDM Multiple-Access and Broadcast Channels," in *IEEE Global Telecommunications Conference, 2006. GLOBECOM '06*. 2006. pp. 1-5. DOI: [10.1109/GLOCOM.2006.587](https://doi.org/10.1109/GLOCOM.2006.587)
279. Y. Kim, J. M. Cioffi, and K. Holt, "Low complexity BICM-OFDM-based MIMO receiver using successive interference cancellation," in *2006 Wireless Telecommunications Symposium, WTS*, 2006, pp.1- 5. DOI: [10.1109/WTS.2006.334553](https://doi.org/10.1109/WTS.2006.334553)
280. C.-S. Hwang, K. Seong, and J. M. Cioffi, "Opportunistic p-persistent CSMA in wireless networks," in *IEEE International Conference on Communications*, 2006, vol. 1, pp. 183–188. DOI: [10.1109/ICC.2006.254725](https://doi.org/10.1109/ICC.2006.254725)
281. K. Seong, M. Mohseni, and J. M. Cioffi, "Optimal resource allocation for OFDMA downlink systems," in *IEEE International Symposium on Information Theory - Proceedings*, 2006, pp. 1394–1398. DOI: [10.1109/ISIT.2006.262075](https://doi.org/10.1109/ISIT.2006.262075)
282. K. Seong, D. D. Yu, Y. Kim, and J. M. Cioffi, "CTH03-5: Optimal resource allocation via geometric programming for OFDM broadcast and multiple access channels," in *Global Telecommunications Conference, 2006. GLOBECOM '06. IEEE*, 2006, pp. 1-5. DOI: [10.1109/GLOCOM.2006.50](https://doi.org/10.1109/GLOCOM.2006.50)
283. C.-Y. Chen, K. Seong, R. Zhang, and J. M. Cioffi, "CTH06-6: Optimized transmission for upstream vectored DSL systems using zero-forcing generalized decision-feedback equalizers," in *GLOBECOM - IEEE Global Telecommunications Conference*, 2006, pp. 1–5. DOI: [10.1109/GLOCOM.2006.69](https://doi.org/10.1109/GLOCOM.2006.69)
284. C.-S. Hwang, K. Seong, and J. M. Cioffi, "Power efficient Opportunistic p-persistent CSMA for Wireless Networks.," in *ICC '06. IEEE International*

- Conference on Communications*, 2006, 2006, pp. 1736–1741. DOI: [10.1109/ICC.2006.254970](https://doi.org/10.1109/ICC.2006.254970)
285. R. Zhang, M. Mohseni, and J. M. Cioffi, “Power Region for Fading Multiple-Access Channel with Multiple Antennas,” in *IEEE International Symposium on Information Theory*, 2006, 2006, pp. 2709–2713. DOI: [10.1109/ISIT.2006.262146](https://doi.org/10.1109/ISIT.2006.262146)
286. K. Seong, R. Narasimhan, and J. M. Cioffi, “Queue proportional scheduling in gaussian broadcast channels,” in *IEEE International Conference on Communications*, 2006, vol. 4, pp. 1647–1652. DOI: [10.1109/ICC.2006.254955](https://doi.org/10.1109/ICC.2006.254955)
287. C.-S. Hwang and J. M. Cioffi, “Scalable feedback protocol asymptotically achieving broadcast channel sum-capacity,” in *Conference Record - Asilomar Conference on Signals, Systems and Computers*, 2006, pp. 191–195. DOI: [10.1109/ACSSC.2006.356613](https://doi.org/10.1109/ACSSC.2006.356613)
288. M. H. Brady, M. Mohseni, and J. M. Cioffi, “Spatially-correlated jamming in Gaussian multiple access and broadcast channels,” in *2006 40th Annual Conference on Information Sciences and Systems (IEEE Cat No. 06EX1366C)*, 2006, pp. 1635–1639. DOI: [10.1109/CISS.2006.286397](https://doi.org/10.1109/CISS.2006.286397)
289. W. Lee, Y. Kim, M. H. Brady, and J. M. Cioffi, “SPC09-6: Band-Preference Dynamic Spectrum Management in a DSL Environment,” in *Global Telecommunications Conference, 2006. GLOBECOM '06. IEEE*, 2006, pp. 1–5. DOI: [10.1109/GLOCOM.2006.585](https://doi.org/10.1109/GLOCOM.2006.585)
290. Y. Kim, J. M. Cioffi, and R. Narasimhan, “SUBF vs. MUBF in a Gaussian MIMO broadcast channel with partial channel state information,” in *2006 IEEE International Conference on Acoustics, Speech, and Signal Processing (IEEE Cat. No. 06CH37812C)*, 2006, vol. 4, pp. IV–773–6. DOI: [10.1109/ICASSP.2006.1661083](https://doi.org/10.1109/ICASSP.2006.1661083)
291. E. W. Jang, Y. Cho, and J. M. Cioffi, “SPC12-4: Throughput optimization for continuous flat fading MIMO channels with estimation error,” in *GLOBECOM - IEEE Global Telecommunications Conference*, 2006, pp. 1–5. DOI: [10.1109/GLOCOM.2006.600](https://doi.org/10.1109/GLOCOM.2006.600)
292. C.-Y. Chen, R. Zhang, and J. M. Cioffi, “A capacity-approaching algorithm for resource allocation in MIMO-OFDM multiple-access channel,” in *GLOBECOM - IEEE Global Telecommunications Conference*, 2007, pp. 2932–2936. DOI: [10.1109/GLOCOM.2007.555](https://doi.org/10.1109/GLOCOM.2007.555)
293. C.-Y. Chen, A. Sezgin, and J. M. Cioffi, “A Low-Complexity Algorithm for Antenna Selection in Space-Time Block Coded Systems,” in *GLOBECOM '07 Global Communications Conference, 26-30 November 2007*, 2007, pp. 4221 – 4225. DOI: [10.1109/GLOCOM.2007.803](https://doi.org/10.1109/GLOCOM.2007.803)

294. R. Agarwal and J. M. Cioffi, "Achieving Sum-Capacity of the MIMO BC with Large Transmit Array using One-Shot Scalable Feedback Protocol," in *Vehicular Technology Conference, 2007. VTC2007-Spring. IEEE 65th*, 2007, pp. 2038–2042. DOI: [10.1109/VETECS.2007.422](https://doi.org/10.1109/VETECS.2007.422)
295. E. W. Jang, J. Lee, L. Song, and J. M. Cioffi, "Concatenation-assisted symbol-level combining scheme for MIMO systems with hybrid ARQ," in *GLOBECOM - IEEE Global Telecommunications Conference*, 2007, vol. 8, no. 5, pp. 3275–3279. DOI: [10.1109/GLOCOM.2007.621](https://doi.org/10.1109/GLOCOM.2007.621)
296. J. Yang, D. B. Williams, and J. M. Cioffi, "Data-dependent superimposed training for noncoherent channels," in *2007 41st Asilomar Conference on Signals, Systems and Computers (ACSSC '07)*, 2007, pp. 1010–1014. DOI: [10.1109/ACSSC.2007.4487373](https://doi.org/10.1109/ACSSC.2007.4487373)
297. T. Tamaki, K. Seong, and J. M. Cioffi, "Downlink MIMO systems using cooperation among base stations in a slow fading channel," in *2007 IEEE International Conference on Communications*, 2007, pp. 4728–4733. DOI: [10.1109/ICC.2007.781](https://doi.org/10.1109/ICC.2007.781)
298. R. Agarwal, V. R. Majjigi, R. Vannithamby, and J. M. Cioffi, "Efficient Scheduling for Heterogeneous Services in OFDMA Downlink," in *IEEE GLOBECOM, November 26-30, 2007, Washington D.C.*, 2007, pp. 3235 – 3239. DOI: [10.1109/GLOCOM.2007.613](https://doi.org/10.1109/GLOCOM.2007.613)
299. R. Agarwal, V. R. Majjigi, R. Vannithamby, and J. M. Cioffi, "Efficient Scheduling for Heterogeneous Traffic in Downlink," in *Vehicular Technology Conference, 2007. VTC-2007 Fall. 2007 IEEE 66th*, 2007, pp. 1917–1921. DOI: [10.1109/VETECS.2007.403](https://doi.org/10.1109/VETECS.2007.403)
300. W. Lee, C.-S. Hwang, and J. M. Cioffi, "Energy-efficient random-access scheduler for delay-limited traffic in wireless networks," in *GLOBECOM - IEEE Global Telecommunications Conference*, 2007, pp. 5048-5052. DOI: [10.1109/GLOCOM.2007.957](https://doi.org/10.1109/GLOCOM.2007.957)
301. C.-S. Ilwang, M. Malkin, A. El Gamal, J. M. Cioffi, and C.-S. Hwang, "Multiple-access channels with distributed channel state information," in *2007 IEEE International Symposium on Information Theory*, 2007, pp. 1561–1565. DOI: [10.1109/ISIT.2007.4557444](https://doi.org/10.1109/ISIT.2007.4557444)
302. G. Fraidenraich, O. Leveque, and J. M. Cioffi, "On the MIMO channel capacity for the nakagami-channel," in *IEEE Global Telecommunications Conference 2007 GLOBECOM*, 2007, pp. 3612–3616. DOI: [10.1109/GLOCOM.2007.686](https://doi.org/10.1109/GLOCOM.2007.686)

303. R. Agarwal, V. Abhishek, R. Vannithamby, and J. M. Cioffi, "Opportunistic Feedback in OFDMA Downlink," in *Vehicular Technology Conference, 2007. VTC-2007 Fall. 2007 IEEE 66th*, 2007, pp. 3220–3224. DOI: [10.1109/GLOCOM.2007.610](https://doi.org/10.1109/GLOCOM.2007.610)
304. R. Agarwal, C.-S. Hwang, and J. M. Cioffi, "Opportunistic Feedback Protocol for Achieving Sum-Capacity of the MIMO Broadcast Channel," in *Vehicular Technology Conference, 2007. VTC-2007 Fall. 2007 IEEE 66th*, 2007, pp. 606–610. DOI: [10.1109/VETEFC.2007.137](https://doi.org/10.1109/VETEFC.2007.137)
305. Agarwal, R.; Abhishek, V.; Vannithamby, R ; Cioffi, J., "Opportunistic Feedback Protocol for Minimizing Power in Uplink with Heterogeneous Traffic," in *Vehicular Technology Conference, 2007. VTC-2007 Fall. 2007 IEEE 66th*, 2007, pp. 1882-1886. DOI: [10.1109/VETEFC.2007.396](https://doi.org/10.1109/VETEFC.2007.396)
306. E. W. Jang, J. Lee, H.-L. Lou, and J. M. Cioffi, "Optimal Combining Schemes for MIMO Systems with Hybrid ARQ," in *IEEE International Symposium on Information Theory, 2007*, 2007, pp. 2286 – 2290. DOI: [10.1109/ISIT.2007.4557560](https://doi.org/10.1109/ISIT.2007.4557560)
307. W. Lee, K. Seong, and J. M. Cioffi, "Optimal delay region for cross-layer resource allocation," in *GLOBECOM - IEEE Global Telecommunications Conference, 2007*, pp. 3343–3347. DOI: [10.1109/GLOCOM.2007.634](https://doi.org/10.1109/GLOCOM.2007.634)
308. V. R. Majjigi, R. Agarwal, R. Vannithamby, and J. M. Cioffi, "Persistent Resource Allocation in OFDMA Networks for Real-Time and Non-Real-Time Traffic," in *Signals, Systems and Computers, 2007. ACSSC 2007. Conference Record of the Forty-First Asilomar Conference on*, 2007, pp. 280–284. DOI: [10.1109/ACSSC.2007.4487213](https://doi.org/10.1109/ACSSC.2007.4487213)
309. C.-S. Hwang, W. Lee, and J. M. Cioffi, "Randomized scheduler for temporally-correlated channels," in *2007 IEEE International Conference on Acoustics, Speech, and Signal Processing (IEEE Cat. No. 07CH37846)*, 2007, vol. 3, pp. III21–III24. DOI: [10.1109/ICASSP.2007.366462](https://doi.org/10.1109/ICASSP.2007.366462)
310. M. Malkin, C.-S. Hwang, and J. M. Cioffi, "Reducing insufficient-cyclic-prefix distortion using tone reservation," in *GLOBECOM - IEEE Global Telecommunications Conference, 2007*, pp. 2889–2893. DOI: [10.1109/GLOCOM.2007.547](https://doi.org/10.1109/GLOCOM.2007.547)
311. R. Kwak, W. Lee, A. El Gamal, and J. M. Cioffi, "Relay with side information," in *IEEE International Symposium on Information Theory - Proceedings, 2007*, pp. 606–610. DOI: [10.1109/ISIT.2007.4557291](https://doi.org/10.1109/ISIT.2007.4557291)

312. R. Kwak and J. M. Cioffi, "Resource-allocation for OFDMA multi-hop relaying downlink systems," in *GLOBECOM 2007 - IEEE Global Telecommunications Conference*, 2007, pp. 3225–3229. DOI: [10.1109/GLOCOM.2007.611](https://doi.org/10.1109/GLOCOM.2007.611)
313. K. Seong, R. Narasimhan, and J. M. Cioffi, "Scheduling for fading multiple access channels with heterogeneous QoS constraints," in *2007 IEEE International Symposium on Information Theory*, 2007, pp. 2966–2970. DOI: [10.1109/ISIT.2007.4557669](https://doi.org/10.1109/ISIT.2007.4557669)
314. E. W. Jang, Y. Cho, J.-W. Choi, and J. M. Cioffi, "Scheduling for time-varying broadcast channels," in *IEEE International Symposium on Information Theory - Proceedings*, 2007, pp. 2956–2960. DOI: [10.1109/ISIT.2007.4557667](https://doi.org/10.1109/ISIT.2007.4557667)
315. C.-S. Hwang and J. M. Cioffi, "Using opportunistic CSMA/CA to achieve multi-user diversity in wireless LAN," in *GLOBECOM - IEEE Global Telecommunications Conference*, 2007, pp. 4952–4956. DOI: [10.1109/GLOCOM.2007.939](https://doi.org/10.1109/GLOCOM.2007.939)
316. S. Yen, O. Leveque, and J. M. Cioffi, "Asymptotic capacity of orthogonal multi-level amplify-and-forward relay networks," in *2007 41st Asilomar Conference on Signals, Systems and Computers (ACSSC '07)*, 2008, pp. 57–61. DOI: [10.1109/ACSSC.2007.4487164](https://doi.org/10.1109/ACSSC.2007.4487164)
317. R. Agarwal and J. M. Cioffi, "Beamforming design for the MIMO downlink for maximizing weighted sum-rate," in *2008 International Symposium on Information Theory and its Applications, ISITA2008*, 2008, pp. 1-6. DOI: [10.1109/ISITA.2008.4895555](https://doi.org/10.1109/ISITA.2008.4895555)
318. S. Jagannathan and J. M. Cioffi, "Distributed Adaptive Bit-Loading for Spectrum Optimization in Multi-User Multicarrier Systems," in *ICC '08. IEEE International Conference on Communications*, 2008. Pp. 625-630. DOI: [10.1109/ICC.2008.123](https://doi.org/10.1109/ICC.2008.123)
319. M. Malkin, T. Maghascar, and J. M. Cioffi, "Dynamic Allocation of Reserved Tones for PAR Reduction," in *OFDM Workshop, August 2008, Hamburg, Germany*, 2008.
320. E. W. Jang, C.-S. Hwang, and J. M. Cioffi, "Flexible adaptive-modulation-and-coding tables for a wireless network," in *IEEE International Conference on Communications*, 2008, pp. 3378–3382. DOI: [10.1109/ICC.2008.635](https://doi.org/10.1109/ICC.2008.635)
321. J. M. Cioffi, H. Zou, A. Chowdhery, W. Lee, and S. Jagannathan, "Greener copper with dynamic spectrum management," in *GLOBECOM - IEEE Global Telecommunications Conference*, 2008, pp. 5697–5701. DOI: [10.1109/GLOCOM.2008.ECP.1092](https://doi.org/10.1109/GLOCOM.2008.ECP.1092)

322. S. Jagannathan, C.-S. Hwang, and J. M. Cioffi, "Margin Optimization in Digital Subscriber Lines - part II: Level-2 Dynamic Spectrum Management (ICC best paper award)," in *IEEE International Conference on Communications (ICC) 2008*, 2008, pp. 435–440. DOI: [10.1109/ICC.2008.87](https://doi.org/10.1109/ICC.2008.87)
323. S. Jagannathan, C. S. Hwang, and J. M. Cioffi, "Margin optimization in digital subscriber lines employing level-1 dynamic spectrum management," in *IEEE International Conference on Communications*, 2008, pp. 441–446. DOI: [10.1109/ICC.2008.88](https://doi.org/10.1109/ICC.2008.88)
324. D. D. Yu, K. Seong, and J. M. Cioffi, "Multiuser discrete bit-loading for digital subscriber lines," in *2007 IEEE International Conference on Communications*, 2008, pp. 2755–2760. DOI: [10.1109/ICC.2007.458](https://doi.org/10.1109/ICC.2007.458)
325. H. Kwon and J. M. Cioffi, "Multi-user MISO broadcast channel with user-cooperating decoder," in *IEEE Vehicular Technology Conference*, 2008, pp. 1-5. DOI: [10.1109/VETEFC.2008.335](https://doi.org/10.1109/VETEFC.2008.335)
326. H. Zou, S. Jagannathan, and J. M. Cioffi, "Multiuser OFDMA resource allocation algorithms for in-home power-line communications," in *GLOBECOM - IEEE Global Telecommunications Conference*, 2008, pp. 2906–2910. DOI: [10.1109/GLOCOM.2008.ECP.557](https://doi.org/10.1109/GLOCOM.2008.ECP.557)
327. G. Fraidenraich, Z. Xu, S. Rane, and J. M. Cioffi, "On capacity of frequency selective multipath channels with path correlations," in *Signal Processing Advances in Wireless Communications, 2008. SPAWC 2008. IEEE 9th Workshop on*, 2008, pp. 570–574. DOI: [10.1109/SPAWC.2008.4641672](https://doi.org/10.1109/SPAWC.2008.4641672)
328. E. W. Jang, H. Kwon, and J. M. Cioffi, "Opportunistic power allocation for random beamforming in MISO broadcast channels," in *2007 IEEE International Conference on Communications*, 2008, pp. 5468–5472. DOI: [10.1109/ICC.2007.906](https://doi.org/10.1109/ICC.2007.906)
329. R. Agarwal, R. Vannithamby, and J. M. Cioffi, "Optimal allocation of feedback bits for downlink OFDMA systems," in *IEEE International Symposium on Information Theory - Proceedings*, 2008, pp. 1686–1690. DOI: [10.1109/ISIT.2008.4595275](https://doi.org/10.1109/ISIT.2008.4595275)
330. M. Malkin, H. Zou, A. Malek, J. M. Cioffi, and B. Krongold, "Optimal constellation distortion for PAR reduction in MIMO-OFDM systems," in *Conference Record - Asilomar Conference on Signals, Systems and Computers*, 2008, pp. 943–947. DOI: [10.1109/ACSSC.2008.5074550](https://doi.org/10.1109/ACSSC.2008.5074550)
331. M. Malkin, B. Krongold, and J. M. Cioffi, "Optimal constellation distortion for PAR reduction in OFDM systems," in *IEEE International Symposium on Personal*,

- Indoor and Mobile Radio Communications, PIMRC*, 2008. DOI: [10.1109/PIMRC.2008.4699505](https://doi.org/10.1109/PIMRC.2008.4699505)
332. H. Kwon and J. M. Cioffi, "Outage connectivity with collaboration in wireless ad hoc networks," in *IEEE Workshop on Signal Processing Advances in Wireless Communications*, 2008, pp. 51–55. DOI: [10.1109/SPAWC.2008.4641568](https://doi.org/10.1109/SPAWC.2008.4641568)
333. R. Kwak and J. M. Cioffi, "Performance analysis for OFDMA downlink relay systems: Relay gain and fairness," in *GLOBECOM - IEEE Global Telecommunications Conference*, 2008, pp. 4244–4248. DOI: [10.1109/GLOCOM.2008.ECP.814](https://doi.org/10.1109/GLOCOM.2008.ECP.814)
334. S. Jagannathan, C. S. Hwang, and J. M. Cioffi, "Per-tone Margin Optimization in Multicarrier Communication Systems," in *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), April 2008, Las Vegas, NV*, 2008, pp. 3057 – 3060. DOI: [10.1109/ICASSP.2008.4518295](https://doi.org/10.1109/ICASSP.2008.4518295)
335. S. Jagannathan, C.-S. Hwang, and J. M. Cioffi, "Resource allocation in uplink multi-carrier MIMO systems for low-complexity transceivers," in *2007 41st Asilomar Conference on Signals, Systems and Computers (ACSSC '07)*, 2008, pp. 1705–1709. DOI: [10.1109/ACSSC.2007.4487523](https://doi.org/10.1109/ACSSC.2007.4487523)
336. S.-W. Han, H. Kim, K. M. Koumadi, Y. Han, and J. M. Cioffi, "Semidefinite relaxation for sum-rate maximization on Gaussian cognitive multiple access channel," in *IEEE Vehicular Technology Conference*, 2008, pp. 1-5. DOI: [10.1109/VETECS.2008.286](https://doi.org/10.1109/VETECS.2008.286)
337. R. Kwak and J. M. Cioffi, "The optimal power-allocation for OFDMA regenerative relaying downlink systems," in *IEEE Workshop on Signal Processing Advances in Wireless Communications, SPAWC*, 2008, pp. 540–544. DOI: [10.1109/SPAWC.2008.4641666](https://doi.org/10.1109/SPAWC.2008.4641666)
338. R. Kwak and J. M. Cioffi, "The Subchannel-Allocation for OFDMA Relaying Downlink Systems with Total Power Constraint," in *Vehicular Technology Conference (VTC), September 21-24 2008, Calgary, Canada*, 2008, pp. 1-5. DOI: [10.1109/VETECS.2008.355](https://doi.org/10.1109/VETECS.2008.355)
339. M. Malkin, C.-S. Hwang, and J. M. Cioffi, "Transmitter precoding for insufficient-cyclic-prefix distortion in multicarrier systems," in *IEEE Vehicular Technology Conference*, 2008, pp. 1142–1146. DOI: [10.1109/VETECS.2008.242](https://doi.org/10.1109/VETECS.2008.242)
340. H. Zou, A. Chowdhery, and J. M. Cioffi, "A Centralized Multi-Level Water-Filling Algorithm for Dynamic Spectrum Management," in *2009 43rd Asilomar Conference on Signals, Systems and Computers*, 2009, pp. 1101–1105. DOI: [10.1109/ACSSC.2009.5470058](https://doi.org/10.1109/ACSSC.2009.5470058)

341. J. Byun, A. Mutapcic, S.-J. Kim, and J. M. Cioffi, "A minimax regret approach to robust beamforming," in *Proceedings of the 2009 IEEE 70th Vehicular Technology Conference (VTC 2009 Fall)*, 2009, pp. 1-6. DOI: [10.1109/VETECECF.2009.5378979](https://doi.org/10.1109/VETECECF.2009.5378979)
342. J. Xia, T. Lv, Y. Li, and J. M. Cioffi, "A novel bit-level DS combining scheme for MIMO systems with HARQ," in *2009 IEEE International Symposium on Information Theory - ISIT*, 2009, pp. 244–248. DOI: [10.1109/ISIT.2009.5206046](https://doi.org/10.1109/ISIT.2009.5206046)
343. A. Chowdhery, S. Jagannathan, J. M. Cioffi, and M. Ouzzif, "A polite cross-layer protocol for contention-based home power-line communications," in *IEEE International Conference on Communications*, 2009. DOI: [10.1109/ICC.2009.5198659](https://doi.org/10.1109/ICC.2009.5198659)
344. J. M. Cioffi, F. Pagliarecci, and L. Spalazzi, "An anomaly-based system for parental control," in *International Conference on High Performance Computing & Simulation, 2009. HPCS '09*, 2009, pp. 193 – 199. DOI: [10.1109/HPCSIM.2009.5194728](https://doi.org/10.1109/HPCSIM.2009.5194728)
345. V. R. Majjigi, D. O'Neill, and J. M. Cioffi, "Buffer State Information: Two-Level Water-Filling for Fixed Rate Applications," in *Global Telecommunications Conference, 2009. GLOBECOM 2009. IEEE*, 2009, pp. 1–6. DOI: [10.1109/GLOCOM.2009.5425894](https://doi.org/10.1109/GLOCOM.2009.5425894)
346. H. Kwon, H. Lee, and J. M. Cioffi, "Cooperative strategy by stackelberg games under energy constraint in multi-hop relay networks," in *GLOBECOM - IEEE Global Telecommunications Conference*, 2009, pp. 1-6. DOI: [10.1109/GLOCOM.2009.5426017](https://doi.org/10.1109/GLOCOM.2009.5426017)
347. M. Charafeddine, Z. Han, A. Paulraj, and J. M. Cioffi, "Crystallized Rates Region of the Interference Channel via Correlated Equilibrium with Interference As Noise," in *Communications, 2009. ICC '09. IEEE International Conference on*, 2009, pp. 1–6. DOI: [10.1109/ICC.2009.5198878](https://doi.org/10.1109/ICC.2009.5198878)
348. R. Zhang and J. M. Cioffi, "Exploiting Opportunistic Multiuser Detection in Decentralized Multiuser MIMO Systems," in *IEEE Global Telecommunications Conference, 2009. GLOBECOM, 2009*. DOI: [10.1109/GLOCOM.2009.5426301](https://doi.org/10.1109/GLOCOM.2009.5426301)
349. R. Kwak and J. M. Cioffi, "Fundamental Power-Allocation for Cooperative Relay Networks," in *Communications, 2009. ICC '09. IEEE International Conference on*, 2009, pp. 1–5. DOI: [10.1109/ICC.2009.5305939](https://doi.org/10.1109/ICC.2009.5305939)
350. J. M. Cioffi, S. Jagannathan, W. Lee, H. Zou, A. Chowdhery, G. Ginis, and P. Silverman, "Greener copper with dynamic spectrum management," in *Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2009*, 2009, pp. 62–77. DOI: [10.1007/978-3-642-04648-3_5](https://doi.org/10.1007/978-3-642-04648-3_5)

351. R. Zhang and J. M. Cioffi, "Iterative spectrum shaping with opportunistic multiuser detection," in *IEEE International Symposium on Information Theory, 2009*, 2009, pp. 2679 – 2683. DOI: [10.1109/ISIT.2009.5205899](https://doi.org/10.1109/ISIT.2009.5205899)
352. H. Kwon and J. M. Cioffi, "MISO broadcast channel with user-cooperation and limited feedback," in *2009 IEEE International Symposium on Information Theory - ISIT*, 2009, pp. 1694–1698. DOI: [10.1109/ISIT.2009.5205764](https://doi.org/10.1109/ISIT.2009.5205764)
353. H. Zou, A. Chowdhery, S. Jagannathan, J. M. Cioffi, and J. Le Masson, "Multi-user joint subchannel and power resource-allocation for powerline relay networks," in *IEEE International Conference on Communications*, 2009, pp. 1-5. DOI: [10.1109/ICC.2009.5199210](https://doi.org/10.1109/ICC.2009.5199210)
354. M. Grieger, P. Marsch, G. Fettweis, and J. M. Cioffi, "On the performance of compressed interference forwarding for uplink base station cooperation," in *GLOBECOM - IEEE Global Telecommunications Conference*, 2009. Pp. 1-6. DOI: [10.1109/GLOCOM.2009.5425370](https://doi.org/10.1109/GLOCOM.2009.5425370)
355. R. Agarwal and J. M. Cioffi, "Optimal resource allocation in the OFDMA downlink with feedback of buffer state information," in *GLOBECOM - IEEE Global Telecommunications Conference*, 2009. DOI: [10.1109/GLOCOM.2009.5426044](https://doi.org/10.1109/GLOCOM.2009.5426044)
356. H. Kwon, H. W. Je, and J. M. Cioffi, "Relaying power allocation with user-cooperation for OFDM-based MISO broadcast channels," in *GLOBECOM - IEEE Global Telecommunications Conference*, 2009, pp. 1-6. DOI: [10.1109/GLOCOM.2009.5426005](https://doi.org/10.1109/GLOCOM.2009.5426005)
357. M.-Y. Chen and J. M. Cioffi, "Space-Time Block Codes with Symbol-by-Symbol Maximum Likelihood Detections", in *Proceedings of IEEE International Conference on Communications, ICC 2009*, 2009, pp. 1–5. DOI: [10.1109/ICC.2009.5199468](https://doi.org/10.1109/ICC.2009.5199468)
358. V. R. Mijigi, R. Agarwal, and J. M. Cioffi, "User Profiling: A Method for Limited Feedback in OFDMA Systems," in *Communications, 2009. ICC '09. IEEE International Conference on*, 2009, pp. 1–5. DOI: [10.1109/ICC.2009.5199554](https://doi.org/10.1109/ICC.2009.5199554)
359. S. S. Christensen, R. Agarwal, E. Carvalho, J. M. Cioffi, and E. De Carvalho, "Weighted sum-rate maximization using weighted MMSE for MIMO-BC beamforming design," in *IEEE International Conference on Communications*, 2009, vol. 7, no. 12, pp. 4792–4799. DOI: [10.1109/ICC.2009.5199574](https://doi.org/10.1109/ICC.2009.5199574)
360. M.-Y. Chen, H.-C. Li, and J. M. Cioffi, "An improved 8×8 approximately universal code with the large normalized diversity product," in *IEEE International*

- Symposium on Information Theory - Proceedings*, 2010, pp. 1052–1055. DOI: [10.1109/ISIT.2010.5513723](https://doi.org/10.1109/ISIT.2010.5513723)
361. M.-Y. Chen and J. M. Cioffi, “An Improved Number-theoretic Method for Constructing Approximately Universal Codes,” in *Proceedings 2010 IEEE Global Communications Conference (GLOBECOM 2010)*, 2010, pp. 1-5. DOI: [10.1109/GLOCOM.2010.5683708](https://doi.org/10.1109/GLOCOM.2010.5683708)
362. M. Mohseni, G. Ginis, and J. M. Cioffi, “Dynamic spectrum management for mixtures of vectored and non-vectored DSL systems,” in *2010 44th Annual Conference on Information Sciences and Systems, CISS 2010*, 2010. DOI: [10.1109/CISS.2010.5464813](https://doi.org/10.1109/CISS.2010.5464813)
363. A. Chowdhery and J. M. Cioffi, “Dynamic spectrum management for upstream mixtures of vectored & non-vectored DSL,” in *GLOBECOM - IEEE Global Telecommunications Conference*, 2010. DOI: [10.1109/GLOCOM.2010.5684068](https://doi.org/10.1109/GLOCOM.2010.5684068)
364. R. Raghavendra, H. Zou, M. Charafeddine, Z. Han, and J. M. Cioffi, “Low Complexity Multi-user Rate Region Maximization for Frequency-Selective Interference Channel,” in *IWCMC 2010 - Proceedings of the 6th International Wireless Communications and Mobile Computing Conference*, 2010, pp. 392–396. DOI: [10.1145/1815396.1815487](https://doi.org/10.1145/1815396.1815487)
365. V. R. Majjigi, D. O’Neill, C. Huppert, and J. M. Cioffi, “Multi-User Buffer Control with Drift Fields,” in *Global Telecommunications Conference (GLOBECOM 2010)*, 2010 IEEE, 2010, pp. 1–5. DOI: [10.1109/GLOCOM.2010.5683514](https://doi.org/10.1109/GLOCOM.2010.5683514)
366. S. C.-H. Huang, H.-C. Wu, and J. M. Cioffi, “Novel PMEPR control approach for 64- and 256-QAM coded OFDM systems,” in *GLOBECOM - IEEE Global Telecommunications Conference*, 2010. DOI: [10.1109/GLOCOM.2010.5683185](https://doi.org/10.1109/GLOCOM.2010.5683185)
367. M.-Y. Chen, K.-C. Chen, and J. M. Cioffi, “Preserving Antenna-selection Diversity in Rayleigh Fading Channels via a Time-efficient Algorithm,” in *Proceedings 2010 IEEE 71st Vehicular Technology Conference (VTC 2010-Spring)*, 2010, p. 5 pp. DOI: [10.1109/VETECS.2010.5493744](https://doi.org/10.1109/VETECS.2010.5493744)
368. V. R. Majjigi, D. O’Neill, and J. M. Cioffi, “Stochastic Optimization for Variable Rate Applications with Time-Varying Statistics,” in *Communications (ICC), 2010 IEEE International Conference on*, 2010, pp. 1–5. DOI: [10.1109/ICC.2010.5502308](https://doi.org/10.1109/ICC.2010.5502308)
369. H. Tabrizi, G. Farhadi, and J. M. Cioffi, “A learning-based network selection method in heterogeneous wireless systems,” in *2011 IEEE Global Telecommunications Conference*, 2011, pp. 1–5. DOI: [10.1109/GLOCOM.2011.6134269](https://doi.org/10.1109/GLOCOM.2011.6134269)

370. M.-Y. Chen and J. M. Cioffi, "A New and Improved Perfect Space-Time Code for 5 x 5 MIMO Channels," in *Vehicular Technology Conference (VTC Spring), 2011 IEEE 73rd*, 2011, pp. 1–4. DOI: [10.1109/VETECS.2011.5956181](https://doi.org/10.1109/VETECS.2011.5956181)
371. A. Chowdhery, W. Yu, and J. M. Cioffi, "Cooperative wireless multicell OFDMA network with backhaul capacity constraints," in *IEEE International Conference on Communications*, 2011. DOI: [10.1109/icc.2011.5962729](https://doi.org/10.1109/icc.2011.5962729)
372. T. Magesacher and J. M. Cioffi, "On minimum peak-to-average power ratio spectral factorization," in *2011 8th International Workshop on Multi-Carrier Systems and Solutions, MC-SS 2011*, 2011. DOI: [10.1109/MC-SS.2011.5910734](https://doi.org/10.1109/MC-SS.2011.5910734)
373. M.-Y. Chen, W. Rhee, M. Mohseni, and J. M. Cioffi, "Practical Crosstalk Management for Upstream VDSL Using Dynamic Power Control," in *GLOBECOM - IEEE Global Telecommunications Conference*, 2011, vol. 60, no. 4, p. 5 pp. DOI: [10.1109/GLOCOM.2011.6133565](https://doi.org/10.1109/GLOCOM.2011.6133565)
374. H. Tabrizi, G. Farhadi, and J. M. Cioffi, "An intelligent power save mode mechanism for IEEE 802.11 WLAN," in *IEEE Global Communications Conference (GLOBECOM), 2012*, 2012, pp. 3460–3464. DOI: [10.1109/GLOCOM.2012.6503650](https://doi.org/10.1109/GLOCOM.2012.6503650)
375. K. Kerpez, J. M. Cioffi, S. Galli, G. Ginis, M. Goldberg, M. Mohseni, and A. Chowdhery, "Compatibility of vectored and non-vectored VDSL2," in *Information Sciences and Systems (CISS), 2012 46th Annual Conference on*, 2012, pp. 1–6. DOI: [10.1109/CISS.2012.6310771](https://doi.org/10.1109/CISS.2012.6310771)
376. H. Tabrizi, G. Farhadi, and J. M. Cioffi, "Dynamic handoff decision in heterogeneous wireless systems: Q-learning approach," in *Communications (ICC), 2012 IEEE International Conference on*, 2012, pp. 3217–3222. DOI: [10.1109/ICC.2012.6364194](https://doi.org/10.1109/ICC.2012.6364194)
377. B. Peleato, R. Agarwal, and J. M. Cioffi, "On the distribution of valid pages with greedy garbage collection for NAND flash," in *Statistical Signal Processing Workshop (SSP), 2012 IEEE*, 2012, pp. 500–503. DOI: [10.1109/SSP.2012.6319743](https://doi.org/10.1109/SSP.2012.6319743)
378. B. Peleato, R. Agarwal, and J. M. Cioffi, "Probabilistic graphical model for flash memory programming," in *Statistical Signal Processing Workshop (SSP), 2012 IEEE*, 2012, pp. 788–791. DOI: [10.1109/SSP.2012.6319823](https://doi.org/10.1109/SSP.2012.6319823)
379. B. Peleato, R. Agarwal, J. M. Cioffi, M. Qin, and P. H. Siegel, "Towards minimizing read time for NAND flash," in *IEEE Global Communications Conference (GLOBECOM), 2012*, 2012, pp. 3219–3224. DOI: [10.1109/GLOCOM.2012.6503610](https://doi.org/10.1109/GLOCOM.2012.6503610)

380. S. Han, H. Kim, Y. Han, J. M. Cioffi, V. C. M. Leung, R. Kim, and J. Zander, “A distributed power allocation scheme for sum-rate maximization on cognitive GMACs,” in *2013 6th Joint IFIP Wireless and Mobile Networking Conference (WMNC 2013). Proceedings*, 2013, vol. 61, no. 1, pp. 248–256. DOI: [10.1109/WMNC.2013.6549031](https://doi.org/10.1109/WMNC.2013.6549031)
381. Sang-wook Han ; Hoon Kim ; Youngnam Han ; Cioffi, J.M. ; Leung, V.C.M., “A distributed power allocation scheme for sum-rate maximization on cognitive GMACs,” in *IEEE 21st International Symposium on Personal Indoor and Mobile Radio Communications (PIMRC)*, 2010, pp.1854-1858. DOI: [10.1109/PIMRC.2010.5671624](https://doi.org/10.1109/PIMRC.2010.5671624)
382. S. Han, H. Kim, Y. Han, J. M. Cioffi, J. Zander and V. C. Leung, “Distributed Power Allocation for Cooperative Access in Cognitive Radios to Guarantee QoS for Cell Edge Primary Users,” in *Proceedings 2013 6th Joint IFIP Wireless and Mobile Networking Conference (WMNC 2013)*, 2013. DOI: [10.1109/WMNC.2013.6549027](https://doi.org/10.1109/WMNC.2013.6549027)
383. S. Han, H. Kim, Y. Han, V. C. Leung, J. M. Cioffi, and J. Zander, “An asynchronous distributed power allocation scheme for sum-rate maximization on cognitive GMACs,” in *IEEE Wireless and Mobile Networking Conference (WMNC), 2013*, 2013, pp. 1–6. DOI: [10.1109/WMNC.2013.6549031](https://doi.org/10.1109/WMNC.2013.6549031)
384. N. Akkari, G. Aldabbagh, M. Nahas, B. Bawazeer, J. M. Cioffi, and H. Tabrizi, “Coordinated tethering over cellular networks: Handover scenarios and signaling,” in *(PIMRC), 2013 IEEE 24th International Symposium on Personal Indoor and Mobile Radio Communications 2013*, 2013, pp. 2170 – 2174. DOI: [10.1109/PIMRC.2013.6666503](https://doi.org/10.1109/PIMRC.2013.6666503)
385. H. Mehmood, J. M. Cioffi, and K. Kerpez, “Enhanced upstream power back-off: For VDSL lines,” in *IEEE International Conference on Communications (ICC), 2013*, 2013, pp. 3996 – 4001. DOI: [10.1109/ICC.2013.6655184](https://doi.org/10.1109/ICC.2013.6655184)
386. V. Ozduran, J. M. Cioffi, and S. B. Yarman, “Opportunistic source-pair selection (OSPS) method for multiuser Bi-directional wireless relaying networks,” in *IEEE 14th Workshop on Signal Processing Advances in Wireless Communications (SPAWC)*, 2013, pp. 565–569. DOI: [10.1109/SPAWC.2013.6612113](https://doi.org/10.1109/SPAWC.2013.6612113)
387. H. Tabrizi, G. Farhadi, and J. M. Cioffi, “Tethering Over TV White-space: Dynamic Hotspot Selection and Resource Allocation,” in *IEEE Vehicular Technology Conference (VTC Fall)*, 2013, pp. 1–6. DOI: [10.1109/VTCFall.2013.6692435](https://doi.org/10.1109/VTCFall.2013.6692435)
388. H. Tabrizi, G. Farhadi, and J. M. Cioffi, “CaSRA: An algorithm for cognitive tethering in dense wireless areas,” in *GLOBECOM - 2013 IEEE Global*

Telecommunications Conference, art. no. 6831674, pp. 3855-3860. DOI:
[10.1109/GLOCOM.2013.6831674](https://doi.org/10.1109/GLOCOM.2013.6831674)

389. H. Tabrizi, G. Farhadi, and J. M. Cioffi, "A framework for spatial reuse in dense wireless Areas," in GLOBECOM - 2013 IEEE Global Telecommunications Conference, art. no. 6831677, pp. 3873-3877. DOI:
[10.1109/GLOCOM.2013.6831677](https://doi.org/10.1109/GLOCOM.2013.6831677)