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# Literature Review

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### I. AUDIO PROCESSING

# [1] [2]

- A. LPC
- B. Frequency-warped LPC
- C. Fourier space excitation-filter framework
- D. Filterbanks (overcomplete codebooks?) for speech analysis

# II. OPTIMIZATION AND LEARNING

- A. LPC optimization
- B. L2, L1 minimizations
- C. Optimization of mixtures
- D. Sparsecoding and compressed sensing
- E. LTI filter clustering

# III. MIR APPLICATIONS

- A. Source separation
- B. Melody extraction
- C. Chord recognition
- D. Instrument recognition

# IV. DATASETS

# REFERENCES

- [1] J. Mairal, F. Bach, J. Ponce, and G. Sapiro, "Online learning for matrix factorization and sparse coding," *The Journal of Machine Learning Research*, vol. 11, pp. 19–60, 2010.
- [2] C. Joder, S. Essid, and G. Richard, "Temporal integration for audio classification with application to musical instrument classification," *IEEE Transactions on Audio, Speech, and Language Processing*, vol. 17, no. 1, pp. 174–186, 2009.