



FUSING DIGITAL AUDIO WATERMARKING AND AUTHENTICATION IN DIVERSE SIGNAL DOMAINS (MonPmOR4)

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✳ Abstract :

A novel scheme that is able to merge digital watermarking and content authentication of digital audio is presented in this paper. The embedding of additional data is performed in different signal domains. Watermark embedding is made by frequency hopping method in the Fourier domain, while the additional authentication data is hidden using the LSB modulation in the wavelet domain. The perceptual transparency is achieved using the frequency masking property of the HAS. The scheme obtains high robustness against standard watermark attacks and localizes accurately tampered parts of the audio clip.