

LIST OF PUBLICATIONS

Vesa Välimäki (Aalto University, Espoo, Finland)

A. Peer-reviewed scientific articles

A.1. Scientific journal articles (134)

1. S. Martikainen, K. Prawda, F. Ståhlberg-Aalto, I. Lautanala, K. Kostilainen, V. Välimäki & M. Tervaniemi, “Acoustics and the well-being of children and personnel in early childhood education and care,” *Frontiers in Education*, vol. 8, paper id 1244428, Dec. 2023.
2. S. J. Schlecht, J. Fagerström & V. Välimäki, “Decorrelation in feedback delay networks,” *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, vol. 31, pp. 3478–3487, Sep. 2023.
3. S. Cecchi, V. Bruschi, S. Nobili, A. Terenzi & V. Välimäki, “Crossover networks: A review,” *Journal of the Audio Engineering Society*, vol. 71, no. 9, pp. 526–551, Sep. 2023.
4. L. Fierro & V. Välimäki, “Enhanced fuzzy decomposition of sound into sines, transients, and noise,” *Journal of the Audio Engineering Society*, vol. 71, no. 7–8, pp. 468–480, Jul. 2023.
5. S. J. Schlecht, V. Välimäki & E. A. P. Habets, “Bounded-magnitude discrete Fourier transform [Tips & Tricks],” *IEEE Signal Processing Magazine*, vol. 40, no. 3, pp. 46–49, May 2023.
6. V. Välimäki & S. Bilbao, “Giant FFTs for sample-rate conversion,” *Journal of the Audio Engineering Society*, vol. 71, no. 3, pp. 88–99, Mar. 2023.
7. J. Estreder, G. Piñero, M. de Diego, J. Rämö & V. Välimäki, “Improved Aures tonality metric for complex sounds,” *Applied Acoustics*, vol. 204, paper id 109238, Mar. 2023.
8. D. Südholt, A. Wright, C. Erkut & V. Välimäki, “Pruning deep neural network models of guitar distortion effects,” *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, vol. 31, pp. 256–264, 2023.
9. J. Lindfors, J. Liski & V. Välimäki, “Loudspeaker equalization for a moving listener,” *Journal of the Audio Engineering Society*, vol. 70, no. 9, pp. 722–730, Sep. 2022.
10. K. Prawda, S. J. Schlecht & V. Välimäki, “Calibrating the Sabine and Eyring formulas,” *The Journal of the Acoustical Society of America*, vol. 152, no. 2, pp. 1158–1169, Aug. 2022.
11. E. Moliner & V. Välimäki, “BEHM-GAN: Bandwidth extension of historical music using generative adversarial networks,” *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, vol. 30, July 2022.
12. M. Antonelli, J. Liski & V. Välimäki, “Sparse graphic equalizer design,” *IEEE Signal Processing Letters*, vol. 29, July 2022.
13. V. Välimäki, L. Fierro, S. J. Schlecht & J. Backman, “Audio peak reduction using ultra-short chirps,” *Journal of the Audio Engineering Society*, vol. 70, no. 6, pp. 485–494, June 2022.
14. V. Bruschi, V. Välimäki, J. Liski & S. Cecchi, “Linear-phase octave graphic equalizer,” *Journal of the Audio Engineering Society*, vol. 70, no. 6, pp. 435–445, June 2022.
15. R. Gupta, J. He, R. Ranjan, W.-S. Gan, F. Klein, C. Schneiderwind, A. Neidhardt, K. Brandenburg & V. Välimäki, “Augmented/mixed reality audio for hearables: Sensing, control, and rendering,” *IEEE Signal Processing Magazine*, vol. 39, no. 3, pp. 63–89, May 2022.
16. N. Meyer-Kahlen, S. J. Schlecht & V. Välimäki, “Colours of velvet noise,” *Electronics Letters*, vol. 68, no. 12, pp. 495–497, Apr. 2022.
17. J. A. Belloch, J. M. Badía, G. León, B. Bank & V. Välimäki, “Multicore implementation of a multichannel parallel graphic equalizer,” *The Journal of Supercomputing*, vol. 78, Apr. 2022.

18. K. Prawda, S. J. Schlecht & V. Välimäki, “Robust selection of clean swept-sine measurements in non-stationary noise,” *The Journal of the Acoustical Society of America*, vol. 151, no. 3, pp. 2117–2126, Mar. 2022.
19. A. Wright & V. Välimäki, “Neural modeling of phaser and flanging effects,” *Journal of the Audio Engineering Society*, vol. 69, no. 7/8, pp. 517–529, Jul./Aug. 2021.
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21. B. Alary, P. Massé, S. J. Schlecht, M. Noisternig & V. Välimäki, “Perceptual analysis of directional late reverberation,” *The Journal of the Acoustical Society of America*, vol. 149, no. 5, pp. 3189–3199, May 2021.
22. V. Välimäki & K. Prawda, “Late-reverberation synthesis using interleaved velvet-noise sequences,” *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, vol. 29, pp. 1149–1160, Mar. 2021.
23. S. Shah & V. Välimäki, “Automatic tuning of high piano tones,” *Applied Sciences*, vol. 10, no. 6, paper no. 1983, Mar. 2020.
24. J. Rämö, J. Liski & V. Välimäki, “Third-octave and Bark graphic-equalizer design with symmetric band filters,” *Applied Sciences*, vol. 10, no. 4, paper no. 1222, Feb. 2020.
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26. V. Välimäki & J. Rämö, “Neurally controlled graphic equalizer,” *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, vol. 27, no. 12, pp. 2140–2149, Dec. 2019.
27. B. Alary, A. Politis, S. J. Schlecht & V. Välimäki, “Directional feedback delay network,” *Journal of the Audio Engineering Society*, vol. 67, no. 10, pp. vol. 67, no. 10, pp. 752–762, Oct. 2019.
28. J. Liski, B. Bank, J. O. Smith & V. Välimäki, “Converting series biquad filters into delayed parallel form: Application to graphic equalizers,” *IEEE Transactions on Signal Processing*, vol. 67, no. 14, pp. 3785–3795, July 2019.
29. E. Thuillier, O. Lähdeoja & V. Välimäki, “Feedback control in an actuated acoustic guitar using frequency shifting,” *Journal of the Audio Engineering Society*, vol. 67, no. 6, pp. 373–381, June 2019.
30. J. Kahles, F. Esqueda & V. Välimäki, “Oversampling for nonlinear waveshaping: Choosing the right filters,” *Journal of the Audio Engineering Society*, vol. 67, no. 6, pp. 440–449, June 2019.
31. A. Mäkivirta, J. Liski & V. Välimäki, “Modeling and delay-equalizing loudspeaker responses,” *Journal of the Audio Engineering Society*, vol. 66, no. 11, pp. 922–934, Nov. 2018.
32. E.-P. Damskägg & V. Välimäki, “Audio time stretching using fuzzy classification of spectral bins,” *Applied Sciences*, vol. 7, no. 12, paper no. 1293, Dec. 2017.
33. B. Bank, J. A. Belloch & V. Välimäki, “Efficient design of a parallel graphic equalizer,” *Journal of the Audio Engineering Society*, vol. 65, no. 10, pp. 817–825, Nov. 2017.
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41. V. Välimäki, A. Franck, J. Rämö, H. Gamper & L. Savioja, “Assisted listening using a headset – Enhancing audio perception in real, augmented, and virtual environments,” *IEEE Signal Processing Magazine*, vol. 32, no. 2, pp. 92–99, Mar. 2015.
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C. Scientific books

C.1. Conference proceedings (2)

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2. J. Pakarinen, C. Erkut, H. Penttinen & V. Välimäki (eds.), *DAFx-08 Proceedings – 11th International Conf. Digital Audio Effects*, Espoo, Finland, Sep. 1–4, 2008.

C.2. Special issues in journals (9)

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