

# Domenico Stefani – Publications

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## LONG PAPERS

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- [2024] **On the Importance of Temporally Precise Onset Annotations for Real-Time Music Information Retrieval: Findings from the AG-PT-set Dataset** [link](#)  
In Proceedings of the 19th International Audio Mostly Conference (AM'24)  
D. Stefani, G. A. Giudici, L. Turchet
- [2024] **Esteso: Interactive AI Music Duet Based on Player-Idiosyncratic Extended Double Bass Techniques** [link](#)  
In Proceedings of the International Conference on New Interfaces for Musical Expression (NIME'24), Utrecht, The Netherlands.  
D. Stefani, M. Tomasetti, F. Angeloni and L. Turchet
- [2024] **Musician-AI partnership mediated by emotionally-aware smart musical instruments** [link](#)  
International Journal of Human-Computer Studies, Volume 191, 2024,  
L.Turchet, D.Stefani, J. Pauwels
- [2024] **BCHJam: a Brain-Computer Music Interface for Live Music Performance in Shared Mixed Reality Environments** [link](#)  
in Proceedings of the 5th International Symposium on the Internet of Sounds (IS ), Erlangen, Germany  
M. Romani, G.A. Giudici, D. Stefani, D. Zanoni, A. Boem and L. Turchet
- [2024] *Embedded Real-time Deep Learning for a Smart Guitar: A Case Study on Expressive Guitar Technique Recognition* [link](#)  
Ph.D. Thesis  
D. Stefani
- [2023] **Real-Time Embedded Deep Learning on Elk Audio OS** [link](#)  
In Proceedings of the International Symposium on the Internet of Sounds, Pisa, Italy, Oct 2023  
D. Stefani and L. Turchet
- [2022] **A Comparison of Deep Learning Inference Engines for Embedded Real-Time Audio Classification** [link](#)  
In Proceedings of the 25-Th International Conference on Digital Audio Effects (DAFx20in22), 3, 256–263. Vienna, Austria.  
D. Stefani, S. Peroni, L. Turchet
- [2022] **On the Challenges of Embedded Real-Time Music Information Retrieval** [link](#)  
In Proceedings of the International Conference on Digital Audio Effects (DAFx20in22), 3, 177–184. Vienna, Austria.  
D. Stefani, L. Turchet
- [2021] **Bio-Inspired Optimization of Parametric Onset Detectors** [link](#)  
In Proceedings of the 24th International Conference on Digital Audio Effects (DAFx20in21), vol. 2, pp. 268–275, Sept. 2021.  
D. Stefani, L. Turchet

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## SHORT PAPERS, DEMOS, TALKS, PERFORMANCES

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- [2024] **Performance with Esteso: Interactive AI Music Duet Based on Player-Idiosyncratic Extended Double Bass Techniques**  
International Conference on New Interfaces for Musical Expression (NIME'24), Utrecht, The Netherlands.  
F. Angeloni, D. Stefani, M. Tomasetti

- [2023] **Demo: Real-Time Embedded Deep Learning on Elk Audio OS**  
at 4th International Symposium on the Internet of Sounds (IS2), Pisa, Italy  
D. Stefani
- [2022] **Riconoscimento in Tempo Reale di Tecniche Espressive per Chitarra su Embedded Computers**  
in Proceedings of the XXIII Colloquio di Informatica Musicale/Colloquium of Musical Informatics (CIM),  
Ancona, Italy  
D. Stefani
- [2022] **Workshop Talk: Embedded Real-Time Expressive Guitar Technique Recognition**  
in Embedded AI for NIME: Challenges and Opportunities Workshop  
D. Stefani
- [2020] **Demo of the TimbreID-VST Plugin for Embedded Real-Time Classification of Individual Musical Instrument Timbres**  
at the 27th Conference of the Open Innovations Association (FRUCT), 2020  
D. Stefani and Luca Turchet