

Augusto Sarti

Short bio and Publications



Stats

NAME Augusto Sarti

PRIMARY AFFILIATION Dipartimento di Elettronica, Informazione e Bioingegneria (DEIB), Politecnico di Milano, Italy

JOB TITLE Full Professor

EXPERTISE Audio and Acoustic Signal Processing, Music Information Processing, Multimedia Signal Processing, Nonlinear Processing, Multi-Dimensional Signal and Image Processing, 3D Vision

PROFILE AT A GLANCE

Coordinator of the **Musical Acoustics Lab** and the **Sound and Music Computing Lab** at PoliMI. Coordinator the Master of Science Program in **Music and Acoustic Engineering** of the Politecnico di Milano.

Co-founder of the **Image and Sound Processing Group (ISPG)**, *DEIB - Politecnico di Milano*.

Senior Member of the IEEE. Member of the Board of Directors of EURASIP (Director of Conferences)

Brief CV

Augusto Sarti received both his “Laurea” degree (joint BS-MS) and his Ph.D. in Electronic Engineering from the University of Padua, Italy, in 1988 and 1993, respectively, with research on nonlinear communication systems. His graduate studies included a joint graduate program with UC Berkeley, CA, USA. After a brief period as Post-Doc Researcher at UCB, in 1993 he joined the faculty of the Politecnico di Milano, Italy, where he is currently a full professor. He also held a Full Professorship (adjunct) at UC Davis, CA, USA, from 2013 to 2017.

His research interests are in the area of multimedia signal processing, with particular focus on audio and acoustic signal processing (space-time audio processing, sound analysis, synthesis and processing). He also worked on topics of music information processing, image analysis and 3D vision, multidimensional signal processing, nonlinear processing, and virtual analog modeling.

In the area of sound synthesis, his main contributions are in the development of generalized Wave Digital Filters, which model general reflection filters and nonlinear elements. In the area of space-time audio processing he focused on the development of visibility-based beam tracing solutions for interactive soundfield modeling and rendering. He also contributed to the field of acoustic scene estimation and environment estimation based on microphone arrays with novel geometric methodologies, which have been the topic of the EC-funded SCENIC project, coordinated by him. His latest contribution to geometric space-time audio processing is the development of novel soundfield imaging (capturing/rendering) technologies, which focus on the plenacoustic function for applications of acoustic scene analysis and reconstruction. More recently these solutions were turned into the definition of soundfield maps and the ray space transform for acoustic scene analysis, processing, manipulation and rendering. In the area of Music Information Processing, he focused on the extraction of high-level music descriptors, evolutive musical genre estimation, musical information extraction (e.g. beat trackers, harmonic trackers, drum transcription); content-based semantic search of music as well as movement in dance (Wholodance EU Project). Along with his team he is currently applying machine learning methods to the timbral, acoustic and vibrational characterization of acoustic musical instruments in collaboration with the Violin Making District and the Violin Museum of Cremona, Italy.

In the area of computer vision, he focused on a wide range of solutions for 3D vision, covering self-calibration of multicamera systems, camera egomotion estimation, depth estimation, surface reconstruction (including surface fusion and fast levelset modeling), using methodologies from projective geometry and geometric algebra.

In the area of nonlinear system theory, his main contribution was the development of a method for the exact algebraic inversion of Volterra systems of arbitrary order.

He also worked on a variety of other topics and applications, including 3D data analysis (GPR analysis, fracture estimation); multidimensional signal processing (signal decimation in multidimensional lattices and filter design); video analysis for surveillance applications; gesture and face recognition; motion vector estimation; tempering detection; non-holonomic motion planning on Lie Groups and Lie Algebra; voice and sound classification; speaker recognition; and more.

He coauthored over 300 journal articles and conference papers, as well as numerous patents in the areas of multimedia signal processing. He also promoted, coordinated or contributed to numerous research Projects (25+ EC-funded projects to date). He is a co-founder of the Image and Sound Processing Group of the Politecnico di Milano, and its first laboratory, the Image and Sound Processing Lab (Milano Leonardo Campus). He established two more laboratories: the Sound and Music Computing Lab; and the Musical Acoustics Lab. He currently coordinates the activities of both such labs, which are very active internationally, with several projects funded by companies within and outside the EU. In 2005 he started the new didactic track of “Sound and Music Engineering” within the MS of Computer Science and Engineering of the Politecnico di Milano, Como Campus (in collaboration with the Como Conservatory of Music). For over 10 years this program graduated 30-40 new experts a year in the areas of audio and acoustics. Starting from the Ac.Yr. 2018-19, this didactic track has become a full-fledged M.Sci. program named “Music and Acoustic Engineering”, offered in the Milano Leonardo and Cremona Campuses of PoliMI.

As a Senior Member of the IEEE, he is actively involved in IEEE events and committees. He has been an elected member of the Audio and Acoustics Signal Processing Technical Committee (AASP-TC) for two consecutive terms. He has also served as Senior Area Editor as well as Associate Editor of IEEE Signal Processing Letters, and IEEE/ACM Transactions on Audio Speech and Language Processing. Since 2019 he has been a member elect of the Board of Directors of the European Association for Signal Processing (EURASIP), with the role of Director for Conferences. He was the founder and chairman of the EURASIP Technical Area Committee (TAC) on "Acoustic, Speech and Music Signal Processing" (ASMSP), from 2016 to 2018, and is currently a member of the same TAC. He is a co-founder and member of the European Acoustics Association (EAA) Technical Committee on Audio Signal Processing. He has served as guest editor for numerous special issues of international journals (IEEE Tr. on Instrumentation and Measurement, EURASIP J. on Advances in Signal Processing, etc.). He was co-chairman of the 2005 Edition of the IEEE Intl. Conf. on Advanced Video and Signal based Surveillance (AVSS); and chairman of the Digital Audio Effects conference, DAFx, 2009. He was in the organizing committee of the 2014 edition of the IEEE Intl. Conf. on Acoustic Speech and Signal Processing (ICASSP 2014); and of the 2009 edition of the ACM/IEEE Intl. Conf. on Distributed Smart Cameras (ICDSC-09). He was Technical Program Co-Chair of the IEEE Intl. Workshop on Haptic Audio-Visual Environment and Game (HAVE-09) as well as of the 2018 edition of the European Signal Processing Conference (EUSIPCO). He was co-chairman of the 2019 edition of IEEE Intl. Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA) in New Paltz, NY, USA. He has been invited as keynote speaker to several International Conferences, including the International Workshop on Multidimensional Systems (nDS13); and the 2017 edition of IEEE WASPAA, New Paltz, NY, USA. He has held several major Conference Tutorials, including one in EUSIPCO 2013 in Bucharest and one in EUSIPCO 2016 in Budapest. In 2017 Augusto Sarti received the "Outstanding Editorial Board Member Awards" by the Signal Processing Society of the IEEE.

Links

Official PoliMI-DEIB webpage

<https://www.deib.polimi.it/eng/people/details/61414>

Master of Science in "Music and Acoustic Engineering" (MAE):

<https://suono.polimi.it>

<https://www.facebook.com/musicalacoustics/>

<http://www.polinternational.polimi.it/educational-offer/laurea-magistrale-equivalent-to-master-of-science-programmes/music-and-acoustic-engineering/>

<https://www.polimi.it/en/programmes/laurea-magistrale-equivalent-to-master-of-science/>

For a full description of MAE see "educational rules" document in

<http://www.ingindinf.polimi.it/>

Image and Sound Processing Group:

<http://ispg.deib.polimi.it/>

Musical Acoustics Lab at the Violin Museum of Cremona

<http://www.museodelviolino.org/laboratori-scientifici/laboratorio-di-acustica-musicale/>

UC Davis personal page:

<http://www.ece.ucdavis.edu/people/sarti/>

Recent International Projects

1. INTERMUSIC: INTERActive environment for learning, information and MUSIC practice - a European funded project (ERASMUS+) focusing on music information extraction for learning and for didactic applications, as well as for Networked Music Performances (expected to start in January 2018). In collaboration with the "G. Verdi" Conservatory of Music, Milano, Italy.
2. WhoLoDance: Whole-Body Interaction Learning for Dance Education - a European funded project focusing on multi-modal interaction and information extraction for dance performances and didactics (started in 2016).
3. Morphoacoustics: individualisation for 3D Audio over Headphones - funded by the Australian Research Council (started in 2016)
4. COSSIM: A Novel, Comprehensible, Ultra-Fast, Security-Aware CPS Simulator - a European funded project focusing on smart Cyber Physical Systems (started in 2015).
5. SCENIC: Self-Configuring ENvironment-aware Intelligent aCOustic sensing - a European project funded under the Future and Emerging Technology initiative concerning environment-aware geometric acoustic processing (**project coordination ISPG**)
6. REWIND: Reverse Engineering of audio-VIsual coNtent Data - a European project funded under the Future and Emerging Technology initiative concerning environment-aware geometric acoustic processing (**project coordination ISPG**)
7. Tai-Chi: Tangible Acoustic Interfaces for Computer-Human Interaction - a European project (STRP) concerning the development of acoustic solutions for tactile interaction (**best exhibit grand prize at IST 2006, Helsinki**)
8. ORIGAMI: A new paradigm for high-quality mixing of real and virtual - a European project (STRP) concerning the development of advanced technologies for film and TV productions (**project coordination ISPG**)
9. ALMA: ALgorithms for the Modeling of Acoustic interactions - a European project funded under the Future and Emerging Technology initiative concerning automatic object-based sound synthesis through physical modeling (**project coordination ISPG**)

Publications

Manuscripts Submitted to International Journals

1. L. Comanducci, F. Borra, P. Bestagini, F. Antonacci, S. Tubaro, A. Sarti, "Source Localization using Distributed Microphones in Reverberant Environments based on Deep Learning and Ray Space Transform". Submitted to IEEE/ACM Tr. Audio, Speech and Language Processing, 2019.
2. M. Cobos, F. Antonacci, L. Comanducci, A. Sarti, "Frequency-Sliding Generalized Cross-Correlation: A Sub-band Time Delay Estimation Approach". Submitted to IEEE/ACM Tr. Audio, Speech and Language Processing, 2019.

Publications on International Journals

3. Craig T. Jin[□], Shiduo Yu, Fabio Antonacci, Augusto Sarti, "Perspectives on microphone array processing including sparse recovery, ray space analysis, and neural networks". *Acoustical Science and Technology*, Vol. 41, No. 1, Jan. 2020, pp. 308-317. Online ISSN: 1347-5177; Print ISSN: 1346-3969; ISSN-L: 0369-4232; DOI: <https://doi.org/10.1250/ast.41.308>

4. A. Bernardini, A.E. Vergani, A. Sarti, "Wave Digital Modeling of Nonlinear 3-terminal Devices for Virtual Analog Applications". *Circuits, Systems, and Signal Processing*, Springer, 2019. Published online: Jan. 9, 2020. DOI: <https://doi.org/10.1007/s00034-019-01331-7>
5. F. Borra, A. Bernardini, F. Antonacci, A. Sarti, "Uniform Linear Arrays of First-Order Steerable Differential Microphones". *IEEE/ACM Tr. Audio, Speech and Language Processing*. Vol. 27, No. 12, Dec. 2019, pp. 1906-1918. Print ISSN: 2329-9290. Online ISSN: 2329-9304. DOI: [10.1109/TASLP.2019.2934567](https://doi.org/10.1109/TASLP.2019.2934567).
6. A. Canclini, F. Antonacci, S. Tubaro, A. Sarti, "A Methodology for the Robust Estimation of the Radiation Pattern of Acoustic Sources", To appear on *IEEE/ACM Tr. Audio, Speech and Language Processing*, 2019.
7. A. Bernardini, P. Maffezzoni, A. Sarti, "Linear Multi-Step Discretization Methods with Variable Step-Size in Nonlinear Wave Digital Structures for Virtual Analog Modeling". *IEEE/ACM Tr. Audio, Speech and Language Processing*, Vol. 27, No. 11, Nov. 2019, pp. 1763-1776. DOI: [10.1109/TASLP.2019.2931759](https://doi.org/10.1109/TASLP.2019.2931759).
8. S. Delle Monache, L. Comanducci, M. Buccoli, M. Zanoni, A. Sarti, E. Pietrocola, F. Berbenni, G. Cospito, "A Framework for Exploring the Sense of Presence in Interactive Networked Music Learning Scenarios". *Hindawi, Wireless Communication and Mobile Computing*, Volume 2019, Article ID 4593853, 2019. DOI: [10.1155/2019/4593853](https://doi.org/10.1155/2019/4593853).
9. A. Bernardini, K.J. Werner, J.O. Smith III, A. Sarti, "Generalized Wave Digital Filter Realizations of Arbitrary Reciprocal Connection Networks". *IEEE Tr. Circuits and Systems I: Regular Papers*, Vol. 66, No. 2, Feb. 2019, pp. 694-707. Print ISSN: 1549-8328, Online ISSN: 1558-0806, Digital Object Identifier: [10.1109/TCSI.2018.2867508](https://doi.org/10.1109/TCSI.2018.2867508).
10. K.J. Werner, A. Bernardini, J.O. Smith III, A. Sarti, "Modeling Circuits with Arbitrary Topologies and Active Linear Multiports using Wave Digital Filters". *IEEE Tr. Circuits and Systems I: Regular Papers*, Vol. 65, No. 12, Dec. 2018, pp. 4233-4246. DOI: [10.1109/TCSI.2018.2837912](https://doi.org/10.1109/TCSI.2018.2837912).
11. A. Bernardini, F. Antonacci, A. Sarti, "Wave Digital Implementation of Robust First-Order Differential Microphone Arrays". *IEEE Signal Processing Letters*, Vol. 25, No. 2, pp. 253-257, 2018. DOI: [10.1109/LSP.2017.2787484](https://doi.org/10.1109/LSP.2017.2787484).
12. A. Bernardini, P. Maffezzoni, L. Daniel, A. Sarti, "Wave-based Analysis of Large Nonlinear Photovoltaic Arrays". *IEEE Tr. Circuits and Systems - I: Regular Papers*, 2017. Vol. 65, No. 4, pp. 1363-1376. Print ISSN: 1549-8328. Online ISSN: 1558-0806. DOI: [10.1109/TCSI.2017.2756917](https://doi.org/10.1109/TCSI.2017.2756917).
13. B. Di Giorgi, S. Dixon, A. Sarti, "A data-driven model of complexity for tonal chord sequences". *IEEE Tr. on Audio, Speech and Language Processing*. Vol. 25, No. 11, Nov. 2017, pp. 2237-2250. DOI: [10.1109/TASLP.2017.2756443](https://doi.org/10.1109/TASLP.2017.2756443).
14. A. Canclini, F. Antonacci, A. Sarti, S. Tubaro, "Distributed 3D source localization from 2D DOA measurements using multiple linear arrays", *Hindawi Wireless Communications and Mobile Computing*, Vol. 2017, Article ID 1049141, <https://doi.org/10.1155/2017/1049141>
15. M. Compagnoni, R. Notari, A.A. Ruggiu, F. Antonacci, A. Sarti, "On the Statistical Model of Source Localization Based on Range Difference Measurements". *Journal of the Franklin Institute*, Vol. 354, No. 15, Oct. 2017, pp. 7183-7214. DOI: [10.1016/j.jfranklin.2017.07.034](https://doi.org/10.1016/j.jfranklin.2017.07.034)
16. M. Compagnoni, A. Pini, A. Canclini, P. Bestagini, F. Antonacci, S. Tubaro, A. Sarti, "A Geometrical-Statistical approach to outlier removal for TDOA measurements". *IEEE Tr. Signal Processing*, Vol 65, No. 15, pp. 3960-3975, 2017.
17. M. Marcon, A. Sarti, S. Tubaro, "Multicamera Rig Calibration by Double-Sided Thick Checkerboard". *IET Computer Vision*, Vol. 11, No. 6, Sept. 2017, pp. 448-454. DOI: [10.1049/iet-cvi.2016.0193](https://doi.org/10.1049/iet-cvi.2016.0193), Inspec Acc. No. 17134893.
18. A. Bernardini, M. D'Aria, R. Sannino, A. Sarti, "Efficient Continuous Beam Steering for Planar Arrays of Differential Microphones". *IEEE Signal Processing Letters* Vol. 24 No. 6, pp. 794-798.
19. A. Bernardini, A. Sarti, "Biparametric Wave Digital Filters". *IEEE Tr. on Circuits and Systems I: Regular Papers*, Vol 64, No. 7, pp. 1826-1838, 2017.
20. C. Rottondi, C. Chafe, C. Allocchio, A. Sarti, "An Overview on Networked Music Performance Technologies". *IEEE Access*, Vol. 4, 2016, pp.8823-8843. DOI: [10.1109/ACCESS.2016.2628440](https://doi.org/10.1109/ACCESS.2016.2628440)
21. F. Setragno, M. Zanoni, F. Antonacci, A. Sarti, M. Malagodi, T. Rovetta, C. Invernizzi, "Feature-Based Analysis of the Impact of Ground Coat and Varnish on Violin Tone Qualities", *Acta Acustica United with Acustica (The Journal of the European Acoustics Association (EAA) - International Journal on Acoustic)*. No. 1, Jan.-Feb. 2017, Vol. 103, pp. 80-93.
22. M. Compagnoni, R. Rotari, A.A. Ruggiu, F. Antonacci, A. Sarti, "The algebro-geometric study of range maps". *J. of Nonlinear Science*, 27(1):99-157, 2017. DOI: [10.1007/s00332-016-9327-4](https://doi.org/10.1007/s00332-016-9327-4), ISSN: 09388974. SCOPUS id: 2-s2.0-84982272809.
23. D. Markovic, F. Antonacci, L. Bianchi, S. Tubaro, A. Sarti, "Extraction of Acoustic Sources through the Processing of Sound Field Maps in the Ray Space". *IEEE Tr. Audio, Speech and Language Processing*, Vol. 24. No. 12, pp. 2481-2494, 2016. DOI: [10.1109/TASLP.2016.2615242](https://doi.org/10.1109/TASLP.2016.2615242). ISSN: 23299290. SCOPUS id: 2-s2.0-84991801118.
24. L. Bianchi, F. Antonacci, A. Sarti, S. Tubaro, "The Ray Space Transform: a New Framework for Wave Field Processing". *IEEE Tr. on Signal Processing*, Vol. 64, No. 21, Nov. 2016, pp. 5696-5706. DOI: [10.1109/TSP.2016.2591500](https://doi.org/10.1109/TSP.2016.2591500). ISSN: 1053587X. SCOPUS id: 2-s2.0-84990996566.
25. B. Di Giorgi, M. Zanoni, S. Böck, A. Sarti, "Multipath Beat Tracking", *J. Audio Engineering Society (JAES)* Vol. 64 Issues 7-8, July-August 2016, pp. 493-502. DOI: [10.17743/jaes.2016.0025](https://doi.org/10.17743/jaes.2016.0025), ISSN: 15494950. SCOPUS id: 2-s2.0-84984853489.
26. A. Bernardini, K.J. Werner, A. Sarti, J.O. Smith III, "Modeling Nonlinear Wave Digital Elements using the Lambert Function". *IEEE Tr. on Circuits and Systems I: Regular Papers*, Vol. 63, Issue 8, August 2016, pp. 1231-1242. DOI: [10.1109/TCSI.2016.2573119](https://doi.org/10.1109/TCSI.2016.2573119). ISSN: 15498328. SCOPUS id: 2-s2.0-84983021793.
27. M. Compagnoni, A. Canclini, P. Bestagini, F. Antonacci, A. Sarti, S. Tubaro, "Source localization and denoising: a perspective from the TDOA space". *Multidimensional Systems and Signal Processing*, Springer. (2017) 28:1283-1308. DOI [10.1007/s11045-016-0400-9](https://doi.org/10.1007/s11045-016-0400-9). ISSN: 09236082. SCOPUS id: 2-s2.0-84962288046. Accessible at: <http://rdcu.be/vm8b>
28. M. Marcon, A. Sarti, S. Tubaro "Toothbrush Motion Analysis to Help Children Learn Proper Tooth Brushing", *ELSEVIER J. on Computer Vision and Image Understanding*, Vol. 148, July 2016, pp. 34-45. DOI: [10.1016/j.cviu.2016.03.009](https://doi.org/10.1016/j.cviu.2016.03.009). ISSN: 10773142. SCOPUS id: 2-s2.0-84964354739.
29. D. Markovic, F. Antonacci, A. Sarti, S. Tubaro, "3D Beam Tracing based on Visibility Lookup for Interactive Acoustic Modeling". *IEEE Tr. on Visualization and Computer Graphics*, Vol. 22, No. 10, Oct. 2016, pp. 2262 - 2274. DOI: [10.1109/TVCG.2016.2515612](https://doi.org/10.1109/TVCG.2016.2515612). ISSN: 10772626. SCOPUS id: 2-s2.0-84985961526.

30. L. Bianchi, F. Antonacci, A. Sarti, S. Tubaro, "Model-Based Acoustic Rendering based on Plane Wave Decomposition". *ELSEVIER Applied Acoustics*, Vol. 104, March 2016, pp. 127–134. DOI: 10.1016/j.apacoust.2015.10.010. ISSN: 0003682X. 2-s2.0-84948432455.
31. C. Rottondi, M. Buccoli, M. Zanoni, D. Garao, G. Verticale, A. Sarti, "Feature-Based Analysis of the Effects of Packet Delay on Networked Musical Interactions". *Journal of the Audio Engineering Society (JAES)*, Vol. 63, No. 11, Nov. 2015, pp 864-875. DOI: 10.17743/jaes.2015.0074. ISSN: 15494950. SCOPUS id: 2-s2.0-84958234547.
32. A. Canclini, P. Bestagini, F. Antonacci, M. Compagnoni, A. Sarti, S. Tubaro, "A Robust and Low-Complexity Source Localization Algorithm for Asynchronous Distributed Microphone Networks". *IEEE/ACM Tr. on Audio Speech and Language Processing*, Vol. 23, No. 3, pp. 1563-75, Oct. 2015. DOI: 10.1109/TASLP.2015.2439040. ISSN: 15587916. SCOPUS id: 2-s2.0-84933575056.
33. D. Markovic, F. Antonacci, A. Sarti, S. Tubaro, "Multiview soundfield imaging in the projective ray space". *IEEE/ACM Tr. Audio Speech and Language Processing*, Vol. 23, No. 6, pp. 1054-1067, June 2015. DOI 10.1109/TASLP.2015.2419076. ISSN: 15587916. SCOPUS id: 2-s2.0-84928571270.
34. A. Canclini, P. Bestagini, F. Antonacci, M. Compagnoni, A. Sarti, S. Tubaro, "A Robust and Low-Complexity Source Localization Algorithm for Asynchronous Distributed Microphone Networks". *IEEE/ACM Transactions on Audio Speech and Language Processing*, Vol. 23, No. 3, pp. 1563-75, Oct. 2015.
35. A. Canclini, D. Markovic, L. Bianchi, F. Antonacci, A. Sarti, S. Tubaro, "A robust geometric approach to room compensation for sound field rendering", *IEICE Tr. on Fundamentals of Electronics, Communications and Computer Sciences*, Vol. E97.A, No. 9, pp. 1884-1892, 2014. DOI: 10.1587/transfun.E97.A.1884. ISSN: 09168508. SCOPUS id: 2-s2.0-84906920750.
36. M. Compagnoni, R. Notari, F. Antonacci, A. Sarti, "A comprehensive analysis of the geometry of TDOA maps in localisation problems". *Inverse Problems*, IOP Science, Vol. 30, N. 035004, 2014, pp. 1-49. DOI:10.1088/0266-5611/30/3/035004
37. A. Sarti, "Inside the science of violins", *Strad*, Vol. 125, Nov. 1, 2014, pp. 25-26. ISSN: 00392049.
38. D. Markovic, K. Kowalczyk, F. Antonacci, C. Hofmann, A. Sarti, W. Kellermann, "Estimation of Acoustic Reflection Coefficients through Pseudospectrum Matching". *IEEE Tr. on Audio Speech and Language Processing*, Vol. 22, No. 1, Jan 2014, pp. 125-137. DOI: 10.1109/TASLP.2013.2285483.
39. D. Markovic, F. Antonacci, A. Sarti, S. Tubaro, "Soundfield Imaging in the ray space". *IEEE Tr. Audio Speech and Language Processing*. Vol. 21, No. 12, pp. 2493 - 2505, December 2013. DOI: 10.1109/TASL.2013.2274697. ISSN: 15587916. SCOPUS id: 2-s2.0-84992260370.
40. A. Canclini, F. Antonacci, A. Sarti, S. Tubaro, "Acoustic Source Localization With Distributed Asynchronous Microphone Networks", *IEEE Tr. on Audio, Speech and Language Processing*, Vol. 21, No. 2, 2013, pp. 439-443. DOI: 10.1109/TASL.2012.2215601. ISSN: 15587916. SCOPUS id: 2-s2.0-84871847219.
41. P. Bestagini, M. Compagnoni, F. Antonacci, A. Sarti, S. Tubaro, "TDOA-based Acoustic Source Localization in the Space-Range Reference Frame". *Multidimensional Systems and Signal Processing*, March 2013, DOI: 10.1007/s11045-013-0233-8. ISSN: 09236082. SCOPUS ID: 2-s2.0-84899451251.
42. F. Antonacci, J. Filos, M.R.P. Thomas, E.A.P. Habets, S. Tubaro, A. Sarti, P.A. Naylor, "Inference of Room Geometry from Acoustic Impulse Responses", *IEEE Tr. on Audio, Speech and Language Processing*, Vol. 20, No. 10, 2012, pp. 2683-2695. DOI: 10.1109/TASL.2012.2210877. ISSN: 15587916. SCOPUS ID: 2-s2.0-84867696572.
43. M. Marcon, E. Frigerio, A. Sarti, S. Tubaro, "3D wide baseline correspondences using depth-maps", *EURASIP Signal Processing: Image Communication*. Vol. 27, No. 8, Sept. 2012, pp. 849–855. DOI:10.1016/j.image.2012.01.009.
44. M. Compagnoni, P. Bestagini, F. Antonacci, A. Sarti, S. Tubaro, "Localization of Acoustic Sources through the Fitting of Propagation Cones using Multiple Independent Arrays". *IEEE Tr. Audio, Speech, and Language Processing*. Vol. 20, No. 7, Sept. 2012, pp. 1964-1975. DOI: 10.1109/TASL.2012.2191958. ISSN: 15587916. SCOPUS id: 2-s2.0-84860850985.
45. L. An, P. Wang, A. Sarti, F. Antonacci, J. Shia, "Hyperbolic boiler tube leak location based on quaternary acoustic array". *Journal on Applied Thermal Engineering*, Vol. 31, No. 16, Nov. 2011, pp. 3428-3436. DOI: 10.1016/j.applthermaleng.2011.06.028, ISSN: 13594311. SCOPUS id: 2-s2.0-80052021696.
46. G. De Sanctis, A. Sarti. "Virtual Analog Modeling in the Wave-Digital Domain". *IEEE Tr. Audio, Speech, And Language Processing*. Vol. 18 No. 4, May 2010, pp. 715-727. DOI: 10.1109/TASL.2009.2033637. ISSN: 15587916. SCOPUS id: 2-s2.0-77951201348.
47. F. Antonacci, A. Sarti, S. Tubaro. "Two-dimensional beam-tracing from Visibility Diagrams for Real-Time Acoustic Rendering", *Eurasip Journal on Advances In Signal Processing*, Vol. 2010, Feb. 2010, pp. 1-18. DOI: 10.1155/2010/642316. ISSN: 16876172. SCOPUS id: 2-s2.0-78650726816.
48. A. Sarti, G. De Sanctis, "Systematic Methods for the Implementation of Nonlinear Wave Digital Structures". *IEEE Transactions on Circuits and Systems I, Regular Papers*, Vol. 56, No. 2, Feb. 2009, pp. 460-472. DOI: 10.1109/TCSI.2008.2001801. ISSN: 10577122. SCOPUS id: 2-s2.0-61349147301.
49. G. Valenzise, G. Prandi, M. Tagliasacchi, A. Sarti. "Identification of sparse audio tampering using distributed source coding and compressive sensing techniques". *EURASIP Journal on Image And Video Processing*, Vol. 2009, pp. 1-12, Article number 158982. DOI: 10.1155/2009/15898. ISSN: 16875176. SCOPUS id: 2-s2.0-61449219097.
50. F. Antonacci, M. Foco, A. Sarti, S. Tubaro, "Fast Tracing of Acoustic Beams and Paths through Visibility Lookup". *IEEE Transactions on Audio, Speech and Language Processing*, Vol. 16, No. 4, May 2008, pp. 812-824. DOI: 10.1109/TASL.2008.920064. ISSN: 15587916. SCOPUS id: 2-s2.0-64849107390.
51. Dell'acqua, A. Sarti, S. Tubaro, "3D Motion from structures of points, lines and planes", *Image and Vision Computing*, Vol. 26, No. 4, April 2008, pp. 529-549. DOI: 10.1016/j.imavis.2007.07.001. ISSN: 02628856. SCOPUS id: 2-s2.0-38149067601.
52. M. Marcon, L. Piccarreta, A. Sarti, S. Tubaro, "Fast PDE Approach to Surface Reconstruction from Large Cloud of Points", *Computer Vision and Image Understanding*, Vol. 112, 2008, pp. 274-285. DOI: 10.1016/j.cviu.2008.05.008. ISSN: 10773142. SCOPUS id: 2-s2.0-54949140779.
53. R. Rabenstein, S. Petrusch, A. Sarti, G. De Sanctis, C. Erkut, M. Karjalainen, "Blocked-based physical modeling for digital sound synthesis". *IEEE Signal Processing Magazine*. Special issue on "Computer-Generated Sounds and Music for All". Vol. 24, Issue 2, Mar. 2007, pp. 42-54. DOI: 10.1109/MSP.2007.323263. ISSN: 10535888. SCOPUS id: 2-s2.0-34047236621.
54. M. Tagliasacchi, D. Maestroni, S. Tubaro, A. Sarti, "Motion Estimation And Signaling Techniques For 2D+t Scalable Video Coding", *EURASIP Journal on Applied Signal Processing*, Vol. 2006, Jan. 2006, pp. 1-21. Article number 57308. DOI:

55. A. Sarti, G. De Sanctis, "Memory Extraction From Dynamic Scattering Junctions In Wave Digital Structures", IEEE Signal Processing Letters, Vol. 13, No. 12, Dec. 2006, pp. 729-732. DOI: 10.1109/LSP.2006.879863. ISSN: 10709908. SCOPUS id: 2-s2.0-33947131095.
56. O. Grau, R. Koch, F. Lavagetto, A. Sarti, S. Tubaro, J. Woetzel, "The ORIGAMI Project: Advanced Tools for Creating and Mixing Real and Virtual Content in Film and TV Production". IEE Vision, Image and Signal Processing, Vol. 152, No. 4, Aug. 2005, pp. 454-469. DOI: 10.1049/ip-vis:20045134. ISSN: 1350245X. SCOPUS id: 2-s2.0-24144445845.
57. A. Dell'Acqua, A. Sarti, S. Tubaro, L. Zanzi, "Detection of linear objects in GPR data". Signal Processing, Vol. 84, No. 4, April 2004, pp. 785-799. DOI: 10.1016/j.sigpro.2003.12.010. ISSN: 01651684. SCOPUS id: 2-s2.0-1442334645.
58. A. Sarti, S. Tubaro, "Image-based multi-resolution implicit object modeling". Journal of Applied Signal Processing. Vol. 01, N. 10, pp. 1053-1066, 2002.
59. A. Sarti, S. Tubaro, "Image-based surface modeling: a multi-resolution approach". Signal Processing. Vol. 82, No. 9, September 2002, pp. 1212-1232.
60. A. Sarti, S. Tubaro, "Detection and characterisation of planar fractures using a 3D Hough transform". Signal Processing, Vol. 82, No. 9, September 2002, pp. 1269-1282.
61. F. Pedersini, A. Sarti, S. Tubaro, "Multi-Camera Parameter Tracking". IEE Proceedings Vision, Image and Signal Processing, Vol. 148, No. 1, Feb. 2001, pp. 70-77.
62. F. Pedersini, A. Sarti, S. Tubaro: "Visible Surface Reconstruction with Accurate Localization of Object Boundaries", IEEE Tr. on Circuits and Systems for Video Technology, Vol. 10, No. 2, March 2000, pp. 278-291.
63. A. Sarti, G. De Poli: "Toward Nonlinear Wave Digital Filters". IEEE Transactions on Signal Processing. Vol. 47, No. 6, June 1999, pp. 1654-1668.
64. F. Pedersini, P. Pigazzini, A. Sarti, S. Tubaro: "Multicamera Motion Estimation for High-Accuracy 3D Reconstruction". Signal Processing, Vol. 80, No. 1, pp. 1-21, Jan. 2000.
65. F. Pedersini, A. Sarti, S. Tubaro: "Object-Based Sound Synthesis for Virtual Environments". IEEE Signal Processing Magazine. Vol. 17, No. 6, Nov. 2000, pp. 37-51.
66. F. Pedersini, A. Sarti, S. Tubaro: "Automatic Monitoring and 3D Reconstruction Applied to Cultural Heritage", Journal of Cultural Heritage, Vol. 1, No. 3, Nov. 2000, pp. 301-313.
67. F. Pedersini, A. Sarti, S. Tubaro: "Multicamera Systems: Calibration and Applications". IEEE Signal Processing Magazine, special issue on "Stereo and 3D Imaging". Vol. 16, No. 3, May 1999, pp. 55-65.
68. F. Pedersini, A. Sarti, S. Tubaro: "Block-wise Physical Model Synthesis for Musical Acoustics". IEE Electronic Letters, Vol. 35, No. 17, Aug. 1999, pp. 1418-19.
69. F. Pedersini, A. Sarti, S. Tubaro: "Accurate and Simple Geometric Calibration of Multi-Camera Systems". Signal Processing, Vol. 77, No. 3, 1999, pp. 309-334.
70. F. Pedersini, P. Pigazzini, A. Sarti, S. Tubaro: "3D Area Matching with Arbitrary Multiview Geometry". Signal Processing: Image Communications. Vol 14, No. 1-2, 1998, pp. 71-94.
71. F. Pedersini, A. Sarti, S. Tubaro: "Improving the Performance of Edge Localization Techniques through Error Compensation". Signal Processing: Image Communications. Vol. 12, No. 1, pp. 33-47, March 1998.
72. F. Pedersini, A. Sarti, S. Tubaro: "Joint Automatic Design of Prefilter and Decimation Grid for the Reduction of Spectral Redundancy in 2D Digital Signals". Signal Processing, Vol. 63, No. 3, pp. 175-197, 1997.
73. F. Pedersini, A. Sarti, S. Tubaro: "Estimation and Compensation of Subpixel Edge Localization Error". IEEE Transactions on Pattern Analysis and Machine Intelligence, Vol. 19, No. 10, Oct. 1997, pp.1278-84.
74. F. Pedersini, A. Sarti, S. Tubaro: "Joint Sublattice Selection and Prefilter Design for the Optimal Decimation of 2D Digital Signals". IEE Proceedings -Vision, Image and Signal Processing, Vol.144, No. 2, Apr. 1997, pp. 98-107.
75. G. Lazzarin, S. Pupolin, A. Sarti: "Nonlinearity Compensation in Digital Radio Systems". IEEE Transactions on Communications, Vol. 42, No. 2-3-4, February-March-April, 1994.
76. A. Sarti, S. Pupolin: "Recursive techniques for the synthesis of a pth-order inverse of a Volterra system". European Transactions on Telecommunications. Vol. 3, No. 4, July-August 1992, pp. 315-322.
77. G. Borin, G. De Poli, A. Sarti: "Algorithms and Structures for Synthesis using Physical Models", Computer Music Journal, Vol. 19, No. 4, pp. 30-42, 1992.
78. S. Pupolin, A. Sarti, H. Fu: "Adaptive pre-equalization in nonlinear M-QAM channels". Journal of Nanjing Institute of Posts and Telecommunications, Vol. 9, No. 2, China 1990.

Publications on International Conferences

79. A. Bernardini, A. Sarti, "Towards Inverse Virtual Analog Modeling". Intl. Conference on Digital Audio Effects (DAFx 2019), Birmingham, UK, Sept. 2-6, 2019.
80. M. Shahnawaz, C. Jin, J.A. Glaunés, A. Sarti, A. Tew, "Morphological Weighting Improves Individualized Prediction of HRTF Directivity Patterns". IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA), Oct. 20-23, 2019, New Paltz, NY, USA
81. R.T. Irene, C. Borrelli, M. Zaroni, M. Buccoli, A. Sarti, "Automatic playlist generation using Convolutional Neural Networks and Recurrent Neural Networks". EURASIP European Signal Processing Conference (EUSIPCO), Sept. 2-6, 2019, A Coruña, Spain.
82. S. Cherubin, C. Borrelli, M. Buccoli, M. Zaroni, A. Sarti, "Three-dimensional mapping of high-level music features for music browsing". First International Workshop on Multilayer Music Representation and Processing (MMRP19), Milano, Italy, Jan 24-25, 2019.
83. S. Mandelli, F. Borra, V. Lipari, P. Bestagini, A. Sarti, S. Tubaro, "Seismic data interpolation through convolutional autoencoder". SEG Technical Program Expanded Abstracts 2018. <https://doi.org/10.1190/segam2018-2995428.1>
84. S. Delle Monache, M. Buccoli, L. Comanducci, A. Sarti, G. Cospito, E. Pietrocola, F. Berbenni, "Time is not on my side: network latency, presence and performance in remote music interaction", XXII CIM 2018, 20-23 No. 2018, Udine, Italy.

85. L. Comanducci, F. Borra, P. Bestagini, F. Antonacci, A. Sarti, S. Tubaro, "Ray Space Transform Interpolation with Convolutional Autoencoder". Intl. Workshop on Acoustic Signal Enhancement (IWAENC-18), 17-20 Sept. 2018, Tokyo, Japan.
86. C. Borrelli, A. Canclini, F. Antonacci, A. Sarti, S. Tubaro, "A Denoising Methodology for Higher Order Ambisonics Recordings". Intl. Workshop on Acoustic Signal Enhancement (IWAENC-18), 17-20 Sept. 2018, Tokyo, Japan.
87. S. Yu, C. Jin, F. Antonacci, A. Sarti, "Adding Sparse Recovery to Projective Ray Space Analysis". Intl. Workshop on Acoustic Signal Enhancement (IWAENC-18), 17-20 Sept. 2018, Tokyo, Japan.
88. F. Picetti, F. Borra, F. Antonacci, A. Sarti, S. Tubaro, "A Methodology for Sound Scene Manipulation Based on the Ray Space Transform". Intl. Workshop on Acoustic Signal Enhancement (IWAENC-18), 17-20 Sept. 2018, Tokyo, Japan.
89. D. Fiocchi, M. Zanoni, M. Buccoli, F. Antonacci, A. Sarti, "Beat Tracking Using Recurrent Neural Network: a Transfer Learning Approach". EURASIP 26th European Signal Processing Conference (EUSIPCO 2018), Sept. 3-7, 2018, Rome, Italy.
90. M. Pezzoli, F. Borra, F. Antonacci, A. Sarti, S. Tubaro "Reconstruction of the Virtual Microphone Signal Based on the Distributed Ray Space Transform". EURASIP 26th European Signal Processing Conference (EUSIPCO 2018), Sept. 3-7, 2018, Rome, Italy.
91. J. Lovatello, A. Bernardini, A. Sarti, "Steerable Circular Differential Microphone Arrays". EURASIP 26th European Signal Processing Conference (EUSIPCO 2018), Sept. 3-7, 2018, Rome, Italy.
92. A. Bernardini, K.J. Werner, P. Maffezzoni, A. Sarti, "Wave Digital Modeling of the Diode-Based Ring Modulator". 144th Audio Engineering Society (AES) Convention, Milan, Italy, May 23-26, 2018.
93. A. Canclini, D. Markovic, M. Schneider, F. Antonacci, E.A.P. Habets, A. Walther, A. Sarti, "A Weighted Least Squares Beam Shaping Technique for Sound Field Control". IEEE Intl. Conf. on Acoustics, Speech and Signal Processing, 15-20 April 2018, Calgary, Alberta, Canada.
94. M. Pezzoli, F. Borra, F. Antonacci, A. Sarti, S. Tubaro, "Estimation of the Sound Field at Arbitrary Positions in Distributed Microphone Networks based on Distributed Ray Space Transform". IEEE Intl. Conf. on Acoustics, Speech and Signal Processing, 15-20 April 2018, Calgary, Alberta, Canada.
95. C. Jin, R. Zolfaghari, X. Long, A. Sebastian, S. Hossain, A. Glaunes, A. Tew, M. Shahnawaz, A. Sarti, "Considerations Regarding Individualization of Head-Related Transfer Functions". IEEE Intl. Conf. on Acoustics, Speech and Signal Processing, 15-20 April 2018, Calgary, Alberta, Canada.
96. A. Bernardini, A. Sarti, P. Maffezzoni, L. Daniel, "Wave Digital-Based Variability Analysis of Electrical Mismatch in Photovoltaic Arrays". IEEE Intl. Symposium on Circuits and Systems (ISCAS). Florence, Italy, May 27-30, 2018.
97. M. Zhu, M. Shahnawaz, S. Tubaro, A. Sarti, "HRTF Personalization Based on Weighted Sparse Representation of Anthropomorphic Features". IEEE Intl. Conference on 3D Immersion (IC3D 2017). Dec. 11-12, 2017, Brussels, Belgium.
98. F. Borra, F. Antonacci, A. Sarti, S. Tubaro, "Localization of Acoustic Sources in the Ray Space for Distributed Microphone Sensors". IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA-17), Mohonk Mountain House, New Paltz, NY, Oct. 15-18, 2017.
99. C. Jin, F. Antonacci, A. Sarti, "Ray Space Analysis with Sparse Recovery". IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA-17), Mohonk Mountain House, New Paltz, NY, Oct. 15-18, 2017.
100. A. Bernardini, A. Sarti, "Canonical Piecewise-Linear Representation of Curves in the Wave Digital Domain". European Signal Processing Conference (EUSIPCO 2017) Kos Island, Greece, Aug. 28 - Sept. 2, 2017.
101. F. Setragno, M. Zanoni, A. Sarti, F. Antonacci, "Feature-based Characterization of Violin Timbre". European Signal Processing Conference (EUSIPCO 2017) Kos Island, Greece, Aug. 28 - Sept. 2, 2017.
102. E. Maestre, A. Sarti, A. Canclini, F. Antonacci, G. Scavone, C. Chafe, "The return of the Messiah: Modal analysis and bridge admittance modeling". Intl. Symposium on Musical Acoustics (ISMA), Montreal, Canada, June 18 - 22, 2017.
103. M. Zanoni, F. Antonacci, A. Sarti, "Towards Prediction of Violin Timbre from vibrational measurements". Intl. Symposium on Musical Acoustics (ISMA), Montreal, Canada, June 18 - 22, 2017.
104. F. Setragno, M. Zanoni, F. Antonacci, A. Sarti, "Feature-based timbral characterization of ancient and modern violins". Intl. Symposium on Musical Acoustics (ISMA), Montreal, Canada, June 18 - 22, 2017.
105. M. Zanoni, S. Lusardi, P. Bestagini, A. Canclini, A. Sarti, S. Tubaro, "Efficient Music Identification Approach Based on Local Spectrogram Image Descriptors". 142nd Audio Engineering Society (AES) Convention. May 20-23, 2017. Berlin Germany.
106. F. Borra, F. Antonacci, A. Sarti, S. Tubaro, "Extraction of acoustic sources for multiple arrays based on the Ray Space Transform". Fifth Joint Workshop on Hands-free Speech Communication and Microphone Arrays, HSCMA 2017. March 1-3, 2017. San Francisco, CA, USA.
107. M. Verasani, A. Bernardini, A. Sarti, "Modeling Sallen-Key Audio Filters in the Wave Digital Domain". IEEE Intl. Conf. on Acoustic Speech and Signal Processing (ICASSP-17), March 5-9, 2017, New Orleans, Louisiana, USA.
108. A. Canclini, M. Varini, F. Antonacci, A. Sarti, "Dictionary-Based Equivalent Source Method for Near-Field Acoustic Holography". IEEE Intl. Conf. on Acoustic Speech and Signal Processing (ICASSP-17), March 5-9, 2017, New Orleans, Louisiana, USA.
109. M. Marcon, A. Sarti, S. Tubaro, "Multicamera rig calibration by double-sided thick checkerboard". IEEE Intl. Conf. on Image Processing (ICIP 2016). Sept. 25-28, 2016, Phoenix AZ, USA.
110. M. Marcon, A. Sarti, S. Tubaro, "Smart Toothbrushes: Inertial Measurement Sensors Fusion with Visual Tracking", Fourth Intl. Workshop on Assistive Computer Vision and Robotics (ECCV/ACVR2016). Amsterdam, The Netherlands - October 9, 2016.
111. F. Borra, L. Bianchi, F. Antonacci, A. Sarti, S. Tubaro, "A Robust Data-Independent Near-Field Beamformer for Linear Microphone Arrays". Intl. Workshop on Acoustic Signal Enhancement (IWAENC-16), 13-16 Sept. 2016, Xi'an, China.
112. D. Markovic, J. Popat, F. Antonacci, A. Sarti, T. Kishore Kumar, "An informed separation algorithm based on sound field mapping for speech recognition systems". Intl. Workshop on Acoustic Signal Enhancement (IWAENC-16), 13-16 Sept. 2016, Xi'an, China.

113. A. Bernardini, A. Sarti, "Dynamic Adaptation of Instantaneous Nonlinear Bipoles in Wave Digital Networks", European Signal Processing Conference (EUSIPCO 2016) Budapest, Hungary, pp. 1038-1042, Aug. 29 - Sept. 2, 2016.
114. M. Buccoli, D. Andreoletti, M. Zanoni, A. Sarti, S. Tubaro, "Unsupervised Feature learning for Music Structural Analysis". European Signal Processing Conference (EUSIPCO 2016) Budapest, Hungary, Aug. 29 - Sept. 2, 2016.
115. M. Shah Nawaz L. Bianchi, A. Sarti, S. Tubaro, "Analyzing Notch Patterns of Head Related Transfer Functions in CIPIC and SYMARE Databases". European Signal Processing Conference (EUSIPCO 2016) Budapest, Hungary, Aug. 29 - Sept. 2, 2016.
116. M. Buccoli, M. Zanoni, G. Fazekas, A. Sarti, M. Sandler, "A Higher-Dimensional Expansion of Affective Norms for English Terms for Music Tagging". 17th Conference of the Intl. Society for Music Information Retrieval (ISMIR 2016), New York City, NY, USA, pp. 316-322, Aug. 7-11, 2016.
117. L. Bonacina, A. Canclini, F. Antonacci, M. Marcon, A. Sarti, S. Tubaro, "A low-cost solution to 3D pinna modeling for HRTF prediction", IEEE Intl. Conf. on Acoustic Speech and Signal Processing (ICASSP-16), March 20-25, 2016, Shanghai, China.
118. L. Bianchi, V. Baldini, D. Markovic, F. Antonacci, A. Sarti, S. Tubaro, "A linear operator for the computation of soundfield maps", IEEE Intl. Conf. on Acoustic Speech and Signal Processing (ICASSP-16), March 20-25, 2016, Shanghai, China.
119. K.J. Werner, V. Nangia, J.O. Smith, A. Sarti, A. Bernardini, "An Exact and General Diode Clipper Model for Wave Digital Filters". AES 139th Convention, 2015 Oct. 29 - Nov. 1. New York, NY, USA.
120. L. Bianchi, M. Verdi, F. Antonacci, A. Sarti, S. Tubaro, "High-Resolution Imaging of Acoustic Reflections with Spherical Microphone Array". IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA-15), Mohonk Mountain House, New Paltz, NY, Oct. 18-21, 2015.
121. L. Bianchi, F. D'Amelio, F. Antonacci, A. Sarti, S. Tubaro, "A Plenacoustic Approach to Acoustic Signal Extraction". IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA-15), Mohonk Mountain House, New Paltz, NY, Oct. 18-21, 2015.
122. D. Markovic, F. Antonacci, A. Sarti, S. Tubaro, "Resolution Issues in Soundfield Imaging: a Multiresolution Approach to Multiple Source Localization". IEEE Workshop on Applications of Signal Processing to Audio and Acoustics (WASPAA-15), Mohonk Mountain House, New Paltz, NY, Oct. 18-21, 2015.
123. M. Buccoli, M. Zanoni, F. Setragno, F. Antonacci, A. Sarti, "An Unsupervised Approach to the Semantic Description of the Sound Quality of Violins", EURASIP European Signal Processing Conference (EUSIPCO 2015), Nice, France, 2015.
124. A. Bernardini, K.J. Werner, A. Sarti, J.O. Smith, "Modeling a class of multi-port nonlinearities in wave digital structures". EURASIP European Signal Processing Conference (EUSIPCO 2015), Nice, France, 2015.
125. M. Mascia, A. Canclini, F. Antonacci, M. Tagliasacchi, A. Sarti, S. Tubaro, "Forensic and anti-forensic analysis of indoor/outdoor classifiers based on acoustic clues". EURASIP European Signal Processing Conference (EUSIPCO 2015), Nice, France, 2015.
126. A. Canclini, L. Mucci, F. Antonacci, A. Sarti, S. Tubaro, "A methodology for Estimating the Radiation Pattern of a violin during the Performance". EURASIP European Signal Processing Conference (EUSIPCO 2015), Nice, France, 2015.
127. A. Bernardini, K.J. Werner, A. Sarti, J.O. Smith, "Multi-port nonlinearities in wave digital structures". IEEE Intl. Symposium on Signals, Circuits and Systems - ISSCS 2015. July 9-10, 2015, Iasi, Romania.
128. F. Antonacci, A. Canclini, R. Corradi, A. Liberatore, S. Miccoli, A. Sarti, M. Zanoni, "A Multidisciplinary Approach to the Characterization of Bowed String Instruments: the Musical Acoustics Lab in Cremona". 22nd Intl. Congress on Sound and Vibration, June 12-16, 2015, Florence, Italy.
129. M. Marcon, A. Sarti, S. Tubaro, "Piecewise Distortion Correction for Fisheye Lenses", IEEE Intl. Conf. on Image Processing 2015 (ICIP 2015). Sept. 27-30, 2015, Quebec City, Canada, pp. 4057-61. DOI: [10.1109/ICIP.2015.7351568](https://doi.org/10.1109/ICIP.2015.7351568)
130. M. Buccoli, A. Gallo, M. Zanoni, A. Sarti, S. Tubaro, "A Dimensional Contextual Semantic Model for Music Description and Retrieval". 40th IEEE Intl. Conf. on Acoustics, Speech and Signal Processing (ICASSP) 2015, April 19-24, 2015, Brisbane, Australia.
131. M. Zanoni, F. Setragno, F. Antonacci, A. Sarti, G. Fazekas, M. Sandler, "Training-based Semantic Descriptors modeling for violin quality sound characterization". 138th Audio Engineering Society (AES) Convention 2015, May 7-10, 2015, Warsaw, Poland.
132. M. Buccoli, P. Bestagini, M. Zanoni, A. Sarti, S. Tubaro, "Unsupervised feature learning for bootleg detection using deep learning architectures", IEEE Intl. Workshop on Information Forensics and Security (WIFS), Atlanta, USA, 2014
133. A. Canclini, D. Marković, L. Bianchi, F. Antonacci, A. Sarti, S. Tubaro, "A Geometrical Approach to Room Compensation for Sound Field Rendering Applications". EURASIP 22nd European Signal Processing Conference, EUSIPCO 2014, Sept. 1-4, 2014, Lisbon, Portugal.
134. M. Zanoni, F. Setragno A. Sarti, "The violin ontology". 9th Conference on Interdisciplinary Musicology - CIM14. Dec. 4-6, 2014, Berlin, Germany.
135. L. Bianchi, R. Magalotti, F. Antonacci, A. Sarti, S. Tubaro, "Robust beamforming under uncertainties in the loudspeakers directivity pattern". IEEE Intl. Conf. on Acoustics, Speech and Signal Processing (ICASSP 2014), May 4-9, 2014, Florence, Italy.
136. L. Bianchi, D. Markovic, F. Antonacci, A. Sarti, S. Tubaro, "Deconvolution of Plenacoustic Images", Proc. Workshop on App. of Signal Processing to Audio and Acoustics (WASPAA 2013), New Paltz, New York, Oct. 20-23, 2013.
137. D. Markovic, F. Antonacci, A. Sarti, S. Tubaro, "Estimation of the Room Geometry From an Impulse Response", Proc. Workshop on App. of Signal Processing to Audio and Acoustics (WASPAA 2013), New Paltz, New York, Oct. 20-23, 2013.
138. P. Bestagini, M. Zanoni, L. Albonico, A. Paganini, A. Sarti, S. Tubaro, "Feature-Based Classification for Audio Bootlegs Detection", IEEE Intl. Workshop on Information Forensics and Security (WIFS 2013), Guangzhou, China, Nov. 18-21, 2013, pp. 126-131.
139. L. Bianchi, F. Antonacci, A. Canclini, A. Sarti, S. Tubaro, "Localization of Virtual Acoustic Sources based on the Hough Transform for Sound Field Rendering Applications". IEEE Intl. Conf. on Acoustics, Speech and Signal Processing (ICASSP 2013). Vancouver, Canada, May 26-31, 2013, pp. 326-330.
140. B. Di Giorgi, M. Zanoni, A. Sarti, S. Tubaro, "Automatic chord recognition based on the probabilistic modeling of diatonic modal harmony". Eight Intl. Workshop on Multidimensional Systems nDS 2013, Erlangen, Germany, Sept. 9-11, 2013.

141. L. Bianchi, F. Antonacci, A. Sarti, S. Tubaro, "Rendering of Directional Sources through Loudspeaker Arrays based on Plane Wave Decomposition". IEEE Intl. Workshop on Multimedia Signal Processing MMSP 2013, Pula (Sardinia), Italy, Sept. 30 -- Oct. 2, 2013.
142. M. Buccoli, M. Zanoni, A. Sarti, S. Tubaro, "A Music Search Engine based on Semantic Text-Based Query". IEEE Intl. Workshop on Multimedia Signal Processing MMSP 2013, Pula (Sardinia), Italy, Sept. 30 -- Oct. 2, 2013.
143. D. Markovic, G. Sandrini, F. Antonacci, A. Sarti, S. Tubaro, "Plenacoustic Imaging in the Ray Space". International Workshop on Acoustic Signal Enhancement (IWAENC 2012). Aachen, Germany, Sept. 4-6, 2012.
144. L. Bianchi, F. Antonacci, A. Canclini, A. Sarti, S. Tubaro, "A Psychoacoustic-Based Analysis of the Impact of Pre-Echoes and Post-Echoes in Soundfield Rendering". International Workshop on Acoustic Signal Enhancement (IWAENC 2012). Aachen, Germany, Sept. 4-6, 2012.
145. A. Canclini, F. Antonacci, J. Filos, A. Sarti, P. Naylor, "Exact Localization of Planar Acoustic Reflectors in Three-Dimensional Geometries". International Workshop on Acoustic Signal Enhancement (IWAENC 2012). Aachen, Germany, Sept. 4-6, 2012.
146. D. Markovic, C. Hofmann, F. Antonacci, K. Kowalczyk, A. Sarti, W. Kellermann, "Reflection Coefficient Estimation by Pseudospectrum Matching". International Workshop on Acoustic Signal Enhancement (IWAENC 2012). Aachen, Germany, Sept. 4-6, 2012.
147. E. Frigerio, M. Marcon, A. Sarti, S. Tubaro, "Correction Method for Non-Ideal Iris Recognition". IEEE Intl. Conference on Image Processing (ICIP 2012), Sept. 30 - Oct. 3, Orlando, FL, USA.
148. A. Canclini, D. Markovic, F. Antonacci, A. Sarti, S. Tubaro, "A Room-Compensated Virtual Surround System Exploiting Early Reflections in a Reverberant Room". EURASIP 20th European Signal Processing Conference (EUSIPCO 2012). Bucharest, Romania, August 27-31, 2012.
149. M. Zanoni, D. Ciminieri, A. Sarti, S. Tubaro, "Searching for Dominant High-Level Features for Music Information Retrieval". EURASIP 20th European Signal Processing Conference (EUSIPCO 2012). Bucharest, Romania, August 27-31, 2012.
150. J. Filos, A. Canclini, F. Antonacci, A. Sarti, P.A. Naylor, "Localization of Planar Acoustic Reflectors From the Combination of Linear Estimates". EURASIP 20th European Signal Processing Conference (EUSIPCO 2012). Bucharest, Romania, August 27-31, 2012.
151. M. Marcon, E. Frigerio, A. Sarti, S. Tubaro, "3D correspondences in textured depth-maps through planar similarity transform". 2012 IEEE International Conference on Emerging Signal Processing Applications (ESPA 2012), Jan. 12-14, 2012 - Las Vegas, Nevada, USA, pp. 17-20.
152. A. Contini, A. Canclini, F. Antonacci, M. Compagnoni, A. Sarti, S. Tubaro, "Self-calibration of microphone arrays from measurement of Times Of Arrival of acoustic signals", 5th Intl. Symposium on Communications, Control and Signal Processing (ISCCSP 2012), May 2-4, 2012, Rome, Italy.
153. A. Canclini, P. Annibale, F. Antonacci, A. Sarti, R. Rabenstein, S. Tubaro, "From Direction Of Arrival Estimates to Localization of Planar Reflectors in a Two Dimensional Geometry". IEEE Intl. Conference on Acoustics, Speech and Signal Processing (ICASSP 2011). Prague, Czech Republic, 22-27 May 2011, pp. 2620 - 2623.
154. A. Canclini, P. Annibale, F. Antonacci, A. Sarti, R. Rabenstein, S. Tubaro. "A Methodology for Evaluating the Accuracy of WaveField Rendering Techniques". IEEE Intl. Conference on Acoustics, Speech and Signal Processing (ICASSP 2011). Prague, Czech Republic, 22-27 May 2011, pp. 69 - 72.
155. A. Sarti, W. Kellermann, R. Rabenstein, P. A. Naylor, M. Omologo, P. Svaizer, F. Antonacci, P. Annibale, P. Bestagini, A. Canclini, D. Markovic, K. Kowalczyk, M. R. P. Thomas and A. Brutti, "The SCENIC Project: Space-Time Audio Processing for Environment-Aware Acoustic Sensing and Rendering", Proc. AES 131st Convention, New York, Oct. 2011.
156. A. Canclini, F. Antonacci, M. R. P. Thomas, J. Filos, A. Sarti, P. A. Naylor, S. Tubaro, "Exact Localization of Acoustic Reflectors from Quadratic Constraints", International Workshop on App. of Signal Processing to Audio and Acoustics (WASPAA 2011), New Paltz, New York, Oct. 2011.
157. J. Filos, A. Canclini, M.R.P. Thomas, F. Antonacci, A. Sarti, P.A. Naylor, "Robust Inference of Room Geometry from Acoustic Measurements Using the Hough Transform". 19th European Signal Processing Conference (EUSIPCO 2011) Barcelona, Spain, August 29 - September 2, 2011.
158. A. Canclini, P. Annibale, F. Antonacci, A. Sarti, R. Rabenstein, S. Tubaro, "An Angular Frequency Domain Metric for the Evaluation of Wave Field Rendering Techniques". 19th European Signal Processing Conference (EUSIPCO 2011) Barcelona, Spain, August 29 - September 2, 2011.
159. E. Nastasia, F. Antonacci, A. Sarti, S. Tubaro, "Localization of Planar Acoustic Reflectors Through Emission of Controlled Stimuli". 19th European Signal Processing Conference (EUSIPCO 2011) Barcelona, Spain, August 29 - September 2, 2011, pp. 156-160.
160. L. Chiarandini, M. Zanoni, A. Sarti, "A System for Dynamic Playlist Generation Driven by Multimodal Control Signals and Descriptors". IEEE Intl. Workshop on Multimedia Signal Processing (MMSP 2011). October 17-19, 2011, Hangzhou, China, pp. 1-6.
161. A. Spich, A. Sarti, S. Tubaro, M. Zanoni. "Drum Music Transcription Using Prior Subspace Analysis and Pattern Recognition". Intl. Conference on Digital Audio Effects (DAFx 2010), Graz, Austria Sept. 6-10, 2010, pp. DAFX1-DAFX4. ISBN: 978-320001940-9.
162. P. Annibale, F. Antonacci, A. Canclini, R. Rabenstein, A. Sarti. "Wave-Based and Geometric Representations of Sound Fields". 9th ITG-Fachtagung Sprachkommunikation. Oct. 6-8, 2010, Bochum, Germany, pp. A1- A4. VDE VERLAG GMBH, Berlin, Offenbach.
163. S.D. Valente, F. Antonacci, M. Tagliasacchi, A. Sarti, S. Tubaro. "Self-calibration of two microphone arrays from volumetric acoustic maps in non-reverberant rooms". Intl. Symposium on Communications Control and Signal Processing (ISCCSP 2010). March 3-5, 2010, Limassol, Cyprus, pp. 224-227.
164. S.D. Valente, M. Tagliasacchi, F. Antonacci, P. Bestagini, A. Sarti, S. Tubaro. "Geometric calibration of distributed microphone arrays from acoustic source correspondences". IEEE Intl. Workshop on Multimedia Signal Processing, (MMSP 2010). Oct. 4-6, 2010, Saint Malo, France, pp. 13-18.
165. D. Markovic, A. Canclini, F. Antonacci, A. Sarti, S. Tubaro, "Visibility-Based Beam Tracing for Soundfield Rendering". IEEE Intl. Workshop on Multimedia Signal Processing (MMSP-2010). Oct. 4-6, 2010, Saint Malo, France, pp. 40-45.
166. F. Antonacci, A. Sarti, S. Tubaro. "Geometric reconstruction of the environment from its response to multiple acoustic emissions". IEEE Intl. Conference on Acoustics Speech and Signal Processing (ICASSP-2010). March 14-19, 2010, Dallas, TX, USA, pp. 2822-2825.

167. M. Marcon, A. Sarti, S. Tubaro. "Geometric and radiometric modeling of 3D scenes". IEEE Intl. Conference on Multimedia and Expo (ICME 2009). June 28-July 3, 2009, New York, NY, USA, pp. 1604-1607.
168. F. Antonacci, A. Calatroni, A. Canclini, A. Galbiati, A. Sarti, S. Tubaro. "Soundfield rendering with loudspeaker arrays through multiple beamshaping". Intl. Workshop on Applications of signal Processing to Audio and Acoustics (WASPAA 2009). Oct. 18-21, 2009, New Paltz, NY, USA, pp. 313-316.
169. F. Antonacci, D. Aprea, A. Sarti, S. Tubaro. "Acoustic reconstruction of the geometry of an environment through acquisition of a controlled emission". 17th European Signal Processing Conference (EUSIPCO 2009), August 25-28, 2009, Glasgow, Scotland, pp. 710-714.
170. A. Canclini, A. Galbiati, A. Calatroni, F. Antonacci, A. Sarti, S. Tubaro, "Rendering of an acoustic beam through an array of loudspeakers", Intl. Digital Audio Effects Conference (DAFx 2009). Sept. 1-4, 2009, Como, Italy, pp. 1-4.
171. G. Prandi, A. Sarti, S. Tubaro, "Music Genre visualization and Classification Exploiting a Small set of High-level Semantic Features". Intl. Digital Audio Effects Conference (DAFx 2009). Sept. 1-4, 2009, Como, Italy, pp. 1-4.
172. A. Redondi, M. Tagliasacchi, F. Antonacci, A. Sarti. "Geometric calibration of distributed microphone arrays". IEEE Intl. Workshop on Multimedia Signal Processing (MMSp 2009). Oct. 5-7, 2009, Rio de Janeiro, BRAZIL, pp. 1-5.
173. F. Antonacci, G. Prandi, G. Bernasconi, R. Galli, A. Sarti, "Audio-based object recognition system for tangible acoustic interfaces", IEEE Intl. Symp. on Haptic Audio Visual Environments and Games (HAVE 2009), Oct. 16-17, 2009, Lecco, Italy, pp. 123-128.
174. P. Romano, G. Prandi, A. Sarti, S. Tubaro. "Musical audio semantic segmentation exploiting analysis of prominent spectral energy peaks and multi-feature refinement". IEEE Intl. Conference on Acoustics, Speech and Signal Processing, (ICASSP 2009). Apr. 19-24, 2009, Taipei, Taiwan, pp. 1965-1968.
175. G. Valenzise, G. Prandi, M. Tagliasacchi, A. Sarti, "Resource constrained efficient acoustic source localization and tracking using a distributed network of microphones", Intl. Conference on Acoustics, Speech, and Signal Processing - (ICASSP 2008), March 30-April 4, 2008, Las Vegas, Nevada, USA, pp. 2581-2584.
176. M. Barbagallo, M. Kleiner, A. Sarti, "Modulation and demodulation of steerable ultrasound beams for audio transmission and rendering". 11th International Conference on Digital Audio Effects DAFx-08 September 1-4, 2008, Espoo, Finland.
177. G. Prandi, G. Valenzise, M. Tagliasacchi, A. Sarti, "Detection and identification of sparse audio tampering using distributed source coding and compressive sensing techniques". 11th Intl. Conference on Digital Audio Effects DAFx-08 September 1-4, 2008, Espoo, Finland.
178. G. Prandi, G. Valenzise, M. Tagliasacchi, F. Antonacci, A. Sarti, S. Tubaro, "Acoustic Source Localization by Fusing Distributed Microphone Arrays Measurements". European Signal Processing Conference, - EUSIPCO 2008, Aug. 25-29, 2008, Lausanne, Switzerland.
179. P. Pagani, D. Riva, F. Antonacci, G. Prandi, M. Tagliasacchi, A. Sarti, S. Tubaro, "Efficient interferer cancelation based on geometrical information of the reverberant environment". European Signal Processing Conference, EUSIPCO 2008, Aug. 25-29, 2008 Lausanne, Switzerland.
180. S. Tebaldini, M. Marcon, A. Sarti, S. Tubaro, "Uncalibrated view synthesis from relative affine structure based on planes parallelism". 2008 IEEE International Conference on Image Processing (ICIP 2008). Oct. 12-15, 2008, San Diego, CA, USA, pp. 317- 320.
181. F. Antonacci, D. Riva, M. Tagliasacchi, A. Sarti, S. Tubaro, "Tracking of Two Acoustic Sources In Reverberant Environment Using A Particle Swarm Optimizer", IEEE International Conference on Advanced Video and Signal-based Surveillance (AVSS 2007), Sept. 5-7. 2007, London, UK, pp. 567- 572.
182. L. Gerosa, G. Valenzise, F. Antonacci, M. Tagliasacchi, A. Sarti, "Scream and Gunshot Detection in Noisy Environments", European Signal Processing Conference (EUSIPCO 2007), Sept. 3-7, 2007, Poznan, Poland, 2007, pp. 1-5.
183. F. Antonacci, D. Riva, M. Tagliasacchi, A. Sarti, "Efficient Localization and Tracking of Two Acoustic Sources Using Particle Filters With Swarm Intelligence", European Signal Processing Conference (EUSIPCO 2007), Sept. 3-7, 2007, Poznan, Poland.
184. F. Antonacci, L. Gerosa, A. Sarti, S. Tubaro, G. Valenzise, "Sound-based Classification of Objects Using a Robust Fingerprinting Approach", European Signal Processing Conference (EUSIPCO 2007), Sept. 3-7, 2007, Poznan, Poland, 2007.
185. L. Gerosa, G. Valenzise, M. Tagliasacchi, F. Antonacci, A. Sarti, "Scream And Gunshot Detection and Localization for Audio-Surveillance Systems", IEEE International Conference on Advanced Video and Signal based Surveillance (AVSS 2007), Sept. 5-7, 2007, London, UK, pp. 21-26.
186. F. Antonacci, M. Matteucci, D. Migliore, D. Riva, A. Sarti, M. Tagliasacchi, S. Tubaro, "Tracking Multiple Acoustic Sources In Reverberant Environments Using Regularized Particle Filter", IEEE/EURASIP International Conference on Digital Signal Processing (CDSP 2007), July 1-4, 2007, Cardiff, UK, pp. 99-102.
187. D. Rovetta, A. Sarti, G. Scarparo, S. Tubaro. "Modeling virtual percussions and their virtual actuators". Intl. Congress on Acoustics (ICA 2007). Sept. 2-7, 2007, Madrid, SPAIN, pp. 1-6.
188. M. Pierobon, M. Marcon, A. Sarti, S. Tubaro, "A Human Action Classifier from 4-D Data (3D+Time) Based on an Invariant Body Shape Descriptor and Hidden Markov Models", Intl. Conference on Signal Processing and Multimedia Applications (SIGMAP 2007), Barcelona, Spain, July 28-31, 2007, pp. 1-4.
189. G. Colombo, D. Rovetta, A. Sarti, S. Tubaro. "Modelling elastic wave propagation in thin plates". Intl. Conference on Innovative Production Machines and Systems (IPROMS 2006). July 16-17, 2009, Cardiff, UK, pp. 1-8.
190. F. Antonacci, D. Riva, D. Saiu, A. Sarti, M. Tagliasacchi, S. Tubaro, "Tracking Multiple Acoustic Sources Using Particle Filtering", European Signal Processing Conference (EUSIPCO 2006), Sept. 4-8, 2006, Florence, Italy.
191. F. Antonacci, D. Saiu, P. Russo, A. Sarti, M. Tagliasacchi, S. Tubaro, "Experimental Evaluation of a Localization Algorithm For Multiple Acoustic Sources In Reverberating Environments", European Signal Processing Conference (EUSIPCO 2006), Sept. 4-8, 2006, Florence, Italy.
192. R. Rabenstein, S. Petrusch, A. Sarti, G. De Sanctis, C. Erkut, M. Karjalainen, "Block-based physical modeling", in Proc. 5th Int. Symp. on Mathematical Modelling (MATHMOD), I. Troch and F. Breitenecker eds, Feb. 8-10, 2006, Vienna, Austria. ISBN 3-901608-30-3.
193. D. Rovetta, A. Sarti, G. De Sanctis, M. Fabiani, "Modelling Elastic Wave Propagation In Thin Plates". European Signal Processing Conference (EUSIPCO 2006), Sept. 4-8, 2006, Florence, Italy.

194. G. De Sanctis, D. Rovetta, A. Sarti, G. Scarparo, S. Tubaro, "Localization of Tactile Interactions Through TDOA Analysis: Geometric Vs. Inversion-Based Method", European Signal Processing Conference (EUSIPCO 2006), Sept. 4-8, 2006, Florence, Italy.
195. F. Colletto, M. Marcon, A. Sarti, S. Tubaro, "A Robust Method for the Estimation of Reliable Wide Baseline Correspondences", IEEE Intl. Conf. on Image Processing (ICIP 2006), Oct. 8-11, 2006, Atlanta, USA, 2006. pp. 1041-1044.
196. M. Tagliasacchi, A. Sarti, S. Tubaro, "On the Modeling of Motion in Wyner-Ziv Video Coding", IEEE International Conference on Image Processing (ICIP 2006), Oct. 8-11, 2006, Atlanta, Georgia, USA,
197. S. Cerutti, L. Mainardi, K. Passera; P. Potepan, A. Sarti, E. Setti, D. Vergnaghi. "A Fuzzy-C-Means Clustering Algorithm for a Volumetric Analysis of Paranasal Sinus and Nasal Cavity Cancer". 28th Intl. Conference of the IEEE- Intl. Conference of the Engineering in Medicine and Biology Society (EMBS 2006), Sept. 1-4, 2006, New York City, NY, USA, pp. 3078-3081.
198. M. Pierobon, M. Marcon, A. Sarti, S. Tubaro. "3-D Body Posture Tracking for Human Action Template Matching". IEEE Intl. Conference on Acoustic Speech and Signal Processing (ICASSP 2006). May 14-19, 2006, Toulouse, France, pp. 501-504.
199. S. Catheline, G. De Sanctis, G. Ribay, D. Rovetta, A. Sarti. "Modelling wave propagation in thin plates for the localization of tactile interactions". 13th Intl. Congress on Sound and Vibration (ICSV 2006). July 2-6, 2006, Vienna, Austria, pp. 1-8.
200. G. Dainese, M. Marcon, A. Sarti, S. Tubaro, "Accurate Depth-Map Estimation For 3D Face Modeling", 13th European Signal Processing Conference (EUSIPCO 2005), Sept. 4-8, 2005, Antalya, Turkey, pp. 1883-1886.
201. G. De Sanctis, A. Sarti, G. Scarparo, S. Tubaro, "An Integrated System for the Automatic Block-Wise Synthesis of Sounds Through Physical Modelling", 13th European Signal Processing Conference (EUSIPCO 2005), Sept. 4-8, 2005, Antalya, Turkey.
202. G. Toffetti, M. Tagliasacchi, M. Marcon, A. Sarti, S. Tubaro, K. Ramchandran, "Image Compression in a Multi-Camera System Based on a Distributed Source Coding Approach", 13th European Signal Processing Conference (EUSIPCO 2005), Sept. 4-8, 2005, Antalya, Turkey.
203. L. Piccarreta, A. Sarti, S. Tubaro, "An Efficient Video Rendering System for Real-Time Adaptive Playout Based on Physical Motion Field Estimation", European Signal Processing Conference (EUSIPCO 2005), Sept. 4-8, 2005, Antalya, Turkey, pp. 607-610.
204. G. De Sanctis, A. Sarti, G. Scarparo, S. Tubaro: "Automatic modeling and authoring of nonlinear interactions between acoustic objects". 4th Intl. Workshop on Multidimensional (nD) Systems (NDS 2005), July 10-13, 2005, Wuppertal, Germany, pp. 116-122.
205. M. Pierobon, M. Marcon, A. Sarti, S. Tubaro. "Classification of Human Body Actions by Invariant Body Shape Descriptor". Intl. Workshop on Immersive Communication And Broadcast Systems (ICOB 2005). Oct. 27-28, 2005, Berlin, Germany, pp. 1-4.
206. G. Dainese, M. Marcon, A. Sarti, S. Tubaro. "A volumetric approach for mesh fusion and complete object modeling". Intl. Workshop on Multimedia Information Design for Cultural Heritage (MIDECH 2005). Milano, Italy, pp. 95-102.
207. M. Marcon, G. Dainese, A. Sarti, S. Tubaro. "Fast and Realistic 3D Face Reconstruction from a Set of Views for Multimedia Applications". European Conference on Visual Media Production (CVMP 2005), London, UK, Nov. 30-Dec. 1, 2005, pp. 162-167.
208. F. Antonacci, D. Lonoce, M. Motta, A. Sarti, S. Tubaro, "Efficient Source Localization And Tracking In Reverberant Environments Using Microphone Arrays", IEEE Intl. Conf. on Acoustics, Speech, and Signal Processing (ICASSP 2005), pp. 1061-1064, Vol. 4, Philadelphia, USA, March 2005, Vol. IV, pp. 1061-1064.
209. G. Dainese, M. Marcon, A. Sarti, S. Tubaro. "Complete object modeling using a volumetric approach for mesh fusion". Proc. 6th Intl. Workshop on Image Analysis for Multimedia Interactive Services (WIAMIS 2005), pp. 436-444.
210. M. Tagliasacchi, S. Tubaro, A. Sarti, "Combining MCTF With Distributed Source Coding", Intl. Conference on Image Processing (ICIP 2005), Genova, Italy, Sept. 12-14, 2005, pp. 797-800.
211. G. Dainese, M. Marcon, A. Sarti, S. Tubaro. "3D object modeling with a Voxelset Carving approach". Intl. Conference on Image Processing (ICIP 2005), Genova, Italy, Sept. 12-14, 2005, pp. 1053-1056.
212. P. Polotti, M. Sampietro, A. Sarti, S. Tubaro, A. Crevoisier "Acoustic localization of tactile interactions for the development of novel tangible interfaces". Proc. of the 8th Int. Conference on Digital Audio Effects (DAFX-05), Madrid, Spain, September 20-22, 2005.
213. A. Dell'Acqua, M. Ferrari, M. Marcon, A. Sarti, S. Tubaro, "Colored Visual Tags: A Robust Approach For Augmented Reality", Intl. Conference on Advanced Video and Signal based Surveillance (AVSS 2005), Como, Italy, Sept. 15-16, 2005, pp. 423-427.
214. M. Pierobon, M. Marcon, A. Sarti, S. Tubaro. "Clustering of human actions using invariant body shape descriptor and dynamic time warping". Intl. Conference on Advanced Video and Signal based Surveillance (AVSS 2005), Como, Italy, Sept. 15-16, 2005, pp. 22-25.
215. G. Dainese, K. Kucharski, M. Marcon, A. Sadka, A. Sarti, Y. Sheng, W. Skarbek, S. Tubaro. "Towards 3D face recognition". Conference on Radiocommunications and Broadcasting (KKRRiT 2005). Varsavia, Poland, pp. 101-110.
216. D. Maestroni, A. Sarti, M. Tagliasacchi, S. Tubaro, "Wavelet-based video coding: optimal use of motion information for the decoding of spatially scaled video sequences". European Signal Processing Conference (EUSIPCO 2004), Sept. 6-10, 2004 Vienna, Austria, pp. 673-676.
217. F. Antonacci, M. Foco, A. Sarti, S. Tubaro, "Fast Modeling of acoustic reflections and diffraction in complex environments using visibility diagrams". European Signal Processing Conference (EUSIPCO 2004), Sept. 6-10, 2004, Vienna, Austria, pp. 1773-1776.
218. D. Maestroni, A. Sarti, M. Tagliasacchi, S. Tubaro, "Fast In-Band Motion Estimation with Variable Size Block Matching". IEEE Intl. Conference on Image Processing (ICIP-04), Singapore, Oct. 24-27, 2004, Vol. 4, pp. 2287-2290.
219. D. Maestroni, A. Sarti, M. Tagliasacchi, S. Tubaro, "Scalable Coding of Variable-Size Motion Vector Blocks". IEEE Intl. Conference on Image Processing (ICIP-04), Singapore, Oct. 24-27, 2004, Vol. 2, pp. 1333-1336.
220. F. Cuzzolin, A. Sarti, S. Tubaro, "Action modeling with volumetric data". IEEE Intl. Conference on Image Processing (ICIP-04), Singapore, Oct. 24-27, 2004, pp. 2287-2290.
221. D. Onofrio, A. Sarti, S. Tubaro, "Area matching based on belief propagation with applications to face modeling". IEEE Intl. Conference on Image Processing (ICIP-04), Singapore, Oct. 24-27, 2004, pp. 1943-1946.

222. F. Antonacci, M. Foco, A. Sarti, S. Tubaro, "Accurate and fast audio-realistic rendering of sounds in virtual environments". IEEE Multimedia Signal Processing Workshop (MMSP 2004), Sept. 29-Oct. 1, 2004, Siena, Italy, pp. 271-274.
223. F. Cuzzolin, A. Sarti, S. Tubaro, "Invariant Action Classification with Volumetric Data". IEEE Multimedia Signal Processing Workshop - MMSP-04, Sept. 29-Oct. 1, 2004, Siena, Italy, pp. 395-398.
224. F. Antonacci, M. Foco, A. Sarti, S. Tubaro, "Real-Time Modeling of Acoustic Propagation in Complex Environments". Intl. Conference on Digital Audio Effects - DAFX 04, Oct. 5-8, 2004, Naples, Italy, pp. 274-279.
225. M. Marcon, L. Piccarreta, A. Sarti, S. Tubaro, "Fast point-cloud wrapping through level-set evolution". First European Conference on Visual Media Production (CVMP-04), March 15-16, 2004, London, UK, pp. 119-125.
226. J.F. Evers-Senne, O. Grau, R. Koch, F. Lavagetto, M. Milne, M. Price, O. Razzoli, A. Sarti, S. Tubaro, "The origami project: advanced tools for creating and mixing real and virtual content in film and TV production". 1st European Conference on Visual Media Production (CVMP-04), March 15-16, 2004, London, UK, pp. 255-262.
227. G. De Sanctis, A. Sarti, S. Tubaro, "Automatic Synthesis Strategies for Object-Based Dynamical Physical Models in Musical Acoustics". Proc. of the 6th Intl. Conference on Digital Audio Effects (DAFX-03), London, England, September 8-11, 2003. pp. 219-224.
228. M. Foco, P. Polotti, A. Sarti, S. Tubaro, "Sound spatialization based on fast beam tracing in the dual space". Intl. Conference on Digital Audio Effects (DAFX 2003), London, England, Sept. 8-11, 2003, pp. 198-202.
229. M. Marcon, L. Piccarreta, A. Sarti, S. Tubaro, "A Fast Level-set Approach to 2D and 3D Reconstruction from Unorganized Sample Points". 3rd Intl. Symp. on Image and Signal Proc. and Analysis (ISPA 2003), September 18-20, 2003, Rome, Italy.
230. M. Marcon, L. Piccarreta, A. Sarti, S. Tubaro, "A Fast Level-set Approach to Surface Modeling from Unorganized Sample Points". 2nd IEEE Workshop on Variational, Geometric and Level Set Methods in Computer Vision (VLSM 2003), Oct. 12, 2003, Nice, France, pp. 191-196.
231. O. Grau, R. Koch, F. Lavagetto, M. Milne, E. Murphy, M. Price, O. Razzoli, A. Sarti, L. Spallarossa, S. Tubaro, J. Woetzel, "New production tools for the planning and the on-set visualisation of virtual and real scenes", Intl. Broadcasting Convention (IBC 2003), Amsterdam, NL, Sept. 11-15, 2003, pp. 451-458.
232. A. Dell'Acqua, C. Landi, A. Sarti, S. Tubaro, "New Geometric Insight on the Trifocal Tensor and its Constraints", 8th Intl. Fall Workshop on Vision, Modeling, and Visualization (VMV 2003), Munich, Germany, Nov. 19-21, 2003, pp. 71-78.
233. A. Dell'Acqua, A. Sarti, S. Tubaro, "Three-view camera calibration using geometric algebra". Intl. Conf. On Image Processing (ICIP 2003), Sept. 14-17, 2003. Barcelona, Spain, pp. 305-308, Vol. 1.
234. A. Sarti, S. Tubaro: "Modeling closed surfaces in a multi-resolution fashion". First Intl. Symposium on 3D Data Processing Visualization Transmission (3DPVT 2002). June 19-21, 2002, Padova, Italy, pp. 362-367.
235. G. Bazzoni, E. Bianchi, O. Grau, A. Knox, R. Koch, F. Lavagetto, A. Parkinson, F. Pedersini, A. Sarti, G. Thomas, S. Tubaro, "The ORIGAMI Project: advanced tools and techniques for high-end mixing and interaction between real and virtual content". First Intl. Symposium on 3D Data Processing Visualization Transmission (3DPVT 2002). June 19-21, 2002, Padova, Italy, pp. 306-312.
236. S. Dal Lago, G. De Petris, P. Pigazzini, A. Sarti, S. Tubaro: "Real-Time Content Creation for Multimedia Didactics", Fourth Intl. Conf. on New Educational Environments (ICNEE 2002). Lugano, Switzerland, May 8-11, 2002, pp. 3.2-3.6.
237. G. Milanese, A. Sarti, S. Tubaro, "Robust real-time intrusion detection with fuzzy classification". Intl. Conference on Image Processing (ICIP 2002), Sept. 22-25, 2002, Rochester, NY, USA, pp. 437-440, Vol. III.
238. C. Defferara, F. Negroni, A. Sarti, S. Tubaro, "New perspectives on camera calibration using geometric algebra". Intl. Conf. on Image Processing (ICIP 2002), Sept. 22-25, 2002, Rochester, NY, USA, pp. 573-576, Vol. II.
239. A. Sarti, S. Tubaro: "Dynamical Modeling of Physics-Based Interactions in Musical Acoustics". Intl. Conf. on Virtual, Synthetic and Entertainment Audio (AES22). June 15-17, 2002, Espoo, Finland, pp. 324-333.
240. C. Defferara, F. Negroni, A. Sarti, S. Tubaro, "The epipolar constraint in geometric algebra and the self-calibration problem". XI European Signal Processing Conference (EUSIPCO 2002), September 3-6, 2002 Toulouse, France, pp. 485-488, Vol. III.
241. G. Milanese, A. Sarti, S. Tubaro, "Real-time video analysis for intrusion detection in indoor environments". XI European Signal Processing Conference (EUSIPCO 2002), September 3-6, 2002 Toulouse, France, pp. 613-616, Vol. I.
242. G. Isella, A. Sarti, S. Tubaro, "Efficient geometry-based sound reverberation". XI European Signal Processing Conference (EUSIPCO 2002), Sept. 3-6, 2002, Toulouse, France, pp.163-66, Vol. I.
243. C. Defferara, A. Dell'Acqua, F. Negroni, A. Sarti and S. Tubaro, "New Perspectives on Camera Calibration Using Geometric Algebra". 2002 Tyrrhenian International Workshop on Digital Communications (IWDC 2002). Sept. 8-11, 2002. Capri, Italy, pp. 209-216.
244. A. Sarti, S. Tubaro, "Multi-resolution implicit object modeling". 6th Intl. Workshop on Vision Modeling and Visualization (VMV 2001), Nov. 21-23, 2001, Stuttgart, Germany, pp. 93-100.
245. A. Sarti, S. Tubaro: "Low-Cost Geometry-Based Acoustic Rendering". Intl. Conference on Digital Audio Effects (DAFx 01), Dec. 6-8 2001, Limerick, Ireland, pp. 19-22.
246. A. Sarti, S. Tubaro, "Object-Based Sound Synthesis through Physical Modelling". Intl. Computer Music Conference (ICMC 2001), Sept. 18-22, 2001, La Habana, Cuba, pp. 71-74.
247. A. Sarti, S. Tubaro, "Image-Based Implicit Object Modeling: Direct and Indirect Multi-Resolution Methods". Intl. Cultural Heritage Informatics Meeting (ICHIM 2001). Milan, Italy, Sept. 3-7, 2001, pp. 215-226, Vol. I.
248. A. Colosimo, A. Sarti, S. Tubaro, "Image-Based Multiresolution Implicit Object Modeling". Intl. Conf. on Augmented, Virtual Environments and Three-Dimensional Imaging (ICAV3D 2001), May 30 - June 01, 2001, Mykonos, Greece, pp. 200-203.
249. L. Basili, A. Sarti, S. Tubaro, "From 3D Data to Animated Face Models through MPEG-4 Model Reshaping". Intl. Conf. on Augmented, Virtual Environments and Three-Dimensional Imaging (ICAV3D 2001), May 30 - June 01, 2001, Mykonos, Greece, pp. 61-64.
250. A. Sarti, S. Tubaro, "Multiresolution Implicit Surface Fusion". Intl. Conf. on Augmented, Virtual Environments and Three-Dimensional Imaging (ICAV3D 2001), May 30 -June 01, 2001, Mykonos, Greece, pp. 33-36.
251. A. Colosimo, A. Sarti, S. Tubaro, "Image-Based Object Modeling: a Multiresolution Level-Set Approach". Intl. Conf. on Image Processing (ICIP 2001), Oct. 7-10, 2001, Thessaloniki, Greece, pp. 205-208, Vol. II.

252. A. Sarti, S. Tubaro, "A Multiresolution Level-Set Approach to Surface Fusion". Intl. Conf. on Image Processing (ICIP 2001), Oct. 7-10, 2001, Thessaloniki, Greece, pp. 181-184, Vol. II.
253. A. Dell'Acqua, A. Sarti, S. Tubaro, "Effective Analysis of Image Sequences for 3D Camera Motion Estimation". Intl. Conf. on Augmented, Virtual Environments and Three-Dimensional Imaging - ICAV3D 2001, May 30-June 01, 2001, Mykonos, Greece, pp. 307-310.
254. F. Pedersini, A. Sarti, S. Tubaro: "Multi-Resolution Area Matching", IEEE Intl. Conf. on Image Processing, ICIP-2000, Sept. 10-13, 2000, Vancouver, British Columbia, Canada, Vol. 1, pp. 553-556.
255. F. Pedersini, E. Pozzoli, A. Sarti, S. Tubaro, "Multi-Resolution Corner Detection" IEEE Intl. Conf. on Image Processing - ICIP-2000, Sept. 10-13, 2000, Vancouver, British Columbia, Canada, Vol. 3, pp. 881-884.
256. F. Pedersini, A. Sarti, S. Tubaro: "Accurate Surface Reconstruction from Apparent Contours", European Signal Processing Conference - EUSIPCO 2000. Tampere, Finland, Sept. 5-8, 2000. Vol. 4, pp. 2089-2092.
257. F. Pedersini, A. Sarti, S. Tubaro: "Multi-Resolution 3D Reconstruction through Texture Matching", European Signal Processing Conference - EUSIPCO 2000. Tampere, Finland, Sept. 5-8, 2000. Vol. 4, pp. 2093-2096.
258. F. Pedersini, A. Sarti, S. Tubaro: "Accurate Camera Calibration with Simplified Patterns with a Self-Calibration Approach". International Workshop on Synthetic-Natural Hybrid Coding and Three-Dimensional Imaging (IWSNHC3DI'99). Santorini, Greece, Sept 15-17, 1999, p. 206-209.
259. F. Pedersini, L. Piccarreta, A. Sarti, S. Tubaro: "Estimation of Radiometric Parameters for a Realistic Rendering of 3D Models". International Conference on Image Processing, ICIP-99, October 1999, Kobe, Japan. Vol. 4, pp. 376-380.
260. F. Pedersini, A. Sarti, S. Tubaro: "Multi-View Surface Reconstruction", Tutorial T5 on Integrated Environments for Cultural Heritage Knowledge. Eurographics 99. Sept. 1999. Milan, Italy.
261. F. Pedersini, A. Sarti, S. Tubaro: "Accurate Feature Detection and Matching for the Tracking of Calibration Parameters in Multi-Camera Acquisition Systems". International Conference on Image Processing, ICIP-98, October 4-7, 1998, Chicago, Illinois, USA. Vol. 2, pp. 598-602.
262. F. Pedersini, A. Sarti, S. Tubaro: "Combined Surface Interpolation and Object Segmentation for Automatic 3-D Scene Reconstruction". International Conference on Image Processing (ICIP-98), October 4-7, 1998, Chicago, Illinois, USA. Vol. 2, pp. 963-966.
263. F. Pedersini, A. Sarti, S. Tubaro: "Tracking Camera Calibration in Multi-Camera Sequences through Automatic Feature Detection and Matching". IX European Signal Processing Conference (EUSIPCO 1998), September 8-11, 1998, Rhodes, Greece, Vol II, pp. 1081-1084.
264. F. Pedersini, A. Sarti, S. Tubaro, R. Zattoni: "Toward the automatic synthesis of nonlinear wave digital models for musical acoustics". IX European Signal Processing Conference (EUSIPCO 1998), September 8-11, 1998, Rhodes, Greece. Vol. IV, pp. 2361-2364.
265. F. Pedersini, A. Sarti, S. Tubaro: "Multi-Camera Acquisitions for High-Accuracy 3D Reconstruction". European Workshop on "3D Structure from Multiple Images of Large-Scale Environments" (3DSMILE 1998). Freiburg, Germany, June 6-7, 1998. Lecture notes in Computer Science, Vol. 1506, pp. 124-138. Springer Verlag, 1998.
266. F. Pedersini, A. Sarti, S. Tubaro: "Multi-Camera Strategies for High-Accuracy 3D Reconstruction". 10th Tyrrhenian International Workshop on Digital Communications: "Multimedia Communications", Ischia, Italy, September 16-18, 1998.
267. F. Pedersini, A. Sarti, S. Tubaro: "Automatic Surface Reconstruction of 3D Works of Art". International Conference on Electronic Imaging and the Visual Arts (EVA'97). March 19-25, 1997, Florence, Italy.
268. F. Pedersini, A. Sarti, S. Tubaro: "Robust Area Matching". IEEE Intl. Conf. on Image Processing (ICIP 1997), October 26-29, 1997, Santa Barbara, CA, USA, Vol. II, p. 704-707.
269. F. Pedersini, A. Sarti, S. Tubaro: "Egomotion Estimation of a Multicamera System through Line Correspondence". IEEE Intern. Conf. on Image Processing (ICIP 1997), October 26-29, 1997, Santa Barbara, CA, USA, Vol. II, p. 175-178.
270. F. Pedersini, A. Sarti, S. Tubaro: "Generalized 3D Area Matching and Multicamera Reconstruction for Scene Analysis". Picture Coding Symposium (PCS 1997). Berlin, Germany, 10-12 Sept. 1997, p. 573-578.
271. F. Pedersini, D. Pele, A. Sarti, S. Tubaro: "Calibration and Self-Calibration of Multi-Ocular Camera Systems". International Workshop on Synthetic-Natural Hybrid Coding and Three-Dimensional (3D) Imaging (IWSNHC3DI'97). September 5-9, 1997, Rhodes, Greece, p. 81-84.
272. F. Pedersini, A. Sarti, S. Tubaro: "3D Surface Reconstruction from Horizons". International Workshop on Synthetic-Natural Hybrid Coding and Three-Dimensional (3D) Imaging (IWSNHC3DI'97). September 5-9 1997, Rhodes, Greece, p. 85-88.
273. F. Pedersini, A. Sarti, S. Tubaro: "A 3D Approach to Multi-Ocular Area Matching". International Workshop on Synthetic-Natural Hybrid Coding and Three-Dimensional (3D) Imaging (IWSNHC3DI'97). September 5-9 1997, Rhodes, Greece, p. 89-92.
274. A. Sarti, G. De Poli: "Toward Nonlinear Wave Digital Structures for Physical Model Synthesis". "Tempo Reale" Workshop: Physical model synthesis. June 21, 1996, Florence, Italy, p. 33-37.
275. F. Pedersini, A. Sarti, S. Tubaro: "Combined motion and edge analysis for a layer-based representation of image sequences". IEEE Intern. Conf. on Image Processing (ICIP 1996), September 16-19, 1996, Lausanne, Switzerland, pp. 921-924.
276. F. Pedersini, A. Sarti, S. Tubaro: "3D Motion Estimation of a Trinocular System for a Full-3D Object Reconstruction". IEEE Intern. Conf. on Image Processing (ICIP 1996), September 16-19, 1996, Lausanne, Switzerland, pp. 867-870.
277. F. Pedersini, A. Sarti, S. Tubaro: "A Multi-view Trinocular System for Automatic 3D Object Modeling and Rendering". XVIII International Congress of the International Society of Photogrammetry and Remote Sensing (ISPRS 1996), Vienna, Austria, 1996.
278. F. Pedersini, A. Sarti, S. Tubaro: "Selection of Sampling Grid and Prefilter for Image Decimation Based on Spectral Extension Analysis". VIII European Signal Processing Conference (EUSIPCO 1996), Trieste, Italy, Sept. 10-13, 1996.
279. A. Sarti, G. De Poli: "Generalized Adaptors with Memory for Nonlinear Wave Digital Structures". VIII European Signal Processing Conference (EUSIPCO 1996), Trieste, Italy, Vol. 3, pp. 1773-6, Trieste, Italy, Sept. 10-13, 1996.
280. F. Pedersini, A. Sarti, S. Tubaro: "Subpixel Edge Localization with Statistical Error Compensation". VIII European Signal Processing Conference (EUSIPCO 1996), Trieste, Italy, Sept. 10-13, 1996.

281. F. Pedersini, A. Sarti, S. Tubaro: "Synthesis of Virtual Views of non-Lambertian Surfaces through Shading-Driven Interpolation of Stereo-Matched Contours". Fifth Intl. Workshop on Time-Varying Image Processing and Moving Object Recognition, Florence, Italy, Sept. 5-6, 1996.
282. F. Pedersini, A. Sarti, S. Tubaro: "Synthesis of Virtual Views Using non-Lambertian Reflectivity Models and Stereo Matching". IEEE International Conference on Image Processing (ICIP 1995), Oct. 23-26, 1995, Washington D.C., USA.
283. F. Bullo, R.M. Murray, A. Sarti: "Control on the Sphere and Reduced Attitude Stabilization". Third IFAC Symposium on Nonlinear Control Systems Design (IFAC 1995), June 25-28, 1995, Tahoe City, California, USA, pp. 495-501.
284. A. Sarti, G. Walsh, S. Sastry: "Steering left-invariant control systems on matrix Lie group". 32nd IEEE Conference on Decision and Control (CDC 1993), December 15-17, 1993, San Antonio, Texas, USA, pp. 3117-3121.
285. G. Walsh, A. Sarti, S. Sastry: "Algorithms for steering on the group of rotations". 1993 IEEE American Control Conference (ACC 1993), June 2-4, 1993, San Francisco, California, USA, pp. 1312-1316.
286. G. Borin, G. De Poli, S. Puppini, A. Sarti: "Generalizing the physical models timbral class". In: Modeles physiques, creation musicale et ordinateur, C. Cadoz ed., pp. 537-554, Ed. de la Maison des Sciences de l'Homme, Paris, 1994.
287. G. Borin, G. De Poli, A. Sarti: "Excitator-resonator interactions: applications to sound synthesis". In Modeles physiques, creation musicale et ordinateur, C. Cadoz ed., pp. 555-582, Ed. de la Maison des Sciences de l'Homme, Paris, 1994.
288. S. Pupolin, A. Sarti, H. Fu: "Adaptive Data Predistortion for the Compensation of Nonlinear Channels with Memory". International Conference of Communication Technology 1990 (CT.10.5), June 1990, Beijing, China, p. 293-296.
289. S. Pupolin, A. Sarti, H. Fu: "Performance analysis of digital radio links with nonlinear transmit amplifier and data predistorter with memory". IEEE International Communication Conference (ICC 1989), June 1989, Boston, MA, USA.
290. G. Borin, G. De Poli, A. Sarti: "A modular approach to excitator-resonator interaction in physical models synthesis". International Computer Music Conference (ICMC 1990), Nov. 1990, pp. 46-50, Columbus, OH, USA.
291. G. Borin, G. De Poli, A. Sarti: "Formalization of the sound generation process: structures and metaphors". International Conference on Musical Structures and Information Technology, pp. 157-167, Oct. 1990, Marseille, France.
292. G. Borin, G. De Poli, A. Sarti: "A class of algorithms for nonlinear dynamical excitators". IX Colloquium of Computer Music, Nov. 13-16, 1991, Genova, Italy.

Contributions to monographs and books

293. S. ESSID, S. Parekh, N.Q.K. Duong, R. Serizel, A. Ozerov, F. Antonacci, A. Sarti, in "Multiview Approaches to Event Detection and Scene Analysis" in "Computational Analysis of Sound Scenes and Events", T. Virtanen · M.D. Plumbley D. Ellis editors, Springer, 2017. ISBN 978-3-319-63449-4, ISBN 978-3-319-63450-0 (eBook), DOI 10.1007/978-3-319-63450-0, Library of Congress Control No. 2017951198.
294. M. Marcon, E. Frigerio, A. Sarti, S. Tubaro, "3D wide baseline correspondences using depth-maps". In "MOBILE MULTIMEDIA COMMUNICATIONS", Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, 2012, Volume 2012, Volume 79, Part 4, pp. 194-203, DOI: 10.1007/978-3-642-30419-4_17
295. G. Borin, G. De Poli, A. Sarti, Musical Signal Synthesis, in "Musical signal processing", C. Roads, S. Pope, A. Piccialli, G. De Poli editors, Swets and Zeitlinger Pub., Lisse NL, 1996.
296. G. Borin, G. De Poli, A. Sarti, Sound Synthesis by Dynamic Systems Interaction, in "Readings in Computer-Generated Music" edited by Denis Baggi, IEEE Computer Society Press, pp. 139-160, 1992.
297. A. M. Guarnieri, A. Sarti: Elaborazione Numerica dei Segnali: Esempi e Applicazioni. Edizioni CUSL, Milano, 1994, ISBN 88-8132-001-0.

Publications on national conferences and journals

298. S. Brofferio, A. Sarti, S. Tubaro: "Telelezioni Universitarie Sperimentali su Rete ISDN". AEI Automazione Energia Informazione, Vol. 81, No. 12, Dec. 1994, pp. 25-32.
299. G. Ghelfi, L. Rizzi, F. Nastasi, A. Sarti, "Misura del tempo di miscelazione in ambienti sabiniani e non sabiniani". 38 Convegno Nazionale dell'Associazione Italiana di Acustica. June 8-10, 2011, pp. 1-8, Rimini, Italy.
300. F. Pedersini, P. Pigazzini, A. Sarti, S. Tubaro. "Stima efficiente di campi di spostamento per segmentazione spaziotemporale di sequenze video". Atti del Convegno Comunicazione Multimediale: analisi di contenuto, modellamento, accesso e protezione dell'informazione. Padova, 14-15 Febbraio 2000, pp. 1-4.
301. F. Pedersini, P. Pigazzini, A. Sarti, S. Tubaro. "Un sistema di basso costo per la creazione di modelli 3D di volti ed oggetti". Atti del Convegno Comunicazione Multimediale: analisi di contenuto, modellamento, accesso e protezione dell'informazione. 14-15 febbraio 2000, Padova, Italia, pp. 1-9.
302. S. Giorgi, R. Manzotti, F. Pedersini, P. Pigazzini, A. Sarti, S. Tubaro: "Tecniche automatiche per la creazione di modelli tridimensionali di manufatti a partire da viste multiple", Proc. of Workshop "Conoscenza per Immagini", 1997, Roma, May 16, 1997
303. F. Pedersini, A. Sarti, S. Tubaro: "3D Reconstruction from Multiple Trinocular Views", Proc. SIMAI'96, Maggio 27-31, 1996, Salice Terme, Pavia, Italy.
304. G. Borin, G. De Poli, A. Sarti: "Sintesi per Modelli Fisici: Strutture e Metodi". VIII Colloquio di Informatica Musicale (VIII CIM), October 1989, Cagliari, Italy.
305. G. Borin, A. Sarti: "Interazione Martelletto-Corda nella Sintesi del Pianoforte". VIII Colloquio di Informatica Musicale (VIII CIM), October 1989, Cagliari, Italy.

Patents (national and international)

1. S. Tubaro, A. Sarti, M. Tagliasacchi, F. Antonacci, F. Crivellaro, G. Genovese, "Apparato e metodo per la localizzazione del punto di impatto di un corpo su una superficie". National Patent N. MO2011A000013. Filed on February 2, 2011. Owner: Technogym S.p.A.
2. S. Tubaro, A. Sarti, M. Tagliasacchi, F. Antonacci, F. Crivellaro, G. Genovese, "Apparatus and method for locating the point of impact of a body on a surface". Owner Technogym S.p.A.
 - European Patent. Publ. No. EP2671135 A2; Appl. No.: EP20120705428; Publication date: Dec 11, 2013; Filing date: Jan 30, 2012; Priority date: Feb 4, 2011.
 - International Patent N. WO/2012/104767, Intl. Appl. No.: PCT/IB2012/050410. Publication Date: Aug. 9, 2012; Intl. Filing Date: Jan. 30, 2012.
 - USA Patent No. US20130304401. Nov. 14, 2013.

3. A. Sarti, S. Tubaro, G. De Sanctis, "Metodo per la simulazione di un circuito elettrico". National Patent No. MI2004A000038, Sept. 29, 2004.
4. A. Sarti, S. Tubaro, G. De Sanctis. "Method for simulating an electrical circuit by synthesis of a physical model, device for simulating an electrical circuit, in particular a musical instrument obtained with that method."
- US Patent. Publ. No. US20080140378 A1; Appl. No. US 11/793,788; PCT No. PCT/IB2005/002902; Publ. date: June 12, 2008; Filing date: Sept. 29, 2005; Priority date: Sept. 29, 2004.
- International Patent. Pub. No.: WO/2006/035304; Intl. Appl. No.: PCT/IB2005/002902; Publ. Date: Apr. 6, 2006; Intl. Filing Date: Sept. 29, 2005.
5. D. Rovetta, G. Scarparo, A. Sarti, S. Tubaro. "Metodo per la determinazione delle proprietà elastiche di un pannello tramite una sorgente elastica e due o più sensori vibrazionali", National Patent No. BG2007A000028. May 8, 2007.
6. D. Rovetta, G. Scarparo, A. Sarti, S. Tubaro, "Metodo per la determinazione delle distanze relative tra sensori vibrazionali posti su un pannello" National Patent No. BG2007A000029. May 8, 2007.
7. D. Rovetta, G. Scarparo, A. Sarti, S. Tubaro. "Metodo per la localizzazione e l'inseguimento di sorgenti elastiche in mezzi sottili" National Patent No. BG2007A000030. May 8, 2007.
8. A. Sarti, S. Tubaro, M. Foco. "Metodo per la determinazione delle riflessioni di un'area". National Patent No. MI2003A0011719. 2003
9. S. Tubaro, A. Sarti, M. Foco, "Method for Determining Reflections in an Area",
- European Patent: Publ. No. EP1665167 B1; Appl. No. EP20040766719; PCT No. PCT/EP2004/052059; Publ. date: July 18, 2007; Filing date: Sept. 6, 2004; Priority date: Sept. 8, 2003.
- International Patent: Pub. No.: WO/2005/024727; Intl. Appl. No.: PCT/EP2004/052059; Publ. Date: Mar. 17, 2005; Intl. Filing Date: Sept. 6, 2004.
10. M. Marcon, L. Piccarreta, A. Sarti, S. Tubaro. "Metodo per la determinazione della superficie tridimensionale di un oggetto". National Patent No. EI.03.012. MI 2003A 001779, 18 Settembre 2003.
11. M. Marcon, L. Piccarreta, A. Sarti, S. Tubaro. "Method for Determining the Three-Dimensional Surface of an Object".
- International Patent: Publ. No.: WO/2005/027053; Intl. Appl. No.: PCT/EP2004/052154; Publ. Date: Mar. 24, 2005; Intl. Filing Date: Sept. 13, 2004.
- US Patent: Publ. No. US7626584 B2; Appl. No. US 10/572,634; PCT No. PCT/EP2004/052154; Publ. Date: Dec. 1, 2009; Intl. Filing Date: Sept. 13, 2004; Priority Date: Sept. 18, 2003
- European Patent: Publ. No. EP1665169 B1; Appl. No. EP20040766778; PCT No. PCT/EP2004/052154; Publ. date: May 14, 2008; Filing date: Sept. 13, 2004; Priority date: Sept. 18, 2003.
12. D. Maestroni, A. Sarti, S. Tubaro, M. Tagliasacchi, "Metodo e sistema per la stima del moto tra una immagine corrente ed una immagine precedente di un segnale video", National Patent No. MI2004A000126. Jan.29, 2004.
13. A. Sarti, S. Tubaro "A process for digital image processing, in particular in the video monitoring field". Owner C.F.D. Elettronica S.p.A.
- European Patent: Publ. No. EP1443460 A1; Appl. No. EP20030425064; Publ. date: Aug. 4, 2004; Filing date: Feb. 3, 2003; Priority date: Feb. 3, 2003.
14. P. Carrai, P. Valle, A. Sarti, S. Tubaro, "Detection Based Text Improvement". Owner: Koninklijke Philips Electronics N.V.
- European Patent: Publ. No. EP1173826 B1; Appl. No. EP20000987481; PCT No. PCT/EP2000/013365; Publ. date: Aug 29, 2007; Filing date: Dec 22, 2000; Priority date:Jan 17, 2000.
- USA Patent: Publ. No. US20010019334 A1; Appl. No. US 09/759,022; Publ. date: Sep 6, 2001; Filing date: Jan. 11, 2001; Priority date: Jan .17, 2000

