

Giovanni Ramponi: Publications

International Journals

1. G. Ramponi, "Edge extraction by a class of second-order nonlinear filters", *Electronics Letters*, vol.22 n.9, 24th April 1986.
2. G.L. Sicuranza and G. Ramponi, "Adaptive nonlinear digital filters using distributed arithmetic", *IEEE Trans on Acoust., Speech and Signal Processing*, vol.ASSP-34, June 1986.
3. G.L. Sicuranza and G. Ramponi, "A variable step adaptation algorithm for memory-oriented Volterra filters", *IEEE Trans. on Acoust., Speech and Signal Processing*, vol. ASSP-35, n.10, Oct. 1987, pp.1492-1494.
4. G. Ramponi and G.L. Sicuranza, "Decision-directed nonlinear filter for image processing", *Electronics Letters*, vol.23 n.23, 5th November 1987, pp.1218-1219.
5. G. Ramponi and G.L. Sicuranza, "Quadratic digital filters for image processing", *IEEE Trans on Acoust., Speech and Signal Processing*, vol.ASSP-36, n.6, June 1988, pp.937-939.
6. G. Ramponi, G.L. Sicuranza and W. Ukovich, "A computational method for the design of 2-D nonlinear Volterra filters", *IEEE Trans. on Circuits and Systems*, vol.CAS-35, n.9, Sept.1988, pp.1095-1102.
7. G.L. Sicuranza and G. Ramponi, "Adaptive nonlinear prediction of TV image sequences", *Electronics Letters*, vol.25 n.8, 13th April 1989, pp.526-527.
8. G.L. Sicuranza, G. Ramponi and S. Marsi, "An artificial neural network for image compression", *Electronics Letters*, vol.26, no.7, 29th March 1990, pp.477-479.
9. G. Ramponi, "Bi-impulse Response Design of Isotropic Quadratic Filters", *IEEE Proceedings*, vol.78, no.4, April 1990, pp.665-677.
10. F. Russo and G. Ramponi, "Fuzzy Operator for Sharpening of Noisy Images", *Electronics Letters*, vol.28, no.18, 27th Aug. 1992, pp.1715-1717.
11. G. Ramponi and P. Fontanot, "Enhancing Document Images with a Quadratic Filter", *Signal Processing*, vol.33, no.1, July 1993, pp.23-34.
12. R. Simonetti, A. Polo Filisan, S. Carrato, G. Ramponi and G.L. Sicuranza, "A Deinterlacer for IQTV Receivers and Multimedia Applications", *IEEE Trans. on Consumer Electronics*, vol.39, no.3, Aug. 1993, pp.234-240.
13. F. Russo and G. Ramponi, "Fuzzy Methods for Multisensor Data Fusion", *IEEE Transactions on Instrumentation and Measurement*, vol.43, no.2, April 1994, pp.288-294.
14. F. Russo and G. Ramponi, "Nonlinear Fuzzy Operators for Image Processing", *Signal Processing*, vol.38, no.3, Aug. 1994, pp. 429-440.

15. G. Ramponi, "Detail-Preserving Filter for Noisy Images", *Electronics Letters*, vol.31, no.11, 25th May 1995, pp.865-866.
16. F. Russo and G. Ramponi, "A Fuzzy Operator for the Enhancement of Blurred and Noisy Images", *IEEE Trans. on Image Processing*, vol.4, no.8, August 1995, pp.1169-1174.
17. G. Ramponi, "The Rational Filter for Image Smoothing," *IEEE Signal Processing Letters*, vol.3, no.3, pp.63-65, March 1996.
18. F. Russo and G. Ramponi, "A Fuzzy Filter for Images Corrupted by Impulse Noise," *IEEE Signal Processing Letters*, vol.3, no.6, pp. 168-170, June 1996.
19. G. Ramponi, N. Strobel, S.K. Mitra and T-H. Yu, "Nonlinear Unsharp Masking Methods for Image Contrast Enhancement," *Journal of Electronic Imaging*, vol.5(3), July 1996, pp. 353-366.
20. S. Marsi, S. Carrato and G. Ramponi, "VLSI Implementation of a Nonlinear Image Interpolation Filter," *IEEE Trans. on Consumer Electronics*, vol.42, no.3, Aug. 1996, pp.721-728.
21. R. Castagno, P. Haavisto and G. Ramponi, "A Method for Motion Adaptive Frame Rate Up-conversion," *IEEE Trans. on Circuits and Systems for Video Technology*, vol.6, no.5, pp.436-446, Oct. 1996.
22. G. Ramponi and C. Moloney, "Smoothing Speckled Images Using an Adaptive Rational Operator," *IEEE Signal Processing Letters*, vol.4, no.3, March 1997, pp. 68-71.
23. F. Cocchia, S. Carrato, and G. Ramponi, "Design and Real-Time Implementation of a 3-D Rational Filter for Edge Preserving Smoothing," *IEEE Trans. on Consumer Electronics*, vol.43, no.4, pp.1291-1300, Nov. 1997.
24. G. Ramponi and A. Polesel, "A Rational Unsharp Masking Technique," *Journal of Electronic Imaging*, vol.7, no.2, April 1998, pp.333-338.
25. G. Ramponi, "A Cubic Unsharp Masking Technique for Contrast Enhancement," *Signal Processing*, vol.67, no.2, June 1998, pp.211-222.
26. S. Marsi, R. Castagno, and G. Ramponi, "A Simple Algorithm for the Reduction of Blocking Artifacts in Images and its Implementation," *IEEE Trans. on Consumer Electronics*, vol.44, no.3, pp.1062-1070, Aug. 1998.
27. G. Ramponi, "Warped Distance for Space-Variant Linear Image Interpolation," *IEEE Trans. on Image Processing*, vol.8, no.5, pp.629-639, May 1999.
28. G. Scognamiglio, A. Rizzi, L. Albani, and G. Ramponi, "Picture enhancement in video and block-coded image sequences," *IEEE Trans. on Consumer Electronics*, vol.45, no.3, pp.680-689, Aug. 1999.
29. G. Ramponi, "Contrast enhancement in images via the product of linear filters," *Signal Processing*, vol.77, no.3, pp.349-353, Sept. 1999.

30. A. Polesel, G. Ramponi and V.J. Mathews, "Image enhancement via adaptive unsharp masking," *IEEE Trans. on Image Processing*, vol.9, no.3, pp.505-510, March 2000.
31. A. Giordano, G. Ramponi, and S. Carrato, "H.263-based video coder for home-produced video sequences," *IEEE Trans. on Consumer Electronics*, vol.47, pp.117-126, Feb. 2001.
32. (National journal) L. Tenze, G. Ramponi and S. Carrato, "Tecniche elettroniche per il restauro di film d'archivio," *Alta Frequenza*, vol.13, no.2, pp.50-55, Marzo 2001.
33. G. Ramponi and S. Carrato, "An adaptive irregular sampling algorithm and its application to image coding," *Image and Vision Computing*, vol.19, no.7, pp.451-460, May 2001.
34. L. Tenze, S. Carrato and G. Ramponi, "An alignment algorithm for old motion pictures", *IEEE Signal Processing Letters*, vol.9, no.10, Oct. 2002, pp.309-311.
35. G. Scognamiglio, G. Ramponi, and A. Rizzi, "Enhancement of coded video sequences via an adaptive nonlinear post-processing," *Signal Processing: Image Communication*, vol.18, no.2, Feb. 2003, pp.127-139.
36. R. Shahidi, C. Moloney and G. Ramponi, "Design of Farthest-Point Masks for Image Halftoning", *EURASIP Journal on Applied Signal Processing*, vol.2004, no.12, 15 Sept. 2004, pp.1886-1898.
37. F. Stanco, L. Tenze and G. Ramponi, "Virtual Restoration of Vintage Photographic Prints Affected by Foxing and Water Blotches", *J. of Electronic Imaging*, vol.14, no.4, Oct.-Dec. 2005.
38. G. Guarnieri, S. Marsi, G. Ramponi, "A fast bilateral filter for edge-preserving smoothing", *IEE Electronics Letters*, vol.42 no.7, 30 March 2006, pp.25-26.
39. S. Marsi, G. Impoco, A. Ukovich, S. Carrato, G. Ramponi, "Video Enhancement and Dynamic Range Control of HDR Sequences for Automotive Applications", *EURASIP Journal on Advances in Signal Processing*, Volume 2007 (2007), Article ID 80971, 9 pages, doi:10.1155/2007/80971.
40. F. Stanco, L. Tenze and G. Ramponi, "Technique to Correct Yellowing and Foxing in Antique Books", *IET Image Processing*, 1, (2), pp. 123-133, June 2007.
41. S. Saponara, L. Fanucci, S. Marsi, G. Ramponi, D. Kammler, and E. M. Witte, "Application-Specific Instruction-Set Processor for Retinex-Like Image and Video Processing", *IEEE Trans. on Circuits and Systems II*, vol. 54, no. 7, July 2007, pp. 596 - 600.
42. S. Saponara, L. Fanucci, S. Marsi, G. Ramponi, "Algorithmic and Architectural Design for Real-time and Power-efficient Retinex Image/Video Processing", *J. of Real-Time Image Processing*, vol.1, no.4, July 2007, pp. 267-283, DOI 10.1007/s11554-007-0027-z.
43. A. Ukovich, G. Ramponi, "Feature extraction and clustering for the computer-aided reconstruction of strip-cut shredded documents", *J. of Electronic Imaging*, Vol.17, No.1, January-March 2008, pp.013008-1-13.

44. S. Marsi, G. Impoco, A. Ukovich, G. Ramponi, S. Carrato, "Using a Recursive Rational Filter to Enhance Color Images", *IEEE Trans. on Instrum. and Meas.*, vol.57, no.6, June 2008, pp.1230-1236.
45. G. Guarnieri, L. Albani, G. Ramponi, "Image Splitting Techniques for a Dual Layer High Dynamic Range LCD Display", *J. of Electronic Imaging*, vol.17, no.4, Oct-Dec. 2008, pp.043009-1 - 9.
46. G. Guarnieri, L. Albani, G. Ramponi, "Minimum-error Splitting Algorithm for a Dual Layer LCD Display. Part I: Theory", *IEEE Journal of Display Technology*, vol.4, no.4, Dec. 2008, pp.383-390.
47. G. Guarnieri, L. Albani, G. Ramponi, "Minimum-error Splitting Algorithm for a Dual Layer LCD Display. Part II: Implementation and Results", *IEEE Journal of Display Technology*, vol.4, no.4, Dec. 2008, pp.391-397.
48. V. Bruni, G. Ramponi, A. Restrepo, D. Vitulano, "Context-based Defading of Archive Photographs", *EURASIP J. on Image and Video Processing*, Special Issue on Image and Video Processing for Cultural Heritage, Vol. 2009, Article ID 986183, doi:10.1155/2009/986183, 11 pages, 2009.
49. F. Dardi, L. Abate, G. Ramponi, "No-reference Measurement of Perceptually Significant Blurriness in Video Frames", *Signal, Image and Video Processing Journal (Springer)*, Vol. 5, No. 3, pp. 271-282, DOI: 10.1007/s11760-010-0198-0, 2011.
50. S. Marsi, G. Ramponi, "A flexible FPGA implementation for illuminance-reflectance video enhancement", *Journal of Real-Time Image Processing*, online: May 2011, printed: (2013) 8:81-93. DOI: 10.1007/s11554-011-0203-z
51. G. Guarnieri, S. Marsi, and G. Ramponi, "High dynamic range image display with halo and clipping prevention", *IEEE Trans. on Image Processing*, vol.20, no.5, May 2011, pp.1351-1362.
52. S. Saponara, G. Ramponi, S. Marsi, G. de Haan and E. Bellers, "Guest editorial: special issue on algorithms and architectures for real-time image and video enhancement", *Journal of Real-Time Image Processing*, Nov. 2011, pp.1-3. DOI: 10.1007/s11554-011-0234-5
53. F. Dardi, L. Abate, J. Stessen, and G. Ramponi, "Causes and subjective evaluation of blurriness in video frames", *Signal Processing: Image Communication*, vol.28, pp.209-221, 2013. DOI: 10.1016/j.image.2012.12.007
54. L. Abate, G. Ramponi, and J. Stessen, "Detection and measurement of the blocking artifact in decoded video frames", *Signal, Image and Video Processing*, Volume 7, Issue 3 (2013), Page 453-466. DOI: 10.1007/s11760-013-0448-z
55. M. Choi, J. Wang, W-C. Cheng, G. Ramponi, L. Albani, and A. Badano, "Effect of Veiling Glare on Detectability in High-Dynamic-Range Medical Images", *IEEE Journal of Display Technology*, vol.10, no.5, May 2014, pp.420-428.

56. G. Ramponi and A. Badano, "Method for adapting the grayscale standard display function to the aging eye", *J. of Digital Imaging* (Springer), Volume 30, Issue 1, 1 February 2017, Pages 17-25. DOI: 10.1007/s10278-016-9900-2
57. R.K. Mantiuk and G. Ramponi, "Age-dependent prediction of visible differences in displayed images", *Journal of the Society for Information Display*, vol.26, no.1, pp.4-13, Jan. 2018. DOI: 10.1002/jsid.623
58. F. Guzzi, L. De Bortoli, R.S. Molina, S. Marsi, S. Carrato, and G. Ramponi, "Distillation of an End-to-End Oracle for Face Verification and Recognition Sensors", *Sensors* 2020, 20, 1369; pp.1-23, doi:10.3390/s20051369
59. J. Bhattacharya and G. Ramponi, "Speeded-up Convolution Neural Network for classification tasks using multiscale 2-dimensional decomposition", *Neurocomputing*, 30 May 2020, DOI: 10.1016/j.neucom.2020.05.068
60. S. Marsi, J. Bhattacharya, R. Molina and G. Ramponi, "A Non-Linear-Convolution Network for Image Processing", *Electronics*, 10(2), 1940000, 00 Jan 2021, DOI: 10.3390/electronics10020201
61. L. Garcia, R. Molina, M.L. Crespo, S. Carrato, G. Ramponi, A. Cicuttin, I. Morales, H. Perez, "Muon-Electron Pulse Shape Discrimination for Water Cherenkov Detectors Based on FPGA/SoC", *Electronics*, 10(2), 1940000, Jan 2021, DOI: 10.3390/electronics10030224
62. M. Savic, Y. Ma, G. Ramponi, W. Du and Y. Peng, "Lung Nodule Segmentation with Region-based Fast Marching Method", *Sensors* 2021, 21, 1908; pp.1-32. DOI: 10.3390/s21051908
63. L. De Bortoli, S. Marsi, F. Marinello, S. Carrato, G. Ramponi and P. Gallina, "Structure from Linear Motion (SfLM): An On-the-Go Canopy Profiling System Based on Off-the-Shelf RGB Cameras for Effective Sprayers Control", *Agronomy*, 2022, 12, pp.1276-1297. DOI: 10.3390/agronomy12061276
64. J. Bhattacharya, S. Modi, L. Gregorat and G. Ramponi, "D2BGAN: A Dark to Bright Image Conversion Model for Quality Enhancement and Analysis Tasks Without Paired Supervision," *IEEE Access*, vol. 10, pp.57942-57961, 2022, DOI: 10.1109/ACCESS.2022.3178698.
65. R. S. Molina, V. Gil-Costa, M. L. Crespo and G. Ramponi, "High-Level Synthesis Hardware Design for FPGA-Based Accelerators: Models, Methodologies, and Frameworks," *IEEE Access*, vol. 10, pp. 90429-90455, 2022, DOI: 10.1109/ACCESS.2022.3201107.
66. J. Bhattacharya, S. Marsi, G. Ramponi, "Nonlinear kernel based feature maps for blur-sensitive unsharp masking of JPEG images," *IET Image Process.* 2023;17:1010–1028. DOI: 10.1049/ipr2.12692.
67. R. Molina, I.R. Morales, M.L. Crespo, V.Gil Costa, S. Carrato, G. Ramponi, "An end-to-end workflow to efficiently compress and deploy DNN classifiers on SoC/FPGA", *IEEE Embedded Systems Letters*, Dec. 2023 (early access), doi: 10.1109/LES.2023.3343030.

68. Y.M. Sosa, R.S. Molina, S. Spagnotto, I. Melchor, A. Nuñez Manquez, M.L. Crespo, G. Ramponi, R. Petrino, "Seismic Event Detection in the Copahue Volcano Based on Machine Learning: Towards an On-the-Edge Implementation". *Electronics*, 2024, 13, 622. doi: 10.3390/electronics13030622
69. P. Mishra, J. Bhattacharya, R. Sharma and G. Ramponi, "H2CGAN: Manageable AI for scene understanding tasks in hazy/rainy environment," in *IEEE Access*, 2024, doi: 10.1109/ACCESS.2024.3419063

International patent applications

70. C. Alessandretti, P. Carrai, L. Albani, V. Rochelli, and G. Ramponi: "Image interpolation". Applicant: Koninklijke Philips Electronics NV. International Publication Number WO 99/56247; publication date 4 Nov. 1999.
71. G. Scognamiglio, A. Rizzi, L. Albani, and G. Ramponi: "Sharpness enhancement". Applicant: Koninklijke Philips Electronics NV. International Publication Number WO 00/42778; publication date 20 July 2000. United States Patent 6,847,738 issued Jan. 25, 2005.
72. R. Di Federico, M. Raffin, P. Carrai, and G. Ramponi: "Video Scaling". Applicant: Koninklijke Philips Electronics NV. International Publication Number WO 03/102903; publication date 11 Dec. 2003. US Application: US 2005/0226538 A1, pub. date 13 Oct. 2005.
73. C. Casale, D. De Monte, L. Albani, and G. Ramponi: "Sharpness enhancement". Applicant: Koninklijke Philips Electronics NV. International Publication Number WO 2004/039063; publication date 6 May 2004. US Application: US 2006/0039622 A1, pub. date 23 Feb. 2006.
74. P. Carrai, G. Ferretti, F. Zotta, G. Ramponi: "Non-linear image interpolator along gradient of samples". Applicant: Koninklijke Philips Electronics NV. International Publication Number WO 2004/109598; publication date 16 Dec. 2004. US Application: US 2007/0003167 A1, pub. date 4 Jan. 2007.

Edited books and book chapters

75. G. Ramponi, G.L. Sicuranza, S. Carrato, and S. Marsi, Eds., *Signal Processing VIII: Theories and Applications*, Lint, Trieste, 1996.
76. S. Carrato, S. Marsi, G. Ramponi and G.L. Sicuranza, "Image Coding Using Artificial Neural Networks," in *Digital Signal Processing in Telecommunications*, A. Figueiras-Vidal, Ed., London: Springer-Verlag, pp.313-361, 1996.
77. G. Ramponi, "Polynomial and rational operators for image processing and analysis," in *Nonlinear Image Processing*, S.K. Mitra and G.L. Sicuranza, Eds., Academic Press, 2000.

78. G. Ramponi, S. Marsi and S. Carrato, "Image processing using rational functions," in *Nonlinear Model-Based Image/Video Processing and Analysis*, I. Pitas and C. Kotropoulos, Eds., J. Wiley & Sons, 2001.
79. F. Stanco, G. Ramponi, and A. Restrepo, "Virtual Restoration of Antique Books and Photographs", in *Digital Imaging for Cultural Heritage Preservation*, G. Gallo, S. Battiato, and F. Stanco Eds., CRC Press, 2011, ISBN: 9781439821732.
80. G. Ramponi, S. Loncaric, A. Carini, K. Egiazarian, *Proceedings of ISPA 2013 - 8th International Symposium on Image and Signal Processing and Analysis*, September 4-6, 2013, Trieste, Italy.
81. G. Ramponi, A. Badano, S. Bonfiglio, L. Albani, G. Guarnieri, "An application of HDR in medical imaging", in *High Dynamic Range Video: From Acquisition to Display and Applications*, F. Dufaux, P. Le Callet, R. Mantiuk, and M. Mrak Eds., Academic Press, London, 2016. ISBN: 978-012803039-4;978-008100412-8; DOI: 10.1016/B978-0-08-100412-8.00019-X

International Conferences

82. G. Ramponi and P. Inchingolo, "Four-band Real-time EEG analyzer", *Proc. World Congress on Medical Physics and Biomedical Engineering* 1982, Amburgo (RDF), p.8.59 .
83. G. Ramponi and G.L. Sicuranza, "Fast 2-D digital filters using look-up tables", *Proc. Int. Conference on Digital Signal Processing*, 1984, Firenze, pp.192-196.
84. G.L. Sicuranza and G. Ramponi, "Distributed arithmetic implementation of nonlinear echo cancellers", *Proc. IEEE Int. Conf. on Acoust., Speech and Signal Processing*, ICASSP-85, Tampa (Florida), pp.42.5.1-42.5.4.
85. G. Ramponi and G.L. Sicuranza, "The sign algorithm in memory-oriented implementations of nonlinear adaptive digital filters", *Proc. 7-th European Conf. on Circuit Theory and Design*, ECCTD-85, Praga (Cecoslovacchia), pp.537-540.
86. G.L. Sicuranza and G. Ramponi, "Theory and realization of M-D nonlinear digital filters", *Proc. IEEE Int. Conf. on Acoust., Speech and Signal Processing*, ICASSP-86, Tokyo (Giappone), pp.20.20.1-20.20.4.
87. G. Ramponi, G.L. Sicuranza and W. Ukovich, "An Optimization approach to the design of nonlinear Volterra filters", *Proc. Third European Signal Processing Conf.*, EUSIPCO-86, The Hague (NL).
88. G. Ramponi, G.L. Sicuranza and S. Cucchi, "2- and 3-D nonlinear predictors", *Proc IEEE Int. Conf. on Acoust., Speech and Signal Processing*, ICASSP-87, Dallas (Texas), April 1987, pp.25.8.1-25.8.4.
89. G. Ramponi and W. Ukovich, "Quadratic 2-D filter design by optimization techniques", *Proc. Int. Conf. on Digital Signal Processing*, 1987, Firenze, pp.59-63.

90. G. Ramponi, "Quadratic filters for image enhancement", *Proc. Fourth European Signal Processing Conf.*, EUSIPCO-88, Grenoble (France), Sept. 1988, pp.239-242.
91. S. Carrato, G.L. Sicuranza and G. Ramponi, "A Gradient-directed Unsharp Masking Algorithm for Synchrotron Radiation Angiography", *Proc. MELECON-89*, Lisboa, Portugal, Apr. 1989, pp.269-272.
92. G. Ramponi and G.L. Sicuranza, "Texture Discrimination via Higher-Order Statistics", *Proc. Workshop on Higher-Order Spectral Analysis*, Vail, Colorado, June 1989, pp.100-105.
93. G. Ramponi, "Design of 2-D Quadratic Filters Using Their Bi-impulse Response", *Proc. European Conf. on Circuit Theory and Design*, ECCTD- 89, Brighton (UK), Sept. 1989, pp.415-419.
94. F. Russo, S. Broili, G. Ramponi, "Fast prototyping of software libraries for multidimensional signal processing", *Proc. Fifth European Signal Processing Conf.*, EUSIPCO-90, Barcelona (Spain), Sept. 1990.
95. S. Carrato, G.L. Sicuranza and G. Ramponi, "Image Compression by Linear and Non-linear Neural Models", *Proc. First COST-229 WG.2 Workshop*, Bayona (Spain), March 13-15, 1991.
96. S. Marsi, G. Ramponi and G.L. Sicuranza, "Improved Neural Structures for Image Compression", *Proc. IEEE Int. Conf. on Acoust., Speech and Signal Processing*, ICASSP-91, Toronto (Canada), May 1991, pp. M9.28.1-4.
97. G. Ramponi and S. Carrato, "Modified Fourth-order Moments in Texture Recognition", *Proc. International Signal Processing Workshop on Higher Order Statistics*, Chamrousse, France, July 10-12, 1991, pp.139-142.
98. G. Ramponi, A. Premoli and G.L. Sicuranza, "A New Piecewise-linear Model for Adaptive Nonlinear Digital Filtering", *Proc. European Conf. on Circuit Theory and Design*, ECCTD-91, Copenhagen (DK), Sept. 1991, pp.595-604.
99. S. Carrato, G. Ramponi, A. Premoli and G.L. Sicuranza, "Improved Structures Based on Neural Networks for Image Compression", *Proc. First IEEE-SP Workshop on Neural Networks for Signal Processing*, Nassau Inn, Princeton, New Jersey, USA, Sept.29-Oct.2, 1991, pp.493-502.
100. S. Carrato, S. Marsi, G.L. Sicuranza and G. Ramponi, "Parallel Structures Based on Neural Networks for Image Compression", *Proc. First COST-229 WG.4 Workshop*, Leysin (CH), March 1992.
101. G. Ramponi, "A Noise-Smoothing Nonlinear Operator for the Preprocessing of Text and Graphics Images", *Proc. 4th International Conf. on Image Processing and its Applications*, IPA'92, Maastricht (NL), April 1992, pp.242-245.
102. F. Russo and G. Ramponi, "Working on Image Data Using Fuzzy Rules", *Proc. Sixth European Signal Processing Conf.*, EUSIPCO-92, Bruxelles (B), Aug.24-27, 1992.

103. G. Ramponi, "Adaptive Piecewise-linear Structure for Wiener Systems Modelling", *Proc. Second COST-229 WG.2 Workshop*, Bordeaux, (France), Sept.30-Oct.2, 1992.
104. R. Simonetti, S. Carrato, G. Ramponi and A. Polo Filisan, "Deinterlacing of HDTV Images for Multimedia Applications", *Proc. International Workshop on HDTV'92*, Kawasaki (Japan), Nov.18-20, 1992.
105. P. Fontanot and G. Ramponi, "A Polynomial Filter for the Preprocessing of Mail Address Images ", *Proc. IEEE Winter Workshop on Nonlinear Digital Signal Processing*, Jan. 17-20, 1993, Tampere, Finland.
106. F. Russo and G. Ramponi, " Nonlinear Effects in a Fuzzy Image Processing System", *Proc. IEEE Winter Workshop on Nonlinear Digital Signal Processing*, Jan. 17-20, 1993, Tampere, Finland.
107. S. Carrato and G. Ramponi, "Edge Detection Using Generalized Higher-Order Statistics", *Proc. IEEE Signal Processing Workshop on Higher-Order Statistics*, June 7-9, 1993, Stanford Sierra Camp, California.
108. S. Carrato, G.L. Sicuranza and G. Ramponi, "Properties of Self-Organizing Feature Maps for Image Coding", *Proc. COST-229 WG.1+2 Workshop*, Bayona (Spain), June 16-18, 1993.
109. G. Ramponi and G.L. Sicuranza, "Image sharpening using a polynomial operator", *Proc. European Conf. on Circuit Theory and Design*, ECCTD-93, Davos (CH), Aug.30 - Sept.3, 1993.
110. R. Castagno, P.J. Haavisto, G. Ramponi, M. Balanza, "A motion compensated algorithm for frame rate up conversion of progressive image sequences", *Proc. International Workshop on HDTV '93*, Ottawa, Canada, Oct.26-28, 1993.
111. A. Makovec and G. Ramponi, "Supervised Discrimination of Noisy Textures Using Third-Order Moments", *Proc. COST-229 WG.1+2 Workshop*, Ljubljana (Slovenia), April 5-7, 1994.
112. F. Russo and G. Ramponi, "A Totally Fuzzy Approach to Multisensor Instrumentation: Preprocessing Techniques", *Proc. IEEE Instrumentation and Measurement Technology Conference*, IMTC/94, May 10-12, 1994.
113. F. Russo and G. Ramponi, "Combined FIRE Filters for Image Enhancement", *Proc. IEEE International Conf. on Fuzzy Systems*, FUZZ-IEEE '94, Orlando (FL), June 26 - July 2, 1994.
114. F. Russo and G. Ramponi, "Edge Extraction by FIRE Operators", *Proc. IEEE International Conf. on Fuzzy Systems*, FUZZ-IEEE '94, Orlando (FL), June 26 - July 2, 1994.
115. A. Makovec and G. Ramponi, "High-Order Moments for Texture Segmentation in Presence of Noise", *Proc. ATHOS Workshop*, Edinburgh, Scotland, Sept. 12, 1994.
116. G. Ramponi and S. Carrato, "Performance of the Skewness-of-Gaussian (SoG) Edge Extractor ", *Proc. Seventh European Signal Processing Conf.*, EUSIPCO-94, Edinburgh, Scotland, Sept. 13-16, 1994.

117. F. Russo and G. Ramponi, "Introducing the Fuzzy Median Filter", *Proc. Seventh European Signal Processing Conf.*, EUSIPCO-94, Edinburgh, Scotland, Sept. 13-16, 1994.
118. L. Biancardi, S. Carrato, G. Ramponi and G. Sansoni, "Whole Field Optical Prophilometry: Application of Nonlinear Processing Algorithms to the Enhancement of Low-contrast Images", *Proc. SPIE Symp. on Photonic Sensors and Controls for Commercial Applications – Videometrics III*, Boston (MA), Oct.31 - Nov.4, 1994.
119. A. Vanzo, G. Ramponi and G.L. Sicuranza, "An Image Enhancement Technique Using Polynomial Filters", *Proc. First IEEE Intern. Conf. on Image Processing*, ICIP-94, Austin (TX), Nov. 13-16, 1994.
120. F. Russo and G. Ramponi, "A Noise Smoother Using Cascaded FIRE Filters", *Proc. IEEE International Conf. on Fuzzy Systems*, FUZZ-IEEE '95, Yokohama (Japan), March 20 - 24, 1995.
121. G. Ramponi, "A Simple Cubic Operator for Sharpening an Image", *Proc. 1995 IEEE Workshop on Nonlinear Signal and Image Processing*, June 20-22, 1995, Neos Marmaras, Greece.
122. F. Russo and G. Ramponi, "Adaptive Image Smoothing Using Fuzzy Operators", *Proc. 1995 IEEE Workshop on Nonlinear Signal and Image Processing*, June 20-22, 1995, Neos Marmaras, Greece.
123. G. Ramponi and G.L. Sicuranza, "Sobel-Laplacian Image Sharpening for Noisy Data", *Proc. Intern. Conf. on Digital Signal Processing*, Limassol, Cyprus, June 26-28, 1995.
124. G. Ramponi, "A Rational Edge-Preserving Smoother," *Proc. Second IEEE Intern. Conf. on Image Processing*, ICIP-95, Washington, DC, USA, Oct. 22-25, 1995.
125. F. Russo and G. Ramponi, "An Image Enhancement Technique Based on the FIRE Operator," *Proc. Second IEEE Intern. Conf. on Image Processing*, ICIP-95, Washington, DC, USA, Oct. 22-25, 1995.
126. R. Castagno and G. Ramponi, "A rational filter for the removal of blocking artifacts in image sequences coded at low bitrate," *Proc. Eighth European Signal Processing Conf.*, EUSIPCO-96, Trieste, Italy, Sept. 10-13, 1996.
127. S. Chiandussi and G. Ramponi, "Nonlinear Unsharp Masking for the Enhancement of Document Images," *Proc. Eighth European Signal Processing Conf.*, EUSIPCO-96, Trieste, Italy, Sept. 10-13, 1996.
128. V. Pahor, G. Ramponi and G.L. Sicuranza, "2-D Adaptive Piecewise Linear Filter for Image Enhancement," *Proc. Eighth European Signal Processing Conf.*, EUSIPCO-96, Trieste, Italy, Sept. 10-13, 1996.
129. F. Russo and G. Ramponi, "Removal of Impulse Noise Using a FIRE Filter," *Proc. Third IEEE Intern. Conf. on Image Processing*, ICIP-96, Lausanne (CH), Sept. 16-19, 1996.
130. S.Carrato, G.Ramponi and S.Marsi, "A Simple Edge-Sensitive Image Interpolation Filter," *Proc. Third IEEE Intern. Conf. on Image Processing*, ICIP-96, Lausanne (CH), Sept. 16-19, 1996.

131. G. Ramponi, "Image Processing Using Rational Functions," *Proc. COST-254 Workshop*, Budapest, Hungary, Feb. 6-7, 1997.
132. V. Pahor, G. Ramponi and R. Castagno, "The ESPRIT LTR Research Project: Non-linear Model-Based Analysis and Description of Images for Multimedia Applications (NOBLESSE)," *Proc. International Conf. on Image Analysis and Processing, ICIAP-97*, Florence, Italy, 17-19 Sept. 1997.
133. G. Ramponi and S. Carrato, "Interpolation of the DC Component of Coded Images Using a Rational Filter," *Proc. Fourth IEEE Intern. Conf. on Image Processing, ICIP-97*, S. Barbara, CA, Oct. 26-29, 1997.
134. A. Polesel, G. Ramponi and V.J. Mathews, "Adaptive Unsharp Masking for Contrast Enhancement," *Proc. Fourth IEEE Intern. Conf. on Image Processing, ICIP-97*, S. Barbara, CA, Oct. 26-29, 1997.
135. F.A. Cheikh, L. Khriji, M. Gabbouj and G. Ramponi, "Color Image Interpolation Using Vector Rational Filters," *Proc. SPIE Symp. on Nonlinear Image Processing*, San Jose, CA, January 24-30, 1998.
136. G. Ramponi and S. Carrato, "An Adaptive Irregular Sampling Method for Progressive Transmission," *Proc. Fifth IEEE Intern. Conf. on Image Processing, ICIP-98*, Oct. 4-7, 1998, Chicago (IL), USA, vol.II, pp.747-751.
137. S. Kröner and G. Ramponi, "Edge Preserving Noise Smoothing with an Optimized Cubic Filter," *Proc. COST-254 Workshop*, Ljubljana, Slovenia, Nov. 19-21, 1998.
138. V. Pahor and G. Ramponi, "Performance Evaluation of H.263 and MPEG-2 Coders for Interactive TV Applications," *Proc. COST-254 Workshop*, Ljubljana, Slovenia, Nov. 19-21, 1998.
139. G. Ramponi, R. D'Alvise and C. Moloney, "Automatic estimation of the noise variance in SAR images for use in speckle filtering," *IEEE-EURASIP Workshop on Nonlinear Signal and Image Processing, NSIP-99*, Antalya, Turkey, June 20-23, 1999.
140. S. Kröner and G. Ramponi, "Design constraints for polynomial and rational filters," *IEEE-EURASIP Workshop on Nonlinear Signal and Image Processing, NSIP-99*, Antalya, Turkey, June 20-23, 1999.
141. R. D'Alvise, C. Moloney and G. Ramponi, "Statistical methods for the evaluation of the coefficient of variation in SAR images," *Int. Geoscience and Remote Sensing Symposium, IGARSS'99*, Hamburg, Germany, 28 June - 2 July 1999.
142. L. Khriji, M. Gabbouj, G. Ramponi, E.D. Ferrandiere, "Old movie restoration using rational spatial interpolators," *6th IEEE International Conference on Electronics, Circuits and Systems, ICECS-99*, Cyprus, Sept. 5-8, 1999.
143. G. Scognamiglio, G. Ramponi, A. Rizzi, and L. Albani, "A Rational unsharp masking method for TV applications," *Proc. Sixth IEEE Intern. Conf. on Image Processing, ICIP-99*, Oct. 25-28, 1999, Kobe, Japan, vol.III, pp.169-173.

144. L. Khriji, M. Gabbouj, S. Marsi, G. Ramponi and E.D. Ferrandiere, "Nonlinear interpolators for old movie restoration," *Proc. Sixth IEEE Intern. Conf. on Image Processing, ICIP-99*, Oct. 25-28, 1999, Kobe, Japan, vol.IV, pp.247-251.
145. A. Skarabot, G. Ramponi and D. Toffoli, "Image sequence processing for videowall visualization," in *Proc. IST/SPIE 12th Annual Intern. Symp. Electronic Imaging 2000*, Jan. 23-28, 2000, San Jose, California.
146. R. Costantini, J. Bracamonte, G. Ramponi, J.-L. Nagel, M. Ansorge, and F. Pellandini, "A low-complexity video coder based on the discrete Walsh-Hadamard transform," *European Conf. on Signal Processing, Eusipco-2000*, Tampere, Finland, Sept.5-8, 2000.
147. M. Biloslavo, G. Ramponi, S. Olivieri, and L. Albani, "Joint Kalman-based noise filtering and motion compensated video coding for low bit rate videoconferencing," *Proc. IEEE Intern. Conf. on Image Processing, ICIP 2000*, Vancouver, Canada, Sept.10-13, 2000.
148. L. Tenze, G. Ramponi, and S. Carrato, "Blotches correction and contrast enhancement for old film pictures," *Proc. IEEE Intern. Conf. on Image Processing, ICIP 2000*, Vancouver, Canada, Sept.10-13, 2000.
149. R. Costantini, G. Ramponi, J. Bracamonte, B. Piller, M. Ansorge, and F. Pellandini, "Countering illumination variations in a video surveillance environment," in *Proc. SPIE Intern. Symp. Electronic Imaging 2001*, Jan. 21-26, 2001, San Jose, California.
150. A. Skarabot, G. Ramponi, and L. Buriola, "FPGA architecture for a videowall image processor," in *Proc. SPIE Intern. Symp. Electronic Imaging 2001*, Jan. 21-26, 2001, San Jose, California.
151. G. Ramponi, "Image processing with rational operators: noise smoothing and anisotropic diffusion", *2nd Int. Symp. on Signal Processing and Analysis, ISPA-01*, June 19-21, 2001, Pula, Croatia.
152. L. Tenze, G. Ramponi, and S. Carrato, "Robust detection and correction of blotches in old films using spatio-temporal information," in *Proc. SPIE Intern. Symp. Electronic Imaging 2002*, Jan. 2002, San Jose, California.
153. L. Tenze, G. Ramponi, and S. Carrato, "A complete system for old motion picture restoration", *Proc. EVA 2002 - Electronic Imaging and the Visual Arts*, 18-22 March 2002, Florence, Italy.
154. G. Ramponi, L. Tenze, S. Carrato, and S. Marsi, "Nonlinear contrast enhancement based on the retinex approach", in *Proc. SPIE Intern. Symp. Electronic Imaging 2003*, 20-24 Jan. 2003, Santa Clara, California.
155. M. Raffin, P. Carrai, R. Di Federico, G. Ramponi, "Interpolation of images containing text for digital displays", in *Proc. SPIE Intern. Symp. Electronic Imaging 2003*, 20-24 Jan. 2003, Santa Clara, California.

156. R. Shahidi, C. Moloney, G. Ramponi, "Farthest Point Halftoning", *IEEE-EURASIP Workshop on Nonlinear Signal and Image Processing*, NSIP-03, Grado, Italy, June 8-11, 2003.
157. L. Tenze and G. Ramponi, "Line Scratch Removal in Vintage Film Based on an Additive/Multiplicative Mode", *IEEE-EURASIP Workshop on Nonlinear Signal and Image Processing*, NSIP-03, Grado, Italy, June 8-11, 2003.
158. S. Carrato, S. Marsi, G. Ramponi, B. Crespi, "A nonlinear pseudo-Retinex for dynamic range compression in CMOS imaging systems ", *IEEE-EURASIP Workshop on Nonlinear Signal and Image Processing*, NSIP-03, Grado, Italy, June 8-11, 2003.
159. G. Orsini, G. Ramponi, P. Carrai, R. Di Federico, "A modified Retinex for image contrast enhancement and dynamics control, *Proc. IEEE Intern. Conf. on Image Processing*, ICIP-03, Barcelona, Spain, Sept.14-17, 2003.
160. F. Stanco, G. Ramponi, and A. de Polo, "Towards the Automated Restoration of Old Photographic Prints: A Survey", *IEEE Int. Conf. EUROCON 2003*, Ljubljana, Slovenia, Sept. 22-24, 2003.
161. F. Stanco, G. Ramponi and L. Tenze, "Removal of semi-transparent blotches in old photographic prints", *Proc. 4th COST 276 Workshop*, 2-5 Oct. 2003, Prague, Czech Republic.
162. A. Ukovich, M. Koeppen, and G. Ramponi, "Temporal co-occurrence matrix approaches to motion analysis", *Proc. SPIE Intern. Symp. Electronic Imaging 2004*, 18-22 Jan. 2004, San Jose, California.
163. F. Zotta, P. Carrai, G. Ferretti and G. Ramponi, "A directional edge-sensitive image interpolator", *Proc. SPIE Intern. Symp. Electronic Imaging 2004*, 18-22 Jan. 2004, San Jose, California.
164. S. Marsi, S. Carrato, G. Ramponi and B. Crespi, "Video dynamic range compression for logarithmic CMOS imagers", *Proc. 6th COST 276 Workshop*, Thessaloniki (Greece), May 6-7, 2004.
165. F. Stanco, L. Tenze, G. Ramponi, and A. de Polo, "Virtual Restoration of Fragmented Glass Plate Photographs", *Proc. IEEE Int. Conf. MELECON 2004*, Dubrovnik, Croatia, 12-15 May 2004.
166. S. Marsi, G. Ramponi, and S. Carrato, "Image Contrast Enhancement Using a Recursive Rational Filter", *Proc. IEEE Int. Workshop on Imaging Systems and Techniques*, IST 2004, Stresa, Italy, 14 May 2004.
167. F. Stanco, L. Tenze, and G. Ramponi, " "Foxing" in Vintage Photographs: Detection and Removal", *European Conf. on Signal Processing, Eusipco-2004*, Vienna, Austria, Sept. 6-10, 2004.
168. F. Stanco, G. Ramponi and L. Tenze, "A Method for Improving the Visual Quality of Digitized Antique Books", *Proc. 7th COST 276 Workshop*, Ankara (Turkey), 4-5 Nov. 2004.

169. A. Ukovich, G. Ramponi, H. Doulaverakis, Y. Kompatsiaris, M.G. Strintzis, "Shredded document reconstruction using MPEG-7 standard descriptors", *IEEE Int. Symp. on Signal Processing and Information Technology - ISSPIT-04*, 18-21 Dec. 2004, Rome, Italy.
170. A. Ukovich and G. Ramponi, "System architecture for the digital recovery of shredded documents", *Proc. Image Processing: Algorithms and Systems IV, IS&T/SPIE Symp. on Electronic Imaging 2005*, 16-20 Jan. 2005, San Jose, CA, USA.
171. G. Ramponi, F. Stanco, W. Dello Russo, S. Pelusi, and P. Mauro, "Digital Automated Restoration of Manuscripts and Antique Printed Books", *Proc. EVA 2005 - Electronic Imaging and the Visual Arts*, 14-18 March 2005, Florence, Italy.
172. A. Ukovich, G. Impoco, G. Ramponi, "A Comprehensive Tool to Measure the Performance of Dynamic Range Reduction Algorithms," *IEEE International Workshop on Imaging Systems and Techniques, IST 2005*, Niagara Falls, Canada, 13 May 2005.
173. F. Stanco and G. Ramponi, "Detection of Water Blotches in Antique Documents", *Proc. 8th COST 276 Workshop*, Trondheim (Norway), 26 May 2005.
174. G. Impoco, A. Ukovich, G. Ramponi, "Exploiting The Local Contrast to Evaluate Image Dynamics Reduction Algorithms", *Proc. 8th COST 276 Workshop*, Trondheim (Norway), 26 May 2005.
175. A. Ukovich and G. Ramponi, "Features for the reconstruction of shredded notebook paper", *Proc. IEEE Intern. Conf. on Image Processing, ICIP-05*, Genova, Italy, Sept. 11-14, 2005.
176. G. Impoco, S. Marsi, G. Ramponi, "Adaptive reduction of the dynamics of HDR video sequences", *Proc. IEEE Intern. Conf. on Image Processing, ICIP-05*, Genova, Italy, Sept. 11-14, 2005.
177. A. Ukovich and G. Ramponi, "Using Clustering for Document Reconstruction", *Proc. Image Processing: Algorithms and Systems V, IS&T/SPIE Symp. on Electronic Imaging 2006*, 15-19 Jan. 2006, San Jose, CA, USA.
178. D. Ardizzzone, V. Bruni, V. Cappellini, A. De Polo, H. Dindo, U. Maniscalco, S. Minelli, L. Moltedo, A. Piva, G. Ramponi, G. Sajeve, D. Vitulano, "A knowledge-based model for the digital restoration and enhancement of images concerning the archaeological and monumental heritage of the Mediterranean coast", *Proc. EVA 2006 - Electronic Imaging for the Visual Arts*, 4-7 April 2006, Florence, Italy.
179. G. Ramponi and V. Bruni, "Virtual Restoration of Faded Photographic Prints", *Proc. EUSIPCO-06, 14th European Signal Processing Conf.*, 4-8 Sept. 2006, Florence, Italy.
180. S. Saponara, L. Fanucci, S. Marsi, G. Ramponi, M. Witte, D. Kammler, "Design of Application Specific Instruction-set Processor for Image and Video Filtering", *Proc. EUSIPCO-06, 14th European Signal Processing Conf.*, 4-8 Sept. 2006, Florence, Italy.

181. G. Guarnieri, S. Carrato, G. Ramponi, "Nonlinear mapping for dynamic range compression in digital images", *Proc. Image Processing: Algorithms and Systems VI, IS&T/SPIE Symp. on Electronic Imaging 2007*, 28 January-1 February 2007, San Jose, CA, USA.
182. A. Restrepo, V. Bruni, G. Ramponi, "Objective measures for the evaluation of techniques for the virtual restoration of faded sepia photographic prints", *Proc. EVA 2007 - Electronic Imaging for the Visual Arts*, 26-30 March 2007, Florence, Italy.
183. G. Guarnieri, S. Carrato, G. Ramponi, "Psychophysical evaluation and tuning of a simple tone mapping operator", *IEEE-EURASIP Workshop on Nonlinear Signal and Image Processing*, NSIP-07, Bucharest, Romania, Sept. 10-12, 2007.
184. G. Ramponi, "Adaptive Contrast Improvement for Still Images and Video Frames", *IEEE-EURASIP Workshop on Nonlinear Signal and Image Processing*, NSIP-07, Bucharest, Romania, Sept. 10-12, 2007.
185. A. Restrepo and G. Ramponi, "Filtering and Luminance Correction of Aged Photographs", *Proc. Image Processing: Algorithms and Systems VII, IS&T/SPIE Symp. on Electronic Imaging 2008*, 26-31 January 2008, San Jose, CA, USA.
186. A. Restrepo, E. Fogar and G. Ramponi, "On the Detection of Cracks in Photographic Prints", *Proc. Image Processing: Algorithms and Systems VII, IS&T/SPIE Symp. on Electronic Imaging 2008*, 26-31 January 2008, San Jose, CA, USA.
187. A. Xu, A. Saha, G. Guarnieri, G. Ramponi, and A. Badano, "Display methods for adjustable grayscale and luminance depth", *Proc. SPIE Medical Imaging 2008*, 16-21 February 2008, San Diego, CA, USA.
188. G. Guarnieri, L. Albani, and G. Ramponi, "Image splitting techniques for a dual layer high dynamic range LCD display", *Proc. SPIE Medical Imaging 2008*, 16-21 February 2008, San Diego, CA, USA.
189. A. Restrepo, S. Marsi, and G. Ramponi, "Chromatic Enhancement for the Virtual Restoration of Art Objects", *Proc. EVA 2008 - Electronic Imaging for the Visual Arts*, 16-18 April 2008, Florence, Italy.
190. V. Bruni, G. Ramponi, A. Restrepo, D. Vitulano, "Restoration of Faded Images Without Noise Amplification", *Proc. EUSIPCO-08, 16th European Signal Processing Conf.*, 25-29 August 2008, Lausanne, Switzerland, pp. SS6.2.4.1-SS6.2.4.5.
191. A. Restrepo and G. Ramponi, "Word Descriptors of Image Quality Based on Local Dispersion-versus-location Distributions", *Proc. EUSIPCO-08, 16th European Signal Processing Conf.*, 25-29 August 2008, Lausanne, Switzerland, pp. P4.1.12.1-P4.1.12.5.
192. G. Ramponi and L. Abate, "Robust Measurement of the Blocking Artifact", *Proc. Image Processing: Algorithms and Systems VIII, IS&T/SPIE Symp. on Electronic Imaging 2009*, 18-22 January 2009, San Jose, CA, USA.
193. G. Guarnieri, G. Ramponi, S. Bonfiglio, and L. Albani, "Nonlinear mapping of the luminance in dual-layer high dynamic range displays", *Proc. Image Processing: Algorithms*

and Systems VIII, IS&T/SPIE Symp. on Electronic Imaging 2009, 18-22 January 2009, San Jose, CA, USA.

194. A. Restrepo, S. Marsi and G. Ramponi, "HSV-domain Enhancement of High-contrast Images - Power Laws and Unsharp Masking for Bounded and Circular Signals", Proc. VISAPP 2009 - Fourth International Conf. on Computer Vision Theory and Applications, Lisboa, Portugal, Feb. 5-8, 2009, vol.2, pp.28-33.
195. A. Badano, S. Park, B.D. Gallas, G. Guarnieri, G. Ramponi, and L. Albani, "Quantization in medical imaging displays: initial observer results for a high-luminance-range, dual-layer LCD", *SID Symposium*, May 31 - June 5, 2009, San Antonio, Texas, USA, pp. 61.4.1 - 61.4.4.
196. A. Badano, D. Sharma, G. Guarnieri, G. Ramponi, and L. Albani, "Effect of case variability on the measurement of reader performance when comparing medical display technologies: application to the study of high-luminance-range displays", *XXIX International Display Research Conference, Eurodisplay 2009*, Sept. 14th-17th, 2009, Rome, Italy.
197. L. Abate, F. Dardi, G. Ramponi, "Blurriness estimation in video frames: a study on smooth objects and textures", Proc. *Image Processing: Algorithms and Systems VIII, IS&T/SPIE Symp. on Electronic Imaging 2010*, 17-21 January 2010, San Jose, CA, USA.
198. F. Dardi, L. Abate, and G. Ramponi, "A set of features for measuring blurriness in video frames", *Melecon 2010*, 15th IEEE Mediterranean Electrotechnical Conference, Valletta, Malta, 26-28 April 2010.
199. L. Abate and G. Ramponi, "Measurement of the blocking artefact in video frames", *Melecon 2010*, 15th IEEE Mediterranean Electrotechnical Conference, Valletta, Malta, 26-28 April 2010.
200. V. Bruni, D. Vitulano, G. Ramponi, "Image Quality Assessment through a Subset of the Image Data", *International Symposium on Image and Signal Processing and Analysis, ISPA 2011*, September 4-6, 2011, Dubrovnik, Croatia.
201. G. Guarnieri, G. Ramponi and S. Marsi, "Gray-level mapping in advanced medical displays: determining the collective and individual visual response of the users", *8th International Symposium on Image and Signal Processing and Analysis, ISPA 2013*, September 4-6, 2013, Trieste, Italy.
202. N. Agarwal, A. Kumar, J. Bhadviya, G. Ramponi, "Low Complexity Algorithm for Interpolation as well as Lossless Compression of Natural Images", *8th International Symposium on Image and Signal Processing and Analysis, ISPA 2013*, September 4-6, 2013, Trieste, Italy.
203. A. Kumar, N. Agarwal, J. Bhadviya, G. Mittal, G. Ramponi, "An Efficient New Edge Preserving Technique for Removal of Salt and Pepper Noise", *8th International Symposium on Image and Signal Processing and Analysis, ISPA 2013*, September 4-6, 2013, Trieste, Italy.

204. L. Albani, L. De Paepe, S. Bonfiglio, G. Guarnieri, G. Ramponi, "HDR Medical Display based on Dual Layer LCD", *8th International Symposium on Image and Signal Processing and Analysis*, ISPA 2013, September 4-6, 2013, Trieste, Italy.
205. S. Marsi, S. Carrato, G. Ramponi, "A Robust Tracking Algorithm for Super-resolution Reconstruction of Vehicle License Plates", *Applications in Electronics Pervading Industry, Environment and Society, ApplePies 2014*, 14-15 May 2014, Rome, Italy.
206. M. Bonetto, P. Korshunov, G. Ramponi and T. Ebrahimi, "Privacy in Mini-drone Based Video Surveillance", *11th IEEE International Conference on Automatic Face and Gesture Recognition Conference and Workshops*, FG 2015, Ljubljana, 4-8 May 2015.
207. S. Marsi, S. Carrato, G. Ramponi, "A New FPGA-based Architecture for Iterative and Space-variant Image Processing", *Applications in Electronics Pervading Industry, Environment and Society, ApplePies 2015*, 14-15 May 2015, Rome, Italy.
208. R. Mantiuk and G. Ramponi, "Human Vision Model Including Age Dependencies", *23rd European Signal Processing Conference*, EUSIPCO-2015, Nice, France, Aug.31-Sept.4, 2015.
209. M. Bonetto, S. Carrato, G. Fenu, E. Medvet, E. Mumolo, F.A. Pellegrino, G. Ramponi, "Image Processing Issues in a Social Assistive System for the Blind", *9th International Symposium on Image and Signal Processing and Analysis*, ISPA 2015, Zagreb, Croatia, September 7-9, 2015.
210. S. Carrato, G. Ramponi, S. Marsi, M. Jerian, L. Tenze, "FPGA implementation of the Lucy-Richardson algorithm for fast space-variant image deconvolution", *9th International Symposium on Image and Signal Processing and Analysis*, ISPA 2015, Zagreb, Croatia, September 7-9, 2015.
211. P. Korshunov, M. Bonetto, T. Ebrahimi and G. Ramponi, "Impact of Mini-drone Based Video Surveillance on Invasion of Privacy", *IEEE International Conference on Image Processing*, ICIP 2015, Québec City, Canada, 27-30 Sept. 2015.
212. S. Carrato, G. Fenu, E. Medvet, E. Mumolo, F.A. Pellegrino, G. Ramponi, "Towards More Natural Social Interactions of Visually Impaired Persons", *Int. Conf. on Advanced Concepts for Intelligent Vision Systems*, ACIVS 2015, Catania, Italy, Oct. 26-29, 2015.
213. S. Carrato, S. Marsi, E. Medvet, F. A. Pellegrino, G. Ramponi, and M. Vittori, "Computer vision for the blind: a dataset for experiments on face detection and recognition", *Proc. 39th International Convention on ICT, Electronics and Microelectronics*, MIPRO 2016, Opatija (HR), 30 May - 3 June 2016.
214. I. Garofolo, E. Medvet, F. Babich, and G. Ramponi, "Understanding needs, identifying opportunities: ICT in the view of Universal Design", *Proc. GOODTECHS 2016, 2nd EAI International Conference on Smart Objects and Technologies for Social Good*, Venice (Italy), 30 Nov. - 1 Dec. 2016.
215. J. Bhattacharya, S. Marsi, S. Carrato, H. Frey, and G. Ramponi, "Feeding a DNN for Face Verification in Video Data Acquired by a Visually Impaired User", *Proc. 40th*

International Convention on ICT, Electronics and Microelectronics, MIPRO 2017, Opatija (HR), 22 - 26 May 2017.

- 216. J. Bhattacharya, F. Guzzi, S. Marsi, S. Carrato, and G. Ramponi, "Real-time DNN-based Face Identification for the Blind", Proc. *Applications in Electronics Pervading Industry, Environment and Society, ApplePies 2017*, 21-22 September 2017, Rome, Italy.
- 217. S. Marsi, J. Bhattacharya, F. Guzzi, S. Carrato, G. Ramponi, L. De Bortoli and F. Cicala, "A face recognition system using off-the-shelf feature extractors and an ad-hoc classifier", Proc. *Applications in Electronics Pervading Industry, Environment and Society, ApplePies 2018*, 26-27 September 2018, Pisa, Italy.
- 218. F. Guzzi, L. De Bortoli, S. Marsi, S. Carrato and G. Ramponi, "Distillation of a CNN for a high accuracy mobile face recognition system", Proc. *42nd International Convention on ICT, Electronics and Microelectronics*, MIPRO 2019, Opatija (HR), 20 - 24 May 2019.
- 219. L. De Bortoli, F. Guzzi, S. Marsi, S. Carrato and G. Ramponi, "A fast face recognition CNN obtained by distillation", Proc. *Applications in Electronics Pervading Industry, Environment and Society, ApplePies 2019*, Sept. 11-13, 2019, Pisa, Italy.
- 220. S. Marsi, S. Carrato, L. De Bortoli, F. Guzzi and G. Ramponi, "An FPGA realization for real-time depth estimation in image sequences", Proc. *Applications in Electronics Pervading Industry, Environment and Society, ApplePies 2019*, Sept. 11-13, 2019, Pisa, Italy.
- 221. M. Prenassi, W. Coppola, G. Ramponi, T. Agostini, S. Marceglia, "The Tomatis electronic ear effects on simple vocalizations", Proc. *11th International Workshop on Models and analysis of vocal emissions for biomedical applications*, Dec. 17-19, 2019, Florence, Italy.
- 222. R. Molina, V. Gonzalez, J. Benito, S. Marsi, G. Ramponi, and R. Petrino, "Implementation of particle image velocimetry for silo discharge and food industry seeds", Proc. *Applications in Electronics Pervading Industry, Environment and Society, ApplePies 2020*, Nov. 19-20, 2020, Online.
- 223. L. Garcia, R. Molina, M.L. Crespo, S. Carrato, G. Ramponi, A. Cicuttin, I. Morales, H. Perez, M. Ballina, R. Sacahui, "Pulse Shape Discrimination for Online Data Acquisition in Water Cherenkov Detectors Based on FPGA/SoC", *37th International Cosmic Ray Conference, ICRC21*, 12-23 July 2021, Berlin, Germany.
- 224. A. Suárez, R. S. Molina, G. Ramponi, R. Petrino, L. Bollati and D. Sequeiros, "Pest detection and classification to reduce pesticide use in fruit crops based on deep neural networks and image processing," Proc. *XIX Workshop on Information Processing and Control (RPIC)*, 3-5 Nov. 2021, San Juan, Argentina.
- 225. R. Molina, V. Carrer, M. Ballina, M. Liz Crespo, L. Bollati, D. Sequeiro, S. Marsi, G. Ramponi, "ML-based classifier for precision agriculture on embedded systems", Proc. *Applications in Electronics Pervading Industry, Environment and Society, ApplePies 2022*, 26-27 September 2022, Genova, Italy.

226. Y. Furushita, M. Fontani, M. Bressan, S. Bianchi, A. Piva, and G. Ramponi, "Double compression detection of HEIF images using coding ghosts". Proc. 9th International Congress on Information and Communication Technology, London, UK, 19-22 February 2024.