

**Mauro Barni**, was born in PRATO, on 30 June 1965

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### **Education**

- PhD degree, Information and Communication Engineering, University of Florence, Italy, awarded on October 30, 1995. Advisor: Prof. V. Cappellini.
- M.Sc. degree, Electronics Engineering, University of Florence, Italy, 1991.

### **Work Experience**

- 2016 – present: Full Professor, Dept. of Information Engineering and Mathematics, University of Siena, Italy.
- 2002 – 2016: Associate Professor, Dept. of Information Engineering and Mathematics, University of Siena, Italy.
- 1998 – 2002: Assistant Professor (“Ricercatore”), Dept. of Information Engineering and Mathematics, University of Siena, Italy.
- 1996 – 1998: Postdoctoral researcher at Dept. of Electronics, University of Florence, Italy.

In July 2010 he has got the full professorship habilitation in Italy.

### **Teaching**

Since 1998 he has been teaching several graduate courses in:

- Signal and Systems
- Digital communication
- Information Theory
- Statistics and probability theory
- Multimedia Security
- Cybersecurity

consistently achieving high scores during internal teaching reviews.

He has thought several courses for graduate students including

- Digital watermarking (University of Trento, 20 hours course)
- Data hiding and multimedia forensics (University of Vigo, 20 hours course)
- Information theory and statistics (University of Siena, 16 hours course)

He has been the advisor of about 60 undergraduate students, and 10 PhD students. He is currently the advisor of 3 PhD students.

He is a member of the PhD board of the doctorate school in Information Engineering and Science of the University of Siena. He has been often appointed member of national and international PhD evaluation committees.

He organized the first and sixth editions of the IEEE SPS Italy Chapter Summer School on Signal Processing. The school usually attracts from 30 to 50 students every year.

## **Scientific activity**

Mauro Barni graduated in electronic engineering at the University of Florence in 1991. He received the PhD in Informatics and Telecommunications in October 1995. He has carried out his research activity for more than 20 years, first at the Department of Electronics and Telecommunication of the University of Florence, then at the Department of Information Engineering and Mathematics of the University of Siena where he works as full Professor. His activity focuses on digital image processing and information security, with particular reference to the application of image processing techniques to copyright protection (digital watermarking) and authentication of multimedia (multimedia forensics). He has been studying the possibility of processing signals that has been previously encrypted without decrypting them (signal processing in the encrypted domain – s.p.e.d.). Lately he has been working on theoretical and practical aspects of adversarial signal processing.

He is author/co-author of about 300 papers published in international journals and conference proceedings, he holds four patents in the field of digital watermarking and one patent dealing with anticounterfeiting technology. His papers on digital watermarking have significantly contributed to the development of such a theory in the last decade as it is demonstrated by the large number of citations some of these papers have received. The overall citation record of M. Barni amounts to an h-number of 52 according to Scholar Google search engine. He is co-author of the book “Watermarking Systems Engineering: Enabling Digital Assets Security and other Applications”, published by Dekker Inc. in February 2004. He is editor of the book “Document and Image Compression” published by CRC-Press in 2006.

He has been the chairman of the IEEE Multimedia Signal Processing Workshop held in Siena in 2004, and the chairman of the IV edition of the International Workshop on Digital Watermarking. He was the technical program co-chair of ICASSP 2014 and the technical program chairman of the 2005 edition of the Information Hiding Workshop, the VIII edition of the International Workshop on Digital Watermarking and the V edition of the IEEE Workshop on Information Forensics and Security (WIFS 2013). In 2008, he was the recipient of the IEEE Signal Processing Magazine best column award. In 2010 he was awarded the IEEE Transactions on Geoscience and Remote Sensing best paper award. He was the recipient of the Individual Technical Achievement Award of EURASIP EURASIP for 2016.

He was the Editor in chief of the IEEE Transactions on Information Forensics and Security from 2015 to 2017. He was the founding editor in chief of the EURASIP Journal on Information Security. He has been a member of the editorial board of several journals including, IEEE Signal Processing Magazine, IEEE Trans. on Circuits and system for Video Technology, IEEE Transactions on Multimedia, IEEE Signal Processing Letters, the Eurasip Journal of Applied Signal Processing and the IET Proceedings on Information Security.

From 2010 to 2011, Prof. Barni has been the chairman of the IEEE Information Forensic and Security Technical Committee (IFS-TC) of the IEEE Signal Processing Society. He has been a member of the IEEE Multimedia Signal Processing technical committee and of the conference board of the IEEE Signal Processing Society. Mauro Barni is a fellow member of the IEEE and senior member of EURASIP. He was appointed distinguished lecturer by the IEEE Signal Processing Society for the years 2013-2014.

## **Awards**

He was the co-author with a graduate student of his of the paper “A structural method for quality evaluation of desynchronization attacks in image watermarking”, that received the best student paper award at the 2008 International Workshop on Multimedia Signal Processing.

He was the recipient of the IEEE Signal Processing Society 2009 Best Paper Award (columns and forum section) for the forum: “What is the future for watermarking ? Part I and II”, IEEE Signal Processing Magazine, vol. 20, no.5-6, September-November 2003.

He is the recipient of the Transactions Paper Award (2011) of the IEEE Geoscience and Remote Sensing Society 2011, for the paper: *A. Abrardo, M. Barni, E. Magli, and F. Nencini, “Error-Resilient and Low-Complexity Onboard Lossless Compression of Hyperspectral Images by Means of Distributed Source Coding”, IEEE Trans. on Geoscience and Remote Sensing Society, vol. 48, no. 4, April 2010, pp. 1892-1904.*

He was the co-author with a graduate student of his of the paper “Source distinguishability under corrupted training”, that received the best student paper award at the 2014 International Workshop on Information Forensics and Security.

He is co-author of the paper “Detection games with a fully active attacker”, that received the best paper award at the 2015 International Workshop on Information Forensics and Security.

He was the recipient of the Individual technical achievement award of EURASIP for 2016

He is co-author of the paper “An overview on video forensics”, published in the APSIPA Transactions on Signal and Information Processing, that received the “Sadaoki Furui Prize Paper Award” in 2016.

He is co-author of the paper “A Message Passing Approach for Decision Fusion of Hidden-Markov observations in the presence of Synchronized Attacks in Sensor Networks”, that received the best paper award at MMEDIA 2017, Ninth International Conferences on Advances in Multimedia.

### **Conference organization**

He was the chairman of the IEEE Multimedia Signal Processing Workshop held in Siena in 2004.

He was the chairman of the IV edition of the International Workshop on Digital Watermarking (IWDW 2005, Siena, September 15-17, 2005).

He was the technical program co-chair of the workshops: 7th International Workshop on Information Hiding (IH05), Barcelona, June 2005; International Workshop on Digital Watermarking (IWDW09), Surrey, UK, August 2009; International Workshop on Digital Watermarking (IWDW10), Seoul, Korea, September 2010; International Workshop on Information Forensics and Security, Guangzhou, China, November 2013.

He was the technical program co-chair of ICASSP 2014, IEEE International Conference on Acoustic Signal and Speech Processing, held in Florence in May 2014.

He is routinely member of the Technical Program Committee of several conferences and workshops including: ICASSP, ICIP, MMSP, WIFS, ICME, EUSIPCO, IWDW, ACM Multimedia and Security workshop, SPIE Security, Steganography and Watermarking of Multimedia Contents, SPIE Media and Forensics Security.

### **Editorial activity**

He was the founding editor in chief of the EURASIP Journal on Information Security.

He served as Editor in Chief of the IEEE Transactions on Information Forensics and Security from 2015 to 2017.

He has served as associate editor of the IEEE Trans. on Circuits and system for Video Technology, the IEEE Transactions on Information Forensics and Security, the IEEE Signal

Processing Letters, the IEEE Transactions on Multimedia, the Eurasip Journal of Applied Signal Processing and the IET Proceedings on Information Security. He has been in the editorial board of the IEEE Signal Processing Magazine.

He was the guest editor of several special issues including: a special issue on Information Theoretic Issues in Digital Watermarking, Signal Processing, June 2001; a special issue on Emerging Applications of Multimedia Data Hiding, EURASIP Journal of Applied Signal Processing, February 2002; a special issue on Steganography and Digital Watermarking, IET Proceedings of Information Security, September 2006; a special issue of the IEEE Signal Processing Magazine on “Signal Processing Applications in the Encrypted Domain”, March 2013.

### **Coordination of Research Projects**

Mauro Barni coordinated several Italian and European projects mostly on multimedia security. The amount of funds gained in the last 5 years is larger than 1MEuro. The most important R&D projects he took part in recently include the following:

- Principal investigator of the research unit of Siena, for the project “MEDIFOR: Media Forensics Integrity Analytics”, funded by DARPA (Defense Advanced Research Projects Agency – USA), for the years 2016-2020. (400.000 USD)
- Principal investigator of the research unit of CNIT (Siena and Florence) of the Project MAVEN (Management and Authenticity Verification of multimedia contENts), funded by the European Commission (7PF, under program *Research for the Benefit of SME*) for the period 2013 - 2015. (310 KEuro)
- Principal investigator of the research unit of CNIT (Siena and Florence) of the European project REWIND (Reverse Engineering of Audio Visual Data), funded by the European Commission (7PF under the FET - Future and Emerging Technologies – program), for the period 2011 - 2014. (315 KEuro)
- Principal investigator of the research unit of Siena of the project: “*Hyperspectral passive satellite imaging via compressive sensing (HPSI-CS)*” funded by ESA (European Space Agency) for the period 2012 - 2013 (31 KEuro).
- Principal investigator of the research project: “AMULET: A multi-clue approach to image forensics”, funded by the European Office of Aerospace Research and Development (USA), under grant no. FA8655-12-1-2138, for the period October 2012 – December 2015 (166000 USD)
- Principal investigator of the research unit of Siena of the EC project: “Living Knowledge: Facts, Opinions and Bias in Time” funded by EC (under FET program) from 2008-2011 (budget 300K);
- Principal investigator of the research unit of Siena of the ESA project “SATSAMP – Next-generation satellite imaging via compressive sampling”; funded by ESA for 2010.
- Coordinator of the project: “Priv-ware: privacy aware processing of encrypted signals for treating sensitive information”; funded by the Italian Ministry of Research and Education from 2008 to 2010. (100 KEuro)
- Coordinator of Project “SPEED: Signal Processing in the EncryptEd Domain”; funded by

EC (under FET program) from 2006 to 2009 1/12/2006-30/11/2009 (budget = 1.6 MEuro).

- Coordinator of the Italy-Israel project “Digital watermarking of still images in the presence of de-synchronization attacks: theoretical analysis and development of practical algorithms”; funded by the Italian ministry from 2006 to 2009 (budget 330Keuro)
- Principal Investigator of the research unit of Siena of the Project ESA-ESTEC 20035/06/NL/LvH, “Distributed image coding for remote sensing applications”; funded under ESA Innovation Triangle Initiative scheme in 2006-2007.
- Principal Investigator of the research unit of Siena of the Project: ESA-ESTEC, “PILL – parallel implementation of lossless hyperspectral image compression”; funded under ESA Innovation Triangle Initiative scheme in 2008.
- Principal Investigator of the research unit of CNIT (Italian Inter-University Consortium for Telecommunications) of the European Network of Excellence: ECRYPT: European Network of Excellence in Cryptology; funded within the Information Societies Technology (IST) Programme of the European Commission's Sixth Framework Program from 2004 to 2008.

## Complete list of publications

### B. Journal publications

- B.1 F.Argenti, M.Barni, V.Cappellini, A.Mecocci: "A vector median deblurring filter for color image restoration"; *Electronic Letters*, Vol.27. No.21, pp. 1899-1900, October 1991.
- B.2 M.Barni, V.Cappellini, A.Mecocci: "Elaborazione numerica delle immagini a colori."; *Alta Frequenza*; vol.IV, n°2, pp. 67-76, Marzo-Aprile 1992.
- B.3 F.Argenti, M.Barni, G.Benelli, V.Cappellini, A.Mecocci, "Broadband network applications in the fine arts world", *Science and Technology for Cultural Heritage, Journal of the "Comitato Nazionale per la Scienza e la Tecnologia dei Beni Culturali"*, CNR, 1, pp. 97-100, 1992.
- B.4 D.Baldini, M.Barni, G.Benelli, A.Foggi, A.Mecocci, "A new star constellation matching algorithm for satellite attitude determination", *ESA Journal*, vol.17, n.2, pp. 185-198, 1993.
- B.5 M.Barni, V.Cappellini, M.Mattioli, A.Mecocci, S.Zipoli, "Scene inspection in complex heterogeneous environments by means of knowledge-maps", *Information Services and Use*, vol.13, n.3, pp. 247-277, 1993.
- B.6 M.Barni, V.Cappellini, A.Mecocci: "Fast vector median filter based on euclidean norm approximation", *IEEE Signal Processing Letters*, vol.1, n.6, June 1994.
- B.7 L.Alparone, M.Barni: "Dual-channel iterative even-median filter", *Pattern Recognition Letters*, 15, pp. 949-956, September 1994.
- B.8 D.Baldini, M.Barni, G.Benelli, A.Foggi, A.Mecocci, "Star-configuration searching for satellite attitude computation", *IEEE Transactions on Aerospace and Electronic Systems*, vol.31, n.2, pp. 768-777, April 1995.
- B.9 M.Barni, V.Cappellini, A.Mecocci, «Comments on 'A possibilistic approach to clustering'», *IEEE Trans. on Fuzzy Systems*, vol.4, no.3, pp.393-396, August 1996.
- B.10 M.Barni, V.Cappellini, A.Mecocci, «Colour-based detection of defects on chicken meat», *Image and Vision Computing*, vol. 15, no. 7, pp. 549-556, July 1997.
- B.11 M.Barni, «A fast algorithm for 1-norm vector median filtering», *IEEE Transactions on Image Processing*, vol. 6, no. 10, pp. 1452-1455, October 1997.
- B.12 M.Barni, F.Bartolini, V.Cappellini, A.Piva, «A DCT-domain system for robust image watermarking », *Signal Processing*, vol. 66, no. 3, pp. 357-372, May 1998.
- B.13 M.Barni, F.Bartolini, V.Cappellini, A.Piva, «Copyright protection of digital images by embedded unperceivable marks», *Image and Vision Computing*, vol. 16, no. 12-13, pp. 897-906, August 1998.
- B.14 M.Barni, V.Cappellini, «On the computational complexity of multivariate median filters"; *Signal Processing*, vol. 71, no. 1, pp. 45-54, November 1998.
- B.15 L.Alparone, M.Barni, F.Bartolini, R.Caldelli, «Regularization of optic flow estimates by means of weighted vector median filtering», *IEEE Transactions on Image Processing*, vol. 8, no. 10, pp. 1462-1467, October 1999.
- B.16 M.Barni, R.Gualtieri, «A new possibilistic clustering algorithm for line detection in real world imagery», *Pattern Recognition*, vol. 32, no. 11, pp. 1897-1909, November 1999.
- B.17 M.Barni, F.Bartolini, V.Cappellini, "Image processing for virtual restoration of art-works", *IEEE Multimedia Magazine*, vol. 7, no. 2, pp. 34-37, April-June 2000 (invited paper).
- B.18 M.Barni, F.Bartolini, A.De Rosa, A.Piva, "Capacity of full frame DCT image watermarks", *IEEE Transactions on Image Processing*, vol. 9, no. 8, pp. 1450-1455, August 2000.

- B.19 M.Barni, F.Bartolini, F.Butì, V.Cappellini, «A quasi-Euclidean norm to speed up vector median filtering», *IEEE Transactions on Image Processing*, vol. 9, no. 10, pp. 1704-1709, October 2000.
- B.20 L.Alparone, M.Barni, F.Bartolini, L.Santurri, “An improved H.263 video coder relying on weighted median filtering of motion vectors”, *IEEE Trans. on Circuits and Systems for Video Technology*, vol. 11, no. 2, pp. 235-240, February 2001.
- B.21 M. Barni, F. Bartolini, A. De Rosa, A. Piva, “A new decoder for the optimum recovery of nonadditive watermarks”, *IEEE Transactions on Image Processing*, vol. 10, no. 5, pp. 755-766, May 2001.
- B.22 M.Barni, F.Bartolini, A.Piva, “Improved wavelet-based watermarking through pixel-wise masking”, *IEEE Transactions on Image Processing*, vol. 10, no. 5, pp. 783-791, May 2001.
- B.23 R.Baitello, M.Barni, F.Bartolini, V.Cappellini, “From watermark detection to watermark decoding: a PPM approach”, *Signal Processing*, vol. 81, June 2001, pp. 1261-1271.
- B.24 A.Abrardo, M.Barni, A.Garzelli, D.Marotta, “Error resilient transmission of H.263 video for slow-fading mobile communications”, *ETT – European Transactions on Telecommunications*, vol.12, no. 3. May/June 2001, pp. 181-188.
- B.25 M. Barni, C. I. Podilchuk, F. Bartolini, E. J. Delp, “Watermark embedding: hiding a signal within a cover image”, *IEEE Communications Magazine*, vol.39, no.8, August 2001, pp. 102-108.
- B.26 F. Bartolini, A. Tefas, M. Barni, I. Pitas, “Image authentication techniques for surveillance applications”, *Proceedings of the IEEE* vol. 89, no. 10, October 2001, pp. 1403-1418 (invited paper).
- B.27 A.Abrardo, M.Barni, A.Garzelli, “Improved group-of-block synchronization for robust transmission of H.263 video over slow-fading channels”, *Journal of Electronic Imaging*, 10 (4), pp. 1016-1024, October 2001.
- B.28 M.Barni, F.Bartolini, L.Boccardi, A. De Rosa, A. Piva, “Color image watermarking in the Karhunen-Loeve transform domain”, *Journal of Electronic Imaging*, Volume 11, no. 1, pp. 87-95, January 2002.
- B.29 M.Barni, F.Bartolini, A.Piva, F.Salucco, “Robust watermarking of cartographic images”, *EURASIP Journal on Applied Signal Processing*, vol. 2002, no.2 pp. 197-208, February 2002.
- B.30 M.Barni, F.Bartolini, A.Piva, “Multichannel watermarking of color images”, *IEEE Trans. on Circuits and Systems for Video Technology*, vol. 12, no. 3, pp. 142-156, March 2002.
- B.31 A. Piva, M. Barni, F. Bartolini, “Managing Copyright in Open Networks”, *IEEE Internet Computing*, Vol. 6, no. 3, May/June 2002, pp. 18-26.
- B.32 M.Barni, F.Bartolini, E.Magli, G.Olmo, “Watermarking techniques for electronic delivery of remote sensing images”, *Journal of Optical Engineering*, vol. 41, no. 9, pp. 2111-2119, 2002. (invited paper).
- B.33 M.Barni, F.Bartolini, R. Caldelli, A. Piva, “Object watermarking for MPEG4 video protection”, *Telecommunications Review*, vol. 12, no. 5, 2002, pp. 695-710.
- B.34 M.Barni, F.Bartolini, A.De Rosa, A. Piva, “Optimum decoding and detection of multiplicative watermarks”, *IEEE Trans. on Signal Processing*, vol. 51, no. 4, April 2003, pp. 1118-1123.
- B.35 V. Cappellini, M. Barni, M. Corsini, A. De Rosa, A. Piva, “ArtShop: an art-oriented image-processing tool for cultural heritage applications”, *J. Visual. Comput. Animat.* 2003; 14, pp. 1-10.
- B.36 M.Barni, F.Bartolini, T.Furon, “A general framework for robust watermarking

- security” *Signal Processing*, vol. 83, no. 10, pp. 2069-2084, October 2003 (invited paper).
- B.37 M.Barni, F. Bartolini, “Data hiding for fighting piracy” *IEEE Signal Processing Magazine*, vol. 21, no. 2, March 2004, pp. 28-39.
- B.38 F. Bartolini, M. Barni, A. Piva, “Performance analysis of ST-DM watermarking in presence of non-additive attacks”, *IEEE Trans. on Signal Processing*, vol. 52, no. 10, October 2004, pp. 2965-2974.
- B.39 M.Barni, F.Bartolini, N.Checcacci, “Watermarking of MPEG-4 video objects”, *IEEE Transactions on Multimedia*, vol. 7, no. 1, February 2005, pp. 23-32.
- B.40 A. Abrardo, M. Barni, “Informed watermarking by means of orthogonal and quasi-orthogonal dirty paper coding”, *IEEE Trans. on Signal Processing*, vol. 53, no.2, February 2005, pp. 824-833.
- B.41 M. Barni, “Effectiveness of exhaustive search ant template matching against watermark de-synchronization”, *IEEE Signal Processing Letters*, vol. 12, no. 2, February 2005, pp. 158-161.
- B.42 M. Barni, A. Pelagotti, A. Piva, “Image processing for the analysis and conservation of paintings: opportunities and challenges”, *IEEE Signal Processing Magazine*, vol. 22, no. 5, pp. 141-144, September 2005
- B.43 A. Piva, M. Barni, F. Bartolini, A. De Rosa, “Data hiding technologies for digital radiographies”, *IEE Proc. on Vision, Image & Signal Processing*, vol. 152, no. 5, pp. 604-610, October 2005.
- B.44 F. Perez-Gonzalez, C. Mosquera, M. Barni, A. Abrardo, “Rational dither modulation: a high-rate data-hiding method invariant to gain attacks, *IEEE Trans. on Signal Processing*, vol. 53, no. 10, Part 2, pp. 3960-3975, October 2005.
- B.45 A. Abrardo, M. Barni, F. Perez-Gonzalez, C. Mosquera, “Improving the Performance of RDM Watermarking by Means of Trellis Coded Quantization” *IEE Proceedings on Information Security*, vol. 153, no. 3, September 2006, pp. 107-114.
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- B.48 E. Magli, M. Barni, A. Abrardo, M. Grangetto, “Distributed Source Coding Techniques for Lossless Compression of Hyperspectral Images” *EURASIP Journal on Advances in Signal Processing*, vol. 2007, Article ID 45493, 13 pages, 2007
- B.49 D. Prattichizzo, M. Barni, G. Menegaz, A. Formaglio, H. Z. Tan, S. Choi, “Perceptual issues in haptic digital watermarking” *IEEE Multimedia Magazine*, vol. 14, no.3, July/September 2007, pp. 84-91.
- B.50 Z. Erkin, A. Piva, S. Katzenbeisser, R. L. Lagendijk, J. Shokrollahi, G. Neven, and M. Barni, “Protection and Retrieval of Encrypted Multimedia Content: When Cryptography Meets Signal Processing,” *EURASIP Journal on Information Security*, vol. 2007, Article ID 78943, 20 pages, 2007. doi:10.1155/2007/78943
- B.51 A. Piva and M. Barni, “Design and Analysis of the First BOWS Contest,” *EURASIP Journal on Information Security*, vol. 2007, Article ID 98684, 8 pages, 2007. doi:10.1155/2007/98684
- B.52 C. Orlandi, A. Piva, and M. Barni, “Oblivious Neural Network Computing via Homomorphic Encryption,” *EURASIP Journal on Information Security*, vol. 2007, Article ID 37343, 11 pages, 2007. doi:10.1155/2007/37343
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- B.55 G. Cancelli, M. Barni, “MPSteg-color: data hiding through redundant basis decomposition”, *IEEE Transactions on Information Forensics and Security*, vol. 4 no. 3, September 2009, pp. 346-358. **IF = 2.34**
- B.56 T. Bianchi, A. Piva, M. Barni, “Encrypted Domain DCT based on Homomorphic Cryptosystems”, *EURASIP Journal on Information Security*, vol. 2009, Article ID 716357, 12 pages, 2009, doi:10.1155/2009/716357.
- B.57 T. Bianchi, A. Piva, M. Barni, “Composite Signal Representation for Fast and Storage-Efficient Processing of Encrypted Signals”, *IEEE Transactions on Information Forensics and Security*, vol. 5, no. 1, March 2010, pp. 180-187. **IF = 1.83**
- B.58 A. D’Angelo, L. Zhaoping, M. Barni, “A full reference quality metric for geometrically distorted images”, *IEEE Transactions on Image Processing*, vol. 19, no. 4, April 2010, pp. 867-881. **IF = 2.92**
- B.59 A. Abrardo, M. Barni, E. Magli, F. Nencini, “Error-resilient and low-complexity onboard lossless compression of hyperspectral images by means of distributed source coding”, *IEEE Transactions on Geoscience and Remote Sensing*, vol. 48, no. 4, Part:1, April 2010, pp. 1892-1904. **IF = 2.49**
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- B.61 K. Kim, M. Barni, H. Z. Tan, “Roughness-Adaptive 3D Watermarking Based on Masking Effect of Surface Roughness”, *IEEE Transactions on Information Forensics and Security*, vol. 5, no. 4, December 2010, pp. 721-733. **IF = 1.83**
- B.62 M. Barni, P. Failla, R. Lazzeretti, A-R. Sadeghi, T. Schneider, “Privacy-Preserving ECG Classification with Branching Programs and Neural Networks”, *IEEE Trans. on Information Forensics and Security*, vol. 6, no. 2, June 2011, pp. 452-468. **IF = 1.34**
- B.63 K. Kim, M. Barni, D. Prattichizzo, Hong Z. Tan, “Visuohaptic Discrimination of 3D Gross Shape”, *Seeing and Perceiving*, 25 (2012), pp. 351-364, DOI:10.1163/187847612X629937. **IF = 0.98**
- B.64 S. Milani, M. Fontani, P. Bestagini, M. Barni, A. Piva, M. Tagliasacchi, S. Tubaro, “An overview on video forensics”, *APSIPA Transactions on Signal and Information Processing*, vol. 1, August 2012, doi:10.1017/ATSIP.2012.2.
- B.65 M. Barni, A. Costanzo “A Fuzzy Approach to Deal with Uncertainty in Image Forensics”, *Signal Processing: Image Communications*, vol. 27, no. 9, pp. 998-1010, October 2012.
- B.66 G. Coluccia, S. Kamdem Kuiteng, A. Abrardo, M. Barni, E. Magli, “Progressive compressed sensing and reconstruction of multidimensional signals using hybrid transform/prediction sparsity model”, *IEEE Journal on Emerging and Selected Topics in Circuits and Systems*, vol. PP, no. 99, pp.1-13, doi: 10.1109/JETCAS.2012.2214891, 2012.
- B.67 R. (Inald) L. Lagendijk, Z. Erkin, M. Barni, “Encrypted signal processing for privacy protection: conveying the utility of homomorphic encryption and multiparty computation”, *IEEE Signal Processing Magazine*, vol. 30, no. 1, pp. 82-105, January 2013, DOI: 10.1109/MSP.2012.2219653. (**IF = 3.34 – 2012**)
- B.68 M. Barni, B. Tondi, “The Source Identification Game: an Information-Theoretic Perspective”, *IEEE Transactions on Information Forensics and Security*, vol. 8, no. 3, pp. 450-463, March 2013. (**IF = 1.89 – 2012**)

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- B.70 I. Amerini, M. Barni, R. Caldelli, A. Costanzo, "Counter-Forensics of SIFT-based Copy-Move Detection by Means of Keypoint Classification", *EURASIP Journal on Image and Video Processing*, vol. 2013, no. 1, pp. 1-18. (IF = 0.57 – 2012)
- B.71 M. Barni, M. Fontani, B. Tondi, "A Universal Attack Against Histogram-Based Image Forensics", *International Journal on Digital Crime and Forensics*, vol. 5, no. 3, pp. 1-18, 2013.
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