

Associate Professor Radu Ovidiu Preda

Competence areas: Digital Image Processing, Digital Video Processing, Multimedia Security, Digital Watermarking, Multimedia Forensics

Scientific activity: First author of 3 scientific books; main author of one and joint author of 3 laboratory books; author of **13 papers published in journals** (7 indexed by ISI Web of Science, 3 indexed by Scopus and 3 papers in national journals), 8 of which as main author; author of **18 conference papers** (9 papers indexed by ISI Web of Science and 9 papers indexed by other international databases). **127 citations** according to ISI Web of Science and **Hirsch index of 5**. Member in 7 research teams for national and international projects, **2 of them as project manager**.

Representative articles associated to the project's theme:

1. **R. O. Preda**, D. N. Vizireanu, *Watermarking-based image authentication robust to JPEG compression*, Electronics Letters, Vol. 51, Issue 23, pp. 1873-1875, 2015, DOI: 10.1049/el.2015.2522. (Web of Science Impact Factor: 0,930)
2. **R. O. Preda**, *Semi-fragile watermarking for image authentication with sensitive tamper localization in the wavelet domain*, Measurement, Vol. 46, Issue 1, pp. 367-373, 2010, DOI: 10.1016/j.measurement.2012.07.010. (Web of Science Impact Factor: 1,484)
3. **R. O. Preda**, N. Vizireanu, *Robust wavelet-based video watermarking scheme for copyright protection using the human visual system*, Journal of Electronic Imaging 20, 013022, 2011, DOI: 10.1117/1.3558734. (Web of Science Impact Factor: 0,672)
4. **R. O. Preda**, N. Vizireanu, *Quantization-based video watermarking in the wavelet domain with spatial and temporal redundancy*, International Journal of Electronics, Vol. 98, Issue 3, pp. 393-405, 2011, DOI: 10.1080/00207217.2010.547810. (Web of Science Impact Factor: 0,459)
5. **R. O. Preda**, D. N. Vizireanu, *A Robust Digital Watermarking Scheme for Video Copyright Protection in the Wavelet Domain*, Measurement, Vol. 43, Issue 10, pp. 1720-1726, 2010, DOI: 10.1016/j.measurement.2010.07.009. (Web of Science Impact Factor: 1,484)
6. **R. O. Preda**, I. Marcu, A. Ciobanu, *Image authentication and recovery using wavelet-based dual watermarking*, Scientific Bulletin of the University Politehnica of Bucharest, Series C: Electrical Engineering and Computer Science, Vol. 77, Issue 4, pp. 119-130, 2015.
7. **R. O. Preda**, D. N. Vizireanu, *New Robust Watermarking Scheme For Video Copyright Protection In The Spatial Domain*, Scientific Bulletin of the „Politehnica” University of Bucharest, series C, vol. 73, Issue 1, pp. 93-104, 2011.
8. I. Pirnog, **R. O. Preda**, C. Oprea, C. Paleologu, *Automatic Lesion Segmentation for Melanoma Diagnostics in Macroscopic Images*, 23rd European Signal Processing Conference (EUSIPCO 2015), pp. 659-663, Nice, France, 31 August – 4 September, 2015, DOI: 10.1109/EUSIPCO.2015.7362465.
9. E. Achimescu, **R. O. Preda**, I. Pirnog, D. N. Vizireanu, *Multiple Point Android Digital Image Authentication*, 2015 International Symposium on Signals, Circuits and Systems (ISSCS 2015), pp. 1-4, ISBN: 978-1-4673-7487-3, Iași, Romania, 9-10 July, 2015, DOI: 10.1109/ISSCS.2015.7203945.
10. **R. O. Preda**, *Self-recovery of unauthentic images using a new digital watermarking approach in the wavelet domain*, Proceedings of the 2014 10th International Conference on Communications (COMM), pp. 169-172, Bucharest, Romania, 29-31 May, 2014, DOI: 10.1109/ICComm.2014.6866744.
11. **R. O. Preda**, N. Vizireanu, *Comparison of “Spread-Quantization” Video Watermarking Techniques for Copyright Protection in the Spatial and Transform Domain*, Watermarking - Volume 1, dr. Mithun Das Gupta (Ed.), pp. 159-182, ISBN: 978-953-51-0618-0, InTech, 2012, DOI: 10.5772/37998.

Research grants as project leader:

1. *Contributions to multimedia content authentication for forensics applications using digital watermarking techniques*, research project for young research teams, funding agency: Romanian National Authority for Scientific Research (CNCS – UEFISCDI), project number PN-II-RU-TE-2011-3-0261, total amount: 167.442 EUR, 2011-2014;
2. *Contributions to the development, optimization and implementation of watermarking algorithms for images and video using the Wavelet Transform*, research project for young PhD students, funding agency: The National University Research Council (CNCSIS), contract number GR 139/02.06.2006, total amount: 10.285 EUR, 2006-2008.