

## 2013-2015 Publications

Andrea Garzelli

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### Books

- [M1] A. Aiazzi, L. Alparone, S. Baronti, A. Garzelli, “Remote Sensing Image Fusion”, CRC Press, Boca Raton, FL (USA), ISBN 9781466587496, March 2015.

### Journal Papers

- [J1] B. Aiazzi, L. Alparone, S. Baronti, A. Garzelli, C. Zoppetti, “Non-parametric change detection in multitemporal SAR images based on mean-shift clustering”, *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 51, No. 4, pp. 2022–2031, April 2013.
- [J2] S. Pettinato, E. Santi, S. Paloscia, B. Aiazzi, S. Baronti, A. Garzelli, “Snow cover area identification by using a change detection method applied to COSMO-SkyMed images”, *SPIE Journal of Applied Remote Sensing*, Vol.8, No.1, pp. 084684:1–14, August 2014.
- [J3] A. Garzelli, “Pansharpening of multispectral images based on nonlocal parameter optimization”, *IEEE Transactions on Geoscience and Remote Sensing*, Vol.53, No.4, pp. 2096–2107, April 2015.
- [J4] G. Vivone, L. Alparone, J. Chanussot, M. Dalla Mura, A. Garzelli, G. Licciardi, R. Restaino, L. Wald, “A critical comparison among pansharpening algorithms”, *IEEE Transactions on Geoscience and Remote Sensing*, Vol.53, No.5, pp. 2565–2586, May 2015.
- [J5] P. Andreini, S. Bonechi, M. Bianchini, A. Garzelli, A. Mecocci, “Automatic Image Classification for the Urinoculture Screening”, *Journal of Computers in Biology and Medicine*, DOI 10.1016/j.compbimed.2015.12.025, Elsevier.
- [J6] R. Annunziata, A. Garzelli, L. Ballerini, A. Mecocci, E. Trucco, “Leveraging Multiscale Hessian-based Enhancement with a Novel Exudate Inpainting Technique for Retinal Vessel Segmentation”, *IEEE Journal of Biomedical and Health Informatics*, in press, DOI 10.1109/JBHI.2015.2440091.
- [J7] L. Alparone, S. Baronti, B. Aiazzi, A. Garzelli, “Spatial Methods for Multispectral Pansharpening: Multiresolution Analysis Demystified”, *IEEE Transactions on Geoscience and Remote Sensing*, in press.

### Conference papers

- [C1] R. Annunziata, A. Garzelli, and A. Mecocci, “A novel unsupervised approach for improved automatic retinal vessels segmentation through exudates estimation, eigenvalue analysis and regularization”, in *Proc. ARVO Annual Meeting*, (Seattle, USA), May 05-09 2013.

- [C2] A. Garzelli, C. Zoppetti, “Detail-preserving change detection from amplitude SAR images,” in Proc. IEEE IGARSS’13, (Melbourne, Australia), July 21-26, 2013, pp 3002–3005, 2013.
- [C3] F. Cuccoli, L. Facheris, A. Garzelli, and C. Zoppetti. “Ndsa measurements between two counter rotating LEO satellites: Performance evaluation at global scale in Ku, K and M bands”, Proc. IEEE International Geoscience and Remote Sensing Symposium, Melbourne, Australia, July 21-26, 2013, pp. 3371-3374.
- [C4] S. Pettinato, E. Santi, S. Paloscia, B. Aiazzi, and A. Garzelli, “Characterization of snow cover areas by change detection applied to COSMO-SkyMed images,” in Proc. 34th PIERS, (Stockholm, Sweden), Aug 12-15, 2013, pp.531–535.
- [C5] B. Aiazzi, L. Alparone, S. Baronti, A. Garzelli, M. Selva, “Pansharpening of hyperspectral images: a critical analysis of requirements and assessment on simulated PRISMA data”, Proc. of SPIE Vol. 8892, SPIE Remote Sensing 2013, Dresden, Germany, Sept 23-26, 2013, pp.889203-1–10.
- [C6] A. Garzelli, “Efficient MMSE pansharpening based on non-local optimization”, IEEE International Geoscience and Remote Sensing Symposium - IGARSS’14, Quebec City, Canada, July 13-18, 2014. pp. 195–198.
- [C7] N. Roberto, A. Adirosi, L. Baldini, L. Facheris, F. Cuccoli, A. Lupidi, A. Garzelli, “Hydrometeor classification for X-band dual polarization radar on-board civil aircrafts”. Proc. IEEE IGARSS 2015, Milan, Italy, July 26-31, 2015, pp. 2319–2322.
- [C8] A. Garzelli, “Building height retrieval from WorldView-2 multi-angular images”, Proc. IEEE International Geoscience and Remote Sensing Symposium (IGARSS’15), (Milan, Italy, July 26-31, 2015), pp. 1163–1166.
- [C9] I. Pippi, S. Baronti, R. Carlà, D. Guzzi, C. Lastrì, V. Nardino, L. Santurri, M. Selva, L. Alparone, A. Garzelli, E. Lopinto, C. Ananasso, A. Barducci, “OPTIMA: Advanced methods for the analysis, integration and optimization of PRISMA mission products”, Proc. SPIE 9639, Sensors, Systems, and Next-Generation Satellites XIX, (SPIE Remote Sensing 2015, Toulouse, France, Sept 21-24, 2015), pp. 96391R.
- [C10] S. Pettinato, E. Santi, S. Paloscia, B. Aiazzi, S. Baronti, E. Palchetti, and A. Garzelli, “Large area robust identification of snow cover from multitemporal COSMO-SkyMed images,” in Proc. SPIE 9642, SAR Image Analysis, Modeling, and Techniques XV, (SPIE Remote Sensing 2015, Toulouse, France, September 21-24, 2015), pp. 964204.
- [C11] L. Alparone, A. Garzelli, and G. Vivone, “Are spectral or spatial methods better for pansharpening? an evaluation for four sample methods based on spatial modulation of pixel spectra”, Proc. SPIE 9643, Image and Signal Processing for Remote Sensing XXI, (SPIE Remote Sensing 2015, Toulouse, France, September 21-24, 2015), pp. 96430V.
- [C12] A. Garzelli and C. Zoppetti, “A fast and reliable change detection feature from bi-temporal amplitude SAR images”, Proc. SPIE 9643, Image and Signal Processing for Remote Sensing XXI, (SPIE Remote Sensing 2015, Toulouse, France, September 21-24, 2015), pp. 964311-1–9, 2015.