



2015 IEEE Geoscience and Remote Sensing Symposium • July 26–31, 2015 • Milan, Italy



Remote Sensing: Understanding the Earth !

afeWorld

IEEE

# IGARSS 2015

July 26-31, 2015 · Milan, Italy

# +IEEE

Copyright ©2015 by The Institute of Electrical and Electronics Engineers, Inc.

IEEE Catalog Number:  
CFP151GA-ART ISBN:  
978-1-4799-7929-5

## Proceedings

<http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=7303999>

**MOP-PG.8: IMAGE REGISTRATION ALGORITHM BASED ON POINT FEATURES OF  
..... 501**

**SUB-PIXEL**

*Zhiguo Zhang, Ye Zhang, Xuan Liu, Harbin Institute of Technology, China*

**MOP-PG.9: NOISE FILTERING OF REMOTELY SENSED IMAGES USING HYBRID  
..... 505**

**WAVELET AND CURVELET TRANSFORM APPROACH**

*Rizwan Ahmed Ansari, Krishna Mohan Buddhiraju, Indian Institute of Technology Bombay, India*

**MOP-PG.10: SEMANTIC RETRIEVAL FOR REMOTE SENSING IMAGES USING  
..... 509**

**ASSOCIATION RULES MINING**

*Jun Liu, Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, China; Shuguang Liu, Chongqing Institute*

*of Green and Intelligent Technology, Chinese Academy of Sciences, China*

**MOP-PH: HIGH PERFORMANCE COMPUTING, IMAGE QUALITY**

**MOP-PH.1: FAST PRINCIPAL COMPONENT ANALYSIS FOR HYPERSPECTRAL  
..... 513**

**IMAGING BASED ON CLOUD COMPUTING**

*Yonglong Li, Zebin Wu, Jie Wei, Nanjing University of Science and Technology, China; Antonio Plaza, University of*

*Extremadura, Spain; Jun Li, Sun Yat-sen University, China; Zihui Wei, Nanjing University of Science and Technology, China*

**MOP-PH.2: FAST BINARY CODING FOR SATELLITE IMAGE SCENE**

**CLASSIFICATION..... 517**

*Fan Hu, Zifeng Wang, Gui-Song Xia, Bin Luo, Liangpei Zhang, Wuhan University, China*

**MOP-PH.3: GPU IMPLEMENTATION OF A HYPERSPECTRAL CODED APERTURE  
..... 521**

**ALGORITHM FOR COMPRESSIVE SENSING**

*Sergio Bernabe, Gabriel Martin, Jose M.P. Nascimento, José M. Bioucas-Dias, Instituto de Telecomunicações, Portugal; Antonio*

*Plaza, Hyperspectral Computing Laboratory, Spain; Vitor Silva, Instituto de Telecomunicações, Portugal*

**MOP-PH.4: FPGA-BASED REMOTELY SENSED IMAGERY**

**DENOISING..... 525**

*Guoqing Zhou, Na Liu, Chenyang Li, Linjun Jiang, Yue Sun, Mingyan Li, Rongting Zhang, Tao Yue, Guilin University of*

*Technology, China*

**MOP-PH.5: OPTIMIZATION OF SELECTED REMOTE SENSING ALGORITHMS FOR**

**..... 529**

**EMBEDDED NVIDIA KEPLER GPU ARCHITECTURE**

*Lubomir Riha, VŠB-Technical University of Ostrava, Czech Republic; Jacqueline Le Moigne, NASA Goddard Space Flight*

*Center, United States; Tarek El-Ghazawi, The George Washington University, United States*

**MOP-PH.6: DIGITAL IMAGE BLURRING-DEBLURRING PROCESS FOR IMPROVED**

**..... 533**

**STORAGE AND TRANSMISSION**

*Gabriel Scarmana, University of Southern Queensland, Australia*

**MOP-PH.7: ACCELERATING SAR IMAGING USING VECTOR EXTENSION ON**

**..... 537**

**MULTICORE SIMD CPU**

*Guojun Li, Fan Zhang, College of Information Science & Technology, Beijing University of Chemical Technology, China;*

*Lixiang Ma, China Academy of Space Technology, China; Wei Hu, Wei Li, College of Information Science & Technology, Beijing*

*University of Chemical Technology, China*

**MOP-PH.8: INTERACTIVE FEATURE LEARNING FROM SAR IMAGE**

**PATCHES..... 541**

*Mohammadreza Babaei, Xuejie Yu, Daniel Merget, Technische Universität München, Germany; Amir Babaeian, University*

*of California, San Diego, United States; Gerhard Rigoll, Technische Universität München, Germany; Mihai Datcu, German*

*Aerospace Center (DLR), Germany*

**MOP-PH.9: RESEARCH ON RELATIONSHIP BETWEEN REMOTE SENSING IMAGE**

**..... 545**

**QUALITY AND PERFORMANCE OF INTEREST POINT DETECTION**

*Jicheng Wang, Yuanxin Ye, Li Shen, Zhipeng Li, Songbo Wu, Southwest Jiaotong University, China*