ALI MAHLOOJI FAR
Associate Professor

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Education

B.Sc., Electronic Engineering, University of Tehran, Tehran, Iran 1983-1987

M.Sc., Digital Electronic, Sharif University of Technology, Tehran, Iran 1988-1991

Ph.D., Biomedical Instrumentation, University of Manchester, Institute of Science and Technology, Manchester, UK, 1992-1997

Research Interests

Image and Signal Processing, Ultrasound Imaging, Optical Imaging,
 Biomedical Instrumentation

Taught Courses

Medical Imaging Systems
Ultrasound in Medicine
BioInstrumentation
Laser in Medicine

Selected Journal Papers

1)Double-Stage Delay Multiply and Sum Beamforming Algorithm: Application to Linear-Array Photoacoustic Imaging
M Mozaffarzadeh, A Mahloojifar, M Orooji, S Adabi, M Nasiriavanaki
IEEE Transactions on Biomedical Engineering 65 (1), 31-42,2018

2)Linear-array photoacoustic imaging using minimum variance-based delay multiply and sum adaptive beamforming algorithm
M Mozaffarzadeh, A Mahloojifar, M Orooji, K Kratkiewicz, S Adabi,.
Journal of Biomedical Optics 23, (2), 026002, 2018

3)Segmentation of breast ultrasound images based on active contours using neutrosophic theory
M Lotfollahi, M Gity, JY Ye, AM Far
Journal of Medical Ultrasonics 45 (2), 205-212,2018

4)Improving beamforming performance by phased synthetic aperture imaging in medical ultrasound
M Sadeghi, A Mahloojifar
Journal of Medical Ultrasonics 44 (1), 51-62,2017

5)Synthetic aperture ultrasound Fourier beamformation using virtual sources
E Moghimirad, CAV Hoyos, A Mahloojifar, BM Asl, JA Jensen
IEEE transactions on ultrasonics, ferroelectrics, and frequency control 63 (12),2018-30,2016

6)Computational complexity reduction of synthetic-aperture focus in ultrasound imaging using frequency-domain reconstruction
E Moghimirad, A Mahloojifar, B Mohammadzadeh Asl
Ultrasonic imaging 38 (3), 175-193, 2016

7)Weighted Capon beamformer combined with coded excitation in ultrasound imaging
SA Izadi, A Mahloojifar, BM Asl
Journal of Medical Ultrasonics 42 (4), 477-488, 2015

8)A low-complexity adaptive beamformer for ultrasound imaging using structured covariance matrix
BM Asl, A Mahloojifar
IEEE transactions on ultrasonics, ferroelectrics, and frequency control 59 (4),2012

9)Contrast enhancement and robustness improvement of adaptive ultrasound imaging using forward-backward minimum variance beamforming
BM Asl, A Mahloojifar
IEEE transactions on ultrasonics, ferroelectrics, and frequency control 58 (4),2011

10)Retinal image analysis using curvelet transform and multistructure elements morphology by reconstructi
MS Miri, A Mahloojifar
IEEE Transactions on Biomedical Engineering 58 (5), 1183-1192,2011

11)Eigenspace-based minimum variance beamforming applied to medical ultrasound imaging
BM Asl, A Mahloojifar
IEEE transactions on ultrasonics, ferroelectrics, and frequency control 57 (11),2010

12)Resolution improvement of scanning acoustic microscopy using sparse signal representation
R Mohammadi, A Mahloojifar
Journal of Signal Processing Systems 54 (1-3), 15-24,2009

13)A transformation based method to design ultrasound array
SM Sakhaei, A Mahloojifar, H Ghassemian
Ultrasonics 49 (2), 179-184, 2009

14)Minimum variance beamforming combined with adaptive coherence weighting applied to medical ultrasound imaging
BM Asl, A Mahloojifar
IEEE transactions on ultrasonics, ferroelectrics, and frequency control 56 (9),2009

15)A transformation based method to design ultrasound array
SM Sakhaei, A Mahloojifar, H Ghassemian
Ultrasonics 49 (2), 179-184,2009

16)Optimization of point spread function in ultrasound arrays
M Sakhaei, A Mahloojifar, A Malek
Ultrasonics 44 (2), 159-165,2006