

Publication list of Dr. Fereidoon Behnia

Selected journal papers

- 1 Ghasem Sobhani, Amir Mansour Pezeshk, Fereidoon Behnia, and Mohammad Sadeghi” Joint Detection of Carrier Frequency and Direction of Arrival of Wideband Signals using Bandpass Sampling and Interferometric Direction Finding”, **AEUE - International Journal of Electronics and Communications**, **accepted**
- 2 Seyed Amir Reza Kazemi, Rouhollah Amiri, and Fereidoon Behnia, ” Data Association for Multi-Target Elliptic Localization in Distributed MIMO Radars”, *IEEE communication letters*, Accepted
- 3 Mohammad Sadeghi, Fereidoon Behnia, and Rouhollah Amiri,”Optimal Geometry Analysis for Elliptic Localization in Multistatic Radars with Two Transmitters”, *IEEE Transactions on Aerospace and Electronic Systems*, Accepted
- 4 Seyed Amir Reza Kazemi, Rouhollah Amiri, and Fereidoon Behnia, “Efficient Closed-Form Solution for 3-D Hybrid Localization in Multistatic Radars”, *IEEE Transactions on Aerospace and Electronic Systems*, Accepted
- 5 Mohammad Sadeghi, Fereidoon Behnia, and Rouhollah Amiri, “ Maritime Target Localization from Bistatic Range Measurements in Space-Based Passive Radar”, *IEEE Transactions on Instrumentation and Measurement*, volume 70
- 6 Mohammad Sadeghi, Fereidoon Behnia, Rouhollah Amiri,” Optimal Geometry Analysis for TDOA-based Localization Under Communication Constraints”, *IEEE Transactions on Aerospace and Electronic Systems*, Accepted
- 7 Mohammad Sadeghi, Fereidoon Behnia, Rouhollah Amiri, and Alfonso Farina,”Target Localization Geometry Gain in Distributed MIMO Radar”, *IEEE Trans. Signal processing*, Volume: 69) Page(s): 1642 – 1652, February 2021
- 8 Ali Gharamohammadi, Fereidoon Behnia , Arash shokouhmand, and George Shaker,” Robust Wiener filter based time gating method for detection of shallowly buried objects”, *IET Signal proc.* Volume15, Issue1, Pages 28-39, February 2021
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- 11 Mohammad Sadeghi, Fereidoon Behnia, and Rouhollah Amiri,” Optimal Sensor Placement for 2-D Range-only Target Localization in Constrained Sensor Geometry”, *IEEE Trans. Signal processing*, vol. 68, pp: 2316 – 2327, April 2020
- 12 Mohammad Sadeghi, Fereidoon Behnia, and Rouhollah Amiri, “ Window Selection of the Savitzky-Golay Filters for Signal Recovery from Noisy Measurements”, *IEEE Transactions on Instrumentation and Measurement*, Volume: 69 , Issue: 8 , Aug. 2020, pp: 5418 – 5427
- 13 M. R. Danaee and F. Behnia,” Improved Least Squares Approaches for Differential Received Signal Strength-Based Localization with Unknown Transmit Power”, *springer Wireless Personal Communications* (2020): pp: 1373–1401
- 14 Amir Reza Kazemi, Rouhollah Amiri, and Fereidoon Behnia, “ Efficient Convex Solution for 3-D Localization in MIMO Radars Using Delay and Angle Measurements”, *IEEE communication letters*, Volume: 23 , Issue: 12, pp 2219 – 2223, Dec. 2019

- 15 Rouhollah Amiri, Fereidoon Behnia and Ali Noroozi, "Efficient Algebraic Solution for Elliptic Target Localization and Antenna Position Refinement in MIMO Radars", *IET RSN*, vol.13,issue 11, pp 2046-2054, 2019
- 16 Mohammad Hamdollahzadeh, Rouhollah Amiri, and Fereidoon Behnia," Moving Target Localization in Bistatic Forward Scatter Radars: Performance Study and Efficient Estimators", *IEEE Transactions on Aerospace and Electronic Systems* ,Volume: 56, Issue: 2, April 2020,pp 1582 – 1594, 2020
- 17 Rouhollah Amiri, Amir Reza Kazemi, and Fereidoon Behnia," Efficient Elliptic Localization in the Presence of Antenna Position Uncertainties and Clock Parameter Imperfections", *IEEE Trans. Vehicular technology*, Volume: 68,Issue: 10, pp 9797– 9805, 2019
- 18 Rouhollah Amiri, Fereidoon Behnia, and Ali Noroozi," Efficient Joint Moving Target and Antenna Localization in Distributed MIMO Radars", *IEEE Tran. Wireless comm.*, Volume: 18,Issue: 9, pp 4425- 4435, 2019
- 19 Rouhollah Amiri, Fereidoon Behnia, Hojatollah Zamani," Closed-Form Positioning in MIMO Radars with Antenna Location Uncertainties", *IET RSN*, vol.13,issue 9, pp 1568- 1579, 2019
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- 22 Mohammad Samizadeh Nikoo; Fereidoon Behnia," A Disambiguation Technique for Passive Localization Using Trajectory Analysis" ,*IEEE Transactions on Aerospace and Electronic Systems*, Vol.: 55 , Issue: 2, pp: 820 – 829, 2019
- 23 Rouhollah Amiri, Fereidoon Behnia, Ali Noroozi, "An Efficient Estimator for TDOA-based Source Localization with Minimum Number of Sensors", *IEEE Communications Letters*, 2018 , Volume: 22 , Issue: 12, Pages: 2499 – 2502, 2018
- 24 Ali Gharamohammadi ; Fereidoon Behnia ; Rouhollah Amiri, "Imaging Based on Correlation Function for Buried Objects Identification" ,*IEEE Sensors Journal*,, Volume: 18 , Issue: 18,Page s: 7407 – 7413, 2018
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- 30 Rouhollah Amiri and Fereidoon Behnia," Positioning in MIMO Radars Based on Constrained Least Squares Estimation", *IEEE communication letters*, vol. 21, issue 10, 2017
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- 32 Rouhollah Amiri, Fereidoon Behnia, and Mohammad Amin Maleki Sadr,"Efficient Positioning in MIMO Radars with Widely Separated Antennas", *IEEE communication letters*, vol.21, issue 7,pp 1569-1572, March 2017
- 33 M. R. Danaee, F. Behnia," Unscented Auxiliary Particle Filter Implementation of the Cardinalized

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- 34 Rouhollah Amiri , Fereidoon Behnia and Hojatollah Zamani,” Asymptotically Efficient Target Localization from Bistatic Range Measurements in Distributed MIMO Radars”, IEEE signal processing letters, vol. 24, no. 3, March 2017
- 35 Mohammad Hamdollahzadeh,Sadjad Adelipour,Fereidoon Behnia,”Recursive Sensor Placement in Two Dimensional TDOA Based Localization” ,ICEE 2016, May 2016, Shiraz, Iran
- 36 Mehdi Boloursaz Mashhadi, F. Behnia,” On Efficient Codebook Design for Digital Communication through Compressed Voice Channels”, IET Communications, 2016, Volume: 10, Issue: 18, Pages: 2613 – 2620, Dec. 2016
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- 38 Rouhollah Amiri, Hojatollah Zamani, Fereidoon Behnia and Farrokh Marvasti, ”sparsity aware target localization using TDOA/AOA measurements in distributed MIMO Radars”, ICT express, January 2016
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- 40 R. Kazemi, R. Rezaei, A. Akhaei, F. Behnia,” Covert Communications through Mobile Voice Channels”, IET IFS, 2016, Volume: 10, Issue: 3, May 2016, ,Pages: 156 – 164.
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- 50 Mohammad Rajabvand and Fereidoon Behnia , "In-Fiber Wavelength Selective Modulation of WDM Channels with Performance Analysis", Journal of Light Wave Technology, Vol. 28, No.1,January 2010
- 51 Majid Abbas-Azimi, Farhad Mazlumi, and Fereidoon Behnia "Design of broadband constant beamwidth conical corrugated-Horn antennas", IEEE Antennas and Propagation Magazine, Vol. 51, No.6, October 2009
- 52 T. Naghibi, M. Namvar and F. Behnia, "Optimal and robust waveform design for MIMO radars in the presence of clutter", Elsevier signal processing , 2009
- 53 M.Rajabvand, F. Behnia , "Fiber Bragg Grating -Based Band Edge Delay Line for Radio Frequency (RF) Photonics Applications "International journal of Electronics and Communication(AEU), Germany,

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- 1 Mohammad Sadeghi, Fereidoon Behnia," Optimum Receiver Position in Multi-static Passive Radars", 7th Iranian Radar Conference, Nov. 2020, Tehran,Iran
- 2 Ali Gharamohammadi, Fereidoon Behnia, and Arash Shokouhmand, "Imaging Based on a Fast Back-Projection Algorithm Considering Antenna Beamwidth", 2019 6th Iranian Conference on Radar and Surveillance Systems, Isfahan, Iran
- 3 Mohammad Solhi ,Mohammad Hamdollahzadeh, and Fereidoon Behnia," Sensor placement in AOA localization of multiple sources in the presence of distance dependent noise, ICEE 2019
- 4 Sayed Mohammad Solhi Juybari, Fereidoon Behnia, "Optimal sensor placement for source localization in NLOS conditions", ICEE 2018, Mashad, Iran
- 5 Abbas Abolfathi Momtaz, Fereidoon Behnia, Farokh Marvasti, "Multi-GNSS Constellation Fusion Based on Statistical Features of Positioning Error", ICEE 2018, Mashad, Iran
- 6 Salman Hassanpour; Amir Mansour Pezeshk; Fereidoon Behnia," Automatic Digital Modulation Recognition Based on Novel Features and Support Vector Machine"2016 12th International Conference on Signal-Image Technology & Internet-Based Systems (SITIS), Naples, Italy,28 Nov. 2016
- 7 Mohammad Hamdollahzadeh,Sadjad Adelipour,Fereidoon Behnia,"Recursive Sensor Placement in Two Dimensional TDOA Based Localization", ICEE 2016, May 2016, Shiraz, Iran
- 8 Hojatollah Zamani, Rouhollah Amiri and Fereidoon Behnia," Compressive Sensing for Elliptic Localization in MIMO Radars",10-12 May, ICEE 2016, Shiraz, Iran
- 9 Hamdollahzadeh M., Adelipour S. Behnia F. and Nayebi M. M.," Target Direct Position Determination In 2D CW Forward Scatter Radar", IRS 2016, May 2016, Krakow, Poland
- 10 Hamdollahzadeh M., Adelipour S. and Behnia F.," Optimal sensor configuration for Two dimensional source localization based on TDOA/FDOA measurements ", IRS 2016, May 2016, Krakow, Poland
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- 14 Mohammad J. Ahmadi, Rouhollah Amiri, Fereidoon Behnia, "mitigation of range and velocity walk in airborne passive radar with long integration time",ICEE,2015,Tehran, ,Pages: 514 – 517
- 15 Mehdi Boloursaz, Reza Kazemi, B. Barzandeh, F. Behnia," Bounds on Compressed Voice Channel Capacity", IWCIT 2014,Iran, May
- 16 M. Boloursaz, R. Kazemi F. Behnia and Akhaei," Performance Improvement of Spread Spectrum Additive

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- 17 M.R. Danaei, F. Behnia ,” Auxiliary Unscented Particle Cardinalized Probability Hypothesis Density”, ICEE 2013, May 14-16,2013, Mashad, Iran
 - 18 M. R. Danaei, F. Behnia, ” Enhanced Strategy to Sample Newborn Targets within Nonthresholded Measurements”, ICEE 2013, May 14-16,2013, Mashad, Iran
 - 19 M. Amiri, E. Zahedi, F. Behnia, "Autoregressive Modeling of the photoplethysmogram AC Signal Amplitude Changes after Flow-Mediated Dilation in Healthy and Diabetic Subjects", Proceedings of 19th Iranian Conference on Biomedical Engineering (ICBME), Iran, 2012
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 - 22 M. Boloursaz , A. H. Hadavi, R. Kazemi and F. Behnia,” A Data modem for GSM Adaptive Multi rate voice channel”, IEEE EDWTS2012, sept 14-17,Kharkov, Ukraine- **Best paper**
 - 23 R. Kazemi, D.Nashtaali, M. Boloursaz and F. Behnia,”secure data over GSM based on algebraic codebooks,” IEEE EDWTS2012, Kharkov, Ukraine
 - 24 Kamal Shadi, F. Behnia,"transmit beampattern synthesis using eigen value decomposition in MIMO radar", ICICS 2011,13-16 December 2011, Singapore
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۱	قاسم سبحانی، فریدون بهنیا، صابر کاویانی، "استفاده از آرایه آنتنی برای افزودن پرتو دیسی به جهت یاب تداخل سنج فازی" مجله علمی پژوهشی رادار، پذیرفته شده
۲	صابر کاویانی، فریدون بهنیا " مکانیابی سه بعدی اهداف هوایی فعال با استفاده از یک ایستگاه گیرنده سطحی"، فصلنامه علمی علوم و فناوری های پدافند نوین- پذیرفته شده
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۵	مینا امیری، ادموند زاهدی، فریدون بهنیا " مدل سازی خود رگرسیو تغییرات بخش AC سیگنال فوتوپلیتیسموگرام پس از آزمون اتساع ناشی از جریان خون در افراد سالم و دیابتی" مجله مهندسی پزشکی زیستی، دوره هفتم، شماره ۱، بهار ۱۳۹۲

Selected Conference papers in Farsi

- ۱ محمد نظری مجد، محمد مهدی چیتگرها، مجتبی رادمرد، محمد مهدی ناییبی و فریدون بهنیا "تعیین چیدمان گیرنده در رادارهای چند ورودی چند خروجی با آنتن های گسترده" کنفرانس رادار دانشگاه امام حسین، اسفند ۱۳۹۱
- ۲ محمد مهدی چیتگرها، محمد نظری مجد، مجتبی رادمرد، محمد مهدی ناییبی و فریدون بهنیا " آشکارسازی و تخصیص بهنیه توان در رادارهای چند ورودی چند خروجی " کنفرانس رادار دانشگاه امام حسین، اسفند ۱۳۹۱
- ۳ مجتبی رادمرد، هومان حبیبی، محمد حسن باستانی و فریدون بهنیا " جبران سازی جایجایی هدف از سلول فاصله در رادار غیرفعال (پسیو)" کنفرانس مهندسی برق ایران، دانشگاه علم و صنعت، ۲۰۰۹

