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Constant Modulus Sequence Set Design with Good Correlation Properties

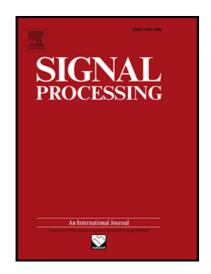
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HIGHLIGHTS

- This paper considers the design problem of constant modulus sequence set which could be applied
 in multiple-input multiple-output (MIMO) radar and communication societies, to achieve desired
 correlation properties.
- A new and general weighted integrated sidelobe level (WISL) accounting for both auto- and cross-correlation functions is proposed.
- An iteration algorithm based on iteration direct search is devised to optimizes the WISL without limitations on the weights
 - lling the gap in the open literature and involves the FFT operation at each iteration ensuring the convergence speed
- Results highlight that the proposed algorithm possesses excellent superiority both in correlation properties and computation complexity compared with the related WeCAN algorithm.



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