In this letter, the authors proposed the beamforming algorithm, which combines Orthogonal Matching Pursuit (OMP) and Kalman iteration (KI) algorithm. The hybrid precoding matrix has been first derived through the OMP algorithm. As a further step, the Kalman filter has been employed to derive a closed-form expression for digital precoding matrix, approximating the optimal system spectral efficiency. From my reading, I have the following suggestions on this work which should be helpful to the authors

1. In the system modeling, the authors employed hybrid architectures for both the transmitter and receiver. However, in optimizing spectral efficiency, only the hybrid beamforming matrix at the transmitter was optimized, raising the question of why the hybrid beamformer at the receiver was not similarly optimized?
2. The authors directly applied the OMP algorithm from the classical literature “Spatially Sparse Precoding in Millimeter Wave MIMO Systems” in transaction wireless communications, 2014 and then optimized the digital precoding matrix using the KI algorithm. What is the mathematical justification for reapplying the iteratively computed digital precoding matrix based on the Kalman iteration? Additionally, why was the Kalman filter used to optimize the digital precoding matrix but not the analog precoding matrix?
3. In Fig. 3, the authors demonstrated that the proposed JOMP-KI algorithm offers improvements over the OMP algorithm, only under the condition of high SNR. However, the lack of improvement at low SNR was not explained. Furthermore, based on my observations, even at high SNRs, the performance gain is less than 1 dB. Does this suggest that the performance improvement of algorithm is relatively limited?
4. In Fig. 4, the author employed 8x8 transmit array at base station and 4x4 receive array at user. The trend for the total number of receive antennas being less than or equal to the number of transmit antennas is not shown. Specifically, it is unclear whether the system spectral efficiency increases or decreases under these conditions.
5. There exist some typos and imprecise sentences. Additionally, the bold formatting of the equations is unclear. The presentation of the paper should be improved.