Supplementary Fig 1. The flowchart of ScCCL

The flowchart of ScCCL. ScCCL first performs data preprocessing on the original input data, then performs two random data augmentations, then uses a momentum encoder structure to extract features, and finally uses MLP to map the extracted features to row space and column space to perform instance-level comparisons. Learning and cluster-level contrastive learning, the model finally updates the model by minimizing the contrastive loss.