cases	doc_1		doc_2		decision	id
	authors	• Chao Lu • Wei Xu • Hong Shen • Hua Zhang • X. You	**authors**	• Chao Lu • Wei Xu • Hong Shen • Hua Zhang • Xiaohu You	DUPLICATES	29
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	abstract	In this paper, we propose a learning approach for sparse code multiple access (SCMA) signal detection by using a deep neural network via unfolding the procedure of message passing algorithm (MPA). The MPA can be converted to a sparsely connected neural network if we treat the weights as the parameters of a neural network. The neural network can be trained off-line and then deployed for online detection. By further refining the network weights corresponding to the edges of a factor graph, the proposed method achieves a better performance. Moreover, the deep neural network based detection is a computationally efficient since highly paralleled computations in the network are enabled in emerging Artificial Intelligence (AI) chips.	**abstract**	In this paper, we propose a learning approach for sparse code multiple access (SCMA) signal detection by using a deep neural network via unfolding the procedure of message passing algorithm (MPA). The MPA can be converted to a sparsely connected neural network if we treat the weights as the parameters of a neural network. The neural network can be trained off-line and then deployed for online detection. By further refining the network weights corresponding to the edges of a factor graph, the proposed method achieves a better performance. Moreover, the deep neural network based detection is a computationally efficient since highly paralleled computations in the network are enabled in emerging Artificial Intelligence (AI) chips.		
	versions		**versions**			