cases	doc_1		doc_2		decision	id
	authors	• Martin Mundt • Iuliia Pliushch • Sagnik Majumder • Visvanathan Ramesh	**authors**	• Mundt, M. • Pliushch, I. • Majumder, S. • Ramesh, V.	DUPLICATES	166
	title	Open Set Recognition Through Deep Neural Network Uncertainty: Does Out-of-Distribution Detection Require Generative Classifiers?	**title**	Open Set Recognition Through Deep Neural Network Uncertainty: Does Out-of-Distribution Detection Require Generative Classifiers?		
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	id	id5035353343286714736	**id**	id-5979211530811295083		
	abstract	We present an analysis of predictive uncertainty based out-of-distribution detection for different approaches to estimate various models' epistemic uncertainty and contrast it with extreme value theory based open set recognition. While the former alone does not seem to be enough to overcome this challenge, we demonstrate that uncertainty goes hand in hand with the latter method. This seems to be particularly reflected in a generative model approach, where we show that posterior based open set recognition outperforms discriminative models and predictive uncertainty based outlier rejection, raising the question of whether classifiers need to be generative in order to know what they have not seen.	**abstract**			
	versions		**versions**			