

Node classification results (%). We report the results of average Macro-F1 and Micro-F1 over ten trials and highlight the best score on each dataset in bold.

(*And ** denote p-value<0.05 and p-value<0.01 with T-test, respectively)

- **ACM**

Metric	Training	HGMAE	HGCA	GraMI	ttest-rel(p)	ttest-ind(p)	ttest-ind1(p)
Macro-F1	10%	84.37±1.02	91.94±1.02	91.31±0.34			
	20%	84.88±0.38	92.13±0.54	91.64±0.28			
	40%	85.74±0.46	92.56±0.52	92.71±0.44	0.0427*	0.0102*	0.4951
	60%	86.94±0.49	93.08±0.41	93.16±0.59	0.0422*	0.4568	0.7288
	80%	87.54±0.87	93.11±0.77	93.23±1.01	0.0373*	0.0115*	0.0768
Micro-F1	10%	84.87±0.95	91.85±0.92	91.22±0.42			
	20%	85.12±0.43	92.01±0.46	91.57±0.30			
	40%	86.03±0.55	92.58±0.44	92.73±0.61	0.0495*	0.3869	0.5361
	60%	87.14±0.62	93.02±0.31	93.10±0.63	0.0389*	0.2659	0.7228
	80%	88.11±0.94	92.97±0.85	93.35±0.98	0.0123*	0.0037**	0.3665

- **DBLP**

Metric	Training	HGMAE	HGCA	GraMI	ttest-rel(p)	ttest-ind(p)	ttest-ind1(p)
Macro-F1	10%	88.14±0.45	91.23±0.82	93.67±0.63	0.0004**	0.0002**	6.51E-07**
	20%	88.71±0.55	92.25±0.74	93.85±0.39	0.0087**	0.0062**	1.02E-05**
	40%	89.32±0.61	93.01±0.53	94.13±0.41	0.0310*	0.0048**	5.02E-05**
	60%	89.83±0.93	93.17±0.45	94.03±0.39	0.0175*	0.0019**	0.0002**
	80%	90.41±1.16	94.12±0.64	95.00±0.48	0.006**	0.0001**	0.0027**
Micro-F1	10%	89.41±0.37	92.01±0.81	94.12±0.60	0.0005**	0.00001**	3.25E-06**
	20%	89.65±0.52	92.94±0.72	94.31±0.37	0.0039**	0.0006**	4.36E-05**
	40%	90.13±0.53	93.55±0.53	94.56±0.35	0.0125*	0.0005**	8.73E-05**
	60%	90.62±0.80	92.96±0.47	94.45±0.39	0.0001**	0.00004**	4.09E-07**
	80%	91.15±1.03	93.18±0.63	95.36±0.50	0.0081**	0.0079**	9.05E-08**

- **YELP**

Metric	Training	HGMAE	HGCA	GraMI	ttest-rel	ttest-ind	ttest-ind1(p)
Macro-F1	10%	57.58±3.38	91.37±0.81	91.48±0.40	0.0277*	0.1189	0.7047
	20%	60.43±3.17	91.91±0.56	92.05±0.36	0.0081**	0.0661	0.5144
	40%	63.92±2.57	92.81±0.57	92.91±0.56	0.0329*	0.4133	0.6969
	60%	67.23±1.82	93.22±0.71	93.43±0.81	0.0469*	0.1005	0.5453
	80%	68.37±2.24	93.41±1.28	93.74±0.40	0.0084**	0.0091**	0.4465
Micro-F1	10%	73.81±0.93	90.69±0.81	91.01±0.46	0.0294*	0.0984	0.2917
	20%	74.92±1.26	91.03±0.56	91.74±0.41	0.0058**	0.0002**	0.0046**
	40%	75.35±1.30	92.33±0.55	92.58±0.62	0.0102*	0.0725	0.3527
	60%	76.34±1.24	92.63±0.72	92.97±0.80	0.0284*	0.0500*	0.3311
	80%	77.87±1.81	92.98±1.31	93.35±0.40	0.0095**	0.0173*	0.4042