

**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)
Macro-F1	10%	84.37±1.02	<b>91.94±1.02</b>	91.31±0.34		
	20%	84.88±0.38	<b>92.13±0.54</b>	91.64±0.28		
	40%	85.74±0.46	92.56±0.52	<b>92.71±0.44</b>	0.0427*	0.0102*
	60%	86.94±0.49	93.08±0.41	<b>93.16±0.59</b>	0.0422*	0.4568
	80%	87.54±0.87	93.11±0.77	<b>93.23±1.01</b>	0.0373*	0.0115*
Micro-F1	10%	84.87±0.95	<b>91.85±0.92</b>	91.22±0.42		
	20%	85.12±0.43	<b>92.01±0.46</b>	91.57±0.30		
	40%	86.03±0.55	92.58±0.44	<b>92.73±0.61</b>	0.0495*	0.3869
	60%	87.14±0.62	93.02±0.31	<b>93.10±0.63</b>	0.0389*	0.2659
	80%	88.11±0.94	92.97±0.85	<b>93.35±0.98</b>	0.0123*	0.0037**

- **DBLP**

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

- **YELP**

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