

# Novel Cover Selection Criterion for Spatial Steganography Using Linear Pixel Prediction Error

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**Table 1** The Spearman's correlation coefficients of LPE and detecting accuracy (HOLMES features, ensemble FLD)

Stego	EmbRt. (bpp)	BOSS $k = 1$	BOSS $k = 2$	BOSS LclVar.	BOSS Entropy	BOWS2 $k = 1$	BOWS2 $k = 2$	BOWS2 LclVar.	BOWS2 Entropy
HUGO	0.10	-0.3688	-0.3765	-0.3007	-0.1631	-0.3030	-0.2962	-0.2632	-0.1015
HUGO	0.20	-0.5332	-0.5391	-0.4397	-0.2550	-0.5185	-0.5087	-0.4727	-0.2248
HUGO	0.30	-0.5278	-0.5304	-0.4433	-0.2989	-0.5264	-0.5145	-0.5082	-0.2107
HUGO	0.40	-0.4960	-0.4923	-0.4228	-0.2499	-0.4808	-0.4670	-0.4803	-0.2181
HUGO	0.50	-0.4688	-0.4636	-0.4022	-0.2311	-0.4414	-0.4314	-0.4388	-0.2149
HUGO	0.60	-0.4342	-0.4267	-0.3766	-0.1890	-0.3745	-0.3638	-0.3740	-0.1557
S-UNI	0.10	-0.3559	-0.3600	-0.3005	-0.2185	-0.2761	-0.2726	-0.2747	-0.1127
S-UNI	0.20	-0.4513	-0.4536	-0.3716	-0.2970	-0.4082	-0.4012	-0.3928	-0.2292
S-UNI	0.30	-0.5025	-0.5063	-0.4290	-0.2638	-0.4962	-0.4889	-0.4604	-0.2327
S-UNI	0.40	-0.5107	-0.5143	-0.4292	-0.2892	-0.4516	-0.4408	-0.4364	-0.2333
S-UNI	0.50	-0.5119	-0.5140	-0.4337	-0.2864	-0.4661	-0.4575	-0.4393	-0.2289
WOW	0.10	-0.2865	-0.2914	-0.2414	-0.1922	-0.2668	-0.2576	-0.2494	-0.1192
WOW	0.20	-0.4205	-0.4221	-0.3527	-0.2719	-0.3675	-0.3578	-0.3655	-0.1993
WOW	0.30	-0.4791	-0.4823	-0.3948	-0.2870	-0.4552	-0.4423	-0.4526	-0.2156
WOW	0.40	-0.4822	-0.4822	-0.3978	-0.2675	-0.4446	-0.4338	-0.4217	-0.2181
WOW	0.50	-0.4808	-0.4764	-0.3943	-0.3035	-0.4378	-0.4309	-0.4158	-0.2352

**Table 2** The Spearman's correlation coefficients of LPE and detecting accuracy (SPAM 2nd order features and SVM).S

Stego	EmbRt. (bpp)	BOSS $k = 1$	BOSS $k = 2$	BOSS LclVar.	BOSS Entropy	Stego	EmbRt. (bpp)	BOSS $k = 1$	BOSS $k = 2$	BOSS LclVar.	BOSS Entropy
HUGO	0.10	-0.1986	-0.2022	-0.1751	-0.1108	QIMD	0.05	-0.2212	-0.2205	-0.1778	-0.1316
HUGO	0.20	-0.3304	-0.3350	-0.2828	-0.1785	QIMD	0.10	-0.2233	-0.2186	-0.1936	-0.1442
HUGO	0.25	-0.3677	-0.3758	-0.3053	-0.1950	QIMD	0.15	-0.2374	-0.2333	-0.2068	-0.1129
HUGO	0.30	-0.3977	-0.4038	-0.3453	-0.2264	QIMD	0.20	-0.2491	-0.2426	-0.2283	-0.1225
HUGO	0.40	-0.4397	-0.4450	-0.3741	-0.3149	QIMD	0.30	-0.1627	-0.1597	-0.1416	-0.0882
LSBM	0.05	-0.1173	-0.1170	-0.0846	-0.1449	LSBR	0.05	-0.1357	-0.1334	-0.1188	-0.1813
LSBM	0.10	-0.0915	-0.0887	-0.0524	-0.1031	LSBR	0.10	-0.1254	-0.1223	-0.0897	-0.0927
LSBM	0.15	-0.0807	-0.0825	-0.0307	-0.0706	LSBR	0.15	-0.1511	-0.1473	-0.1170	-0.0936
LSBM	0.20	-0.0967	-0.0976	-0.0512	-0.0660	LSBR	0.20	-0.1918	-0.1879	-0.1506	-0.1149
LSBM	0.30	-0.1092	-0.1063	-0.0748	-0.0712	LSBR	0.30	-0.1938	-0.1877	-0.1663	-0.0951

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