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**Table 4**

| (1) object name | (2) other names | (3) R.A. | (4) Decl. | (5) redshift | (6) $B_H$ | (7) $B_L$ | (8) S | (9) run or reference | (10) remarks |
|---|---|---|---|---|---|---|---|---|---|
| HS0000+2252 | IRAS F00000+2252 | 00 00 01.0 | +22 52 20 | 0.0730 | 16.3 | 17.33 | E | o4 | IrS |
| | NPM1G +22.0001 | | | | | | | | |
| HS0000+2422 | NPM1G +21.0002 | 00 00 20.9 | +24 22 35 | 0.0382 | 17.0 | | E | o4 | IrS |
| HS0006+2133 | IRAS 00067+2133 | 00 06 43.7 | +21 33 09 | 0.0774 | 17.5 | 16.9 | E | l12 | IrS |
| | IRAS F00067+2133 | | | | | | | | |
| | [dKM92] 003 | | | | | | | | |
| HS0013+0809 | | 00 13 02.0 | +08 09 37 | 0.0844 | 19.3 | | E | o7 | |
| HS0013+1942 | | 00 13 14.4 | +19 42 08 | 0.0258 | 17.1 | | E | o4 | abs |
| HS0013+2241 | | 00 13 15.0 | +22 41 45 | 0.0217 | 17.7 | | E | o4 | |
| HS0016+1449 | | 00 16 35.7 | +14 49 44 | 0.0147 | 17.6 | | E | o7 | |
| HS0020+0656 | UM 029 | 00 20 18.4 | +06 56 53 | 0.051 | 18.0 | | E | l77 | |
| HS0021+1347 | | 00 21 50.5 | +13 47 33 | 0.0144 | 16.5 | | E | o2 | |
| HS0022+0014 | UM 241 | 00 22 46.1 | +00 14 54 | 0.0139 | 16.3 | | E | o4 | |
| HS0022+1945 | | 00 22 44.8 | +19 45 23 | 0.0926 | 18.2 | | E | o5 | |
| HS0024+2314 | | 00 24 15.4 | +23 14 37 | 0.0238 | 18.0 | | E | o4 | |
| HS0024+1022 | | 00 24 32.2 | +10 22 28 | 0.0071 | 17.0 | | E | o2 | |
| HS0026+0332 | | 00 26 52.4 | +03 32 49 | 0.0410 | 17.5 | | E | o4 | |
| HS0028+1747 | | 00 28 42.1 | +17 47 58 | 0.0978 | 18.1 | | E | o7 | |
| HS0029+1748 | NPM1G +17.0024 | 00 29 26.5 | +17 48 11 | 0.0073 | 17.5 | 18.03 | E | o7 | |
| HS0029+1443 | | 00 29 42.3 | +14 43 38 | 0.0175 | 17.2 | | E | o7 | |
| HS0032+0116 | UM 258 | 00 32 03.3 | +01 16 10 | 0.0147 | 19.0 | | E | o7 | |
| HS0033+0421 | UGC 00359 | 00 33 36.0 | +04 21 37 | 0.01637 | 16.5 | 15.5 | E | l19 | IrS |
| | UM 048 | | | | | | | | |
| | CGCG 409-047 | | | | | | | | |
| | CGCG 0033.6+0422 | | | | | | | | |
| | MCG +01-02-035 | | | | | | | | |
| | IRAS 00335+0421 | | | | | | | | |
| | IRAS F00336+0421 | | | | | | | | |
| HS0035+0725 | | 00 35 45.9 | +07 25 29 | 0.8541 | 18.3 | | E | o7 | QSO |
| HS0036+0437 | | 00 36 01.6 | +04 37 19 | 0.0289 | 17.3 | | E | o4 | |
| HS0036+0352 | | 00 36 05.7 | +03 52 32 | 0.3884 | 18.5 | | E | o5 | * |
| HS0037+0111 | | 00 37 45.2 | +01 11 18 | 0.0136 | 17.0 | | E | o4 | |
| HS0038+0122 | PC 0038+0122 | 00 38 06.1 | +01 22 52 | 0.066 | 17.6 | 18.11 | B | l67 | |
| HS0040+0952 | | 00 40 51.5 | +09 52 29 | 0.0156 | 17.3 | | E | o4 | |
| HS0041+2333 | | 00 41 41.3 | +23 33 36 | 0.0218 | 17.7 | | E | o4 | |
| HS0043+0531 | | 00 43 16.2 | +05 31 37 | 0.0408 | 17.6 | | E | o7 | |
| HS0044+0453 | UM 065 | 00 44 52.8 | +04 53 27 | 0.021 | 17.2 | | E | l77 | |
| HS0045+0020 | UM 279 | 00 45 55.6 | +00 20 50 | 0.0381 | 18.9 | | E | o7 | |
| HS0049-0006 | UM 282 | 00 49 13.4 | -00 06 33 | 0.037 | 19.1 | 18 | E | l77 | |
| | UCM 0049-0006 | | | | | | | | |
| HS0049+0017 | UM 283 | 00 49 15.5 | +00 17 38 | 0.01500 | 17.0 | 16.76 | E | l58 | |
| | UCM 0049+0017 | | | | | | | | |
| HS0051+0927 | | 00 51 22.4 | +09 27 27 | 0.0202 | 18.9 | | E | o7 | |
| HS0051+0555 | UM 077 | 00 51 44.4 | +05 55 35 | 0.017 | 18.6 | | B | l77 | |
| HS0052+2119 | | 00 52 33.0 | +21 19 52 | 0.0434 | 17.7 | | E | o4 | |
| HS0055+0104 | UM 293 | 00 55 19.8 | +01 04 04 | 0.0567 | 16.8 | 16.4 | E | l13 | Sy1.5 |
| HS0056+0044 | UM 295 | 00 56 21.3 | +00 44 09 | 0.0176 | 17.2 | | E | o4 | |
| | UCM 0056+0044 | | | | | | | | |
| HS0056+0043 | UM 296 | 00 56 30.0 | +00 43 55 | 0.01800 | 16.5 | 16.58 | E | l58 | IrS |
| | IRAS F00564+0043 | | | | | | | | |
| | UCM 0056+0043 | | | | | | | | |

**Table 4: Continued**

| (1) object name | (2) other names | (3) R.A. | (4) Decl. | (5) redshift | (6) $B_H$ | (7) $B_L$ | (8) S | (9) run or reference | (10) remarks |
|---|---|---|---|---|---|---|---|---|---|
| HS0058+1847 | | 00 58 52.6 | +18 47 25 | 0.0376 | 17.4 | | E | o7 | |
| HS0058+0638 | UM 082 | 00 58 44.7 | +06 38 42 | 0.051 | 17.2 | 17.88 | E | l77 | Sy 2 |
| | NPM1G +06.0048 | | | | | | | | |
| HS0101+0310 | | 01 01 24.9 | +03 10 56 | 0.0654 | 17.3 | | E | o4 | |
| HS0103+2441 | | 01 03 40.5 | +24 41 12 | 0.0541 | 17.1 | | B | o5 | |
| HS0103+1242 | IRAS F01037+1242 | 01 03 46.4 | +12 42 29 | 0.0447 | 16.5 | | E | o4 | IrS |
| HS0104+0622 | UM 085 | 01 04 09.3 | +06 22 00 | 0.041 | 17.2 | 17.29 | E | l77 | Sy 2 |
| | NPM1G +06.0054 | | | | | | | | |
| HS0106+1304 | | 01 06 14.5 | +13 04 14 | 0.0597 | 16.8 | | E | o4 | |
| HS0107+1946 | | 01 07 29.7 | +19 46 38 | 0.0423 | 18.0 | | E | o4 | |
| HS0107+2458 | | 01 07 58.5 | +24 58 26 | 0.0394 | 17.3 | | B | o5 | |
| HS0108+0150 | UM 306 | 01 08 00.4 | +01 50 52 | 0.0170 | 15.9 | | E | o4 | |
| HS0108+0103 | UM 307 | 01 08 56.6 | +01 03 19 | 0.0228 | 17.6 | 14.31 | E | l77 | HII region in an Sdm |
| | UGC 00749 | | | | | | | | IrS |
| | CGCG 385-022 | | | | | | | | |
| | CGCG 0109.0+0104 | | | | | | | | |
| | MCG +00-04-030 | | | | | | | | |
| | IRAS 01089+0103 | | | | | | | | |
| | IRAS F01089+0103 | | | | | | | | |
| HS0110+2149 | NPM1G +21.0055 | 01 10 31.6 | +21 49 54 | 0.0563 | 18.3 | 16.69 | E | o4 | |
| HS0111+1300 | UGC 00774 | 01 11 12.4 | +13 00 25 | 0.0491 | 16.8 | 14.76 | E | l13 | Sy 1 |
| | MRK 0975 | | | | | | | | IrS |
| | CGCG 0111.2+1300 | | | | | | | | Radio S |
| | IRAS F01112+1300 | | | | | | | | |
| | OC +118 | | | | | | | | |
| HS0111+2115 | NPM1G +21.0056 | 01 11 55.6 | +21 15 25 | 0.0318 | 16.3 | 16.42 | E | o7 | |
| HS0113+1750 | | 01 13 59.5 | +17 50 03 | 0.0626 | 18.5 | | E | o7 | |
| HS0115+1156 | MRK 0979 | 01 15 22.6 | +11 56 38 | 0.0190 | 15.6 | 15.5 | E | l44 | |
| HS0116+2244 | NPM1G +22.0058 | 01 16 53.0 | +22 44 33 | 0.0439 | 17.2 | 16.80 | B | o7 | abs |
| HS0117+1017 | | 01 17 13.6 | +10 17 33 | 0.0342 | 16.5 | | E | o6 | |
| HS0117+1135 | | 01 17 29.8 | +11 35 17 | 0.0615 | 16.2 | | B | o7 | |
| HS0118+1236 | | 01 18 36.4 | +12 36 49 | 0.0198 | 16.7 | | E | o6 | |
| HS0119+0331 | UM 099 | 01 19 32.6 | +03 31 41 | 0.0237 | 16.5 | | E | o4 | |
| HS0119+0044 | IRAS 01197+0044 | 01 19 43.9 | +00 44 42 | 0.0555 | 16.9 | | E | l72 | IrS |
| HS0122+0743 | UGC 00993 | 01 22 57.1 | +07 43 47 | 0.00975 | 17.6 | 15.00 | E | l19 | |
| HS0123+1624 | | 01 23 36.3 | +16 24 55 | 0.0290 | 17.2 | | E | o7 | |
| HS0124+1126 | NPM1G +11.0056 | 01 24 46.4 | +11 26 42 | 0.0327 | 16.7 | 17.36 | E | o6 | |
| HS0131+1937 | IRAS F01318+1936 | 01 31 52.3 | +19 37 04 | 0.0359 | 17.6 | | E | o7 | IrS |
| HS0133+1341 | | 01 33 43.0 | +13 41 43 | 0.0239 | 17.7 | | E | o7 | |
| HS0137+1539 | UGC 01176 | 01 37 30.4 | +15 39 34 | 0.0021 | 18.8 | 14.4 | E | o7 | HII region in an Im |
| | DDO 013 | | | | | | | | |
| | [RC2] A0137+15 | | | | | | | | |
| | LGG 029: [G93] 006 | | | | | | | | |
| HS0138+0458 | UM 126 | 01 38 48.8 | +04 58 04 | 0.032 | 17.4 | 18.0 | E | l80 | |
| HS0141+0719 | | 01 41 23.4 | +07 19 46 | 0.023 | 16.3 | | E | l80 | |
| HS0142+1651 | MRK 0361 | 01 42 03.7 | +16 51 31 | 0.0275 | 15.8 | 15.6 | E | l50 | |
| | CGPG 0142.0+1650 | | | | | | | | |
| | [RC2] A0142+16 | | | | | | | | |
| | NPM1G +16.0052 | | | | | | | | |
| HS0143+2400 | | 01 43 07.5 | +24 00 55 | 0.0346 | 18.4 | | E | o7 | |

**Table 4: Continued**

| (1) object name | (2) other names | (3) R.A. | (4) Decl. | (5) redshift | (6) $B_H$ | (7) $B_L$ | (8) S | (9) run or reference | (10) remarks |
|---|---|---|---|---|---|---|---|---|---|
| HS0143+0549 | UM 138 | 01 43 51.1 | +05 49 57 | 0.018 | 16.2 | 17.7 | E | l80 | |
| HS0148+1700 | | 01 48 32.0 | +17 00 13 | 0.0647 | 16.8 | | B | o7 | |
| HS0148+2123 | | 01 48 18.4 | +21 23 51 | 0.0165 | 17.2 | | E | o7 | |
| HS0153+2205 | | 01 53 17.9 | +22 05 05 | 0.0664 | 18.0 | | E | o7 | |
| HS0731+6348 | | 07 31 42.3 | +63 48 27 | 0.3447 | 18.6 | | B | o2 | Sy1 |
| HS0732+6503 | | 07 32 09.2 | +65 03 38 | 0.0217 | 17.2 | | B | o1 | |
| HS0737+6442 | | 07 37 35.2 | +64 42 18 | 0.036 | 17.7 | | E | l80 | |
| HS0746+6139 | KUG 0746+616 | 07 46 54.6 | +61 39 40 | 0.023 | 18.7 | | E | l80 | |
| HS0747+6456 | | 07 47 05.1 | +64 56 42 | 0.0247 | 16.5 | | E | o2 | |
| HS0749+5649 | | 07 49 37.7 | +56 49 48 | 0.0190 | 17.4 | | E | o7 | |
| HS0750+6019 | | 07 50 54.7 | +60 19 27 | 0.0356 | 17.8 | | E | o2 | |
| HS0752+5603 | | 07 52 45.1 | +56 03 07 | 0.0275 | 16.5 | | B | o7 | |
| HS0752+6147 | | 07 52 48.3 | +61 47 43 | 0.0287 | 16.0 | | E | o1 | |
| HS0757+6441 | | 07 57 19.2 | +64 41 52 | 0.0733 | 17.7 | | B | o5 | |
| HS0805+5742 | IRAS F08054+5742 | 08 05 25.6 | +57 42 30 | 0.0271 | 17.4 | | B | o7 | IrS |
| HS0808+5842 | SBS 0808+587<br>VII Zw 217<br>CGCG 287-051<br>CGCG 0808.1+5843<br>CGPG 0808.1+5842<br>IRAS F08082+5842 | 08 08 11.0 | +58 42 48 | 0.0272 | 17.7 | 15.5 | E | l43 | Sy 2<br>IrS |
| HS0814+6439 | | 08 14 47.8 | +64 39 03 | 0.0390 | 17.1 | | E | o2 | Sy1 |
| HS0831+6215 | | 08 31 18.4 | +62 15 43 | 0.0187 | 17.5 | | E | o7 | |
| HS0838+6253 | | 08 38 45.2 | +62 53 07 | 0.0044 | 16.0 | | E | o1 | |
| HS0847+6112 | MRK 0099<br>MCG +10-13-025<br>[RC2] A0847+61 | 08 47 25.4 | +61 12 30 | 0.0125 | 16.2 | 16.6 | E | l44 | |
| HS0912+5959 | MRK 0019<br>CGCG 288-028<br>CGCG 0912.9+5959<br>MCG +10-13-071<br>IRAS 09129+5958<br>IRAS F09129+5958<br>[RC2] A0912+59 | 09 12 54.2 | +59 59 00 | 0.0141 | 16.7 | 16.0 | E | l45 | G pair, IrS |
| HS0915+5540 | | 09 15 35.8 | +55 40 35 | 0.0494 | 17.2 | | E | o7 | |
| HS0930+5527 | MRK 0116<br>I Zw 018<br>CGPG 0930.5+5527<br>[RC2] A0930+55B | 09 30 30.3 | +55 27 46 | 0.0031 | 16.2 | 15.6 | E | l45 | |
| HS1222+3741 | CG 1022 | 12 22 08.2 | +37 41 13 | 0.0409 | 18.1 | | E | o7 | |
| HS1223+3938 | NPM1G +39.0289 | 12 23 29.8 | +39 38 30 | 0.0360 | 16.8 | 16.92 | E | o7 | |
| HS1232+3846 | | 12 32 15.5 | +38 46 56 | 0.0528 | 17.2 | | E | o7 | |
| HS1232+3947 | | 12 32 54.6 | +39 47 37 | 0.0210 | 17.2 | | E | o7 | |
| HS1232+3612 | KUG 1232+362<br>CG 1033 | 12 32 59.5 | +36 12 52 | 0.0425 | 16.2 | | E | o7 | G pair |
| HS1236+3821 | UGC 07816<br>CGCG 188-012<br>CGCG 1236.5+3822<br>NPM1G +38.0259 | 12 36 31.8 | +38 21 51 | 0.0073 | 15.4 | | E | o7 | |
| HS1244+3648 | | 12 44 37.0 | +36 48 05 | 0.0472 | 16.4 | | E | o7 | |

**Table 4: Continued**

| (1) object name | (2) other names | (3) R.A. | (4) Decl. | (5) redshift | (6) $B_H$ | (7) $B_L$ | (8) S | (9) run or reference | (10) remarks |
|---|---|---|---|---|---|---|---|---|---|
| HS1254+3323 | | 12 54 46.3 | +33 23 27 | 0.0032 | 17.7 | | B | o1 | abs |
| HS1255+3506 | | 12 55 22.2 | +35 06 32 | 0.0155 | 17.1 | | E | o2 | |
| HS1256+3505 | CG 1058 | 12 56 02.9 | +35 05 10 | 0.0342 | 16.5 | | E | o2 | |
| HS1256+3512 | | 12 56 51.2 | +35 12 19 | 0.0035 | 16.8 | | E | o2 | |
| HS1301+3312 | | 13 01 05.5 | +33 12 27 | 0.0371 | 17.8 | | E | o3 | |
| HS1301+3325 | | 13 01 20.0 | +33 25 37 | 0.0246 | 17.5 | | B | o2 | |
| HS1301+3209 | | 13 01 59.4 | +32 09 02 | 0.0238 | 17.8 | | E | o7 | |
| HS1302+3046 | | 13 02 35.4 | +30 46 30 | 0.0355 | 16.0 | | E | o3 | * |
| HS1304+3529 | CG 1085 | 13 04 03.7 | +35 29 43 | 0.0165 | 16.6 | | E | o3 | |
| HS1306+3525 | CG 1090 | 13 06 10.0 | +35 25 40 | 0.0165 | 16.6 | | E | o3 | |
| HS1306+3320 | | 13 06 12.8 | +33 20 39 | 0.0270 | 16.6 | | E | o3 | |
| HS1306+3527 | | 13 06 29.5 | +35 27 25 | 0.0371 | 17.0 | | E | o7 | |
| HS1308+3044 | CG 0984 | 13 08 42.5 | +30 44 55 | 0.0209 | 16.3 | | B | o7 | |
| HS1309+3409 | CG 1099 | 13 09 00.0 | +34 09 11 | 0.0785 | 17.0 | | B | o7 | |
| HS1309+3431 | KUG 1309+345B | 13 09 45.4 | +34 31 15 | 0.0168 | 16.2 | | E | o3 | spiral |
| HS1311+3628 | UGC 08303<br>DDO 166<br>CGCG 1311.0 +3628<br>MCG +06-29-061<br>IRAS F13110+3628<br>[RC2] A1310+36<br>[RC1] A1311<br>LGG 334:[G93] 004 | 13 11 00.0 | +36 28 02 | 0.0031 | 18.0 | 13.48 | E | o7 | IrS, HII region |
| HS1312+3847 | | 13 12 14.1 | +38 47 53 | 0.0515 | 17.3 | | E | o7 | |
| HS1312+3508 | | 13 12 28.3 | +35 08 47 | 0.0035 | 18.1 | | E | o3 | |
| HS1318+3406 | CG 1131 | 13 18 36.1 | +34 06 45 | 0.0352 | 16.6 | | E | o3 | |
| HS1319+3848 | NGC 5107<br>MRK 1346<br>KUG 1319+387<br>CGCG 217-033<br>CGCG 1319.1+3848<br>MCG +07-28-001<br>IRAS 13191+3847<br>IRAS F13191+3848<br>LGC 334:[G93] 011 | 13 19 08.3 | +38 48 05 | 0.00316 | 17.4 | 13.81 | E | l68 | IrS |
| HS1323+3211 | KUG 1323+321<br>[SMB88] 0540 | 13 23 16.8 | +32 11 23 | 0.0384 | 16.3 | | E | o3 | *, SBa(s) |
| HS1323+3319 | WAS 69<br>CG 1146 | 13 23 31.4 | +33 19 28 | 0.0153 | 16.7 | | E | o3 | |
| HS1323+3316 | MRK 0453<br>[SMB88] 0555<br>IRAS F13236+3316<br>KUG 1323+332<br>CG 1147 | 13 23 40.8 | 33 16 16 | 0.0465 | 16.4 | 16.5 | E | l44 | IrS |

**Table 4: Continued**

| (1) object name | (2) other names | (3) R.A. | (4) Decl. | (5) redshift | (6) $B_H$ | (7) $B_L$ | (8) S | (9) run or reference | (10) remarks |
|---|---|---|---|---|---|---|---|---|---|
| HS1328+3132 | UGC 08602 | 13 28 21.5 | +31 32 35 | 0.0342 | 15.3 | 14.6 | E | l14 | |
| | CGCG 1328.3+3132 | | | | | | | | |
| | MCG +05-32-035 | | | | | | | | |
| | MRK 0455 | | | | | | | | |
| | VV 326a | | | | | | | | |
| | [RC2] A1328+31 | | | | | | | | |
| | CGCG 161-074 | | | | | | | | |
| | [SMB88] 0767 | | | | | | | | |
| | CGCG 161-074E | | | | | | | | |
| | KUG 1328+315 | | | | | | | | |
| HS1328+3424 | KUG 1328+344 | 13 28 44.5 | +34 24 35 | 0.0227 | 16.8 | | B | o7 | G pair |
| HS1329+3703 | | 13 29 52.7 | +37 03 39 | 0.0557 | 16.9 | | E | o7 | |
| HS1330+3651 | | 13 30 54.1 | +36 51 54 | 0.0167 | 16.7 | | E | o7 | |
| HS1331+3906 | KUG 1331+391 | 13 31 17.7 | +39 06 32 | 0.0643 | 16.4 | | B | o7 | |
| HS1332+3417 | MRK 0459 | 13 32 54.0 | +34 17 23 | 0.0241 | 15.7 | 17.0 | E | l44 | G pair |
| | [RC2] A1332+34C | | | | | | | | |
| | CG 1165 | | | | | | | | |
| HS1333+3149 | | 13 33 06.8 | +31 49 36 | 0.0248 | 15.9 | | E | o3 | |
| HS1333+3058 | | 13 33 17.3 | +30 58 25 | 0.0402 | 17.3 | | E | o3 | |
| HS1334+3957 | | 13 34 11.5 | +39 57 32 | 0.0083 | 16.9 | | E | o7 | |
| HS1336+3114 | CGCG 1336.2+3115 | 13 36 12.5 | +31 14 26 | 0.0158 | 15.7 | | B | o7 | |
| | CGCG 161-097 | | | | | | | | |
| | [SMB88] 1072 | | | | | | | | |
| | KUG 1336+312 | | | | | | | | |
| HS1336+3650 | | 13 36 43.8 | +36 50 56 | 0.0202 | 17.1 | | E | o7 | |
| HS1338+3037 | CGCG 1338.9+3038 | 13 38 54.0 | +30 37 51 | 0.0410 | 16.2 | | E | l13 | G pair, IrS |
| | MRK 0268 | | | | | | | | |
| | CGCG1 161-119 | | | | | | | | |
| | IRAS F13389+3037 | | | | | | | | |
| | IRAS 13388+3037 | | | | | | | | |
| | KUG 1338+306B | | | | | | | | |
| HS1339+3046 | MRK 0067 | 13 39 39.5 | +30 46 17 | 0.0029 | 15.7 | 16.5 | E | l51 | IrS |
| | UGCA 372 | | | | | | | | |
| | [RC2] A1339+30 | | | | | | | | |
| | IRAS F13396+3046 | | | | | | | | |
| | KUG 1339+307 | | | | | | | | |
| HS1340+3307 | CG 1176 | 13 40 08.6 | +33 07 19 | 0.0158 | 16.8 | | E | o3 | |
| HS1340+3207 | | 13 40 28.3 | +32 07 59 | 0.0365 | 16.8 | | E | o3 | |
| HS1341+3409 | | 13 41 50.9 | +34 09 50 | 0.0171 | 17.3 | | E | o3 | |
| HS1344+3511 | IRAS 13448+3511 | 13 44 54.0 | +35 11 35 | 0.0539 | 16.8 | 16 | E | l12 | IrS |
| | IRAS F13449+3511 | | | | | | | | |
| | CG 1189 | | | | | | | | |
| | [dKM92] | | | | | | | | |
| HS1349+4027 | MRK 0462 | 13 49 17.8 | 40 27 35 | 0.0079 | 17.0 | 15.38 | E | l44 | |
| | KUG 1349+404 | | | | | | | | |
| | CGCG 218-064 | | | | | | | | |
| | CGCG 219-009 | | | | | | | | |
| | CGCG 1349.3+4027 | | | | | | | | |
| | MCG +07-29-002 | | | | | | | | |
| | [RC2] A1349+40 | | | | | | | | |
| | NPM1G +40.0336 | | | | | | | | |
| | LGG 361:[G93] 016 | | | | | | | | |
| HS1349+3942 | NPM1G +39.0332 | 13 49 22.9 | +39 42 03 | 0.0054 | 16.7 | 15.86 | E | o7 | |

**Table 4: Continued**

| (1) object name | (2) other names | (3) R.A. | (4) Decl. | (5) redshift | (6) $B_H$ | (7) $B_L$ | (8) S | (9) run or reference | (10) remarks |
|---|---|---|---|---|---|---|---|---|---|
| HS1353+3849 | MRK 0464<br>KUG 1353+388<br>H 1350+390<br>XRS 13505+390 | 13 53 45.4 | +38 49 07 | 0.0510 | 16.9 | 16.5 | E | l13 | Sy 1.5, XrayS |
| HS1354+3634 | CG 1200 | 13 54 27.5 | +36 34 28 | 0.0167 | 17.2 | | B | o7 | |
| HS1354+3635 | CG 1201 | 13 54 29.8 | +36 35 39 | 0.0171 | 16.1 | 15 | B | o7 | |
| HS1400+3927 | CG 0330<br>[SP82] 02 | 14 00 29.8 | +39 27 37 | 0.0045 | 17.2 | 17 | E | l78 | |
| HS1402+3657 | MRK 1369<br>IRAS F14021+3657<br>CG 0340<br>NPM1G +36.0325 | 14 02 06.6 | +36 57 53 | 0.0120 | 15.5 | 17.0 | E | l44 | IrS |
| HS1402+3650 | | 14 02 39.2 | +36 50 45 | 0.0347 | 16.3 | | E | o7 | |
| HS1408+4429 | CG 0368 | 14 08 23.6 | +44 29 01 | 0.0338 | 16.9 | 16 | B | l88 | |
| HS1408+4201 | | 14 08 39.7 | +42 01 06 | 0.0939 | 17.9 | | B | o7 | abs |
| HS1410+3627 | | 14 10 02.1 | +36 27 15 | 0.0338 | 16.9 | | E | o7 | |
| HS1410+3446 | MRK 0467<br>[RC2] A1410+34<br>IRAS F14103+3447<br>KUG 1410+347<br>CG 0374 | 14 10 21.5 | +34 46 57 | 0.0316 | 15.8 | 16.5 | E | l44 | IrS |
| HS1413+4402 | IRAS F14131+4402 | 14 13 08.2 | +44 02 07 | 0.0698 | 17.4 | | B | o7 | IrS |
| HS1413+3956 | KUG 1413+399<br>IRAS F14131+3955<br>NPM1G +39.0344 | 14 13 10.4 | +39 56 08 | 0.0426 | 16.1 | 16.5 | E | l6 | IrS |
| HS1415+4203 | | 14 15 57.1 | +42 03 05 | 0.0683 | 18.1 | | B | o7 | |
| HS1416+3554 | KUG 1416+359 | 14 16 03.3 | +35 54 27 | 0.0103 | 17.0 | 16 | E | o7 | spiral |
| HS1419+3639 | UGC 09198 | 14 19 16.2 | +36 39 19 | 0.0114 | 16.2 | 16.5 | E | l59 | Sb |
| HS1420+3437 | | 14 20 59.2 | +34 37 05 | 0.0246 | 18.2 | | E | o3 | |
| HS1421+4018 | | 14 21 37.9 | +40 18 43 | 0.0982 | 17.6 | | B | o7 | emi+abs |
| HS1422+3325 | | 14 22 18.9 | +33 25 58 | 0.0341 | 18.5 | | E | o3 | |
| HS1422+3339 | CG 0419 | 14 22 53.7 | +33 39 22 | 0.0114 | 17.1 | | E | o3 | |
| HS1425+3835 | CG 0435 | 14 25 14.6 | +38 35 33 | 0.0223 | 16.8 | 16 | E | o7 | |
| HS1429+3451 | CG 0457 | 14 29 14.3 | +34 51 17 | 0.0144 | 17.5 | 17.3 | E | o3 | |
| HS1429+3154 | CG 1236<br>NPM1G +31.0320 | 14 29 35.4 | +31 54 39 | 0.0117 | 16.7 | 16.9 | E | o7 | |
| HS1429+4511 | | 14 29 45.9 | +45 11 41 | 0.0321 | 18.0 | | E | o7 | |
| HS1435+4523 | | 14 35 06.7 | +45 23 03 | 0.1267 | 18.3 | | B | o7 | |
| HS1437+3701 | MRK 0475<br>CG 0493 | 14 37 03.6 | +37 01 12 | 0.0018 | 16.4 | 14.47 | E | l44 | |
| HS1438+3147 | CG 1250 | 14 38 33.7 | +31 47 39 | 0.0443 | 18.4 | 18 | E | o7 | |
| HS1440+3805 | NPM1G +38.0321 | 14 40 08.8 | +38 05 06 | 0.0322 | 16.7 | 17.00 | B | o7 | |
| HS1440+4302 | CG 0903<br>NPM1G +43.0283 | 14 40 22.3 | +43 02 32 | 0.0085 | 17.6 | 17.00 | E | o7 | |
| HS1442+4250 | | 14 42 17.9 | +42 50 13 | 0.0025 | 17.7 | | E | o7 | |
| HS1442+4332 | CG 0523 | 14 42 26.5 | +43 32 19 | 0.0811 | 17.5 | 16 | B | o7 | ** |
| HS1444+3114 | IRAS F14440+3114<br>CG 1260 | 14 44 01.6 | +31 14 23 | 0.0297 | 16.1 | 17 | E | o7 | IrS |
| HS1450+3844 | CG 0565<br>[SP82] 25 | 14 50 21.9 | +38 44 34 | 0.0140 | 17.8 | 16 | E | l78 | |
| HS1502+4152 | | 15 02 31.3 | +41 52 35 | 0.0164 | | | B | o7 | |

**Table 4: Continued**

| (1) object name | (2) other names | (3) R.A. | (4) Decl. | (5) redshift | (6) $B_H$ | (7) $B_L$ | (8) S | (9) run or reference | (10) remarks |
|---|---|---|---|---|---|---|---|---|---|
| HS1504+3922 | CG 0624 | 15 04 15.5 | 39 22 15 | 0.0302 | 18.8 | 17 | E | l78 | |
| | [SP82] 31 | | | | | | | | |
| HS1505+3944 | CG 0632 | 15 05 53.6 | +39 44 19 | 0.0366 | 17.6 | 16 | E | o7 | |
| HS1507+3743 | CG 0644 | 15 07 38.1 | +37 43 06 | 0.0322 | 18.3 | 18 | E | o7 | |
| HS1522+4214 | CG 0702 | 15 22 23.3 | +42 14 40 | 0.0190 | 17.1 | | B | o7 | |
| | NPM1G +42.0413 | | | | | | | | |
| HS1524+4205 | | 15 24 08.0 | +42 05 01 | 0.0225 | 18.4 | | E | o7 | |
| HS1526+4045 | | 15 26 56.7 | +40 45 17 | 0.0288 | 17.7 | | B | o7 | |
| HS1543+4525 | | 15 43 23.3 | +45 25 45 | 0.0389 | 17.4 | | E | o3 | |
| HS1544+4736 | | 15 44 28.0 | +47 36 20 | 0.0195 | 18.0 | | E | o3 | |
| HS1546+4755 | | 15 46 56.3 | +47 55 34 | 0.0377 | 18.9 | | E | o3 | |
| HS1548+4745 | PC 1548+4745 | 15 48 04.2 | +47 45 09 | 0.070 | 18.9 | | B | l67 | |
| HS1549+4630 | PC 1549+4630 | 15 49 35.5 | +46 30 37 | 0.098 | 18.9 | | B | l67 | |
| HS1609+4827 | | 16 09 44.4 | +48 27 44 | 0.0096 | 16.4 | | E | o3 | |
| HS1610+4539 | | 16 10 40.9 | +45 39 37 | 0.0196 | 17.7 | | E | o3 | |
| HS1614+4709 | | 16 14 54.2 | +47 09 22 | 0.0026 | 16.9 | | E | o3 | |
| HS1626+5153 | MRK 1498 | 16 26 48.4 | +51 53 05 | 0.0547 | 16.8 | 17.0 | E | l12 | Sy 1, IrS |
| | IRAS F16268+5152 | | | | | | | | |
| | IRAS 16268+5152 | | | | | | | | |
| | [dKM92] 408 | | | | | | | | |
| HS1627+5239 | | 16 27 33.1 | +52 39 36 | 0.0288 | 18.3 | | E | o3 | |
| HS1633+4703 | | 16 33 12.7 | +47 03 44 | 0.0086 | 16.7 | | E | o3 | |
| HS1634+5218 | CGCG 1634.0+5220 | 16 34 07.7 | +52 18 56 | 0.0087 | 15.0 | 16.0 | E | l44 | G pair, IrS |
| | MRK 1499 | | | | | | | | |
| | UGC A 412 | | | | | | | | |
| | CGCG 276-029 | | | | | | | | |
| | [RC2] A1634+52 | | | | | | | | |
| | IRAS F16340+5219 | | | | | | | | |
| | CGPG 1634.0+5220 | | | | | | | | |
| | I Zw 159 | | | | | | | | |
| HS1640+5136 | CGCG 1640.8+5138 | 16 40 48.2 | +51 36 30 | 0.0308 | 15.8 | 15.6 | E | o3 | IrS |
| | MRK 1500 | | | | | | | | |
| | CGCG 276-037 | | | | | | | | |
| | IRAS F16408+5136 | | | | | | | | |
| | IRAS 16407+5136 | | | | | | | | |
| HS1641+5053 | IRAS F16415+5053 | 16 41 31.6 | +50 53 22 | 0.0292 | 16.4 | | E | o3 | IrS |
| HS1643+5313 | | 16 43 10.2 | +53 13 16 | 0.785 | 19.5 | | E | o3 | QSO |
| HS1645+5155 | | 16 45 19.8 | +51 55 42 | 0.0286 | 19.5 | | E | o3 | |
| HS1657+5033 | CGCG 1657.3+5034 | 16 57 22.2 | +50 33 53 | 0.0102 | 16.0 | | E | o3 | IrS |
| | CGCG 252-012 | | | | | | | | |
| | IRAS F16573+5034 | | | | | | | | |
| HS1657+5735 | MRK 0891 | 16 57 36.2 | +57 35 48 | 0.0505 | 16.2 | | E | o3 | IrS |
| | IRAS F16576+5735 | | | | | | | | |
| | IRAS 16576+5735 | | | | | | | | |
| | CGPG 1657.6+5736 | | | | | | | | |
| | Zw 670 | | | | | | | | |
| HS1711+5758 | | 17 11 38.2 | +57 58 34 | 2.996 | 19.0 | | E | o7 | QSO |
| HS1723+5631 | IRAS F17237+5631 | 17 23 43.5 | +56 31 14 | 0.0286 | 17.0 | | E | o3 | IrS |
| HS1728+5655 | | 17 28 14.4 | +56 55 36 | 0.0160 | 17.0 | | E | o3 | |
| HS1734+5704 | IRAS F17341+5704 | 17 34 10.1 | +57 04 58 | 0.0475 | 16.3 | | E | o3 | IrS |
| HS2353+2005 | | 23 53 39.4 | +20 05 13 | 0.0236 | 17.5 | | E | o4 | |

* - galaxies with only one line detection
** - galaxies with only one line detection but twice observed

**List of Abbreviations**

| abrrev. | | reference |
|---|---|---|
| A | Abell galaxy | 1 |
| CG | Case Galaxy | 53-57, 62-65, 71 |
| CGCG | Catalogue of Galaxies and of Cluster of Galaxies 1968 | 93 |
| CGPG | Catalogue of Selected Compact Galaxies and of Post Eruptive Galaxies 1971 | 92 |
| DDO | David Dunlap Observatory catalog, van den Bergh 1966 | 3 |
| [dKM92] | de Grijp, Keel, Miley et. al. 1992 | 12 |
| [G93] | Garcia '93 | 11 |
| H | Hard X-Ray Sources | 42 |
| IRAS | Infrared Astronomical Satellite Catalogs 1988. The Point Source Catalog | 15 |
| IRAS F | Infrared Astronomical Satellite Catalogs 1990. The Faint Source Catalog | 46 |
| KUG | Kiso Survey for UV Excess Galaxies | 73-76 |
| LGG | Lyon Group of Galaxies Catalog | 11 |
| MCG | Morphological Catalogue of Galaxies 1962 | 82-86 |
| MRK | Markarian Galaxy | 25-40 |
| NPM | Lick Northern Proper Motion Program | 16 |
| OA-OZ | Ohio Source Catalog, 1415 MHz | 17, 47, 18, 66, 7, 10, 8, 5, 9, 60 |
| PC | Palomar Transit Grism Survey | 67 |
| [RC2] | The Second Reference Catalogue 1976 | 79 |
| [SMB88] | Slezak, Mars, Bijaoi et. al. 1988 | 69 |
| SBS | Second Byurakan Spectral Sky Survey | 41, 70 |
| [SP82] | Sanduleak and Pesch 1982 | 61 |
| UCM | Universidad Complutense de Madrid | 58, 89, 90 |
| UGC | Uppsala General Catalogue of Galaxies 1973 | 48 |
| UM | University of Michigan | 20-24 |
| VV | Vorontsov-Velyaminov 1959, 1977, Atlas and Catalog of Interacting Galaxies | 81 |
| WAS | Wasilewski 1983 | 87 |
| XRS | Second Catalogue of X-ray Sources | 2 |
| Zw | Zwicky Compact Galaxy | 91 |

**References to the Table 4**


1. Abell, G.O., Corwin, H.G., and Olowin, R.P. 1989, ApJS 70, 1
2. Amnuel, P.R., Guseinov, O.H., and Rakhamimov, Sh. Yu. 1982, Astrophys. and Space Sci. 82, 3
3. van den Bergh, S. 1966, AJ 71, 922
4. Bothun, G.D., Halpern, J.P., Lonsdale, C.J., Impey, C., and Schmitz, M. 1989, ApJS 70, 271
5. Brundage, R.K., Dixon, R.S., Ehman, J.R., and Kraus, J.D. 1971, AJ 76, 777
6. Dey, A., and Strauss, A. 1990, AJ 99, 463
7. Dixon, R.S., and Kraus, J.D. 1968, A.J. 73, 381
8. Ehman, J.R., Dixon, R.S., and Kraus, J.D. 1970, AJ 75, 351
9. Ehman, J.R., Dixon, R.S., Ramakrishna, C.M., and Kraus, J.D. 1974, AJ 79, 144
10. Fitch, L.T., Dixon, R.S., and Kraus, J.D. 1969, AJ 74, 612
11. Garcia, A.M. 1993, A&AS 100, 46
12. de Grijp, M.H.K., Keel, W.C., Miley, G.K., Goudfrooij, P., and Lub, J. 1992, A&AS 96, 389
13. Hewitt, A., and Burbidge, G. 1991, ApJS 75, 297
14. Huchra, J.P., Geller, M.J., de Lapparent, V., and Corwin JR, H.G. 1990, ApJS 72, 433
15. Joint IRAS Science Working Group 1988, Infrared Astronomical Satellite Catalogs, 1988, The Point Source Catalog, Version2.0, NASA RP-1190
16. Klemola, A.R., Jones, B.F., and Hanson, R.B. 1987, AJ 94, 501
17. Kraus, J.D. 1964, Nature 202, 269
18. Kraus, J.D., Dixon, R.S., and Fisher, R.O. 1966, Ap.J. 144, 559
19. Lu, N.Y., Hoffman, G.L., Groff, T., Ross, T., and Lamphier, C. 1993, ApJS 88, 383
20. MacAlpine, G.M., Smith, S.B., and Lewis, D.W. 1977, ApJS 34, 95 (List I)
21. MacAlpine, G.M., Smith, S.B., and Lewis, D.W. 1977, ApJS, 35, 197 (List II))
22. MacAlpine, G.M., Lewis, D.W., Smith, S.B. 1977, ApJS 35, 203 (List III)
23. MacAlpine, G.M., Lewis, D.W. 1978, ApJS 36, 587 (List IV)
24. MacAlpine, G.M., and Williams, G.A. 1981, ApJS 45, 1113 (List V)
25. Markarian, B.E.,1967, Astrofizika 3, 55
26. Markarian, B.E., 1969, Astrofizika 5, 443
27. Markarian, B.E., and Lipovetskii, V.A. 1969, Astrofizika 5, 581
28. Markarian, B.E., and Lipovetskii, V.A. 1971, Astrofizika 7, 511
29. Markarian, B.E., and Lipovetskii, V.A. 1972, Astrofizika 58, 155
30. Markarian, B.E., and Lipovetskii, V.A. 1973, Astrofizika 9, 487
31. Markarian, B.E., and Lipovetskii, V.A. 1974, Astrofizika 10, 307
32. Markarian, B.E., and Lipovetskii, V.A. 1976a, Astrofizika 12, 389
33. Markarian, B.E., and Lipovetskii, V.A. 1976b, Astrofizika 12, 657
34. Markarian, B.E., Lipovetskii, V.A., and Stepanian, D.A. 1977a, Astrofizika 13, 225
35. Markarian, B.E. Lipovetskii, V.A., and Stepanian, D.A. 1977b, Astrofizika 13, 397
36. Markarian, B.E. Lipovetskii, V.A., and Stepanian, D.A. 1979a, Astrofizika 15, 201
37. Markarian, B.E. Lipovetskii, V.A., and Stepanian, D.A. 1979b, Astrofizika 15, 363
38. Markarian, B.E. Lipovetskii, V.A., and Stepanian, D.A. 1979c, Astrofizika 15, 54
39. Markarian, B.E. Lipovetskii, V.A., and Stepanian, D.A. 1981, Astrofizika 17,61
40. Markarian, B.E., Lipovetskii, V.A., and Stepanian, D.A. 1983, Astrofizika 19, 221
41. Markarian, B.E., and Stepanian, J.A. 1983, Astrophysics 19, 354; Astrofizika 19,639
42. Marshall, F.E., Boldt, E.A., Holt, S.S., Mushotzky, R.F., Pravdo, S.H., Rothschild, R.E., and Serlemitsos, P.J. 1979, ApJS 40, 657
43. Martel, A., and Osterbrock, D.E. 1994, AJ 107, 1283
44. Mazzarella, J.M., and Balzano, V.A. 1986, ApJS 62, 751
45. Mazzarella, J.M., and Boroson, T.A. 1993, ApJS 85, 27
46. Moshir, M., Kopan, G., Conrow, T., Mccallon, H., Hacking, P., Gregorich, D., Rohrbach, G., Melnyk, M., Rice, W. Fullmer, L., et. al. 1990, Infrared Astronomical Satellite Catalogs, 1990, The Faint Source Catalog, Version 2.0
47. Nash, R.T. 1965, AJ 70, 846
48. Nilson, P. 1973, Uppsala General Catalogue of Galaxies, Nova Acta Regiae Societatis Scientiarum Ser. V, Vol.1, Uppsala
49. Noguchi, T., Maehara, H., and Kondo, M. 1980, Ann. Tokio Astron. Obs., 2-nd Series 18, 55
50. Osterbrock, D.E., and Pogge, R.W. 1987, ApJ 323, 108
51. Osterbrock, D.E., and Shaw, R.A. 1988, ApJ 327, 89
52. Palumbo, G.C.G., Tanzella-Nitti, G., and Vettolani, G. 1983, Catalog of Radial Velocities of Galaxies, New-York: Gordon&Breach
53. Pesch, P., Sanduleak, N. (Paper I) 1983, ApJS 51, 171
54. Pesch, P., Sanduleak, N. (Paper III) 1986, ApJS 60, 543
55. Pesch, P., Sanduleak, N. (Paper V) 1988, ApJS 66, 297
56. Pesch, P., Sanduleak, N. (Paper VIII) 1989, ApJS 70, 163
57. Pesch, P., Sanduleak, N., and Stephenson, C.B. (Paper XII) 1991, ApJS 76,1043
58. Rego, M., Cordero-Gracia, M., Zamorano, J. and Gallego, J. 1993, AJ 105, 427
59. Richter, O.-G., and Huchtmeier, W.K. 1991, A&AS 87, 425
60. Rinsland, C.P., Dixon, R.S., Gerhart, M.R., and Kraus, J.D. 1974, AJ 79, 1129
61. Sanduleak, N. and Pesch, P. 1982, ApJ 258, L11
62. Sanduleak, N., Pesch, P. (Paper II) 1984, ApJS 55, 517
63. Sanduleak, N., and Pesch, P.(Paper IV) 1987, ApJS 63, 809
64. Sanduleak, N., Pesch, P. (Paper IX) 1989, ApJS 70, 173

**References to the Table 4. Continued**


65. Sanduleak, N., Pesch, P. (Paper XI) 1990, ApJS 72, 291
66. Scheer, D.J., and Kraus, J.D. 1967, A.J. 72, 536
67. Schneider, D.P., Schmidt, M., and Gunn, J.E., 1994, AJ 107, 1245
68. Schneider, S.E., Thuan, T.X., Mangum, J.G. and Miller, J. 1992, ApJS 81, 5
69. Slezak, E., Mars, G., Bijaoui, A., Balkowski, C., and Fontanelli, P. 1988, A&AS 74, 83
70. Stepanian, J.A., Lipovetski, V.A. and Erastova, L.K. 1990, Astrophysics 32, 252; Astrofizika 32, 441
71. Stephenson, C.B., Pesch, P., and MacConnell, D.J. (Paper XIII) 1992, ApJS 82, 471
72. Strauss, M.A., Huchra, J.P., Davis, M., Yahil, A., Fisher, K.B., and Tonry, J. 1992, ApJS 83, 29
73. Takase, B., and Miyauchi-Isobe, N. 1984, Annals of the Tokio Ast. Obs. 19, 595
74. Takase, B., and Miyauchi-Isobe, N. 1986, Annals of the Tokio Ast. Obs. 21, 181
75. Takase, B., and Miyauchi-Isobe, N. 1987, Annals of the Tokio Ast. Obs. 21, 251
76. Takase, B, and Miyauchi-Isobe, N. 1989 Pub. National Ast. Obs. of Japan 1, 11
77. Terlevich, R., Melnick, J., Masegosa, J., Moles, M., and Copetti, M.V.F. 1991, A&AS 91, 285
78. Tifft, W.C., Kirshner, R.P., Gregory, S.A., Moody, J.W. 1986, ApJ 310,75
79. de Vaucouleurs, G., de Vaucouleurs, A., and Corwin, H.G. 1976, Second Reference Catalogue of Bright Galaxies, University of Texas Press, Austin
80. Vogel, S., Engels, D., Hagen, H.-J., Groote, D., Wisotzki, L., Cordis, L., and Reimers, D. 1993, A&AS 98, 193
81. Vorontsov-Velyaminov, B.A. 1959, Atlas and Catalog of Interacting Galaxies, Sternberg. Inst., Moscow State University
82. Vorontsov-Velyaminov, B.A., and Krasnogorskaja, A.A. 1962, Morphological Catalog of Galaxies, Part I Moscow State University
83. Vorontsov-Velyaminov, B.A., and Arhipova, V.P. 1964, Morphological Catalog of Galaxies, Part II Moscow State University
84. Vorontsov-Velyaminov, B.A., and Arhipova, V.P. 1963, Morphological Catalog of Galaxies, Part III Moscow State University
85. Vorontsov-Velyaminov, B.A., and Arhipova, V.P. 1968, Morphological Catalog of Galaxies, Part IV Moscow State University
86. Vorontsov-Velyaminov, B.A., and Arhipova, V.P. 1974, Morphological Catalog of Galaxies, Part V Moscow State University
87. Wasilewski, A.J. 1983, ApJ 272, 68
88. Weistrop, D., and Downes, R.A. 1988, ApJ 331, 172
89. Zamorano, J., Rego, M., Gonzáles-Riestra, R. 1989, 79, 443
90. Zamorano, J., Rego, M., Gallego, J., Vitores, A.G. , Gonza'ales-Riestra, R., and Rodrígues-Caderot, G.
91. Zwicky, F. 1961-1968, Seven privately circulated lists.
92. Zwicky, F. 1971, Catalogue of Selected Compact Galaxies and of Post Eruptive Galaxies
93. Zwicky, F., Herzog, E., Wild, P., Karpowicz, M., and Kowal, C. 1961-1968, Catalog of Galaxies and of Clusters of Galaxies, Pasadena: California Institute of Technology