Appendix

Table A1. Site-specific walk lengths to a centro-symmetric sink (trap) on a regular square-planar lattice of N sites and a companion, fractal-like lattice of N sites. For site specifications, see Figs. (1, 2).

N = L x L	Site	<n(i)>, Regular Lattice	<n(i)>, "Fractal" Lattice
3 x 3	1	8	8
	2	10	10
5 x 5	1	24	24
	2	30	26
	3	32	40
	4	34	46
	5	36	48
7 x 7	1	48	48
	2	786/13	50
	3	872/13	88
	4	922/13	94
	5	76	96
	6	968/13	112
	7	990/13	122
	8	1028/13	128
	9	1054/13	130

9 x 9	1	80	80
	2	101.2	82
	3	113.7	152
	4	120.3	158
	5	130.0	160
	6	129.9	208
	7	132.6	218
	8	137.6	224
	9	142.3	226
	10	136.9	240
	11	138.4	254
	12	141.7	264
	13	145.0	270
	14	147.0	272
11 x 11	1	120	120
	2	152.1	122
	3	171.8	232
	4	182.2	238
	5	197.7	240
	6	198.9	328
	7	203.1	338
	8	211.3	344
	9	219.7	346
	10	213.8	400
	11	215.9	414
	12	220.7	424
	13	226.1	430
	14	230.6	432
	15	220.5	440
	16	221.9	458
	17	225.4	472
	18	229.5	482
	19	233.0	488
	20	235.0	490

13 x 13	1	168	168
	2	213.2	170
	3	241.6	328
	4	256.4	334
	5	279.1	336
	6	281.6	472
	7	287.6	482
	8	299.9	488
	9	313.0	490
	10	305.7	592
	11	308.7	606
	12	315.7	616
	13	324.1	622
	14	331.8	624
	15	319.8	680
	16	321.6	698
	17	326.1	712
	18	331.9	722
	19	337.6	728
	20	341.9	730
	21	326.5	728
	22	327.8	750
	23	331.3	768
	24	335.9	782
	25	340.6	792
	26	344.2	798
	27	346.2	800

15 x 15	1	224	224
	2	284.5	226
	3	323.0	440
	4	343.0	446
	5	374.1	448
	6	378.1	640
	7	386.3	650
	8	403.3	656
	9	422.0	658
	10	412.7	816
	11	416.8	830
	12	426.7	840
	13	438.8	846
	14	450.6	848
	15	435.2	960
	16	437.6	978
	17	443.8	992
	18	452.0	1002
	19	460.3	1008
	20	467.6	1010
	21	449.0	1064
	22	450.6	1086
	23	454.9	1104
	24	460.8	1118
	25	467.2	1128
	26	472.9	1134
	27	477.2	1136
	28	455.5	1120
	29	456.8	1146
	30	460.3	1168
	31	465.3	1186
	32	470.7	1200
	33	475.7	1210
	34	479.5	1216
	35	481.5	1218

17 x 17	1	288	288
	2	366.0	290
	3	416.0	568
	4	442.0	574
	5	482.7	576
	6	488.2	832
	7	499.0	842
	8	521.5	848
	9	546.8	850
	10	535.0	1072
	11	540.4	1086
	12	553.6	1096
	13	570.1	1102
	14	586.6	1104
	15	566.8	1280
	16	570.0	1298
	17	578.2	1312
	18	589.4	1322
	19	601.2	1328
	20	612.1	1330
	21	588.4	1448
	22	590.5	1470
	23	596.0	1488
	24	603.9	1502
	25	612.6	1512
	26	621.0	1518
	27	628.0	1520
	28	601.9	1528
	29	603.4	1594
	30	607.6	1616
	31	613.6	1634
	32	620.5	1648
	33	627.2	1658
	34	633.0	1664
	35	637.2	1666

17 x17 (con't)	36	608.4	1632
	37	609.7	1662
	38	613.2	1688
	39	618.4	1710
	40	624.4	1728
	41	630.4	1742
	42	635.6	1752
	43	639.4	1758
	44	641.4	1760

Table A2. Site-specific walklengths to a corner trap on a regular square-planar lattice of N sites, and a companion, fractal-like lattice of N sites. See Fig. 2 for site specifications; values for selected sites are specified to more decimal places (see text).

N = L x L	Site	<n(i)>, Regular Lattice	<n(i)>, "Fractal" Lattice
3 x 3	S	21.5	43/2
	1	16	16
	2	0	0
	45	25	25
	46	27	27
	89	22.5	45/2
5 x 5	S	90.742424	864/7
	1	16	807/7
	2	81.8	821/7
	45	97.7	907/7
	46	102.3	921/7
	89	92.4	871/7
	5	0	0
	3	74.106060	92
	4	48	48
	90	88.5	761/7
	91	95.075757	850/7
	92	97.6	911/7
	47	101.4	944/7
	48	104.8	986/7
	49	106.8	1000/7

7 x 7	S	218.9430943	12485/34
	1	206.6	12157/34
	2	188.1	12225/34
	45	229.3	12745/34
	46	236.8	12813/34
	89	220.9	12519/34
	3	194.3	11263/34
	4	167.6	11467/34
	5	132.8	11535/34
	90	213.2	5954/17
	91	225.2	12417/34
	92	230.5	6395/17
	47	236.6	13027/34
	48	242.3	13231/17
	49	246.6	13299/34
	6	185.9822034	276
	7	151.2	188
	8	96	96
	9	0	0
	93	208.4	10361/34
	94	222.0	5601/17
	95	228.5160385	11907/34
	96	231.0	6238/17
	97	235.3	12909/34
	50	240.4	6603/17
	51	245.2	6773/17
	52	248.9	6875/17
	53	250.9	6909/17

9 x 9	S	413.1288271	169952/209
	1	397.4	167799/209
	2	375.9	168217/209
	45	426.9	171687/209
	46	437.5	172105/209
	89	415.2	170161/209
	3	381.2	14730/19
	4	352.4	14844/19
	5	318.3	14882/19
	90	403.8	166200/209
	91	420.4	169534/209
	92	428.8	172032/209
	47	437.8	173694/209
	48	446.1	174948/209
	49	453.0	175366/209
	6	367.1	150001/209
	7	330.3	152091/209
	8	282.2	153345/209
	9	222.1	153763/209
	93	394.4	156303/209
	94	413.8	161769/209
	95	426.1	166399/209
	96	431.3	170193/209
	97	438.0	15741/19
	50	445.2	175273/209
	51	452.1	177363/209
	52	457.9	178617/209
	53	462.1	179035/209
	10	358.5851353	616
	11	315.6	468
	12	253.9	316
	13	160	160
	14	0	0
	98	389.0	137583/209
	99	410.0	145586/209
	100	423.3	152753/209
	101	429.7390500	159084/209
	102	432.2	164579/209

9 x 9 (con't)

103	436.7	169238/209
104	442.5	173061/209
54	449.0	176048/209
55	455.2	178974/209
56	460.4	181064/209
57	464.3	182318/209
58	466.3	182736/209

11 x 11	S	678.4846260	2351555/1546
	1	659.3	2335489/1546
	2	634.7	2338581/1546
	45	695.6	2364529/1546
	46	709.4	2367621/1546
	89	680.7	2230893/1546
	3	639.4	2292535/1546
	4	608.1	2301811/1546
	5	572.6	2304903/1546
	90	665.6	2323591/1546
	91	686.4	2348463/1546
	92	698.1	2367151/1546
	47	710.0	2379655/1546
	48	721.2	2388931/1546
	49	730.9	2392023/1546
	6	620.7	2203065/1546
	7	581.8	2218525/1546
	8	535.0	2227801/1546
	9	481.2	2230893/1546
	93	651.9	2249985/1546
	94	676.1	2290721/1546
	95	693.7	2325273/1546
	96	701.9	2353641/1546
	97	711.3	2375825/1546
	50	721.1	2391825/1546
	51	730.4	2407285/1546
	52	738.6	2416561/1546
	53	745.2	2419653/1546
	10	605.6	2045031/1546
	11	559.4	2066675/1546
	12	500.3	2082135/1546
	13	425.4	2091411/1546
	14	333.7	2094503/1546
	98	641.3	1055420/773
	99	668.3	2170465/1546
	100	687.6	1111953/773
	101	700.2	2271163/1546
	102	705.2	1156118/773

11 x 11 (con't)

103	712.1	2347125/1546
104	720.1	1187915/773
54	728.6	2398351/1546
55	736.7	2419995/1546
56	744.0	2435455/1546
57	749.8	2444731/1546
58	754.0	2447823/1546
15	597.0366561	1160
16	546.0	936
17	477.6	708
18	382.3	476
19	240	240
20	0	0
105	635.5	1881809/1546
106	664.0	982037/773
107	684.4	2040155/1546
108	697.5	1055026/773
109	703.9083671	2173765/1546
110	706.3	1115647/773
111	710.9	2282639/1546
112	717.2	1163900/773
113	724.5	2366777/1546
59	732.3	1199785/773
60	739.9	1213699/773
61	746.7	1224521/773
62	752.20	1232251/773
63	756.1	1236889/773
64	758.1	1238435/773

13 x 13	S	1019.1300000	33986848/13327
	1	996.6	33851841/13327
	2	968.8	33878495/13327
	45	1039.6	34095201/13327
	46	1056.6	34121855/13327
	89	1021.4	34000175/1327
	3	973.1	33488538/13327
	4	939.0	33568500/13327
	5	901.2	33595154/13327
	90	1002.7	33751020/13327
	91	1027.5	33960194/13327
	92	1042.5	34116060/13327
	47	1057.5	34218618/13327
	48	1071.6	34298580/13327
	49	1084.3	34325234/13327
	6	950.2	32729483/13327
	7	908.9	32862753/13327
	8	861.4	32942715/13327
	9	808.8	32969369/13327
	93	985.0	33126393/13327
	94	1013.4	33469995/13327
	95	1035.8	33760289/13327
	96	1047.2	33997275/13327
	97	1059.6	34180953/13327
	50	1072.1	34311323/13327
	51	1084.1	34444593/13327
	52	1095.0	34524555/13327
	53	1104.2	34551209/13327
	10	929.7	31386940/13327
	11	881.1	31573518/13327
	12	822.7	31706788/13327
	13	754.1	31786750/13327
	14	676.7	31813404/13327
	98	969.6	31943628/13327
	99	1001.5	32447008/13327
	100	1026.3	32897080/13327
	101	1044.4	33293844/13327
	102	1052.4	33637300/13327

13 x 13 (con't)

103	1061.9	33927448/13327
104	1072.5	34164288/13327
54	1083.3	34347820/13327
55	1093.7	34534398/13327
56	1103.3	34667668/13327
57	1111.4	34747630/13327
58	1117.9	34774284/13327
15	914.0	29247823/13327
16	858.9	29487709/13327
17	790.2	29674287/13327
18	704.4	29807557/13327
19	597.3	29887519/13327
20	467.6	29914173/13327
105	958.1	29995723/13327
106	992.8	30690315/13327
107	1019.4	31331599/13327
108	1038.7	31919575/13327
109	1051.3	32454243/13327
110	1056.3	32935603/13327
111	1063.3	33363655/13327
112	1071.7	33738399/13327
113	1081.1	34059835/13327
59	1090.8	34327963/13327
60	1100.3	34567849/13327
61	1108.9	34754427/13327
62	1116.4	34887697/13327
63	1122.3	34967659/13327
64	1126.4	34994313/13327
21	905.4281745	1956
22	846.4	1640
23	770.8	1320
24	671.8	996
25	536.4	668
26	336	336
27	0	0
114	951.9	27045425/13327

13 x 13 (con't)

115	988.1	27969940/13327
116	1015.7	28841127/13327
117	1035.7	29659016/13327
118	1048.7	30423597/13327
119	1055.137285	31134870/13327
120	1057.5	31792835/13327
121	1062.2	32397492/13327
122	1068.7	32948841/13327
123	1076.6	33446882/13327
124	1085.5	33891615/13327
65	1094.6	34283040/13327
66	1103.6	34576234/13327
67	1111.8	34816120/13327
68	1118.9	35002698/13327
69	1124.6	35135968/13327
70	1128.5	35215930/13327
71	1130.5	35242584/13327

15 x 15	S	1438.485683	518415429/130922
	1	1412.4	517150507/130922
	2	1381.6	517412351/130922
	45	1462.4	519418507/130922
	46	1482.6	519680351/130922
	89	1440.8	518546351/130922
	3	1385.6	513704209/130922
	4	1348.5	514489741/130922
	5	1308.1	514751585/130922
	90	1418.6	46926431/11902
	91	1447.1	518153585/130922
	92	1465.4	519592741/130922
	47	1483.6	520508209/130922
	48	1500.8	521293741/130922
	49	1516.6	521555585/130922
	6	1358.7	506462159/130922
	7	1314.8	507771379/130922
	8	1265.7	508556911/130922
	9	1212.4	508818755/130922
	93	1396.9	510228379/130922
	94	1429.4	513470911/130922
	95	1456.2	516189755/130922
	96	1470.9	47125901/11902
	97	1486.3	520056379/130922
	50	1501.8	521204159/130922
	51	1516.6	522513379/130922
	52	1530.3	523298911/130922
	53	1542.3	523560755/130922
	10	929.7	493620981/130922
	11	1282.4	495453889/130922
	12	1223.5	496763109/130922
	13	1157.0	497548641/130922
	14	1084.4	497810485/130922
	98	1377.0	498903139/130922
	99	1413.4	45787419/11902
	100	1443.1	507896391/130922
	101	1466.4	511607485/130922

15 x 15 (con't)

102	1477.4	514794891/130922
103	1061.9	517458609/130922
104	1503.2	519598639/130922
54	1516.6	521214981/130922
55	1529.6	523047889/130922
56	1541.6	524357109/130922
57	1552.3	525142641/130922
58	1561.2	525404485/130922
15	1311.8	473141049/130922
16	1253.8	475497645/130922
17	1184.8	477330553/130922
18	1103.8	478639773/130922
19	1009.9	479425305/130922
20	904.8	479687149/130922
105	1360.3	480232095/130922
106	1400.2	486799453/130922
107	1432.3	492843123/130922
108	1457.4	498363105/130922
109	1475.8	503359399/130922
110	1483.6	507832005/130922
111	1493.2	511780923/130922
112	1504.2	46836923/11902
113	1515.9	518107695/130922
59	1527.9	520485549/130922
60	1539.5	522842145/130922
61	1550.3	524675053/130922
62	1560.0	525984273/130922
63	1568.1	526769805/130922
64	1574.5	527031649/130922
21	1535.4	442689787/130922
22	1232.0	445570071/130922
23	1154.3	447926667/130922
24	1059.4	449759575/130922
25	942.4	451068795/130922
26	797.8	451854327/130922
27	623.9	452116171/130922

15 x 15 (con't)

114	1348.1	225975198/65461
115	1390.6	460687317/130922
116	1424.7	234450275/130922
117	1451.0	476590095/130922
118	1470.3	241877976/65461
119	1483.0	490398121/130922
120	1487.9	248258301/65461
121	1494.9	502111395/130922
122	1503.7	23053750/5951
123	1513.7	511729917/130922
124	1524.4	257876823/65461
65	1535.4	519253687/130922
66	1546.2	522133971/130922
67	1556.2	524490567/130922
68	1565.3	526323475/130922
69	1572.9	527632695/130922
70	1578.8	528418227/130922
71	1582.9	528680071/130922
28	1287.168981	3052
29	1220.1	2628
30	1137.1	2200
31	1033.0	1768
32	898.5	1332
33	716.1	892
34	448	448
35	0	0
125	1341.6	411445341/130922
126	1385.7	211396525/65461
127	1420.7	433617071/130922
128	1447.7	221958702/65461
129	1467.5	453694049/130922
130	1480.4	231473503/65461
131	1486.844140	471676275/130922
132	1489.2	239940928/65461
133	1493.9	487563749/130922

15 x 15 (con't)

134	1500.6	247360977/65461
135	1508.9	45577861/11902
136	1518.4	253733650/65461
137	1528.7	513054441/130922
72	1539.2	259058947/65461
73	1549.5	260760933/65461
74	1559.2	262201075/65461
75	1567.9	263379373/65461
76	1575.3	264295827/65461
77	1581.0	264950437/65461
78	1548.9	265343203/65461
79	1586.9	265474125/65461

17 x 17	S	1939.477675	8374133440/1441729
	1	1910.2	8361039231/1441729
	2	1875.9	8363922689/1441729
	45	1966.7	8384344191/1441729
	46	1990.2	8387227649/1441729
	89	1941.8	8375575169/1441729
	3	1879.8	8324758710/1441729
	4	1839.6	8333409084/1441729
	5	1796.4	8336292542/1441729
	90	1916.1	8350887804/1441729
	91	1948.3	8371249982/1441729
	92	1970.0	8385845244/1441729
	47	1991.4	8394673590/1441729
	48	2011.7	8403323964/1441729
	49	2030.5	8406207422/1441729
	6	1847.1	8247931805/1441729
	7	1802.4	8262349095/1441729
	8	1751.2	8270999469/1441729
	9	1696.2	8273882927/1441729
	93	1890.7	8287596135/1441729
	94	1927.0	8321493549/1441729
	95	1957.9	8349624047/1441729
	96	1976.0	8371987629/1441729
	97	1994.6	8388584295/1441729
	50	2013.1	8399414045/1441729
	51	2030.8	8413831335/1441729
	52	2047.3	8422481709/1441729
	53	2062.2	8425365167/1441729
	10	1819.5	8111256364/1441729
	11	1765.9	8131440570/1441729
	12	1705.6	8145857860/1441729
	13	1639.3	8154508234/1441729
	14	1568.1	8157391692/1441729
	98	1866.5	8166883530/1441729
	99	1907.0	8216743780/1441729
	100	1941.2	8260837114/1441729

17 x 17 (con't)

101	1969.3	8299163532/1441729
102	1983.6	8331723034/1441729
103	1999.1	8358515620/1441729
104	2015.3	8379541290/1441729
54	2031.5	8394800044/1441729
55	2047.1	8414984250/1441729
56	2061.8	8429401540/1441729
57	2075.1	8438051914/1441729
58	2086.6	8440935372/1441729
15	1792.6	7893002635/1441729
16	1731.9	7918953757/1441729
17	1662.2	7939137963/1441729
18	1583.1	7953555253/1441729
19	1494.9	7962205627/1441729
20	1399.5	7965089085/1441729
105	1844.9	7967602861/1441729
106	1889.3	8036436171/1441729
107	1926.5	8099502565/1441729
108	1956.8	8156802043/1441729
109	1980.7	8208334605/1441729
110	1991.5	8254100251/1441729
111	2004.0	8294098981/1441729
112	2017.7	8328330795/1441729
113	2032.0	8356795693/1441729
59	2046.4	8379493675/1441729
60	2060.4	8405444797/1441729
61	2073.7	8425629003/1441729
62	2085.7	8440046293/1441729
63	2096.2	8448696667/1441729
64	2104.9	8451580125/1441729
21	1770.1	7568430642/1441729
22	1702.9	7600148680/1441729
23	1624.1	7626099802/1441729
24	1532.0	7646284008/1441729
25	1425.0	7660701298/1441729
26	1302.1	7669351672/1441729

17 x 17 (con't)

27	1165.6	7672235130/1441729
114	1827.1	7665710064/1441729
115	1875.0	7757222570/1441729
116	1914.7	7842968160/1441729
117	1946.9	7922946834/1441729
118	1972.1	7997158592/1441729
119	1990.7	8065603434/1441729
120	1998.3	8128281360/1441729
121	2008.0	8185192370/1441729
122	2019.2	8236336464/1441729
123	2031.6	8281713642/1441729
124	2044.5	8321323904/1441729
65	2057.7	8355167250/1441729
66	2070.5	8386885288/1441729
67	2082.7	8412836410/1441729
68	2093.8	8433020616/1441729
69	2013.6	8447437906/1441729
70	2111.7	8456088280/1441729
71	2117.9	8458971738/1441729
28	1753.8	7109094273/1441729
29	1681.5	7146579227/1441729
30	1595.3	7178297265/1441729
31	1491.9	7204248387/1441729
32	1367.0	7224432593/1441729
33	1214.4	7238849883/1441729
34	1027.0	7247500257/1441729
35	802.5	7250383715/1441729
125	1814.3	7233586723/1441729
126	1864.8	7352312257/1441729
127	1906.4	7465270875/1441729
128	1939.9	7572462577/1441729
129	1966.1	7673887363/1441729
130	1985.4	7769545233/1441729
131	1998.1	7859436187/1441729
132	2002.9	7943560225/1441729
133	2010.0	8021917347/1441729

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134	2018.9	8094507553/1441729
135	2029.3	8161330843/1441729
136	2040.8	8222387217/1441729
137	2052.9	8277676675/1441729
72	2065.3	8327199217/1441729
73	2077.3	8364684171/1441729
74	2088.8	8396402209/1441729
75	2099.3	8422353331/1441729
76	2108.5	8442537537/1441729
77	2116.2	8456954827/1441729
78	2122.2	8465605201/1441729
79	2126.2	8468488659/1441729
36	1745.180178	4496
37	1670.1	3948
38	1579.6	3396
39	1469.4	2840
40	1332.6	2280
41	1157.5	1716
42	921.5	1148
43	576	576
44	0	0
138	1807.7	6639233471/1441729
139	1859.5	6790686442/1441729
140	1902.1	6936372497/1441729
141	1936.4	7076291636/1441729
142	1964.0	7210443859/1441729
143	1982.7	7338829166/1441729
144	1995.6	7461447557/1441729
145	2001.953828	7578299032/1441729
146	2004.3	7689383591/1441729
147	2009.0	7794701234/1441729
148	2015.8	7894251961/1441729
149	2024.4	7988035772/1441729
150	2034.4	8076052667/1441729
151	2045.5	8158302646/1441729
152	2057.1	8234785709/1441729

80	2069.1	8305501856/1441729
81	2080.8	8348753726/1441729
82	2091.9	8386238680/1441729
83	2102.1	8417956718/1441729
84	2111.0	8443907840/1441729
85	2118.5	8464092046/1441729
86	2124.3	8478509336/1441729
87	2128.3	8487159710/1441729
88	2130.3	8490043168/1441729