

**Table 1.** Cluster sample with radio halo detections and upper limits.

	Redshift	$L_X$ $10^{44} \text{ erg s}^{-1}$	$K_0$ $\text{keV cm}^2$	$P_{1.4 \text{ GHz}}$ $10^{31} \text{ erg s}^{-1} \text{ Hz}^{-1}$	Reference
Giant radio halos					
1E50657-558	0.2994	$23.03 \pm 1.81$	$299.4 \pm 19.6$	$28.21 \pm 1.97$	4, 24
A209	0.2060	$6.29 \pm 0.65$	$100.7 \pm 26.3$	$1.19 \pm 0.26$	4, 28
A520	0.2010	$8.83 \pm 1.99$	$325.5 \pm 29.2$	$3.91 \pm 0.39$	12, 2
A521	0.2475	$8.18 \pm 1.36$	$201.6 \pm 36.1$	$1.16 \pm 0.11$	4, 9
A545	0.1530	$5.66 \pm 0.49$	–	$1.48 \pm 0.06$	4, 2
A665	0.1816	$9.84 \pm 1.54$	$134.6 \pm 23.5$	$3.98 \pm 0.39$	12, 19
A754	0.0535	$4.31 \pm 0.33$	$70.4 \pm 23.8$	$1.08 \pm 0.06$	11, 2
A773	0.2170	$8.10 \pm 1.35$	$244.3 \pm 31.7$	$1.73 \pm 0.17$	12, 21
A1300	0.3075	$13.97 \pm 2.05$	–	$6.09 \pm 0.61$	4, 15
A1656 (Coma)	0.0231	$3.77 \pm 0.10$	$154.0 \pm 43.0$	$0.72 \pm 0.07$	11, 23, 10, 25
A1914	0.1712	$10.71 \pm 1.02$	$63.3 \pm 22.3$	$5.21 \pm 0.24$	11, 2
A2163	0.2030	$23.17 \pm 1.48$	$437.3 \pm 82.7$	$18.44 \pm 0.24$	4, 16
A2219	0.2281	$12.73 \pm 1.37$	$411.6 \pm 43.2$	$12.23 \pm 0.59$	12, 2
A2254	0.1780	$4.32 \pm 0.92$	–	$2.94 \pm 0.29$	11, 2
A2255	0.0808	$2.65 \pm 0.12$	$529.1 \pm 28.2$	$0.89 \pm 0.05$	11, 22
A2256	0.0581	$3.81 \pm 0.17$	$349.6 \pm 11.6$	$0.68 \pm 0.12$	11, 8, 6
A2319	0.0559	$7.40 \pm 0.40$	$270.2 \pm 4.8$	$1.12 \pm 0.11$	11, 15
A2744	0.3066	$12.92 \pm 2.41$	$295.1 \pm 113.4$	$17.16 \pm 1.71$	4, 21
CL0016+16	0.5545	$18.83 \pm 1.88$	–	$6.74 \pm 0.67$	27, 19
MACSJ0717	0.5548	$24.60 \pm 0.3$	$158.7 \pm 111.6$	$50.00 \pm 10.00$	14, 31, 5
RXCJ2003.5-2323	0.3171	$9.25 \pm 1.53$	–	$12.30 \pm 0.71$	4, 18
Radio mini-halos					
A426 (Perseus)	0.018	8.31	$19.4 \pm 0.2$	4.40	1, 26
A2142	0.089	10.89	$58.5 \pm 2.7$	0.66	30, 19
A2390	0.2329	$13.43 \pm 3.16$	$14.7 \pm 7.0$	$9.77 \pm 0.45$	12, 2
A2626	0.0604	1.96	$23.2 \pm 2.9$	0.43	30, 20
PKS0745-191	0.1028	14.06	$11.9 \pm 0.7$	27.00	30, 3
RXCJ1314.4-2515	0.2439	$10.94 \pm 1.81$	–	$0.75 \pm 0.15$	4, 28, 17
Z7160	0.2578	$8.41 \pm 2.12$	$18.8 \pm 3.2$	$2.19 \pm 0.26$	12, 7
No radio halo detection					
A141	0.2300	$5.76 \pm 0.90$	$144.1 \pm 31.3$	<0.36	4, 29
A611	0.2880	$8.86 \pm 2.53$	$124.9 \pm 18.6$	<0.40	13, 29
A781	0.2984	$11.29 \pm 2.82$	–	<0.36	12, 29
A1423	0.2130	$6.19 \pm 1.34$	$58.8 \pm 12.6$	<0.41	12, 29
A2537	0.2966	$10.17 \pm 1.45$	$106.7 \pm 19.6$	<0.50	4, 29
A2631	0.2779	$7.57 \pm 1.50$	$308.8 \pm 37.4$	<0.39	4, 29
A2667	0.2264	$13.65 \pm 1.38$	$12.3 \pm 4.0$	<0.42	4, 29
A2697	0.2320	$6.88 \pm 0.85$	–	<0.40	4, 29
A3088	0.2537	$6.95 \pm 1.20$	$32.7 \pm 9.5$	<0.42	4, 29
RXCJ1115.8+0129	0.3499	$13.58 \pm 2.99$	$14.1 \pm 5.1$	<0.45	4, 29
RXCJ1512.2-2254	0.3152	$0.19 \pm 1.76$	–	<0.63	4, 29
RXJ0027.6+2616	0.3649	$12.29 \pm 3.88$	–	<0.68	13, 29
RXJ1532.9+3021	0.3450	$16.49 \pm 4.50$	$14.3 \pm 1.9$	<0.62	12, 29
RXJ2228.6+2037	0.4177	$19.44 \pm 5.55$	–	<0.91	13, 29
S780	0.2357	$15.53 \pm 2.80$	–	<0.36	4, 29
Z2089	0.2347	$6.79 \pm 1.76$	–	<0.27	12, 29
Z2701	0.2140	$6.59 \pm 1.15$	$34.0 \pm 4.2$	<0.42	12, 29
Z5699	0.3063	$8.96 \pm 2.24$	–	<0.54	13, 29
Z5768	0.2660	$7.47 \pm 1.66$	–	<0.36	13, 29
Z7215	0.2897	$7.34 \pm 1.91$	–	<0.55	13, 29

**Notes.** Sample base from [Brunetti et al. \(2009\)](#). Four mini-halos are added from [Gitti et al. \(2004\)](#). The X-ray luminosities are as in [Brunetti et al. \(2009\)](#), for the four additional mini-halos data was added from [Reiprich & Böhringer \(2002\)](#), and for A2626 from [Stott et al. \(2008\)](#). Central values for the entropy indicator  $K_0 = kT_{x,0} n_{e,0}^{-2/3}$  are taken from the extrapolation method in [Cavagnolo et al. \(2009\)](#) applied to Chandra data.  $K_0$  of Coma at 12 kpc is from [Rafferty et al. \(2008\)](#).

**References.** 1 = [Allen et al. \(1992\)](#), 2 = [Bacchi et al. \(2003\)](#), 3 = [Baum & O’Dea \(1991\)](#), 4 = [Böhringer et al. \(2004\)](#), 5 = [Bonafede et al. \(2009\)](#), 6 = [Brentjens \(2008\)](#), 7 = [Cassano et al. \(2008\)](#), 8 = [Clarke & Enßlin \(2006\)](#), 9 = [Dallacasa et al. \(2009\)](#), 10 = [Deiss et al. \(1997\)](#), 11 = [Ebeling et al. \(1996\)](#), 12 = [Ebeling et al. \(1998\)](#), 13 = [Ebeling et al. \(2000\)](#), 14 = [Ebeling et al. \(2007\)](#), 15 = [Feretti \(2002\)](#), 16 = [Feretti et al. \(2001\)](#), 17 = [Giacintucci \(2007\)](#), 18 = [Giacintucci et al. \(2009\)](#), 19 = [Giovannini & Feretti \(2000\)](#), 20 = [Gitti et al. \(2004\)](#), 21 = [Govoni et al. \(2001b\)](#), 22 = [Govoni et al. \(2005\)](#), 23 = [Kim et al. \(1990\)](#), 24 = [Liang et al. \(2000\)](#), 25 = [Rafferty et al. \(2008\)](#), 26 = [Sijbring \(2007\)](#), 27 = [Tsuru et al. \(1996\)](#), 28 = [Venturi et al. \(2007\)](#), 29 = [Venturi et al. \(2008\)](#), 30 = [White et al. \(1997\)](#), 31 = [van Weeren et al. \(2009\)](#).