OTHER LIGHT UNFLAVORED MESONS ($S = C = B = 0$)

$e^+e^-(1100–2200)$

$I^G(J^{PC}) = ?^?(1^{--})$

OMITTED FROM SUMMARY TABLE

This entry contains nonstrange vector mesons coupled to e^+e^- (photon) between the ϕ and $J/\psi(1S)$ mass regions. See also $\omega(1420)$, $\rho(1450)$, $\omega(1600)$, $\phi(1680)$, and $\rho(1700)$.

$e^+e^-(1100–2200)$ MASSES AND WIDTHS

We do not use the following data for averages, fits, limits, etc.

VALUE (MeV)	DOCUMENT ID
1100 to 2200 OUR LIMIT	

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
$1097.0^{+16.0}_{-19.0}$	BARTALUCCI	79	OSPK	$7\,\gamma p \to e^+e^-p$
$31.0^{+24.0}_{-20.0}$	BARTALUCCI	79	OSPK	$7\,\gamma p \to e^+e^-p$

VALUE (MeV)	DOCUMENT ID		TECN	CHG	COMMENT
1266.0 ± 5.0	BARTALUCCI	79	DASP	0	$7\,\gamma p \to e^+e^-p$
110.0 ± 35.0	BARTALUCCI	79	DASP	0	$7\,\gamma p \to e^+e^-p$

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
~ 1830.0	PETERSON	78	SPEC	$\gamma p \to K^+K^-p$
~ 120.0	PETERSON	78	SPEC	$\gamma p \to K^+K^-p$

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
~ 1820	[1] SPINETTI	79	RVUE	$e^+e^- \to 4\pi^\pm 2\gamma$
~ 30	[1] SPINETTI	79	RVUE	$e^+e^- \to 4\pi^\pm 2\gamma$

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
~ 2130	[2] ESPOSITO	78	FRAM	$e^+e^- \to K^*(892)^+ \ldots$
~ 30	[2] ESPOSITO	78	FRAM	$e^+e^- \to K^*(892)^+ \ldots$

[1] Integrated cross section of BACCI 77, BARBIELLINI 77, ESPOSITO 77.

[2] Not seen by DELCOURT 79.

$e^+e^-(1100–2200)$ REFERENCES

BARTALUCCI	79	NC 49A 207	+Basini, Bertolucci+	(DESY, FRAS)
DELCOURT	79	PL 86B 395	+Derado, Bertrand, Bisello, Bizot, Buon+	(LALO)
SPINETTI	79	Batavia Conf. 506		(FRAS)
ESPOSITO	78	LNC 22 305	+Felicetti	(FRAS, NAPL, PADO, ROMA)
PETERSON	78	PR D18 3955	+Dixon, Ehrlich, Galik, Larson	(CORN, HARV)
BACCI	77	PL 68B 393	+DeZorzi, Penso, Stella, Baldini+	(ROMA, FRAS)
BARBIELLINI	77	PL 68B 397	+Barletta+	(FRAS, NAPL, PISA, SANI)
ESPOSITO	77	PL 68B 389	+Felicetti, Marini+	(FRAS, NAPL, PADO, ROMA)

OTHER RELATED PAPERS

BACCI	76	PL 64B 356	+Bidoli, Penso, Stella, Baldini+	(ROMA, FRAS)
BACCI	75	PL 58B 481	+Bidoli, Penso, Stella+	(ROMA, FRAS)

$\overline{N}N(1100–3600)$

OMITTED FROM SUMMARY TABLE

This entry contains various high mass, nonstrange structures coupled to the baryon-antibaryon system, as well as quasi-nuclear bound states below threshold.

$\overline{N}N(1100–3600)$ MASSES AND WIDTHS

We do not use the following data for averages, fits, limits etc.

VALUE (MeV)	DOCUMENT ID
1100 to 3600 OUR LIMIT	

VALUE (MeV)	DOCUMENT ID		TECN	CHG	COMMENT
1107 ± 4	DAFTARI	87	DBC	0	0. $\overline{p}n \to \rho^-\pi^+\pi^-$
$111 \pm 8 \pm 15$	DAFTARI	87	DBC	0	0. $\overline{p}n \to \rho^-\pi^+\pi^-$

VALUE (MeV)	DOCUMENT ID		TECN	CHG	COMMENT
1167 ± 7	[1] CHIBA	91	CNTR		$\overline{p}d \to \gamma X$
1191.0 ± 9.9	[1] CHIBA	87	CNTR	0	0. $\overline{p}p \to \gamma X$
1210 ± 5.0	[1,2,3,4] RICHTER	83	CNTR	0	Stopped $\overline{p}$

VALUE (MeV)	DOCUMENT ID		TECN	CHG	COMMENT
1325 ± 5	[1] CHIBA	91	CNTR		$\overline{p}d \to \gamma X$
1329.2 ± 7.6	[1] CHIBA	87	CNTR	0	0. $\overline{p}p \to \gamma X$

VALUE (MeV)	DOCUMENT ID		TECN	CHG	COMMENT
1390.9 ± 6.3	[1] CHIBA	87	CNTR	0	0. $\overline{p}p \to \gamma X$
1395	[1,3,4,5] PAVLOPO...	78	CNTR		Stopped $\overline{p}$

VALUE (MeV)	DOCUMENT ID		TECN	CHG	COMMENT
~ 1410	BETTINI	66	DBC	0	0. $\overline{p}N \to 5\pi$
~ 100	BETTINI	66	DBC	0	0. $\overline{p}N \to 5\pi$

VALUE (MeV)	DOCUMENT ID		TECN	CHG	COMMENT
1468 ± 6	[6] BRIDGES	86B	DBC	0	0. $\overline{p}N \to 2\pi^-\pi^+\pi^0$
88 ± 18	[6] BRIDGES	86B	DBC	0	0. $\overline{p}N \to 2\pi^-\pi^+\pi^0$

VALUE (MeV)	DOCUMENT ID		TECN	CHG	COMMENT
1512 ± 7	[1] CHIBA	91	CNTR		$\overline{p}d \to \gamma X$
1523.8 ± 3.6	[1] CHIBA	87	CNTR	0	0. $\overline{p}p \to \gamma X$
1522 ± 7	[6] BRIDGES	86B	DBC	0	0. $\overline{p}N \to 2\pi^-\pi^+$
59 ± 12	[6] BRIDGES	86B	DBC	0	0. $\overline{p}N \to 2\pi^-\pi^+$

VALUE (MeV)	DOCUMENT ID		TECN	CHG	COMMENT
1577.8 ± 3.4	[1] CHIBA	87	CNTR	0	0. $\overline{p}p \to \gamma X$
1594 ± 9	[6] BRIDGES	86B	DBC	–	0. $\overline{p}N \to 2\pi^-\pi^+\pi^0$
81 ± 12	[6] BRIDGES	86B	DBC	–	0. $\overline{p}N \to 2\pi^-\pi^+\pi^0$

VALUE (MeV)	DOCUMENT ID		TECN	CHG	COMMENT
1633.6 ± 4.1	[1] CHIBA	87	CNTR	0	0. $\overline{p}p \to \gamma X$
$1637.1^{+5.6}_{-7.3}$	ADIELS	84	CNTR		$\overline{p}$He

VALUE (MeV)	DOCUMENT ID		TECN	CHG	COMMENT
1638 ± 3.0	[1,2,3,4] RICHTER	83	CNTR	0	Stopped $\overline{p}$

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
$1644.0^{+5.6}_{-7.3}$	ADIELS	84	CNTR	$\overline{p}$He

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
1646	[1,3,4,5] PAVLOPO...	78	CNTR	Stopped $\overline{p}$

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
$1687.1^{+5.0}_{-4.3}$	ADIELS	84	CNTR	$\overline{p}$He
1684	[1,3,4,5] PAVLOPO...	78	CNTR	Stopped $\overline{p}$

VALUE (MeV)	DOCUMENT ID		TECN	CHG	COMMENT
1693 ± 2	[1] CHIBA	91	CNTR		$\overline{p}d \to \gamma X$
1694 ± 2.0	[1,2,3,4] RICHTER	83	CNTR	0	Stopped $\overline{p}$

VALUE (MeV)	DOCUMENT ID		TECN	CHG	COMMENT
1713.0 ± 2.6	[1] CHIBA	87	CNTR	0	0. $\overline{p}p \to \gamma X$

VALUE (MeV)	DOCUMENT ID		TECN	CHG	COMMENT
1731.0 ± 1.5	[1] CHIBA	87	CNTR	0	0. $\overline{p}p \to \gamma X$