$\psi(3836)$

$I^G(J^{PC}) = 0^-(2^{--})$

OMITTED FROM SUMMARY TABLE

Quantum numbers are not established.

Seen in $\pi^{\pm}$Li interactions by ANTONIAZZI 94 as a peak in the invariant mass of the $J/\psi(1S)\pi^+\pi^-$ system. Possibly seen also in pLi interactions. Interpretation as a $^3D_2$ (2^{--}) charmonium state favored. Not seen by BAI 98E in e^+e^- interactions. Needs confirmation.

$\psi(3836)$ MASS

VALUE (MeV)	*EVTS*	*DOCUMENT ID*	*TECN*	*COMMENT*
3836±13	58 ± 21	ANTONIAZZI 94	E705	$\pi^{\pm}\text{Li} \to J/\psi\pi^+\pi^-X$

$\psi(3836)$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$J/\psi(1S)\pi^+\pi^-$	seen

$\psi(3836)$ REFERENCES

BAI	98E	PR D57 3854	J.Z. Bai *et al.*	(BES Collab.)
ANTONIAZZI	94	PR D50 4258	L. Antoniazzi *et al.*	(E705 Collab.)