

X(4660)

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

OMITTED FROM SUMMARY TABLE

Seen in radiative return from e^+e^- collisions at $\sqrt{s} = 9.54\text{--}10.58$ GeV by WANG 07D. Also obtained in a combined fit of WANG 07D and AUBERT 07S. See also the review under the X(3872) particle listings. (See the index for the page number.)

X(4660) MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
$4664 \pm 11 \pm 5$	WANG	07D BELL	10.58 $e^+e^- \rightarrow \psi(2S)\pi^+\pi^-\gamma$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●			
$4661_{-8}^{+9} \pm 6$	¹ LIU	08H RVUE	10.58 $e^+e^- \rightarrow \psi(2S)\pi^+\pi^-\gamma$

¹ From a combined fit of AUBERT 07S and WANG 07D data with two resonances.

X(4660) WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
$48 \pm 15 \pm 3$	WANG	07D BELL	10.58 $e^+e^- \rightarrow \psi(2S)\pi^+\pi^-\gamma$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●			
$42_{-12}^{+17} \pm 6$	² LIU	08H RVUE	10.58 $e^+e^- \rightarrow \psi(2S)\pi^+\pi^-\gamma$

² From a combined fit of AUBERT 07S and WANG 07D data with two resonances.

X(4660) DECAY MODES

Mode	Fraction (Γ_i/Γ)
Γ_1 e^+e^-	
Γ_2 $\psi(2S)\pi^+\pi^-$	seen

X(4660) $\Gamma(i)\Gamma(e^+e^-)/\Gamma(\text{total})$

$\Gamma(\psi(2S)\pi^+\pi^-) \times \Gamma(e^+e^-)/\Gamma_{\text{total}}$	$\Gamma_2\Gamma_1/\Gamma$		
VALUE (eV)	DOCUMENT ID	TECN	COMMENT
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●			
$2.2_{-0.6}^{+0.7}$	³ LIU	08H RVUE	10.58 $e^+e^- \rightarrow \psi(2S)\pi^+\pi^-\gamma$
5.9 ± 1.6	⁴ LIU	08H RVUE	10.58 $e^+e^- \rightarrow \psi(2S)\pi^+\pi^-\gamma$
$3.0 \pm 0.9 \pm 0.3$	⁵ WANG	07D BELL	10.58 $e^+e^- \rightarrow \psi(2S)\pi^+\pi^-\gamma$
$7.6 \pm 1.8 \pm 0.8$	⁶ WANG	07D BELL	10.58 $e^+e^- \rightarrow \psi(2S)\pi^+\pi^-\gamma$

³ Solution I in a combined fit of AUBERT 07S and WANG 07D data with two resonances.

⁴ Solution II in a combined fit of AUBERT 07S and WANG 07D data with two resonances.

⁵ Solution I of two equivalent solutions in a fit using two interfering resonances.

⁶ Solution II of two equivalent solutions in a fit using two interfering resonances.

X(4660) REFERENCES

LIU	08H	PR D78 014032	Z.Q. Liu, X.S. Qin, C.Z. Yuan	
AUBERT	07S	PRL 98 212001	B. Aubert <i>et al.</i>	(BABAR Collab.)
WANG	07D	PRL 99 142002	X.L. Wang <i>et al.</i>	(BELLE Collab.)
