$\Gamma(\gamma f_1(1420) \to \gamma K\overline{K}\pi)/\Gamma_{total}$ Γ_{106}/Γ

VALUE (units 10^{-3})	DOCUMENT ID		TECN	COMMENT
0.83±0.15 OUR AVERAGE				
0.76±0.15±0.21	[51,52] AUGUSTIN	92	DM2	$J/\psi \to \gamma K\overline{K}\pi$
$0.87\pm0.14^{+0.14}_{-0.11}$	[51] BAI	90C	MRK3	$J/\psi \to \gamma K^0_S K^\pm \pi^\mp$

[51] Included unknown branching fraction $f_1(1420) \to K\overline{K}\pi$.
[52] From fit to the $K^*(892)K$ 1^{++} partial wave.

$\Gamma(\gamma f_1(1285))/\Gamma_{total}$ Γ_{107}/Γ

VALUE (units 10^{-3})	CL%	DOCUMENT ID		TECN	COMMENT
0.65 ±0.10 OUR AVERAGE					
0.625±0.063±0.103		[53] BOLTON	92	MRK3	$J/\psi \to \gamma f_1(1285)$
0.70 ±0.09 ±0.16		[54] BURCHELL	91	MRK3	$J/\psi \to \gamma\eta\pi^+\pi^-$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
0.025±0.007±0.003		[55] COFFMAN	90	MRK3	$J/\psi \to \gamma\gamma\pi^+\pi^-$
<6	90	[56] SCHARRE	80	MRK2	$J/\psi \to \gamma K\overline{K}\pi$

[53] Obtained summing the sequential decay channels
$B(J/\psi \to \gamma f_1(1285), f_1(1285) \to \pi\pi\pi\pi) = (1.44 \pm 0.39 \pm 0.27)\times 10^{-4}$;
$B(J/\psi \to \gamma f_1(1285), f_1(1285) \to \delta\pi, \delta \to \eta\pi) = (3.90 \pm 0.42 \pm 0.87)\times 10^{-4}$;
$B(J/\psi \to \gamma f_1(1285), f_1(1285) \to \delta\pi, \delta \to K\overline{K}) = (0.66 \pm 0.26 \pm 0.29)\times 10^{-4}$;
$B(J/\psi \to \gamma f_1(1285), f_1(1285) \to \gamma\rho^0) = (0.25 \pm 0.07 \pm 0.03)\times 10^{-4}$.
[54] Using $B(f_1(1285) \to a_0(980)\pi) = 0.37$, and including unknown branching ratio for $a_0(980) \to \eta\pi$.
[55] Includes unknown branching fraction $f_1(1285) \to \gamma\rho^0$.
[56] Using $B(f_1(1285) \to K\overline{K}\pi) = 0.12$.

$\Gamma(\gamma f_2'(1525))/\Gamma_{total}$ Γ_{108}/Γ

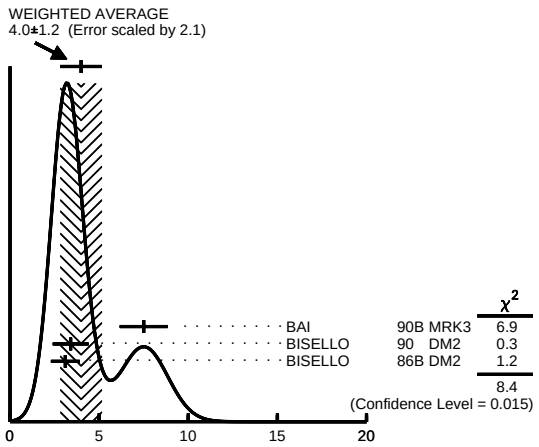
VALUE (units 10^{-3})	CL%	EVTS	DOCUMENT ID		TECN	COMMENT
0.63±0.10 OUR AVERAGE						
0.70±0.17±0.11			[57] AUGUSTIN	88	DM2	$J/\psi \to \gamma K^+K^-$
0.56±0.06±0.11			[57] AUGUSTIN	88	DM2	$J/\psi \to \gamma K^0_S K^0_S$
0.84±0.20±0.17			[57] BALTRUSAIT...87		MRK3	$J/\psi \to \gamma K^+K^-$
• • • We do not use the following data for averages, fits, limits, etc. • • •						
0.25±0.14			[57] FRANKLIN	83B	MRK2	$J/\psi \to \gamma K\overline{K}$
<0.34	90	4	[58] BRANDELIK	79C	DASP	$e^+e^- \to \pi^+\pi^-\gamma$
<0.23	90	3	ALEXANDER	78	PLUT	$e^+e^- \to K^+K^-\gamma$

[57] Using $B(f_2'(1525) \to K\overline{K}) = 0.713$.
[58] Assuming isotropic production and decay of the $f_2'(1525)$ and isospin.

$\Gamma(\gamma\phi\phi)/\Gamma_{total}$ Γ_{109}/Γ

VALUE (units 10^{-4})	EVTS	DOCUMENT ID		TECN	COMMENT
4.0±1.2 OUR AVERAGE Error includes scale factor of 2.1. See the ideogram below.					
7.5±0.6±1.2	168	BAI	90B	MRK3	$J/\psi \to \gamma 4K$
3.4±0.8±0.6	33 ± 7	[59] BISELLO	90	DM2	$J/\psi \to \gamma K^+K^-K^0_S K^0_L$
3.1±0.7±0.4		[59] BISELLO	86B	DM2	$J/\psi \to \gamma K^+K^-K^+K^-$

[59] $\phi\phi$ mass less than 2.9 GeV, η_c excluded.



$\Gamma(\gamma p\overline{p})/\Gamma_{total}$ Γ_{110}/Γ

VALUE (units 10^{-3})	CL%	EVTS	DOCUMENT ID		TECN	COMMENT
0.38±0.07±0.07		49	EATON	84	MRK2	e^+e^-
• • • We do not use the following data for averages, fits, limits, etc. • • •						
<0.11	90		PERUZZI	78	MRK1	e^+e^-

$\Gamma(\gamma\eta(2225))/\Gamma_{total}$ Γ_{111}/Γ

VALUE (units 10^{-3})	DOCUMENT ID		TECN	COMMENT
0.29±0.06 OUR AVERAGE				
0.33±0.08±0.05	[60] BAI	90B	MRK3	$J/\psi \to \gamma K^+K^-K^+K^-$
0.27±0.06±0.06	[60] BAI	90B	MRK3	$J/\psi \to \gamma K^+K^-K^0_S K^0_L$
$0.24^{+0.15}_{-0.10}$	[61,62] BISELLO	89B	DM2	$J/\psi \to 4\pi\gamma$

[60] Includes unknown branching fraction to $\phi\phi$.
[61] Estimated by us from various fits.
[62] Includes unknown branching fraction to $\rho^0\rho^0$.

$\Gamma(\gamma\eta(1760) \to \gamma\rho^0\rho^0)/\Gamma_{total}$ Γ_{112}/Γ

VALUE (units 10^{-3})	DOCUMENT ID		TECN	COMMENT
0.13±0.09	[63,64] BISELLO	89B	DM2	$J/\psi \to 4\pi\gamma$

[63] Estimated by us from various fits.
[64] Includes unknown branching fraction to $\rho^0\rho^0$.

$\Gamma(\gamma\pi^0)/\Gamma_{total}$ Γ_{113}/Γ

VALUE (units 10^{-3})	EVTS	DOCUMENT ID		TECN	COMMENT
0.039±0.013 OUR AVERAGE					
0.036±0.011±0.007		BLOOM	83	CBAL	e^+e^-
0.073±0.047	10	BRANDELIK	79C	DASP	e^+e^-

$\Gamma(\gamma p\overline{p}\pi^+\pi^-)/\Gamma_{total}$ Γ_{114}/Γ

VALUE (units 10^{-3})	CL%	DOCUMENT ID		TECN	COMMENT
<0.79	90	EATON	84	MRK2	e^+e^-

$\Gamma(\gamma\gamma)/\Gamma_{total}$ Γ_{115}/Γ

VALUE (units 10^{-3})	CL%	DOCUMENT ID		TECN	COMMENT
<0.5	90	BARTEL	77	CNTR	e^+e^-

$\Gamma(\gamma\Lambda\overline{\Lambda})/\Gamma_{total}$ Γ_{116}/Γ

VALUE (units 10^{-3})	CL%	DOCUMENT ID		TECN	COMMENT
<0.13	90	HENRARD	87	DM2	e^+e^-

$\Gamma(3\gamma)/\Gamma_{total}$ Γ_{117}/Γ

VALUE (units 10^{-3})	CL%	DOCUMENT ID		TECN	COMMENT
<0.055	90	PARTRIDGE	80	CBAL	e^+e^-

$\Gamma(\gamma X(2200))/\Gamma_{total}$ Γ_{118}/Γ

VALUE (units 10^{-4})	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
1.5	[65] AUGUSTIN	88	DM2	$J/\psi \to \gamma K^0_S K^0_S$

[65] Includes unknown branching fraction to $K^0_S K^0_S$.

$\Gamma(\gamma f_4(2220))/\Gamma_{total}$ Γ_{119}/Γ

VALUE (units 10^{-5})	EVTS	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •					
< 2.3	95	[66] AUGUSTIN	88	DM2	$J/\psi \to \gamma K^+K^-$
< 1.6	95	[66] AUGUSTIN	88	DM2	$J/\psi \to \gamma K^0_S K^0_S$
$12.4^{+6.4}_{-5.2}\pm2.8$	23	[66] BALTRUSAIT...86D		MRK3	$J/\psi \to \gamma K^0_S K^0_S$
$8.4^{+3.4}_{-2.8}\pm1.6$	93	[66] BALTRUSAIT...86D		MRK3	$J/\psi \to \gamma K^+K^-$

[66] Includes unknown branching fraction to K^+K^- or $K^0_S K^0_S$.

$\Gamma(\gamma X(1400))/\Gamma_{total}$ Γ_{120}/Γ

VALUE (units 10^{-4})	EVTS	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •					
3.83±0.33±0.059		[67] BURCHELL	91	MRK3	$J/\psi \to \gamma\eta\pi^+\pi^-$
7.0 ±0.6 ±1.1	261	[67] AUGUSTIN	90	DM2	$J/\psi \to \gamma\eta\pi^+\pi^-$

[67] Includes unknown branching fraction to $\eta\pi^+\pi^-$.