Topology Analysis \* (v1.5)

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<sup>\*</sup>This package is implemented with reference to a program called Topo, which is developed by Prof. Shuxian Du from Zhengzhou University in China and has been widely used by people in BESIII collaboration. Several years ago, when I was a PhD student working on BESIII experiment, I learned the idea of topology analysis and a lot of programming techniques from the Topo program. So, I really appreciate Prof. Du's original work very much. To meet my own needs and to practice developing analysis tools with C++, ROOT and LaTex, I wrote the package from scratch. At that time, the package functioned well but was relatively simple. At the end of last year (2017), my co-supervisor, Prof. Chengping Shen reminded me that it could be a useful tool for Belle II experiment as well. So, I revised and extended it, making it more well-rounded and suitable for Belle II experiment. Here, I would like to thank Prof. Du for his original work, Prof. Shen for his suggestion and encouragement, and Wencheng Yan, Sen Jia, Yubo Li, Suxian Li, Longke Li, Guanda Gong, Junhao Yin, Xiaoping Qin, Xiqing Hao, HongPeng Wang, JiaWei Zhang for their efforts in helping me test the program.

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Table 1: Event trees and their respective initial-final states.

	Table 1. Event trees and then respective initial-inia states.				
index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
	$e^+e^-  o \Upsilon(4S), \Upsilon(4S)  o B^0 \bar{B}^0, B^0  o \pi^0 \pi^0 \rho^0 \pi^+ \bar{D}^{*-}, \bar{B}^0  o \pi^+ D^0 D_s^{*-} \gamma^{gFSR}, \rho^0  o \pi^+ \pi^-, \bar{D}^{*-}  o \pi^- \bar{D}^0,$				
	$D^{0} \to \rho^{+} K^{*-}, D_{s}^{*-} \to D_{s}^{-} \gamma, \bar{D}^{0} \to \eta \eta', \rho^{+} \to \pi^{0} \pi^{+}, K^{*-} \to \pi^{-} \bar{K}^{0}, D_{s}^{-} \to e^{-} \bar{\nu}_{e} \phi \gamma^{gFSR},$	0		1	1
1	$\eta \rightarrow \pi^0\pi^0\pi^0, \eta' \rightarrow \pi^0\pi^0\eta, \bar{K}^0 \rightarrow K_S, \phi \rightarrow K^+K^-, \eta \rightarrow \gamma\gamma, K_S \rightarrow \pi^0\pi^0$	0	0	1	1
	$(e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{-}K^{*+}J/\psi, \bar{B}^{0} \to \pi^{0}\pi^{-}D^{*+}, K^{*+} \to \pi^{+}K^{0}, J/\psi \to \pi^{+}K^{0}K^{*-}, K^{*+} \to \pi^{+}K^{0}K^{0}K^{*-}$				
2	$\pi^0 \to e^+ e^- \gamma^{gFSR}, D^{*+} \to \pi^+ D^0, K^0 \to K_S, K^0 \to K_S, K^{*-} \to \pi^- \bar{K}^0, D^0 \to \pi^+ \pi^- \bar{K}^*,$	1	1	1	2
	$K_S \to \pi^0 \pi^0, K_S \to \pi^+ \pi^-, \bar{K}^0 \to K_S, \bar{K}^* \to \pi^+ K^-, K_S \to \pi^+ \pi^- \gamma^{gFSR}$	1	_	1	_
	$(e^+e^- \to e^+e^-\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^-\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma)$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{*+}\bar{D}^{*-}D^{*0}, \bar{B}^{0} \to \pi^{0}\rho^{0}\rho^{-}\eta D^{+}, K^{*+} \to \pi^{+}K^{0}, \bar{D}^{*-} \to \pi^{0}D^{-}, \\ D^{*0} \to \pi^{0}D^{0}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{-} \to \pi^{0}\pi^{-}, \eta \to \gamma\gamma, D^{+} \to e^{+}\nu_{e}\bar{K}^{0}\gamma^{gFSR}, K^{0} \to K_{L},$				
3	$D^{*o} \rightarrow \pi^*D^*, \rho^* \rightarrow \pi^*\pi^*, \rho^- \rightarrow \pi^*\pi^*, \eta \rightarrow \gamma\gamma, D^+ \rightarrow e^+\nu_e K^*\gamma^{s^*b^*b^*}, K^* \rightarrow K_L, \\ D^- \rightarrow K_L\pi^-\pi^-K^+, D^0 \rightarrow \pi^0\eta K_S, \bar{K}^0 \rightarrow K_S, \eta \rightarrow \pi^0\pi^+\pi^-, K_S \rightarrow \pi^+\pi^-, K_S \rightarrow \pi^0\pi^0$	2	2	1	3
	$D \to K_L \pi \pi K, D \to \pi \eta K_S, K \to K_S, \eta \to \pi \pi \pi, K_S \to \pi \pi K, K_S \to \pi \pi K_S$ $(e^+e^- \to e^+\nu_e K_L K_L \pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \bar{D}^{*-}a_{1}^{+}, \bar{B}^{0} \to \pi^{+}\pi^{+}\pi^{-}\pi^{-}D^{*+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, a_{1}^{+} \to \pi^{0}\rho^{+},$				
	$D^{*+} \to \pi^{+}D^{0}, \bar{D}^{0} \to \pi^{-}K^{+}\eta', \rho^{+} \to \pi^{0}\pi^{+}, D^{0} \to e^{+}\nu_{e}\pi^{-}, \eta' \to \pi^{+}\pi^{-}\eta, \pi^{0} \to e^{+}e^{-}\gamma^{gFSR},$				
4	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3	3	1	4
	$(e^{+}e^{-} \to e^{+}e^{+}e^{-}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{gFSR}\gamma\gamma\gamma\gamma)$				
	$e^+e^- \to \Upsilon(4S), \Upsilon(4S) \to B^0B^0, B^0 \to D^-D_{s1}^{\prime+}, B^0 \to \pi^0\rho^+\omega\bar{D}^{*-}, D^- \to \pi^0\pi^-, D_{s1}^{\prime+} \to \pi^0D_s^{*+},$				
5	$\rho^{+} \to \pi^{0} \pi^{+}, \omega \to \pi^{0} \pi^{+} \pi^{-}, \bar{D}^{*-} \to \pi^{-} \bar{D}^{0}, D_{s}^{*+} \to D_{s}^{+} \gamma, \bar{D}^{0} \to K_{L} \omega, D_{s}^{+} \to e^{+} \nu_{e} \phi,$	4	4	1	5
9	$\omega  o \pi^0 \gamma, \phi  o K^+ K^-$	4	4	1	3
	$(e^{+}e^{-} \to e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				
_	$e^+e^-  o \Upsilon(4S), \Upsilon(4S)  o B^0 \bar{B}^0, \bar{B}^0  o e^+ \nu_e \bar{D}^{*-}, \bar{B}^0  o \pi^+ \pi^- D^+ D_s^-, \bar{D}^{*-}  o \pi^- \bar{D}^0, D^+  o e^+ \nu_e \pi^+ K^-,$	_	_		_
6	$D_s^-  o \pi^0 \pi^- \omega, \bar{D}^0  o \omega K_S, \omega  o \pi^0 \pi^+ \pi^-, \omega  o \pi^0 \pi^+ \pi^-, K_S  o \pi^+ \pi^-$	5	5	1	6
	$(e^{+}e^{-} \to e^{+}e^{+}\nu_{e}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma)$ $e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{0}\pi^{+}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{0}K^{*}K^{-}D^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, K^{*} \to \pi^{-}K^{+},$				
7	$\begin{array}{c} e^+e^- \rightarrow 1  (4S),  1  (4S) \rightarrow B^+B^-,  B^- \rightarrow \pi^+\pi^+D^- ,  B^+ \rightarrow \pi^+K^-K^-D^+,  D^+ \rightarrow \pi^-D^-,  K^+ \rightarrow \pi^-K^+, \\ D^+ \rightarrow \pi^0\pi^+\eta',  \bar{D}^0 \rightarrow \mu^-\bar{\nu}_\mu K^+\gamma^{gFSR},  \eta' \rightarrow \pi^+\pi^-\eta,  \eta \rightarrow \pi^0\pi^0\pi^0 \end{array}$	6	6	1	7
'	$D^+  ightharpoonup \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ K^+ K^- \circ g^{FSR}$ (correspondence (correspondence)	0	0	1	'
	$(e^{+}e^{-} \rightarrow \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$ $e^{+}e^{-} \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow B^{0}B^{0}, B^{0} \rightarrow \tau^{+}\nu_{\tau}\bar{D}^{*-}, B^{0} \rightarrow \pi^{0}\pi^{+}\eta\eta D^{-}, \tau^{+} \rightarrow e^{+}\nu_{e}\bar{\nu}_{\tau}\gamma^{gFSR}\gamma^{gFSR}, \bar{D}^{*-} \rightarrow \pi^{-}\bar{D}^{0},$				
	$\eta \to \gamma \gamma, \eta \to \gamma \gamma, D^- \to \pi^0 \pi^- K^*, \bar{D}^0 \to \pi^0 \pi^+ \pi^- K^*, K^* \to \pi^0 K^0, K^* \to \pi^0 K^0,$				
8	$K^0  ightarrow K_S, K^0  ightarrow K_L, K_S  ightarrow \pi^+\pi^-$	7	7	1	8
	$(e^+e^- o e^+ u_e u_ auar u_ au K_L\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\gamma^{gFSR}\gamma^{gFSR}\gamma$				
	$e^+e^- \to \Upsilon(4S), \Upsilon(4S) \to B^0\bar{B}^0, B^0 \to \pi^0\pi^+\pi^+\pi^-\bar{D}^{*-}, \bar{B}^0 \to \mu^-\bar{\nu}_\mu D^{*+}\gamma^{gFSR}, \bar{D}^{*-} \to \pi^0D^-, D^{*+} \to \pi^+D^0,$				
9	$D^- \to \pi^- \omega K^0 \gamma^{gFSR}, D^0 \to K_L \omega, \omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S, \omega \to \pi^0 \pi^+ \pi^-, K_S \to \pi^0 \pi^0$	8	8	1	9
	$(e^+e^- \to \mu^- \bar{\nu}_\mu K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \gamma^{gFSR} \gamma^{gFSR} \gamma \gamma)$				
	$e^+e^- \to \Upsilon(4S), \Upsilon(4S) \to B^0\bar{B}^0, B^0 \to K^0D^-D^{*+}, \bar{B}^0 \to D^{*+}D_s^{*-}, K^0 \to K_S, D^- \to \pi^-\pi^-K^+,$				
10	$D^{*+} \to \pi^0 D^+, D^{*+} \to \pi^0 D^+, D_s^{*-} \to D_s^- \gamma, K_S \to \pi^+ \pi^-, D^+ \to \mu^+ \nu_\mu \bar{K}^0, D^+ \to \pi^+ \eta',$	9	9	1	10
	$D_s^-  o K^*K^{*-}, ar{K}^0  o K_L, \eta'  o  ho^0 \gamma, K^*  o \pi^-K^+, K^{*-}  o \pi^0K^-,  ho^0  o \pi^+\pi^-$			_ *	
	$(e^{+}e^{-} \to \mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				

. ,	event tree		ID ITEM		G 1.7
index	(event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}\bar{D}^{*-}, \bar{B}^{0} \to \rho^{0}K^{0}K^{*-}D^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{0} \to \pi^{+}\pi^{-}\gamma^{gFSR},$				
11	$K^{0} \to K_{L}, K^{*-} \to \pi^{0}K^{-}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{0}, \bar{D}^{0} \to \rho^{-}K^{*+}, \bar{K}^{0} \to K_{L}, \rho^{-} \to \pi^{0}\pi^{-}, K^{*+} \to \pi^{0}K^{+}$	10	10	1	11
11		10	10	1	11
	$\frac{(e^+e^- \to \mu^+\mu^+\nu_\mu\nu_\mu K_L K_L \pi^+\pi^-\pi^-\pi^- K^+ K^- \gamma^{gFSR} \gamma \gamma \gamma \gamma \gamma \gamma)}{e^+e^- \to \Upsilon(4S), \Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \rho^- K^+ J/\psi \gamma^{gFSR}, \bar{B}^0 \to D^+ D_s^{*-}, \rho^- \to \pi^0 \pi^-, J/\psi \to e^+ e^- \gamma^{gFSR},}$				
12	$\begin{array}{c} e^+e^- \rightarrow 1 (4S), 1 (4S) \rightarrow B^+B^+, B^+ \rightarrow \rho^- K^+ J/\psi \gamma^{S^- + \gamma}, B^+ \rightarrow D^+ D_s^-, \rho^- \rightarrow \pi^+ \pi^-, J/\psi \rightarrow e^+e^- \gamma^{S^- + \gamma}, \\ D^+ \rightarrow \pi^0 \pi^+ K_S, D_s^{*-} \rightarrow D_s^- \gamma, K_S \rightarrow \pi^0 \pi^0, D_s^- \rightarrow \tau^- \bar{\nu}_\tau, \tau^- \rightarrow \mu^- \bar{\nu}_\mu \nu_\tau \end{array}$	11	11	1	12
12	$(e^{+}e^{-} \rightarrow e^{+}e^{-}\mu^{-}\bar{\nu}_{\mu}\nu_{\tau}\bar{\nu}_{\tau}\pi^{+}\pi^{-}K^{+}\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma\gamma\gamma\gamma\gamma\gamma\gamma})$	11	11	1	12
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\pi^{-}K^{0}D^{0}\bar{D}^{0}, \bar{B}^{0} \to \pi^{0}\pi^{+}\rho^{-}\rho^{-}D^{+}, K^{0} \to K_{L}, D^{0} \to K_{S}\eta',$				
13	$\bar{D}^0 \to \rho^- K^{*+}, \rho^- \to \pi^0 \pi^-, \rho^- \to \pi^0 \pi^-, D^+ \to \mu^+ \nu_\mu \bar{K}^0, K_L \to \pi^0 \pi^0 \pi^0, K_S \to \pi^+ \pi^- \gamma^{gFSR},$	12	12	1	13
15	$\eta'  o \pi^+ \pi^- \eta,  ho^-  o \pi^0 \pi^-, K^{*+}  o \pi^0 K^+, ar{K}^0  o K_L, \eta  o \pi^0 \pi^+ \pi^-$	12	12	1	15
	$(e^+e^- \to \mu^+\nu_\mu K_L\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma^{gFSR}\gamma$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\eta\bar{D}^{*-}, \bar{B}^{0} \to K^{0}K^{*-}D^{*+}, \eta \to \pi^{0}\pi^{0}\pi^{0}, \bar{D}^{*-} \to \pi^{0}D^{-}, K^{0} \to K_{S}, K^{*-} \to \pi^{0}K^{-}, D^{*+} \to \pi^{+}D^{0}, D^{-} \to \mu^{-}\bar{\nu}_{\mu}K^{0}, K_{S} \to \pi^{+}\pi^{-}, D^{0} \to \pi^{0}\rho^{0},$				
14	$K \to K_S, K \to \pi^- K^-, D \to \pi^- U^-, K_S \to \pi^- \pi^- K_S \to \pi^- K^-, D \to \pi^+ \mu^-$	13	13	1	14
	$(e^+e^-  o \mu^- \bar{\nu}_\mu K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma \gamma)$				
15	$e^+e^- \to \Upsilon(4S), \Upsilon(4S) \to B^0\bar{B}^0, B^0 \to \rho^+D^-, \bar{B}^0 \to \pi^-K^+K^-D^{*+}\gamma^{gFSR}, \rho^+ \to \pi^0\pi^+, D^- \to K_Sa_1^-,$				
	$D^{*+} \to \pi^+ D^0, K_S \to \pi^0 \pi^0, a_1^- \to \pi^0 \rho^-, D^0 \to \pi^0 \pi^+ K^-, \rho^- \to \pi^0 \pi^-$	14	14	1	15
	$(e^+e^- \to \pi^+\pi^+\pi^+\pi^-\pi^-K^+K^-K^-\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				
16	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{0}\pi^{+}\eta\bar{D}^{*-}\gamma^{gFSR}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}, \eta \to \pi^{0}\pi^{0}\pi^{0}, \bar{D}^{*-} \to \pi^{0}D^{-}, D^{*+} \to \pi^{0}D^{+}, D^{-} \to \pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{*}, \bar{K}^{*} \to \pi^{+}K^{-}\gamma^{gFSR}$	15	15	1	16
10	$(e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma))$	10	10	1	10
	$e^{+}e^{-} \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow B^{0}\bar{B}^{0}, B^{0} \rightarrow e^{+}\nu_{e}\bar{D}^{*-}\gamma^{gFSR}, \bar{B}^{0} \rightarrow \pi^{0}\pi^{+}K^{*-}D^{0}\bar{D}^{*0}\gamma^{gFSR}, \bar{D}^{*-} \rightarrow \pi^{-}\bar{D}^{0}, K^{*-} \rightarrow \pi^{-}\bar{K}^{0},$				
17	$D^0  o K_L \pi^+ \pi^-, ar{D}^{*0}  o \pi^0 ar{D}^0, ar{D}^0  o \mu^- ar{ u}_\mu K^+, ar{K}^0  o K_S, ar{D}^0  o \pi^+ \pi^- K_S K_S, K_S  o \pi^+ \pi^-,$	16	16	1	17
11	$K_S  ightarrow \pi^0 \pi^0, K_S  ightarrow \pi^+ \pi^-$	10	10	1	17
	$\frac{(e^{+}e^{-} \to e^{+}\nu_{e}\mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{*}D^{-}D^{*+}, \bar{B}^{0} \to \pi^{0}\eta\bar{K}^{0}K^{-}D^{+}_{s}, K^{*} \to \pi^{0}K^{0}, D^{-} \to \pi^{-}\pi^{-}K^{+},}$				
	$e^+e^-  ightarrow 1  (4S),  1  (4S)  ightarrow B^0 B^0,  B^0  ightarrow K^* D^- D^{*+},  B^0  ightarrow \pi^0 \eta K^0 K^- D_s^+,  K^*  ightarrow \pi^0 K^0,  D^-  ightarrow \pi^- \pi^- K^-, \ D^{*+}  ightarrow \pi^+ D^0,  \eta  ightarrow \gamma \gamma,  ar{K}^0  ightarrow K_L,  D_s^+  ightarrow \mu^+  u_\mu \phi,  K^0  ightarrow K_S,  D^0  ightarrow \pi^0 \pi^+ K^{*-}, \ T^0 F^0 F^0 F^0 F^0 F^0 F^0 F^0 F^0 F^0 F$				
18	$D \xrightarrow{r} \pi^{r} D \xrightarrow{r} \eta \rightarrow \gamma \gamma, K \xrightarrow{r} K_{L}, D_{s} \xrightarrow{r} \mu^{r} \nu_{\mu} \varphi, K \xrightarrow{r} K_{S}, D \xrightarrow{r} \pi^{r} K \xrightarrow{r},$ $\phi \rightarrow K^{+} K^{-}, K_{S} \rightarrow \pi^{0} \pi^{0}, K^{*-} \rightarrow \pi^{-} \bar{K}^{0}, \bar{K}^{0} \rightarrow K_{L}$	17	17	1	18
	$(e^{+}e^{-} \rightarrow \mu^{+}\nu_{\mu}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \bar{D}^{*-}D_{s}^{*+}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D_{s}^{*+} \to D_{s}^{+}\gamma,$				
19	$D^{*+} \to \pi^+ D^0, \bar{D}^0 \to \pi^0 \pi^+ \pi^- K_S, D_s^+ \to \rho^+ \eta, D^0 \to \pi^+ \eta K^- \gamma^{gFSR}, K_S \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+,$	18	18	1	19
10	$\eta  o \pi^0 \pi^0 \pi^0, \eta  o \pi^0 \pi^0 \pi^0$	10	10	1	15
	$\frac{(e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \mu^{+}\nu_{\mu}D_{2}^{*-}, B^{0} \to \pi^{0}\pi^{+}\pi^{+}\pi^{-}\rho^{-}\bar{D}^{*0}, D_{2}^{*-} \to \pi^{-}\bar{D}^{*0}, \rho^{-} \to \pi^{0}\pi^{-},}$				
20	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	19	19	1	20
20	$(e^+e^- \rightarrow \mu^+\nu_\mu K_L\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	10	10	1	20
	7 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	1			<u> </u>

index	event tree	iEvtTr	iEvtIFSts	E+-	nCmltEvts
index	(event initial-final states)	1EVt 1r	1EVtIF Sts	nEvts	nCmitevts
	$e^+e^- \to \Upsilon(4S), \Upsilon(4S) \to \bar{B}^0\bar{B}^0, \bar{B}^0 \to \mu^-\bar{\nu}_\mu D^{*+}, \bar{B}^0 \to \pi^0\bar{K}^*K^+K^-, D^{*+} \to \pi^+D^0, \bar{K}^* \to \pi^0\bar{K}^0,$				
21	$D^0  ightarrow \pi^0 K_L, ar K^0  ightarrow K_L$	20	20	1	21
	$(e^+e^- \to \mu^- \bar{\nu}_\mu K_L K_L \pi^+ K^+ K^- \gamma \gamma \gamma \gamma \gamma \gamma)$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\pi^{+}\omega K^{0}K^{*-}\bar{D}^{*-}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}\gamma^{gFSR}, \omega \to \pi^{0}\pi^{+}\pi^{-}, K^{0} \to K_{S},$				
22	$K^{*-} \to \pi^0 K^-, \bar{D}^{*-} \to \pi^0 D^-, D^{*+} \to \pi^0 D^+, K_S \to \pi^+ \pi^-, D^- \to \pi^- \pi^- K^+, D^+ \to K_L a_1^+,$	21	21	1	22
22	$K_L \to \mu^+ \nu_\mu \pi^-, a_1^+ \to \pi^+ f_0(600) \gamma^{gFSR}$			_	
	$\frac{(e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}f_{0}(600)\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \bar{D}^{*-}D^{*+}_{s}, \bar{B}^{0} \to \pi^{0}\pi^{0}\rho^{-}\eta\omega D^{*+}, \bar{D}^{*-} \to \pi^{0}D^{-}, D^{*+}_{s} \to D^{+}_{s}\gamma,}$				
	$e^+e^-  o \Upsilon(4S), \Upsilon(4S)  o B^0B^0, B^0  o D^{*-}D_s^{*+}, B^0  o \pi^0\pi^0 ho^-\eta\omega D^{*+}, D^{*-}  o \pi^0D^-, D_s^{*+}  o D_s^+\gamma,$				
23	$ ho^-  o \pi^0 \pi^-, \eta  o \pi^0 \pi^0 \pi^0, \omega  o \pi^0 \pi^+ \pi^-, D^{*+}  o \pi^+ D^0, D^-  o \pi^- K_S, D_s^+  o  ho^+ \eta',$	22	22	1	23
	$D^{0} \rightarrow K^{-}a_{1}^{+}, K_{S} \rightarrow \pi^{0}\pi^{0}, \rho^{+} \rightarrow \pi^{0}\pi^{+}, \eta' \rightarrow \rho^{0}\gamma, a_{1}^{+} \rightarrow \pi^{+}\pi^{+}\pi^{-}, \rho^{0} \rightarrow \pi^{+}\pi^{-}$ $(e^{+}e^{-} \rightarrow \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma$				
	$e^+e^- \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow B^0B^0, B^0 \rightarrow K^*D^+\bar{D}^{*-}, B^0 \rightarrow \pi^+\pi^-\rho^-\omega K^{*+}, K^* \rightarrow \pi^-K^+, D^+ \rightarrow \pi^0K_L\pi^+,$	_			
	$\bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{-} \to \pi^{0}\pi^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}, K^{*+} \to \pi^{0}K^{+}, \bar{D}^{0} \to K^{+}a_{1}^{-}, a_{1}^{-} \to \rho^{0}\pi^{-},$				
24	$D \rightarrow \mathcal{K} D , \rho \rightarrow \mathcal{K} \mathcal{K} , \omega \rightarrow \mathcal{K} \mathcal{K} \mathcal{K} , \Lambda \rightarrow \mathcal{K} \mathcal{K} , D \rightarrow \mathcal{K} \mathcal{U}_1, \mathcal{U}_1 \rightarrow \rho \mathcal{K} , $	23	23	1	24
	$\frac{(e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\rho^{0}\pi^{-}\rho^{+}\rho^{+}\eta D^{-}, \bar{B}^{0} \to \pi^{+}\bar{K}^{*}\bar{D}^{*-}D^{0}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+},}$				
25	$\rho^{+} \to \pi^{0} \pi^{+}, \eta \to \pi^{0} \pi^{+} \pi^{-}, D^{-} \to \pi^{-} \pi^{-} K^{+}, \bar{K^{*}} \to \pi^{+} K^{-} \gamma^{gFSR}, \bar{D^{*-}} \to \pi^{-} \bar{D^{0}}, D^{0} \to e^{+} \nu_{e} \pi^{0} K^{-},$		2.4		25
25	$\pi^0 \to e^+ e^- \gamma^{gFSR}, \bar{D}^0 \to \mu^- \bar{\nu}_\mu K^{*+}, K^{*+} \to \pi^+ K^0, K^0 \to K_S, K_S \to \pi^+ \pi^-$	24	24	1	25
	$(e^{+}e^{-} \to e^{+}e^{+}e^{-}\nu_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+$				
	$e^+e^-  o \Upsilon(4S), \Upsilon(4S)  o B^0 \bar{B}^0, B^0  o K^0 \bar{D}^0 D^{*0}, \bar{B}^0  o \pi^0 \pi^- \omega D^+ \gamma^{gFSR}, K^0  o K_L, \bar{D}^0  o K^+ a_1^-,$				
26	$D^{*0} \to D^{0} \gamma, \omega \to \pi^{0} \pi^{+} \pi^{-}, D^{+} \to \pi^{+} K^{0} \bar{K}^{*}, a_{1}^{-} \to \rho^{0} \pi^{-}, D^{0} \to e^{+} \nu_{e} K^{*-}, K^{0} \to K_{L}, \\ \bar{K}^{*} \to \pi^{+} K^{-}, \rho^{0} \to \pi^{+} \pi^{-} \gamma^{gFSR}, K^{*-} \to \pi^{0} K^{-}$	25	25	1	26
20	$ar{K}^*  o \pi^+ K^-,  ho^0  o \pi^+ \pi^- \gamma^{gFSR}, K^{*-}  o \pi^0 K^-$	25	2.5	1	20
	$(e^+e^- \to e^+\nu_e K_L K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ K^- K^- \gamma^{gFSR} \gamma^{gFSR} \gamma^{gFSR} \gamma^{\gamma\gamma\gamma\gamma\gamma\gamma})$				
	$e^{+}e^{-} \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow B^{0}B^{0}, B^{0} \rightarrow e^{+}\nu_{e}\bar{D}^{*-}, B^{0} \rightarrow \mu^{+}\nu_{\mu}D^{-}, \bar{D}^{*-} \rightarrow \pi^{-}\bar{D}^{0}, D^{-} \rightarrow \pi^{0}\pi^{-}K^{*},$				
27	$\bar{D}^0 \to \pi^- K^+, K^* \to \pi^- K^+$	26	26	1	27
	$\frac{(e^{+}e^{-} \to e^{+}\nu_{e}\mu^{+}\nu_{\mu}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}\bar{D}^{*-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D_{1}^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D_{1}^{+} \to \pi^{+}\pi^{-}D^{+},}$				
28	$e^+e^-  o \Gamma(4S), \Gamma(4S)  o B^*B^*, B^*  o \mu^+  u_\mu D^-, B^*  o \mu^-  u_\mu D^+_1, D^-  o \pi^- D^*, D^+_1  o \pi^- \pi^- D^-, D^+_1  o \pi^- \pi^- \pi^- D^-, D^1  o \pi^- \pi^- \pi^- D^-, D^1  o \pi^- \pi^- \pi^- D^-$	27	27	1	28
28		21	21	1	28
	$(e^{+}e^{-} \to \mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{gFSR}\gamma\gamma\gamma\gamma)$ $e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \tau^{+}\nu_{\tau}\bar{D}^{*-}, \bar{B}^{0} \to \rho^{-}D^{+}, \tau^{+} \to \bar{\nu}_{\tau}\pi^{0}\pi^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0},$				
29	$ ho^-  ightarrow \pi^0 \pi^-, D^+  ightarrow e^+  u_e ar K^0, ar D^0  ightarrow \pi^- \omega K^+, ar K^0  ightarrow K_L, \omega  ightarrow \pi^0 \pi^+ \pi^-$	28	28	1	29
23	$(e^+e^-  ightarrow e^+ u_e N_{,L} \pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma\gamma\gamma\gamma\gamma)$	20	20	1	23
	$e^+e^- \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow \bar{B}^0\bar{B}^0, \bar{B}^0 \rightarrow \pi^+\pi^-\rho^-D^+, \bar{B}^0 \rightarrow \pi^+\rho^-\rho^-D^+, \rho^- \rightarrow \pi^0\pi^-, D^+ \rightarrow \pi^0K_L\pi^+,$				
30	$\rho^{-} \to \pi^{0}\pi^{-}, \rho^{-} \to \pi^{0}\pi^{-}\gamma^{gFSR}, D^{+} \to K_{L}a_{1}^{+}, a_{1}^{+} \to \rho^{0}\pi^{+}, \rho^{0} \to \pi^{+}\pi^{-}$	29	29	1	30
	$(e^+e^- \to K_L K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \gamma^{9FSR} \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma)$				
		1	I.		

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
	$e^+e^-  o \Upsilon(4S), \Upsilon(4S)  o B^0 \bar{B}^0, B^0  o \mu^+ \nu_\mu D_1^-, \bar{B}^0  o \bar{K}_1^0 \gamma, D_1^-  o \pi^+ \pi^- D^-, \bar{K}_1^0  o \pi^+ \pi^- \bar{K}^0,$				
31	$D^-  o \mu^- ar{ u}_\mu K^0, ar{K}^0  o K_S, K^0  o K_S, K_S  o \pi^+ \pi^-, K_S  o \pi^0 \pi^0$	30	30	1	31
	$(e^{+}e^{-} \to \mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma\gamma)$			_	
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{-}K^{+}D^{*+}\bar{D}^{*-}, \bar{B}^{0} \to \rho^{0}\rho^{-}\eta\omega D^{+}, D^{*+} \to \pi^{+}D^{0}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0},$				
32	$\rho^{0} \to \pi^{+}\pi^{-}\gamma^{gFSR}, \rho^{-} \to \pi^{0}\pi^{-}, \eta \to \pi^{0}\pi^{+}\pi^{-}, \omega \to \pi^{+}\pi^{-}, D^{+} \to e^{+}\nu_{e}\pi^{+}K^{-}\gamma^{gFSR}, D^{0} \to K_{L}\pi^{+}\pi^{-}, D^{0} \to \pi^{0}\pi^{-}K^{+}\gamma^{gFSR}, \pi^{0} \to e^{+}e^{-}\gamma^{gFSR}, K_{L} \to \pi^{0}\pi^{0}\pi^{0}$	31	31	1	32
32	$\bar{D}^0  o \pi^0 \pi^- K^+ \gamma^{gFSR}, \pi^0  o e^+ e^- \gamma^{gFSR}, K_L  o \pi^0 \pi^0 \pi^0$	31	91	1	32
	$(e^{+}e^{-} \to e^{+}e^{+}e^{-}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to D^{-}D^{+}_{s}, B^{0} \to \pi^{0}\pi^{0}\rho^{0}\pi^{+}\pi^{-}\pi^{-}D^{+}\gamma^{gFSR}, D^{-} \to \pi^{0}\pi^{-}K_{S}, D^{+}_{s} \to \pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-},$				
33	$\rho^{0} \to \pi^{+}\pi^{-}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{0}, K_{S} \to \pi^{0}\pi^{0}, \bar{K}^{0} \to K_{S}, K_{S} \to \pi^{0}\pi^{0}$	32	32	1	33
	$\frac{(e^{+}e^{-} \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-$				
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$				
34	$ ho \rightarrow \pi \ \pi^+, \eta \rightarrow \pi \ \pi^-, \omega \rightarrow \pi \ \pi^-, \omega \rightarrow \pi^- D^-, D^- \rightarrow \mu^-  u_\mu K^-, D^- \rightarrow K L u_1^-, $ $a_1^- \rightarrow  ho^0 \pi^-,  ho^0 \rightarrow \pi^+ \pi^-$	33	33	1	34
	$(e^+e^- \rightarrow \mu^-\bar{\nu}_{\mu}\nu_{\tau}\bar{\nu}_{\tau}K_{I}\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^+\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				
	$(e^{+}e^{-} \rightarrow \mu^{-}\bar{\nu}_{\mu}\nu_{\tau}\bar{\nu}_{\tau}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$ $e^{+}e^{-} \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow B^{0}\bar{B}^{0}, B^{0} \rightarrow \bar{D}^{*-}\bar{\Delta}^{0}\Delta^{+}, \bar{B}^{0} \rightarrow \bar{K}^{*}\chi_{c1}, \bar{D}^{*-} \rightarrow \pi^{-}\bar{D}^{0}, \bar{\Delta}^{0} \rightarrow \pi^{0}\bar{n},$				
95	$\Delta^+ \rightarrow \pi^0 p, \bar{K}^* \rightarrow \pi^+ K^-, \chi_{c1} \rightarrow \eta K^+ K^-, \bar{D}^0 \rightarrow \mu^- \bar{\nu}_\mu K^{*+}, \eta \rightarrow \gamma \gamma, K^{*+} \rightarrow \pi^+ K^0,$	9.4	9.4	1	95
35	$K^0 o K_L$	34	34	1	35
	$(e^+e^- \to \mu^- \bar{\nu}_\mu K_L \pi^+ \pi^+ \pi^- K^+ K^- K^- \bar{n} p \gamma \gamma \gamma \gamma \gamma)$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \bar{D}^{0}\bar{p}\Delta^{+}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D_{1}^{+}\gamma^{gFSR}, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}, \Delta^{+} \to \pi^{+}n,$				
36	$D_1^+ \to \pi^+ \pi^- D^+, D^+ \to K_L \pi^+$	35	35	1	36
	$(e^{+}e^{-} \to e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}n\bar{p}\gamma^{gFSR}\gamma\gamma)$				
97	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}D^{-}, \bar{B}^{0} \to \pi^{0}\pi^{-}D^{*+}, D^{-} \to K_{L}a_{1}^{-}, D^{*+} \to \pi^{+}D^{0}, K_{L} \to \pi^{0}\pi^{0}\pi^{0}, a_{1}^{-} \to \pi^{0}\rho^{-}, D^{0} \to \pi^{0}\pi^{0}\pi^{0}\pi^{+}\pi^{-}, \rho^{-} \to \pi^{0}\pi^{-}$	20	36	1	27
37		36	90	1	37
	$\frac{(e^{+}e^{-} \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to \eta D^{+}p\bar{\Delta}^{++}, \bar{B}^{0} \to \pi^{0}\pi^{+}\pi^{-}\rho^{-}D^{+}, \eta \to \gamma\gamma, D^{+} \to \pi^{+}K_{S},}$				
38	$\bar{\Delta}^{++} \to \pi^- \bar{p},  ho^- \to \pi^0 \pi^-, D^+ \to \pi^0 K_L \pi^+, K_S \to \pi^+ \pi^-$	37	37	1	38
	$\frac{(e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}p\bar{p}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to \pi^{-}D^{+}, \bar{B}^{0} \to \pi^{0}\pi^{0}K^{*}K^{*-}D^{+}, D^{+} \to e^{+}\nu_{e}\bar{K}^{*}\gamma^{gFSR}, K^{*} \to \pi^{0}K^{0},}$				
39	$K^{*-}  o \pi^- ar{K}^0, D^+  o \mu^+  u_\mu \pi^0, ar{K}^*  o \pi^+ K^-, K^0  o K_L, ar{K}^0  o K_S, K_S  o \pi^0 \pi^0$	38	38	1	39
	$(e^{+}e^{-} \to e^{+}\nu_{e}\mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}\pi^{+}\bar{D}^{*-}, \bar{B}^{0} \to \rho^{-}D^{*+}\gamma, \rho^{0} \to \pi^{+}\pi^{-}, \bar{D}^{*-} \to \pi^{0}D^{-},$				
40	$\rho^{-} \to \pi^{0}\pi^{-}, D^{*+} \to \pi^{+}D^{0}, D^{-} \to \rho^{-}K^{*}, D^{0} \to \rho^{0}\pi^{+}K^{-}, \rho^{-} \to \pi^{0}\pi^{-}, K^{*} \to \pi^{-}K^{+}, \\ \rho^{0} \to \pi^{+}\pi^{-}$	39	39	1	40
	$(e^{+}e^{-} \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma)$ $e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}\pi^{0}\pi^{0}D^{*+}, D^{*+} \to \pi^{0}D^{+}, D^{*+} \to \pi^{+}D^{0},$				
41	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	40	40	1	41
11	$(e^{+}e^{-} \rightarrow \mu^{-}\mu^{-}\bar{\nu}_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}K^{+}K^{-}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma))$	10	10	_	11
	1 1 7 7	1	1	1	<u>I</u>

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
42	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{-}\omega D^{*+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \omega \to \pi^{0}\pi^{+}\pi^{-},$ $D^{*+} \to \pi^{0}D^{+}, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}, D^{+} \to \pi^{+}\pi^{+}K^{-}$ $(e^{+}e^{-} \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma)$	41	41	1	42
43	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to \pi^{+}K^{-}\eta_{c}(2S), \bar{B}^{0} \to \pi^{0}\pi^{+}\pi^{-}D^{+}\Sigma^{-}\bar{\Sigma}^{0}, \eta_{c}(2S) \to \pi^{0}\rho^{0}\pi^{+}\pi^{-}\pi^{-}\rho^{+}\eta, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{*},$ $\Sigma^{-} \to \pi^{-}n, \bar{\Sigma}^{0} \to \bar{\Lambda}\gamma, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+}, \eta \to \gamma\gamma, \bar{K}^{*} \to \pi^{+}K^{-}\gamma^{gFSR},$ $\bar{\Lambda} \to \pi^{+}\bar{p}$ $(e^{+}e^{-} \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}K^{-}n\bar{p}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$ $e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \eta D^{-}D^{+}_{s}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}, \eta \to \pi^{0}\pi^{0}\pi^{0}, D^{-} \to \rho^{-}K^{*},$	42	42	1	43
44	$D_s^+ \to \pi^+ \eta', D^{*+} \to \pi^+ D^0, \rho^- \to \pi^0 \pi^-, K^* \to \pi^0 K^0, \eta' \to \pi^0 \pi^0 \eta, D^0 \to \pi^0 \pi^+ K^-, K^0 \to K_S, \eta \to \gamma \gamma, K_S \to \pi^+ \pi^- (e^+ e^- \to e^- \bar{\nu}_e \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma \gamma)$	43	43	1	44
45	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \omega K^{+}\bar{D}^{*-}, \bar{B}^{0} \to D^{*+}D_{s}^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0},$ $D^{*+} \to \pi^{0}D^{+}, D_{s}^{-} \to \pi^{-}f_{0}(980), \bar{D}^{0} \to \pi^{-}\omega K^{+}, D^{+} \to K_{S}K^{*+}, f_{0}(980) \to \pi^{+}\pi^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-},$ $K_{S} \to \pi^{+}\pi^{-}, K^{*+} \to \pi^{+}K^{0}, K^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-}$ $(e^{+}e^{-} \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma)$	44	44	1	45
46	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \eta \bar{D}^{*-}D_{s}^{+}, B^{0} \to \pi^{0}\pi^{-}\rho^{+}\bar{K}^{0}K^{+}D^{-}, \eta \to \gamma\gamma, \bar{D}^{*-} \to \pi^{0}D^{-}, D^{+}_{s} \to \mu^{+}\nu_{\mu}\eta, \rho^{+} \to \pi^{0}\pi^{+}, \bar{K}^{0} \to K_{S}, D^{-} \to K_{S}K^{*-}, D^{-} \to \pi^{-}\pi^{-}K^{+}, \eta \to \pi^{0}\pi^{0}\pi^{0}, K_{S} \to \pi^{0}\pi^{0}, K_{S} \to \pi^{+}\pi^{-}, K^{*-} \to \pi^{-}\bar{K}^{0}, \pi^{0} \to e^{+}e^{-}\gamma^{gFSR}, \bar{K}^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-}, K^{*-} \to \pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	45	45	1	46
47	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{+}\pi^{+}\pi^{-}\rho^{-}\eta\eta\bar{K}^{0}K^{+}D^{-}, \bar{B}^{0} \to \pi^{0}\rho^{0}\pi^{-}D^{*+}, \rho^{-} \to \pi^{0}\pi^{-}, \eta \to \gamma\gamma,$ $\eta \to \pi^{0}\pi^{0}\pi^{0}, \bar{K}^{0} \to K_{L}, D^{-} \to \pi^{-}K_{S}, \rho^{0} \to \pi^{+}\pi^{-}, D^{*+} \to \pi^{0}D^{+}, K_{S} \to \pi^{+}\pi^{-},$ $D^{+} \to \pi^{0}K_{L}\pi^{+}$ $(e^{+}e^{-} \to K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$ $e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}\rho^{+}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{+}K^{-}D^{+}D^{-}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+},$	46	46	1	47
48	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}\rho^{+}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{+}K^{-}D^{+}D^{-}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+},$ $\bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{+} \to \pi^{0}\pi^{+}\bar{K}^{*}, D^{-} \to \mu^{-}\bar{\nu}_{\mu}K^{0}, \bar{D}^{0} \to \mu^{-}\bar{\nu}_{\mu}K^{+}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, K^{0} \to K_{S},$ $\bar{K}^{0} \to K_{L}, K_{S} \to \pi^{+}\pi^{-}$ $(e^{+}e^{-} \to \mu^{-}\mu^{-}\bar{\nu}_{\mu}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma)$ $e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}\rho^{+}D^{-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{+}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+},$	47	47	1	48
49	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}\rho^{+}D^{-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{+}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+},$ $D^{-} \to \mu^{-}\bar{\nu}_{\mu}K^{*}, D^{+} \to e^{+}\nu_{e}\bar{K}^{*}, K^{*} \to \pi^{0}K^{0}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0}, K^{0} \to K_{L}, \bar{K}^{0} \to K_{S},$ $K_{S} \to \pi^{0}\pi^{0}$ $(e^{+}e^{-} \to e^{+}\nu_{e}\mu^{-}\mu^{-}\bar{\nu}_{\mu}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$ $e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\pi^{-}\rho^{+}\eta D^{-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, \rho^{+} \to \pi^{0}\pi^{+}, \eta \to \pi^{0}\pi^{0}\pi^{0},$	48	48	1	49
50	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\pi^{-}\rho^{+}\eta D^{-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, \rho^{+} \to \pi^{0}\pi^{+}, \eta \to \pi^{0}\pi^{0}\pi^{0},$ $D^{-} \to K_{S}K^{-}, D^{*+} \to \pi^{+}D^{0}, \pi^{0} \to e^{+}e^{-}\gamma^{gFSR}, K_{S} \to \pi^{+}\pi^{-}, D^{0} \to \pi^{0}\pi^{+}\pi^{-}\bar{K}^{*}, \bar{K}^{*} \to \pi^{0}\bar{K}^{0},$ $\bar{K}^{0} \to K_{L}$ $(e^{+}e^{-} \to e^{+}e^{-}\mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	49	49	1	50

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
	,				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to e^{+}\nu_{e}\eta D^{-}\gamma^{gFSR}, B^{0} \to \pi^{0}\pi^{+}\pi^{+}\pi^{-}\bar{D}^{*-}, \eta \to \pi^{+}\pi^{-}\gamma^{gFSR}, D^{-} \to K_{L}a_{1}^{-}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, a_{1}^{-} \to \pi^{-}f_{0}(600), \bar{D}^{0} \to \mu^{-}\bar{\nu}_{\mu}K^{+}$	F0	F0		F-1
51		50	50	1	51
	$\frac{(e^{+}e^{-} \to e^{+}\nu_{e}\mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}f_{0}(600)\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{+}\pi^{+}\rho^{-}D^{-}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{+}, \rho^{-} \to \pi^{0}\pi^{-}, D^{-} \to \pi^{0}\pi^{+}\pi^{-}\pi^{-}K^{0},}$				
52	$e^+e^-  ightarrow 1 (4S), 1 (4S)  ightarrow B B, B  ightarrow \pi^+\pi^+\pi^- P D, B  ightarrow e^-  u_e D^+, \rho^-  ightarrow \pi^-\pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- $	51	51	1	52
32		91	31	1	32
	$\frac{(e^{+}e^{-} \to e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}\pi^{+}\pi^{+}\pi^{-}\omega D^{-}, \bar{B}^{0} \to \rho^{+}\rho^{-}D^{*0}, \rho^{0} \to \pi^{+}\pi^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}\gamma^{gFSR},}$				
	$D^{-} \to \pi^{-} K_{1}^{'0}, \rho^{+} \to \pi^{0} \pi^{+}, \rho^{-} \to \pi^{0} \pi^{-}, D^{*0} \to D^{0} \gamma, K_{1}^{'0} \to \pi^{-} K^{*+}, D^{0} \to e^{+} \nu_{e} K^{*-},$				
53	$K^{*+} \to \pi^0 K^+, K^{*-} \to \pi^- ar{K}^0, ar{K}^0 \to K_L$	52	52	1	53
	$(e^+e^- \to e^+\nu_e K_L\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				
	$e^+e^-  o \Upsilon(4S), \Upsilon(4S)  o B^0 \bar{B}^0, B^0  o \pi^- \bar{D}^0 D_s^+, \bar{B}^0  o D^{*+} D_s^{*-}, \bar{D}^0  o  ho^- K^{*+}, D_s^+  o  ho^+ \eta,$				
F 4	$D^{*+} \to \pi^+ D^0$ , $D^{*-}_* \to D^- \gamma$ , $\rho^- \to \pi^0 \pi^-$ , $K^{*+} \to \pi^0 K^+$ , $\rho^+ \to \pi^0 \pi^+$ , $n \to \gamma \gamma$ .	F0.	F0.	1	F 4
54	$D^{0} \to K_{S}K^{+}K^{-}, D_{s}^{-} \to \pi^{-}\eta', K_{S} \to \pi^{0}\pi^{0}, \eta' \to \pi^{+}\pi^{-}\eta, \eta \to \pi^{0}\pi^{+}\pi^{-}$	53	53	1	54
	$\frac{(e^+e^- \to \pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)}{e^+e^- \to \Upsilon(4S), \Upsilon(4S) \to B^0\bar{B}^0, B^0 \to \bar{D}^{*-}a_1^+, \bar{B}^0 \to \pi^0\rho^0\rho^0\rho^-D^+, \bar{D}^{*-} \to \pi^-\bar{D}^0, a_1^+ \to \pi^+K^0\bar{K}^0,}$				
	$e^+e^-  o \Upsilon(4S), \Upsilon(4S)  o B^0 \bar{B}^0, B^0  o \bar{D}^{*-}a_1^+, \bar{B}^0  o \pi^0 \rho^0 \rho^0 \rho^- D^+, \bar{D}^{*-}  o \pi^- \bar{D}^0, a_1^+  o \pi^+ K^0 \bar{K}^0,$				
55	$ ho^0 \to \pi^+\pi^-,  ho^0 \to \pi^+\pi^-,  ho^- \to \pi^0\pi^-, D^+ \to \pi^0\pi^+K_S, \bar{D}^0 \to K^+a_1^-, K^0 \to K_S,$	54	54	1	55
	$ar{K}^0  o K_S, K_S  o \pi^0 \pi^0, a_1^-  o  ho^0 \pi^-, K_S  o \pi^+ \pi^-, K_S  o \pi^0 \pi^0,  ho^0  o \pi^+ \pi^-$				
	$\frac{(e^{+}e^{-} \rightarrow \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)}{e^{+}e^{-} \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow B^{0}\bar{B}^{0}, B^{0} \rightarrow \pi^{0}\Delta^{+}\bar{\Xi}_{c}^{*-}, \bar{B}^{0} \rightarrow \pi^{0}\pi^{+}D^{0}D_{s}^{*-}, \Delta^{+} \rightarrow \pi^{+}n, \bar{\Xi}_{c}^{*-} \rightarrow \bar{\Xi}_{c}^{-}\gamma,}$				
	$\begin{array}{c} e^{+}e^{-} \to \Gamma(4S), \Gamma(4S) \to B^{o}B^{o}, B^{o} \to \pi^{o}\Delta^{+}\Xi_{c}^{-}, B^{o} \to \pi^{o}\pi^{+}D^{o}D_{s}^{-}, \Delta^{+} \to \pi^{+}n, \Xi_{c}^{-} \to \Xi_{c}^{-}\gamma, \\ D^{0} \to \mu^{+}\nu_{\mu}K^{*-}, D_{s}^{*-} \to D_{s}^{-}\gamma, \bar{\Xi}_{c}^{-} \to \pi^{0}\pi^{-}\bar{\Xi}^{0}, K^{*-} \to \pi^{-}\bar{K}^{0}, D_{s}^{-} \to K^{0}K^{*-}, \bar{\Xi}^{0} \to \pi^{0}\bar{\Lambda}, \end{array}$				
56	$D^*  ightarrow \mu^+ V_{\mu} K^-, D_s^-  ightarrow D_s^- \gamma, \Xi_c^-  ightarrow \pi^+ \pi^- \Xi^+, K^-  ightarrow \pi^+ K^+, D_s^-  ightarrow K^- K^-  ightarrow \pi^+ K^-, \Lambda  ightarrow \pi^+ ar{p}, K_L  ightarrow \mu^-  u_{\mu} \pi^+$	55	55	1	56
	$\frac{(e^+e^- \to \mu^+\mu^-\nu_\mu\nu_\mu K_L\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-K^-n\bar{p}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)}{e^+e^- \to \Upsilon(4S), \Upsilon(4S) \to B^0\bar{B}^0, B^0 \to e^+\nu_e\bar{D}^{*-}, \bar{B}^0 \to \pi^0\bar{\Delta}^+\Sigma_c^+, \bar{D}^{*-} \to \pi^0D^-, \bar{\Delta}^+ \to \pi^-\bar{n},}$				
	$\Sigma_c^+ \to \pi^0 \Lambda_c^+, D^- \to \pi^0 \pi^- \phi, \Lambda_c^+ \to \pi^+ \eta \Lambda, \phi \to K_L K_S, \eta \to \pi^0 \pi^+ \pi^-, \Lambda \to \pi^- p,$				
57	$K_S  ightarrow \pi^+\pi^-$	56	56	1	57
	$(e^{+}e^{-} \to e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\bar{n}p\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				
	$e^+e^- \to \Upsilon(4S), \Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \rho^0 \pi^+ \pi^- \bar{D}^{*0}, \bar{B}^0 \to \mu^- \bar{\nu}_{\nu}, D^{*+}, \rho^0 \to \pi^+ \pi^-, \bar{D}^{*0} \to \bar{D}^0 \gamma_{\nu}$				
58	$D^{*+} \to D^{+}\gamma, \bar{D}^{0} \to \rho^{-}K^{*+}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{0}, \rho^{-} \to \pi^{0}\pi^{-}, K^{*+} \to \pi^{+}K^{0}, \bar{K}^{0} \to K_{S}, K_{S} \to \pi^{0}\pi^{0}, K_{S} \to \pi^{0}\pi^{0}$	57	57	1	58
30	$K^0  o K_S, K_S  o \pi^0 \pi^0, K_S  o \pi^0 \pi^0$	01	01	1	36
	$\frac{(e^{+}e^{-} \to \mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to D^{+}\Delta^{0}\bar{\Delta}^{+}, \bar{B}^{0} \to \pi^{0}\rho^{0}\pi^{+}\pi^{-}\eta\eta, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{*}\gamma^{gFSR}, \Delta^{0} \to \pi^{0}n,}$				
	$e^{+}e^{-}  o \Upsilon(4S), \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to D^{+}\Delta^{0}\Delta^{+}, B^{0} \to \pi^{0}\rho^{0}\pi^{+}\pi^{-}\eta\eta, D^{+} \to \mu^{+}\nu_{\mu}K^{*}\gamma^{gFSR}, \Delta^{0} \to \pi^{0}n,$				
59	$ar{\Delta}^+  o \pi^0 ar{p},  ho^0  o \pi^+ \pi^-, \eta  o \gamma \gamma, \eta  o \pi^0 \pi^+ \pi^-, ar{K}^*  o \pi^+ K^-$	58	58	1	59
	$\frac{(e^{+}e^{-} \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}n\bar{p}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{+}\pi^{+}\pi^{-}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{0}\pi^{0}\pi^{0}\rho^{0}\rho^{0}\pi^{+}\pi^{-}\pi^{-}D^{*+}\gamma^{gFSR}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{0} \to \pi^{+}\pi^{-},$				
60	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	50	F0.	1	60
60	$\begin{array}{c} \rho^{\circ} \rightarrow \pi^{+}\pi^{-}, D^{+} \rightarrow \pi^{+}D^{\circ}, D^{\circ} \rightarrow K^{+}a_{1}, D^{\circ} \rightarrow \mu^{+}\nu_{\mu}\pi^{-}, a_{1} \rightarrow \rho^{\circ}\pi^{-}, \rho^{\circ} \rightarrow \pi^{+}\pi^{-}\\ (e^{+}e^{-} \rightarrow \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-$	59	59	1	60
	$(e e \rightarrow \mu \nu_{\mu} n n n n n n n n n n n n n n n n n n n$				

$ \begin{array}{c} \text{index} & \text{(event initial-linal states)} \\ \text{(event initial-linal states)} \\ \text{(event initial-linal states)} \\ \\ \text{61} & & & & & & & & & & & & & & & & & & &$	
$ \begin{array}{c} 61 \\ \hline \\ R^{\dot{0}} \rightarrow K_S, D^{\dot{+}} \rightarrow \pi^0 \pi^+ \bar{K}^*, \bar{D}^{\dot{+}0} \rightarrow \bar{D}^0 \gamma, D^{\dot{-}} \rightarrow e^{\dot{-}\nu} e^{\dot{\nu}} K^0 \gamma^{gFSR}, K_S \rightarrow \pi^+ \pi^-, \bar{K}^* \rightarrow \pi^+ K^-, \\ D^0 \rightarrow n^0 n^0 n^0 \pi^+ \pi^- \gamma^{gFSR}, K^0 \rightarrow K_S, K_S \rightarrow n^0 n^0 \\ \hline \\ (e^+e^- \rightarrow e^- \bar{\nu}_e \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^- \gamma^{gFSR} \gamma^{gFSR}$	nCmltEvts
$\begin{array}{c} 01 \\ \hline & D^0 \to \pi^0 \pi^0 \pi^0 \pi^+ \pi^- \gamma^{gFSR}, K^0 \to K_S, K_S \to \pi^0 \pi^0 \\ \hline & (e^+e^- \to e^- \bar{\nu}_e \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^- \gamma^{gFSR} \gamma^{$	
$ \begin{array}{c} D^{O} \rightarrow \pi^{0} \pi^{0} \pi^{0} \pi^{1} \pi^{-} - g^{1SB}, K^{O} \rightarrow K_{S}, K_{S} \rightarrow \pi^{0} \pi^{0} \\ (e^{+}e^{-} \rightarrow e^{-} \bar{\nu}_{e} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} K^{-} \gamma^{6FS} R^{9FS} R^{9F$	61
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	01
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
$ \begin{array}{c} 62 \\ & K^{*-} \to \pi^- \bar{K}^0, a_1^- \to \pi^- \hat{f}_0(600) \gamma^{gFSR}, \bar{K}^0 \to K_L \\ & (e^+e^- \to e^+\nu_e K_L K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ K^+ f_0(600) \gamma^{gFSR} \gamma \gamma \gamma \gamma) \\ & e^+e^- \to \Upsilon(4S), \Upsilon(4S) \to B^0 B^0, B^0 \to D^{*-}a_1^+, B^0 \to \pi^+ \pi^+ \pi^+ \pi^- \pi^- D^- \Delta^+ \Delta^+, \bar{D}^{*-} \to \pi^- \bar{D}^0, a_1^+ \to \rho^0 \pi^+, \\ & D^- \to e^- \bar{\nu}_e \pi^- K^+, \Delta^+ \to \pi^0 p, \bar{\Delta}^+ \to \pi^0 \bar{p}, \bar{D}^0 \to \mu^- \bar{\nu}_\mu K^{*+}, \rho^0 \to \pi^+ \pi^- \gamma^{gFSR}, K^{*+} \to \pi^+ K^0, \\ & K^0 \to K_S, K_S \to \pi^+ \pi^- \\ & (e^+e^- \to e^- \bar{\nu}_e \mu^- \bar{\nu}_\mu \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ p \bar{p} \gamma^{gFSR} \gamma \gamma \gamma \gamma) \\ & e^+e^- \to \Upsilon(4S), \Upsilon(4S) \to B^0 B^0, B^0 \to \pi^+ \pi^- \eta \bar{D}^0, B^0 \to \pi^- \pi^- \pi^- \rho^+ \rho^+ \omega D^{*+}, \eta \to \eta^0 \pi^0, \bar{D}^0 \to \pi^0 \pi^- K^+, \\ & \rho^+ \to \pi^0 \pi^+, \rho^+ \to \pi^0 \pi^+, \omega \to \pi^0 \pi^+ \pi^-, D^* \to \pi^0 \pi^0, \rho^0 \to e^+ \nu_e \pi^0 K^- \gamma^{gFSR} \gamma^{gFSR} \\ & (e^+e^- \to e^+ \nu_e \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^- \gamma^{gFSR} \gamma^{gFSR} \gamma^{\gamma \gamma $	
$(e^{+}e^{-} \rightarrow e^{+}\nu_{e}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}f_{0}(600)\gamma^{gFSR}\gamma\gamma\gamma\gamma)}$ $e^{+}e^{-} \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow B^{0}B^{0}, B^{0} \rightarrow D^{*} - a_{+}^{1}, B^{0} \rightarrow \pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}D^{-}\Delta^{+}\Delta^{+}, \bar{D}^{*} \rightarrow \pi^{-}\bar{D}^{0}, a_{+}^{1} \rightarrow \rho^{0}\pi^{+}, D^{-} \rightarrow e^{-}\bar{\nu}_{e}\pi^{-}K^{+}, \Delta^{+} \rightarrow \pi^{0}\bar{p}, \bar{D}^{0} \rightarrow \mu^{-}\bar{\nu}_{\mu}K^{*}, \rho^{0} \rightarrow \pi^{+}\pi^{-}\gamma^{gFSR}, K^{*+} \rightarrow \pi^{+}K^{0}, K^{*} \rightarrow K^{*}, K^{*} \rightarrow \pi^{+}K^{0}, K^{*} \rightarrow K^{*} \rightarrow K^{*}, K^{*} \rightarrow \pi^{+}K^{0}, K^{*} \rightarrow K^{*} \rightarrow K^{*}, K^{*} \rightarrow K^{*}$	62
$\begin{array}{c} e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \bar{D}^{*-}a_{1}^{+}, B^{0} \to \pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}D^{-}\Delta^{+}\bar{\Delta}^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, a_{1}^{+} \to \rho^{0}\pi^{+}, \\ D^{-} \to e^{-}\bar{\nu}_{e}\pi^{-}K^{+}, \Delta^{+} \to \pi^{0}p, \bar{\Delta}^{+} \to \pi^{0}\bar{p}, \bar{D}^{0} \to \mu^{-}\bar{\nu}_{\mu}K^{*+}, \rho^{0} \to \pi^{+}\pi^{-}\gamma^{gFSR}, K^{*+} \to \pi^{+}K^{0}, \\ K^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-} \\ (e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}p\bar{p}\gamma^{gFSR}, \gamma\gamma\gamma\gamma}) \\ e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\pi^{-}n\bar{D}^{0}, B^{0} \to \pi^{-}\pi^{-}\pi^{-}\pi^{-}\rho^{+}\rho^{+}\omega D^{*+}, \eta \to \pi^{0}\pi^{0}, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}, \\ \rho^{+} \to \pi^{0}\pi^{+}, \rho^{+} \to \pi^{0}\pi^{+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{*+} \to \pi^{+}D^{0}, D^{0} \to e^{+}\nu_{e}\pi^{0}K^{-}\gamma^{gFSR}\gamma^{gFSR} \\ (e^{+}e^{-} \to e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR} \\ (e^{+}e^{-} \to e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR} \\ (e^{+}e^{-} \to e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma}) \\ e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}\pi^{+}K^{-}K^{*+}\bar{D}^{*-}, B^{0} \to \pi^{0}\pi^{0}\rho^{0}\rho^{0}\pi^{-}D^{+}, \rho^{0} \to \pi^{+}\pi^{-}, K^{*+} \to \pi^{+}K^{0}, \\ \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}, K_{S} \to \pi^{+}\pi^{-}, \rho^{\gamma} \to \pi^{+}\pi^{-}, K_{S} \to \pi^{+}\pi^{-}, \eta^{\gamma} \to \pi^{+}\pi^{-}, K_{S} \to \pi^{+}\pi^{-}, \eta^{\gamma} \to \pi^{+}\pi^{-}, K_{S} \to \pi^{+}\pi^{-}, \eta^{\gamma} \to \pi^{+}\pi^{-}, \pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-$	
$ \begin{array}{c} 63 \\ D^{-} \rightarrow e^{-} \bar{\nu}_{e} \pi^{-} K^{+}, \Delta^{+} \rightarrow \pi^{0} p, \bar{\Delta}^{+} \rightarrow \pi^{0} \bar{p}, \bar{D}^{0} \rightarrow \mu^{-} \bar{\nu}_{\mu} K^{*+}, \rho^{0} \rightarrow \pi^{+} \pi^{-} \gamma^{gFSR}, K^{*+} \rightarrow \pi^{+} K^{0}, \\ K^{0} \rightarrow K_{S}, K_{S} \rightarrow \pi^{+} \pi^{-} \\ (e^{+} e^{-} \rightarrow e^{-} \bar{\nu}_{e} \mu^{-} \bar{\nu}_{\mu} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \pi^{-} K^{+} \nu \bar{p} \bar{p} \gamma^{gFSR} \gamma \gamma \gamma \gamma ) \\ E^{+} e^{-} \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow B^{0} \bar{B}^{0}, B^{0} \rightarrow \pi^{+} \pi^{-} \eta \bar{D}^{0}, \bar{B}^{0} \rightarrow \pi^{-} \pi^{-} \pi^{-} \mu^{-} \mu^{+} \nu D^{*+}, \eta \rightarrow \pi^{0} \pi^{0}, \bar{D}^{0} \rightarrow \pi^{0} \pi^{-} K^{+}, \\ \rho^{+} \rightarrow \pi^{0} \pi^{+}, \rho^{+} \rightarrow \pi^{0} \pi^{+}, \omega \rightarrow \pi^{0} \pi^{+} \pi^{-}, D^{+} \rightarrow \pi^{+} D^{0}, D^{0} \rightarrow e^{+} \nu_{e} \pi^{0} K^{-} \gamma^{gFSR} \gamma^{gFSR} \\ (e^{+} e^{-} \rightarrow e^{+} \nu_{e} \pi^{+} \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \pi^{-} K^{+} K^{-} \gamma^{gFSR} \gamma^{gFSR} \gamma^{gFSR} \gamma^{gFSR} \gamma^{gFSR} \\ (e^{+} e^{-} \rightarrow e^{+} \nu_{e} \pi^{+} \pi^{+} \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \pi^{-} K^{+} K^{-} \gamma^{gFSR} \gamma^{gFS$	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
$(e^{+}e^{-} \rightarrow e^{-}\overline{\nu}_{e}\mu^{-}\overline{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+$	63
$\begin{array}{c} e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, \bar{B}^{0} \to \pi^{+}\pi^{-}\eta\bar{D}^{0}, \bar{B}^{0} \to \pi^{-}\pi^{-}\pi^{-}\rho^{+}\rho^{+}\omega D^{*+}, \eta \to \pi^{0}\pi^{0}, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}, \\ \rho^{+} \to \pi^{0}\pi^{+}, \rho^{+} \to \pi^{0}\pi^{+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{*+} \to \pi^{+}D^{0}, D^{0} \to e^{+}\nu_{e}\pi^{0}K^{-}\gamma^{gFSR}\gamma^{gFSR} \\ (e^{+}e^{-} \to e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma g\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma}) \end{array} \qquad $	
$ \begin{array}{ c c c c c } \hline 64 & \rho^{+} \to \pi^{0}\pi^{+}, \rho^{+} \to \pi^{0}\pi^{+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{*+} \to \pi^{+}D^{0}, D^{0} \to e^{+}\nu_{e}\pi^{0}K^{-}\gamma^{gFSR}\gamma^{gFSR}} \\ & (e^{+}e^{-} \to e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}} \\ \hline & e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}\pi^{+}K^{-}K^{*+}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{0}\pi^{0}\rho^{0}\rho^{0}\pi^{-}D^{+}, \rho^{0} \to \pi^{+}\pi^{-}, K^{*+} \to \pi^{+}K^{0}, \\ \hline & \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}, D^{+} \to e^{+}\nu_{e}\bar{K}^{0}\gamma^{gFSR}, K^{0} \to K_{S}, \bar{D}^{0} \to K_{L}\eta^{\prime}, \\ \hline & K^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-}, \eta^{\prime} \to \pi^{+}\pi^{-}, \eta^{\prime} \to \pi^{+}\pi^{-}, \eta \to \gamma\gamma \\ & (e^{+}e^{-} \to e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-$	
$ \begin{array}{c} e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}\pi^{+}K^{-}K^{*+}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{0}\pi^{0}\rho^{0}\rho^{0}\pi^{-}D^{+}, \rho^{0} \to \pi^{+}\pi^{-}, K^{*+} \to \pi^{+}K^{0}, \\ \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}, D^{+} \to e^{+}\nu_{e}\bar{K}^{0}\gamma^{gFSR}, K^{0} \to K_{S}, \bar{D}^{0} \to K_{L}\eta', \\ \bar{K}^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-}, \eta' \to \pi^{+}\pi^{-}\eta, K_{S} \to \pi^{+}\pi^{-}, \eta \to \gamma\gamma \\ (e^{+}e^{-} \to e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-$	64
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
$(e^{+}e^{-} \to e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+$	65
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$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	
$(e^+e^- \to \mu^+\nu_\mu\nu_\tau\bar{\nu}_\tau\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma)$	
$(e^+e^- \to \mu^+\nu_\mu\nu_\tau\bar{\nu}_\tau\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma)$	67
$e^+e^-  o \Upsilon(4S), \Upsilon(4S)  o B^0 \bar{B}^0, B^0  o \pi^+ \omega \omega \bar{D}^{*-}, \bar{B}^0  o \eta D^+ D_s^{*-}, \omega  o \pi^0 \gamma, \omega  o \pi^0 \pi^+ \pi^-,$	
$\bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \eta \to \gamma\gamma, D^{+} \to K_{L}\pi^{+}, D_{s}^{*-} \to D_{s}^{-}\gamma, \bar{D}^{0} \to \pi^{-}\eta K^{+}, D_{s}^{-} \to K^{0}K^{*-}, $	68
$   \begin{array}{c cccccccccccccccccccccccccccccccccc$	
$(e^+e^- \to K_L K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^- \gamma \gamma$	
$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{+}\gamma^{gFSR}, \bar{B}^{0} \to \rho^{0}\rho^{-}\eta D^{*+}, D^{+} \to \pi^{0}\pi^{+}K_{S}, \rho^{0} \to \pi^{+}\pi^{-},$ $\rho^{-} \to \pi^{0}\pi^{-}, \eta \to \gamma\gamma, D^{*+} \to \pi^{+}D^{0}, K_{S} \to \pi^{+}\pi^{-}, D^{0} \to \omega \bar{K}^{*}, \omega \to \pi^{+}\pi^{-},$ $CS = CS = 1$	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	69
$(e^+e^- \to e^- \bar{\nu}_e \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^- \gamma^{gFSR} \gamma \gamma \gamma \gamma \gamma \gamma)$	
$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{+}D^{-}, \bar{B}^{0} \to \rho^{-}D^{*+}, \rho^{+} \to \pi^{0}\pi^{+}, D^{-} \to \pi^{0}\pi^{-}\phi,$	
70 $\rho^- \to \pi^0 \pi^-, D^{*+} \to \pi^+ D^0, \phi \to K^+ K^-, D^0 \to e^+ \nu_e \pi^- \gamma^{gFSR}$ 69 69	70
$(e^+e^- \to e^+\nu_e\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma)$	

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
	$e^+e^-  o \Upsilon(4S), \Upsilon(4S)  o B^0 \bar{B}^0, B^0  o \pi^- K^+ D^0 \bar{D}^0, \bar{B}^0  o K^{*-} D^+, D^0  o \rho^+ K^{*-}, \bar{D}^0  o \rho^0 \rho^0,$				
	$K^{*-} \to \pi^- \bar{K}^0, D^+ \to e^+ \nu_e \bar{K}^* \gamma^{gFSR}, \rho^+ \to \pi^0 \pi^+, K^{*-} \to \pi^- \bar{K}^0, \rho^0 \to \pi^+ \pi^-, \rho^0 \to \pi^- \pi^-$				
71	$ar{K}^0  ightarrow K_L, ar{K}^*  ightarrow \pi^+ K^- \gamma^{gFSR}, ar{K}^0  ightarrow K_L$	70	70	1	71
	$(e^{+}e^{-} \to e^{+}\nu_{e}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma})$				
	$e^+e^-  o \Upsilon(4S), \Upsilon(4S)  o B^0 \bar{B}^0, B^0  o \pi^0 \pi^0 \pi^+ \rho^+ \rho^- D^-, \bar{B}^0  o e^- \bar{\nu}_e D^+, \rho^+  o \pi^0 \pi^+, \rho^-  o \pi^0 \pi^-,$				
72	$D^-  o e^- ar{ u}_e \pi^- K^+, D^+  o \pi^0 \pi^+ \pi^+ K^- \gamma^{gFSR}$	71	71	1	72
	$(e^+e^- \to e^-e^-\bar{\nu}_e\bar{\nu}_e\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				
79	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{*}n\bar{\Sigma}_{c}^{*0}, \bar{B}^{0} \to \pi^{-}D^{+}\gamma^{gFSR}, K^{*} \to \pi^{-}K^{+}, \bar{\Sigma}_{c}^{*0} \to \pi^{+}\bar{\Lambda}_{c}^{-}, \\ D^{+} \to \pi^{0}\pi^{+}\bar{K}^{*}, \bar{\Lambda}_{c}^{-} \to \pi^{0}\pi^{-}K^{+}\bar{p}, \bar{K}^{*} \to \pi^{+}K^{-}$	70	70	1	79
73	$D^+  ightarrow \pi^+\pi^+K^-, \Lambda_c^-  ightarrow \pi^-K^+p, K^-  ightarrow \pi^+K^ (e^+e^-  ightarrow \pi^+\pi^+\pi^-\pi^-\pi^-K^+K^+K^-nar{p}\gamma^{gFSR}\gamma\gamma\gamma\gamma)$	72	72	1	73
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to e^{+}\nu_{e}\bar{D}^{*-}\gamma^{gFSR}, \bar{B}^{0} \to \pi^{-}\pi^{-}D^{*+}\bar{n}\Delta^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{*+} \to \pi^{+}D^{0},$				
74	$\Delta^{+} \rightarrow \pi^{0} p, \bar{D}^{0} \rightarrow e^{-} \bar{\nu}_{e} \pi^{+} K^{0}, D^{0} \rightarrow K^{-} a_{1}^{+}, K^{0} \rightarrow K_{L}, a_{1}^{+} \rightarrow \pi^{+} f_{0}(600) \gamma^{gFSR}$	73	73	1	74
'-	$(e^{+}e^{-} \rightarrow e^{+}e^{-}\nu_{e}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\bar{n}pf_{0}(600)\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma)$			_	, -
	$e^+e^- \to \Upsilon(4S), \Upsilon(4S) \to B^0\bar{B}^0, B^0 \to K^{*+}\bar{D}^{*-}D^0, \bar{B}^0 \to D^{*+}D^{*-}, K^{*+} \to \pi^+K^0, \bar{D}^{*-} \to \pi^-\bar{D}^0.$				
75	$D^{0} \to \pi^{0} \pi^{+} K^{-}, D^{*+} \to \pi^{0} D^{+}, D^{*-}_{s0} \to \pi^{0} D^{-}_{s}, K^{0} \to K_{L}, \bar{D}^{0} \to \rho^{-} K^{*+}, D^{+} \to \mu^{+} \nu_{\mu} \pi^{+} K^{-},$	74	74	1	75
10	$D_s^- \to K^*K^-, \rho^- \to \pi^0\pi^-, K^{*+} \to \pi^0K^+, K^* \to \pi^0K^0, K^0 \to K_L$	1 1 1	14		10
	$(e^+e^- \to \mu^+\nu_\mu K_L K_L \pi^+ \pi^+ \pi^- \pi^- K^+ K^- K^- Y^\gamma \gamma \gamma$				
76	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{0}\pi^{+}\pi^{-}\rho^{+}\bar{D}^{*-}D^{*0}, \bar{D}^{*-} \to \pi^{0}D^{-}, \rho^{+} \to \pi^{0}\pi^{+}, \bar{D}^{*-} \to \pi^{0}D^{-}, D^{*0} \to \pi^{0}D^{0}, D^{-} \to K_{L}\pi^{-}K^{+}K^{-}, D^{-} \to \pi^{0}\pi^{-}\pi^{-}K^{+}\gamma^{gFSR}, D^{0} \to \pi^{0}\pi^{+}K^{-}$	75	75	1	76
10	$(e^+e^- \to \mu^+\nu_\mu K_L\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^+K^-K^-\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	10	15	1	70
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\rho^{+}\omega\omega D^{-}, \bar{B}^{0} \to K^{-}D^{*+}\bar{D}^{*0}, \rho^{+} \to \pi^{0}\pi^{+}, \omega \to \pi^{+}\pi^{-},$				
	$\omega \to \pi^0 \pi^+ \pi^-, D^- \to \pi^0 K_L \pi^-, D^{*+} \to \pi^0 D^+, \bar{D}^{*0} \to \pi^0 \bar{D}^0, D^+ \to \pi^+ \bar{K}_1^{'0}, \bar{D}^0 \to \rho^- K^{*+},$				
77	$\bar{K}_1^{'0} \to \pi^+ K^{*-}, \rho^- \to \pi^0 \pi^-, K^{*+} \to \pi^+ K^0, K^{*-} \to \pi^- \bar{K}^0, K^0 \to K_L, \bar{K}^0 \to K_S,$	76	76	1	77
	$K_S  ightarrow \pi^0 \pi^0$				
	$(e^+e^- \to K_L K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^- \gamma \gamma$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}, \bar{B}^{0} \to \pi^{0}\pi^{+}\pi^{-}\rho^{-}\omega\bar{K}^{0}D^{*+}, D^{*+} \to \pi^{+}D^{0}, \rho^{-} \to \pi^{0}\pi^{-},$				
78	$\omega  o \pi^0 \pi^+ \pi^-, \bar{K}^0  o K_S, D^{*+}  o \pi^+ D^0, D^0  o \pi^0 \eta K_S, D^0  o \mu^+  u_\mu K^{*-}, \eta  o \gamma \gamma,$	77	77	1	78
	$K_S \to \pi^+\pi^-, K^{*-} \to \pi^-\bar{K}^0, \bar{K}^0 \to K_S, K_S \to \pi^+\pi^-$				
	$\frac{(e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K_{S}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to e^{+}\nu_{e}\eta D^{-}, \bar{B}^{0} \to \rho^{0}\pi^{-}D^{*+}, \eta \to \pi^{0}\pi^{+}\pi^{-}, D^{-} \to e^{-}\bar{\nu}_{e}K_{1}^{0},}$				
79	$\rho^0 \rightarrow \pi^+\pi^-, D^{*+} \rightarrow \pi^+D^0, K_1^0 \rightarrow \pi^0\pi^-K^+, D^0 \rightarrow e^+\nu_e K^- \gamma^{gFSR}$	78	78	1	79
13	$(e^+e^- o e^+e^+e^- u_e u_ear u_e^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-\gamma^{gFSR}\gamma\gamma\gamma\gamma)$	10	10	1	19
	$e^+e^- \to \Upsilon(4S), \Upsilon(4S) \to B^0 \bar{B}^0, B^0 \to \rho^0 \pi^+ \pi^- \rho^+ m \bar{p}^{*-}, \bar{B}^0 \to \mu^- \bar{\nu}_\mu D^{*+}, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+,$				
80	$\eta \to \pi^0 \pi^+ \pi^-, \eta \to \pi^0 \pi^+ \pi^-, \bar{D}^{*-} \to \pi^- \bar{D}^0, D^{*+} \to \pi^0 D^+, \bar{D}^0 \to \pi^- K^+, D^+ \to e^+ \nu_e \bar{K}^*,$	79	79	,	80
00	$ar{K}^*  o \pi^+ K^-$	19	19	1	00
	$(e^{+}e^{-} \to e^{+}\nu_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \tau^{+}\nu_{\tau}D_{0}^{*-}, \bar{B}^{0} \to \pi^{0}\pi^{-}\omega K^{0}\bar{K}^{0}\bar{K}^{*}D^{*+}, \tau^{+} \to \mu^{+}\nu_{\mu}\bar{\nu}_{\tau}, D_{0}^{*-} \to \pi^{-}\bar{D}^{0},$				
81	$\omega \to \pi^0 \pi^+ \pi^-, K^0 \to K_S, \bar{K}^0 \to K_L, \bar{K}^* \to \pi^+ K^-, D^{*+} \to \pi^0 D^+, \bar{D}^0 \to \pi^+ \pi^- \pi^- K^+,$	80	80	1	81
	$K_S \to \pi^+ \pi^-, D^+ \to \pi^0 \pi^+ K_S, K_S \to \pi^+ \pi^-$	80	80	1	81
	$\frac{(e^{+}e^{-} \to \mu^{+}\nu_{\mu}\nu_{\tau}\bar{\nu}_{\tau}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to D^{-}a_{1}^{+}, \bar{B}^{0} \to \pi^{+}\pi^{-}D^{+}D_{s}^{*-}, D^{-} \to \mu^{-}\bar{\nu}_{\mu}\omega, a_{1}^{+} \to \rho^{0}\pi^{+},}$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to D^{-}a_{1}^{+}, B^{0} \to \pi^{+}\pi^{-}D^{+}D_{s}^{*-}, D^{-} \to \mu^{-}\bar{\nu}_{\mu}\omega, a_{1}^{+} \to \rho^{0}\pi^{+}, D^{+} \to \pi^{+}\pi^{+}K^{-}, D_{s}^{*-} \to D_{s}^{-}\gamma, \omega \to \pi^{0}\pi^{+}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}, D_{s}^{-} \to \rho^{-}\phi, \rho^{-} \to \pi^{0}\pi^{-}, D^{+} \to \mu^{-}\mu^{-}\mu^{-}\mu^{-}\mu^{-}\mu^{-}\mu^{-}\mu^{-}$				
82	$D^+  ightarrow \pi^+ \pi^- K^-, D_s^-  ightarrow D_s^- \gamma, \omega  ightarrow \pi^- \pi^-,  ho^-  ightarrow \pi^+ \pi^-, D_s^-  ightarrow  ho^-  ightarrow \pi^+ \pi^-,  onumber \ \phi  ightarrow K^+ K^-$	81	81	1	82
	$(e^{+}e^{-} \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma)$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{+}\eta\omega D^{-}, \bar{B}^{0} \to \pi^{+}D^{0}D_{s}^{-}, \rho^{+} \to \pi^{0}\pi^{+}, \eta \to \pi^{+}\pi^{-}\gamma^{gFSR},$				
83	$\omega \to \pi^0 \gamma, D^- \to \mu^- \bar{\nu}_\mu K^*, D^0 \to K_S K^+ K^-, D_s^- \to \rho^- \phi, K^* \to \pi^- K^+, K_S \to \pi^+ \pi^-,$	82	82	1	83
	$\rho^- \to \pi^0 \pi^-, \phi \to \pi^- \rho^+, \rho^+ \to \pi^0 \pi^+$	02	02	1	0.5
	$(e^{+}e^{-} \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$ $e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}K^{0}D^{-}, \bar{B}^{0} \to \pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}D^{*+}, K^{0} \to K_{S}, D^{-} \to \pi^{-}K^{+}K^{-},$				
84	$e^{+}e^{-} \rightarrow 1 (4S), 1 (4S) \rightarrow B^{*}B^{*}, B^{*} \rightarrow \pi^{+}K^{*}D^{-}, B^{*} \rightarrow \pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}D^{+}, K^{*} \rightarrow K_{S}, D^{-} \rightarrow \pi^{-}K^{+}K^{-}, D^{*} \rightarrow \pi^{+}D^{0}, K_{S} \rightarrow \pi^{0}\pi^{0}, D^{0} \rightarrow \rho^{+}K^{*-}, \rho^{+} \rightarrow \pi^{0}\pi^{+}, K^{*-} \rightarrow \pi^{0}K^{-}$	83	83	1	84
04	$(e^+e^- \to \pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^-K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	0.0	0.5	1	04
	$e^+e^-  o \Upsilon(4S), \Upsilon(4S)  o B^0ar{B}^0, B^0  o \pi^0\pi^+ ho^-ar{D}^{*0}, ar{B}^0  o e^-ar{ u}_e\eta D^+,  ho^-  o \pi^0\pi^-, ar{D}^{*0}  o \pi^0ar{D}^0,$				
85	$\eta \to \pi^{0}\pi^{+}\pi^{-}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{0}, \bar{D}^{0} \to K_{S}\eta', \bar{K}^{0} \to K_{L}, K_{S} \to \pi^{0}\pi^{0}, \eta' \to \pi^{+}\pi^{-}\eta, \\ \eta \to \pi^{0}\pi^{0}\pi^{0}$	84	84	1	85
0.0	$\eta  o \pi^0 \pi^0 \pi^0$	04	04	1	0.0
	$\frac{(e^+e^- \to e^-\bar{\nu}_e\mu^+\nu_\mu K_L\pi^+\bar{\pi}^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)}{e^+e^- \to \Upsilon(4S), \Upsilon(4S) \to B^0B^0, B^0 \to \eta'D^+\bar{D}^{*-}, B^0 \to \omega\bar{D}^{*-}\bar{n}p, \eta' \to \pi^0\pi^0\eta, D^+ \to \pi^+\phi,}$				
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$				
86	$D \to \pi D, \omega \to \pi \pi \pi, D \to \pi D, \eta \to \pi \pi \pi, \varphi \to K K, D \to e^- \nu_e \rho,$ $\bar{D}^0 \to e^- \bar{\nu}_e K^+ \gamma^{gFSR} \gamma^{gFSR}, \rho^+ \to \pi^0 \pi^+ \gamma^{gFSR}$	85	85	1	86
	$(e^+e^- \rightarrow e^-e^-\bar{\nu}_e\bar{\nu}_e\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^+K^-\bar{n}p\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma})$				
	$e^{+}e^{-} \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow B^{0}\bar{B}^{0}, B^{0} \rightarrow \pi^{+}\pi^{-}\rho^{+}D^{-}, \bar{B}^{0} \rightarrow e^{-}\bar{\nu}_{e}D_{2}^{*+}, \rho^{+} \rightarrow \pi^{0}\pi^{+}, D^{-} \rightarrow \mu^{-}\bar{\nu}_{\mu}K^{*},$				
87	$D_2^{*+}  o \pi^+ D^0, K^*  o \pi^- K^+, D^0  o K_L \omega, \omega \stackrel{\frown}{ o} \pi^0 \pi^+ \pi^-$	86	86	1	87
	$(e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma)$				
	$e^+e^-  o \Upsilon(4S), \Upsilon(4S)  o B^0 \bar{B}^0, B^0  o  ho^0 \pi^+ \eta D^-, \bar{B}^0  o \pi^- \rho^+ K^0 K^{*-} D^+,  ho^0  o \pi^+ \pi^-, \eta  o \gamma \gamma,$				
88	$D^-  o \pi^- \pi^- K^+,  ho^+  o \pi^0 \pi^+, K^0  o K_L, K^{*-}  o \pi^0 K^-, D^+  o  ho^0 \pi^+, K_L  o \mu^+ \nu_\mu \pi^-,$	87	87	1	88
	$\rho^{0} \to \pi^{+}\pi^{-}$ $(e^{+}e^{-} \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma)$ $e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}p\bar{\Sigma}_{c}^{*-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D_{0}^{*+}, \rho^{0} \to \pi^{+}\pi^{-}, \bar{\Sigma}_{c}^{*-} \to \pi^{0}\bar{\Lambda}_{c}^{-},$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}p\bar{\Sigma}_{c}^{*-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D_{0}^{*+}, \rho^{0} \to \pi^{+}\pi^{-}, \bar{\Sigma}_{c}^{*-} \to \pi^{0}\bar{\Lambda}_{c}^{-},$				
89	$D_0^{++}  o \pi^+ D^0, ar{\Lambda}_c^-  o K^+ ar{\Delta}^{++}, D^0  o \pi^+ \pi^- ar{K}^*, ar{\Delta}^{++}  o \pi^- ar{p}, ar{K}^*  o \pi^+ K^-$	88	88	1	89
	$(e^{+}e^{-} \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}p\bar{p}\gamma\gamma)$				
	$e^{+}e^{-} \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow B^{0}\bar{B}^{0}, B^{0} \rightarrow \mu^{+}\nu_{\mu}\bar{D}^{*-}, \bar{B}^{0} \rightarrow \pi^{-}\pi^{-}D^{+}\bar{n}p\gamma^{gFSR}, \bar{D}^{*-} \rightarrow \pi^{0}D^{-}, D^{+} \rightarrow K_{S}a_{1}^{+},$				
90	$D^{-} \to \pi^{0} \pi^{0} \pi^{-} \pi^{-} K^{+}, K_{S} \to \pi^{0} \pi^{0}, a_{1}^{+} \to \pi^{+} f_{0}(600)$ $(e^{+}e^{-} \to \mu^{+} \nu_{\mu} \pi^{+} \pi^{-} \pi^{-} \pi^{-} K^{+} \bar{n} p f_{0}(600) \gamma^{gFSR} \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma)$	89	89	1	90
	$(e \cdot e \rightarrow \mu \cdot \nu_{\mu} \pi \cdot \pi \cdot \pi \cdot \pi \cdot \pi \cdot \pi \cdot n p J_0(000) \gamma^{\omega} \qquad \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma)$				

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index	(event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
	$e^+e^- \to \Upsilon(4S), \Upsilon(4S) \to B^0\bar{B}^0, B^0 \to \pi^0\pi^+\pi^-\rho^+D^-, \bar{B}^0 \to \mu^-\bar{\nu}_\mu D^{*+}, \rho^+ \to \pi^0\pi^+, D^- \to \mu^-\bar{\nu}_\mu\pi^-K^+,$				
91	$D^{*+}  o \pi^0 D^+, D^+  o \pi^+ \pi^+ K^-$	90	90	1	91
	$(e^+e^- \to \mu^-\mu^-\bar{\nu}_\mu\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma\gamma\gamma\gamma)$				
	$e^+e^-  o \Upsilon(4S), \Upsilon(4S)  o B^0 ar{B}^0, B^0  o \pi^- K^{*+} J/\psi, ar{B}^0  o \pi^0 \pi^+ K^- \eta_c(2S), K^{*+}  o \pi^0 K^+, J/\psi  o e^+ e^- \gamma^{gFSR},$				
92	$\pi^0  ightarrow e^+ e^- \gamma^{gFSR}, \eta_c(2S)  ightarrow \eta \Sigma^+ ar{\Sigma}^-, \eta  ightarrow \pi^0 \pi^0 \eta, \Sigma^+  ightarrow \pi^+ n, ar{\Sigma}^-  ightarrow \pi^0 ar{p}$	91	91	1	92
	$\frac{(e^+e^- \to e^+e^+e^-e^-\pi^+\pi^+\pi^-K^+K^-n\bar{p}\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)}{e^+e^- \to \Upsilon(4S), \Upsilon(4S) \to \bar{B}^0\bar{B}^0, \bar{B}^0 \to \bar{K}^0\psi', \bar{B}^0 \to \pi^-\rho^+\rho^-D^+, \bar{K}^0 \to K_S, \psi' \to \pi^0\pi^0J/\psi,}$				
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$				
93	$a_1^+  ightarrow \pi^+ f_0(600)$	92	92	1	93
	$(e^+e^- \to \mu^+\mu^-\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-f_0(600)\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				
	$\frac{(e^{+}e^{-} \to \mu^{+}\mu^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}f_{0}(600)\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}\rho^{+}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{-}K^{0}D^{+}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+}\gamma^{gFSR},}$				
94	$\bar{D}^{*-} \to \pi^- \bar{D}^0, K^0 \to K_L, D^+ \to K_L a_1^+, \bar{D}^0 \to \pi^- K^+, a_1^+ \to \pi^+ f_0(600)$	93	93	1	94
	$(e^{+}e^{-} \to K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}f_{0}(600)\gamma^{gFSR}\gamma\gamma)$				
	$e^+e^- \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow B^0\bar{B}^0, B^0 \rightarrow \rho^+\omega D^-, \bar{B}^0 \rightarrow \pi^0\omega K^0K^-D^+, \rho^+ \rightarrow \pi^0\pi^+, \omega \rightarrow \pi^0\pi^+\pi^-, E^{SR}$				
95	$D^-  o \pi^- \pi^- K^+, \pi^0  o e^+ e^- \gamma^{gFSR}, \omega  o \pi^0 \pi^+ \pi^-, K^0  o K_S, D^+  o \mu^+  u_\mu \bar{K}^*, K_S  o \pi^+ \pi^-, K^0  o K_S, D^+  o \mu^+  u_\mu \bar{K}^*, K_S  o \pi^+ \pi^-, K^0  o K_S, D^+  o \mu^+  u_\mu \bar{K}^*, K_S  o \pi^+ \pi^-, K^0  o K_S, D^+  o \mu^+  u_\mu \bar{K}^*, K_S  o \pi^+ \pi^-, K^0  o K_S, D^+  o \mu^+  u_\mu \bar{K}^*, K_S  o \pi^+ \pi^-, K^0  o K_S, D^+  o \mu^+  u_\mu \bar{K}^*, K_S  o \pi^+ \pi^-, K^0  o K_S, D^+  o \mu^+  u_\mu \bar{K}^*, K_S  o \pi^+ \pi^-, K^0  o K_S, D^+  o \mu^+  u_\mu \bar{K}^*, K_S  o \pi^+ \pi^-, K^0  o K_S, D^+  o \mu^+  u_\mu \bar{K}^*, K_S  o \pi^+ \pi^-, K^0  o K_S, D^+  o \mu^+  u_\mu \bar{K}^*, K_S  o \pi^+ \pi^-, K^0  o K_S, D^+  o \mu^+  u_\mu \bar{K}^*, K_S  o \pi^+ \mu^-, K^0  o K_S, D^+  o \mu^+  u_\mu \bar{K}^*, K_S  o \pi^+ \mu^-, K^0  o K_S, D^+  o \mu^+  u_\mu \bar{K}^*, K_S  o \pi^+ \mu^-, K^0  o K_S, D^+  o \mu^+  u_\mu \bar{K}^*, K_S  o \pi^+ \pi^-, K^0  o K_S, D^+  o \mu^+  u_\mu \bar{K}^*, K_S  o \pi^+ \mu^-, K^0  o K_S  o \mu^+  u_\mu \bar{K}^*, K_S  o \pi^+ \mu^-, K^0  o K_S  o \mu^+  u_\mu \bar{K}^*, K_S  o \pi^+ \mu^-, K^0  o K_S  o \mu^+ $	94	94	1	95
	II / N II				
	$\frac{(e^{+}e^{-} \to e^{+}e^{-}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to e^{+}\nu_{e}\bar{D}^{*-}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{*+} \to \pi^{+}D^{0},}$				
96	$ar{D}^0  o K^+ a_1^-, D^0  o \pi^0 \pi^+ K^-, a_1^-  o \pi^- f_0(600)$	95	95	1	96
	$\frac{(e^{+}e^{-} \to e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}f_{0}(600)\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{*+}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{0}\pi^{-}D^{*+}\Delta^{+}\bar{\Delta}^{+}, K^{*+} \to \pi^{+}K^{0}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0},}$				
97	$D^{*+} \to \pi^+ D^0, \Delta^+ \to \pi^+ n, \bar{\Delta}^+ \to \pi^0 \bar{p}, K^0 \to K_L, \bar{D}^0 \to \pi^0 \pi^- K^+, D^0 \to \pi^+ \pi^- K_S,$	96	96	1	97
	$K_S  o \pi^+\pi^-$	30	30	1	31
	$(e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}n\bar{p}\gamma\gamma\gamma\gamma\gamma)$ $e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to D_{s}^{*-}D_{s}^{*+}, \bar{B}^{0} \to \pi^{+}\pi^{-}D^{+}D_{s}^{-}, D_{s}^{*-} \to \pi^{0}\bar{D}^{*-}, D_{s}^{*+} \to D_{s}^{+}\gamma,$				
	$e^{+}e^{-} \rightarrow 1 (4S), 1 (4S) \rightarrow B^{\circ}B^{\circ}, B^{\circ} \rightarrow D_{2}^{-}D_{s}^{+}, B^{\circ} \rightarrow \pi^{+}\pi^{-}D^{+}D_{s}^{-}, D_{2}^{-} \rightarrow \pi^{\circ}D^{+}, D_{s}^{+} \rightarrow D_{s}^{-}\gamma, \\ D^{+} \rightarrow \pi^{+}\bar{K}_{1}^{'0}, D_{s}^{-} \rightarrow e^{-}\bar{\nu}_{e}\eta', \bar{D}^{*-} \rightarrow \pi^{-}\bar{D}^{0}, D_{s}^{+} \rightarrow \pi^{+}\phi, \bar{K}_{1}^{'0} \rightarrow \pi^{+}K^{*-}, \eta' \rightarrow \pi^{0}\pi^{0}\eta, \\ D^{+} \rightarrow \pi^{+}\bar{K}_{1}^{'0}, D_{s}^{-} \rightarrow e^{-}\bar{\nu}_{e}\eta', \bar{D}^{*-} \rightarrow \pi^{-}\bar{D}^{0}, D_{s}^{+} \rightarrow \pi^{+}\phi, \bar{K}_{1}^{'0} \rightarrow \pi^{+}K^{*-}, \eta' \rightarrow \pi^{0}\pi^{0}\eta, \\ D^{+} \rightarrow \pi^{+}\bar{K}_{1}^{'0}, D_{s}^{-} \rightarrow e^{-}\bar{\nu}_{e}\eta', \bar{D}^{*-} \rightarrow \pi^{-}\bar{D}^{0}, D_{s}^{+} \rightarrow \pi^{+}\phi, \bar{K}_{1}^{'0} \rightarrow \pi^{+}K^{*-}, \eta' \rightarrow \pi^{0}\pi^{0}\eta, \\ D^{+} \rightarrow \pi^{+}\bar{K}_{1}^{'0}, D_{s}^{-} \rightarrow e^{-}\bar{\nu}_{e}\eta', \bar{D}^{*-} \rightarrow \pi^{-}\bar{D}^{0}, D_{s}^{+} \rightarrow \pi^{+}\phi, \bar{K}_{1}^{'0} \rightarrow \pi^{+}K^{*-}, \eta' \rightarrow \pi^{0}\pi^{0}\eta, \\ D^{+} \rightarrow \pi^{+}\bar{K}_{1}^{'0}, D_{s}^{-} \rightarrow e^{-}\bar{\nu}_{e}\eta', \bar{D}^{*-} \rightarrow \pi^{-}\bar{D}^{0}, D_{s}^{+} \rightarrow \pi^{+}\phi, \bar{K}_{1}^{'0} \rightarrow \pi^{+}K^{*-}, \eta' \rightarrow \pi^{0}\pi^{0}\eta, \\ D^{+} \rightarrow \pi^{+}\bar{K}_{1}^{'0}, D_{s}^{-} \rightarrow \pi^{-}\bar{D}^{0}, D_{s}^{+} \rightarrow \pi^{+}\bar{K}_{1}^{'0}, D_{s}^{-} \rightarrow \pi^{-}\bar{D}^{0}, D_{s}^{+} \rightarrow \pi^{+}\bar{K}_{1}^{'0}, D_{s}^{-} \rightarrow \pi^{-}\bar{D}^{0}, D_{s}^{+} \rightarrow \pi^{+}\bar{K}_{1}^{'0}, D_{s}^{-} \rightarrow \pi^{+}\bar{K}_{1}^{'0}, D_{s}^{-} \rightarrow \pi^{-}\bar{D}^{0}, D_{s}^{+} \rightarrow \pi^{+}\bar{K}_{1}^{'0}, D_{s}^{-} \rightarrow \pi^{+}\bar{K}_{1}^{'0$				
98	$D^+  ightarrow \pi^+ K_1^-, D_s^-  ightarrow e^-  u_e \eta^+, D^+  ightarrow \pi^- D^-, D_s^+  ightarrow \pi^+ \phi, K_1^-  ightarrow \pi^+ K^+, \eta^+  ightarrow \pi^0 \pi^0 \eta^+, \ ar{D}^0  ightarrow \pi^- \omega K^+, \phi  ightarrow \pi^-  ho^+, K^{*-}  ightarrow \pi^- ar{K}^0, \eta  ightarrow \pi^0 \pi^+ \pi^-, \omega  ightarrow \pi^0 \pi^+ \pi^-,  ho^+  ightarrow \pi^0 \pi^+,$	97	97	1	98
90	$D \to \pi^- \omega K^-, \phi \to \pi^- \rho^-, K^- \to \pi^- K^-, \eta \to \pi^- \pi^- \pi^-, \psi \to \pi^- \pi^- \pi^-, \bar{K}^0 \to K_S, K_S \to \pi^0 \pi^0$	91	91	1	90
	$(e^+e^- \to e^- \bar{\nu}_e \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- K^+ \gamma \gamma$				
	$e^+e^-  o \Upsilon(4S), \Upsilon(4S)  o B^0 \bar{B}^0, B^0  o K_L \eta_c, \bar{B}^0  o \pi^- \pi^- \rho^+ D^{*+}, \eta_c  o \pi^0 K^0 \bar{K}^0 \bar{K}^0 K^*, \rho^+  o \pi^0 \pi^+,$				
99	$D^{*+} \to \pi^0 D^+, K^0 \to K_S, \bar{K}^0 \to K_L, \bar{K}^0 \to K_S, K^* \to \pi^- K^+, D^+ \to \pi^0 \pi^+ K_S,$	98	98	1	99
99	$K_S  ightarrow \pi^0 \pi^0, K_S  ightarrow \pi^+ \pi^-, K_S  ightarrow \pi^+ \pi^- \gamma^{gFSR}$	98	90	1	99
	$\frac{(e^{+}e^{-} \to K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{0}\rho^{0}\pi^{+}\bar{D}^{*-}, \bar{B}^{0} \to K^{*}K^{-}D^{+}, \rho^{0} \to \pi^{+}\pi^{-}\gamma^{gFSR}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0},}$				
100	$e^{+}e^{-}  o \Upsilon(4S), \Upsilon(4S)  o B^{0}B^{0}, B^{0}  o \pi^{0}\pi^{0}\rho^{0}\pi^{+}D^{*-}, B^{0}  o K^{*}K^{-}D^{+}, \rho^{0}  o \pi^{+}\pi^{-}\gamma^{gFSR}, D^{*-}  o \pi^{-}D^{0},$				100
100	$K^* \to \pi^0 K^0, D^+ \to \pi^+ \pi^+ K^-, \bar{D}^0 \to \pi^- \rho^+, K^0 \to K_S, \rho^+ \to \pi^0 \pi^+, K_S \to \pi^0 \pi^0$ $(e^+ e^- \to \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^- K^- \gamma^{gFSR} \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma)$	99	99	1	100
	$(e^+e^- \to \pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\Lambda^-\Lambda^-\Lambda^-\gamma^ \gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				

index	event tree	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
	(event initial-final states)				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{+}\rho^{-}\eta\bar{D}^{0}, \bar{B}^{0} \to \pi^{-}\rho^{+}\rho^{-}D^{+}, \rho^{-} \to \pi^{0}\pi^{-}, \eta \to \pi^{0}\pi^{+}\pi^{-}, \bar{D}^{0} \to \pi^{0}\pi^{+}\pi^{-}K_{S}\gamma^{gFSR}, \rho^{+} \to \pi^{0}\pi^{+}\gamma^{gFSR}, \rho^{-} \to \pi^{0}\pi^{-}, D^{+} \to e^{+}\nu_{e}\bar{K}^{0}\gamma^{gFSR}, \pi^{0} \to e^{+}e^{-}\gamma^{gFSR}, K_{S} \to \pi^{+}\pi^{-}\gamma^{gFSR}, \bar{K}^{0} \to \pi^{0}\pi^{-}, \bar{K}^{0} \to$				
101	$D^{\circ}  o \pi^{\circ} \pi^{+} \pi^{-} K_{S} \gamma^{g_{S} \circ N}, \rho^{+}  o \pi^{\circ} \pi^{+} \gamma^{g_{S} \circ N}, \rho^{-}  o \pi^{\circ} \pi^{-}, D^{+}  o e^{+} \nu_{e} K^{\circ} \gamma^{g_{S} \circ N}, \pi^{\circ}  o e^{+} e^{-} \gamma^{g_{S} \circ N}, K_{S}  o \pi^{+} \pi^{-} \gamma^{g_{S} \circ N}, \kappa^{\circ} \to \kappa^{\circ} \pi^{\circ} \pi^{\circ}$	100	100	1	101
	$(e^+e^- \to e^+e^+e^-\nu_e\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gY}\gamma$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{0}\eta\omega\bar{D}^{0}, \bar{B}^{0} \to \pi^{+}\pi^{-}D^{+}D_{s}^{-}, \eta \to \pi^{+}\pi^{-}\gamma^{gFSR}, \omega \to \pi^{0}\pi^{+}\pi^{-},$				
102	$\bar{D}^{0} \to \pi^{0} \pi^{-} K^{+} \gamma^{gFSR}, D^{+} \to \pi^{0} \pi^{+} K_{S}, D_{s}^{-} \to e^{-} \bar{\nu}_{e} \eta, K_{S} \to \pi^{+} \pi^{-} \gamma^{gFSR}, \eta \to \pi^{+} \pi^{-} \gamma^{gFSR}$	101	101	1	102
102	$(e^+e^- \rightarrow e^- \bar{\nu}_e \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- K^+ \gamma^{gFSR} \gamma^{gFSR} \gamma^{gFSR} \gamma^{gFSR} \gamma^{\gamma \gamma $	101	101	_	102
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\rho^{+}\omega\omega D^{-}, \bar{B}^{0} \to \pi^{0}\pi^{0}\rho^{0}\pi^{-}\pi^{-}\rho^{+}D^{*+}, \rho^{+} \to \pi^{0}\pi^{+}, \omega \to \pi^{0}\pi^{+}\pi^{-},$				
103	$\omega \to \pi^0 \pi^+ \pi^-, D^- \to \pi^- \pi^- K^+, \rho^0 \to \pi^+ \pi^-, \rho^+ \to \pi^0 \pi^+, D^{*+} \to \pi^+ D^0, D^0 \to \pi^0 \pi^+ K^-$	102	102	1	103
	$(e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^-\gamma$				
	$e^+e^- \to \Upsilon(4S), \Upsilon(4S) \to B^0\bar{B}^0, B^0 \to D^-D_s^{*+}, \bar{B}^0 \to \rho^0\pi^-\rho^+D^0, D^- \to \pi^0\pi^-K_S, D_s^{*+} \to D_s^+\gamma,$				
104	$\rho^{0} \to \pi^{+}\pi^{-}\gamma^{gFSR}, \rho^{+} \to \pi^{0}\pi^{+}, D^{0} \to \mu^{+}\nu_{\mu}K^{-}, K_{S} \to \pi^{+}\pi^{-}, \underline{D}_{s}^{+} \to \pi^{0}\pi^{+}\omega, \omega \to \pi^{0}\pi^{+}\pi^{-}$	103	103	1	104
	$(e^+e^- \to \mu^+\nu_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^-\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\rho^{0}\pi^{+}\pi^{+}\pi^{-}\omega D^{-}, \bar{B}^{0} \to \pi^{+}D^{*0}D_{s}^{-}\gamma^{gFSR}, \rho^{0} \to \pi^{+}\pi^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \omega \to \pi^{0}\pi^{-}, \omega$				
105	$D^{-} \to \pi^{0} \pi^{-} K^{*}, D^{*0} \to \pi^{0} D^{0}, D_{s}^{-} \to e^{-} \bar{\nu}_{e} \eta' \gamma^{gFSR}, K^{*} \to \pi^{-} K^{+} \gamma^{gFSR}, D^{0} \to \pi^{+} \pi^{-} \bar{K}^{*}, \eta' \to \pi^{+} \pi^{-} \eta,$	104	104	1	105
	$ar{K}^*  o \pi^+ K^-, \eta  o \gamma \gamma$				
	$\frac{(e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+$				
106	$\begin{array}{c} e^+e^- \rightarrow 1 (4S), 1 (4S) \rightarrow B^+B^-, B^+ \rightarrow \rho^+K^+K^-D^-, B^+ \rightarrow e^- \nu_e D^+, \rho^+ \rightarrow \pi^+\pi^+, D^- \rightarrow \pi^-D^+, \\ D^{*+} \rightarrow \pi^0 D^+, \bar{D}^0 \rightarrow K_L \pi^+\pi^- \gamma^{gFSR} \gamma^{gFSR}, D^+ \rightarrow \pi^0 \pi^+ K_S, K_S \rightarrow \pi^0 \pi^0 \end{array}$	105	105	1	106
100	$(e^+e^-  ightarrow e^- ar{ u}_e K_L \pi^+ \pi^+ \pi^- \pi^- K^+ K^- \gamma^{gFSR} \gamma^{gFSR} \gamma^{\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma})$	105	105	1	100
	$e^+e^- \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow B^0\bar{B}^0, B^0 \rightarrow K^0J/\psi, \bar{B}^0 \rightarrow \pi^0\pi^+\pi^-\pi^-D^{*+}\gamma^{gFSR}, K^0 \rightarrow K_S, J/\psi \rightarrow e^+e^-\gamma^{gFSR}\gamma^{gFSR},$				
107	$D^{*+} \to \pi^+ D^0, K_S \to \pi^+ \pi^-, D^0 \to \pi^0 \pi^+ \pi^- K_S, K_S \to \pi^+ \pi^-$	106	106	1	107
10.	$(e^+e^- \to e^+e^-\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma\gamma\gamma\gamma})$	100	100	_	10.
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{0}\pi^{+}\rho^{-}\bar{D}^{*0}, \bar{B}^{0} \to \rho^{-}\eta\omega\omega D^{*+}, \rho^{-} \to \pi^{0}\pi^{-}, \bar{D}^{*0} \to \bar{D}^{0}\gamma,$				
100	$\rho^- \to \pi^0\pi^-, \eta \to \pi^0\pi^0\pi^0, \omega \to \pi^0\pi^+\pi^-, \omega \to \pi^0\pi^+\pi^-\gamma^{gFSR}, D^{*+} \to \pi^0D^+, \bar{D}^0 \to \pi^-\omega K^+,$	107	107	1	100
108	$\pi^0 \to e^+ e^- \gamma^{gFSR}, D^+ \to \pi^0 \pi^+ \bar{K}^*, \omega \to \pi^0 \gamma, \bar{K}^* \to \pi^0 \bar{K}^0, \bar{K}^0 \to K_L, K_L \to \mu^- \nu_\mu \pi^+$	107	107	1	108
	$\frac{(e^+e^- \to e^+e^-\mu^-\nu_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\pi^{-}\bar{D}^{*0}, \bar{B}^{0} \to \pi^{0}\pi^{+}\pi^{-}\rho^{-}D^{+}, \bar{D}^{*0} \to \pi^{0}\bar{D}^{0}, \rho^{-} \to \pi^{0}\pi^{-},$				
109	$D^+ \to \pi^+ K_S, \bar{D}^0 \to \mu^- \bar{\nu}_\mu K^+, K_S \to \pi^+ \pi^-$	108	108	1	109
	$(e^+e^- \to \mu^- \bar{\nu}_\mu \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma \gamma \gamma \gamma \gamma)$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to \rho^{0}\pi^{-}D^{*+}, \bar{B}^{0} \to \bar{K}^{0}\bar{\Sigma}^{*0}\Sigma_{c}^{*0}, \rho^{0} \to \pi^{+}\pi^{-}, D^{*+} \to \pi^{+}D^{0}, \\ \bar{K}^{0} \to K_{L}, \bar{\Sigma}^{*0} \to \pi^{0}\bar{\Lambda}, \Sigma_{c}^{*0} \to \pi^{-}\Lambda_{c}^{+}, D^{0} \to \pi^{0}\pi^{0}\bar{K}^{*}, \bar{\Lambda} \to \pi^{+}\bar{p}, \Lambda_{c}^{+} \to \pi^{+}\eta\Lambda,$				
110	$egin{aligned} K^+  ightarrow K_L, \Sigma^+  ightarrow \pi^+ \Lambda, \Sigma_c^-  ightarrow \pi^- \Lambda_c^-, D^+  ightarrow \pi^+ \pi^- K^-, \Lambda  ightarrow \pi^+ p, \Lambda_c^+  ightarrow \pi^+ \eta \Lambda, \ ar{K}^*  ightarrow \pi^+ K^- \gamma^{gFSR}, \eta  ightarrow \pi^0 \pi^0, \Lambda  ightarrow \pi^- p \end{aligned}$	109	109	1	110
	$(e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}p\bar{p}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				
	$e^+e^- \to \Upsilon(4S), \Upsilon(4S) \to \bar{B}^0\bar{B}^0, \bar{B}^0 \to D^{*+}D_s^{*-}, \bar{B}^0 \to \rho^0\pi^+\bar{\Delta}^{++}\Lambda_c^+, D^{*+} \to \pi^0D_s^+, \gamma^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^$	-			
	$\rho^0 \rightarrow \pi^+\pi^-, \bar{\Delta}^{++} \rightarrow \pi^-\bar{p}, \Lambda_c^+ \rightarrow \rho^0\Sigma^+, D^+ \rightarrow \pi^0K_L\pi^+, D_s^- \rightarrow \mu^-\bar{\nu}_\mu\eta, \rho^0 \rightarrow \pi^+\pi^-\gamma^{gFSR},$				
111	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	110	110	1	111
	$(e^{+}e^{-} \to \mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}p\bar{p}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				
	$\mathcal{L}^{-1}$ if $\mathbf{p}$ $\mathbf{p}$ $\mathbf{E}^{-1}$ is a second of $\mathbf{E}\mathbf{E}$ $\mathbf{I}$ . It is in the $\mathbf{I}$	1	l .		1

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
112	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to e^{+}\nu_{e}D_{2}^{*-}, \bar{B}^{0} \to \rho^{-}D^{*+}, D_{2}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{-} \to \pi^{0}\pi^{-},$ $D^{*+} \to \pi^{+}D^{0}, \bar{D}^{0} \to \pi^{0}K_{1}^{0}, D^{0} \to K^{-}a_{1}^{+}, K_{1}^{0} \to \omega K^{0}, a_{1}^{+} \to \pi^{0}\rho^{+}, \omega \to \pi^{0}\pi^{+}\pi^{-},$ $K^{0} \to K_{S}, \rho^{+} \to \pi^{0}\pi^{+}, K_{S} \to \pi^{+}\pi^{-}$ $(e^{+}e^{-} \to e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	111	111	1	112
113	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to e^{+}\nu_{e}D^{-}\gamma^{gFSR}\gamma^{gFSR}, \bar{B}^{0} \to D_{s}^{*+}\bar{\Delta}^{+}\Lambda, D^{-} \to \pi^{-}\pi^{-}K^{+}, D_{s}^{*+} \to D_{s}^{+}\gamma, \\ \bar{\Delta}^{+} \to \pi^{-}\bar{n}, \Lambda \to \pi^{0}n, D_{s}^{+} \to \pi^{+}\eta, \eta \to \pi^{0}\pi^{+}\pi^{-} \\ (e^{+}e^{-} \to e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}n\bar{n}\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma)$	112	112	1	113
114	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{+}\pi^{+}\pi^{-}\bar{D}^{*-}\gamma^{gFSR}, \bar{B}^{0} \to K^{-}D^{*+}\bar{D}^{*0}, \bar{D}^{*-} \to \pi^{0}D^{-}, D^{*+} \to \pi^{+}D^{0},$ $\bar{D}^{*0} \to \pi^{0}\bar{D}^{0}, D^{-} \to K_{L}\pi^{+}\pi^{-}K^{-}\gamma^{gFSR}, D^{0} \to \pi^{-}\rho^{+}, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}, \rho^{+} \to \pi^{0}\pi^{+}$ $(e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	113	113	1	114
115	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \bar{D}^{*-}D_{s1}^{'+}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}\gamma^{gFSR}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D_{s1}^{'+} \to \pi^{0}D_{s}^{*+}, \\ D^{*+} \to \pi^{+}D^{0}, \bar{D}^{0} \to \pi^{-}\eta K^{+}, D_{s}^{*+} \to D_{s}^{+}\gamma, D^{0} \to K_{L}K^{+}K^{-}, \eta \to \pi^{0}\pi^{+}\pi^{-}\gamma^{gFSR}, D_{s}^{+} \to \pi^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-} \\ (e^{+}e^{-} \to e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma\rho\gamma\gamma\gamma\gamma})$	114	114	1	115
116	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to D^{*+}D_{s}^{*-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D_{1}^{\prime+}, D^{*+} \to \pi^{+}D^{0}, D_{s}^{*-} \to D_{s}^{-}\gamma,$ $D_{1}^{\prime+} \to \pi^{0}D^{*+}, D^{0} \to \pi^{0}\pi^{+}K^{-}, D_{s}^{-} \to \rho^{-}\eta, D^{*+} \to \pi^{+}D^{0}, \rho^{-} \to \pi^{0}\pi^{-}, \eta \to \pi^{0}\pi^{+}\pi^{-},$ $D^{0} \to \pi^{0}\pi^{+}\pi^{-}K_{S}, K_{S} \to \pi^{+}\pi^{-}\gamma^{gFSR}$ $(e^{+}e^{-} \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	115	115	1	116
117	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{+}\eta\bar{K}^{0}K^{*}D^{-}, \bar{B}^{0} \to D^{*+}D^{*-}_{s}, \eta \to \pi^{+}\pi^{-}\gamma^{gFSR}, \bar{K}^{0} \to K_{L},$ $K^{*} \to \pi^{-}K^{+}, D^{-} \to \pi^{0}\pi^{-}K^{*}\gamma^{gFSR}, D^{*+} \to \pi^{+}D^{0}, D^{*-}_{s} \to D^{-}_{s}\gamma, K^{*} \to \pi^{-}K^{+}, D^{0} \to e^{+}\nu_{e}K^{*-},$ $D^{-}_{s} \to \rho^{-}\eta', K^{*-} \to \pi^{0}K^{-}, \rho^{-} \to \pi^{0}\pi^{-}, \eta' \to \pi^{+}\pi^{-}\eta, \eta \to \gamma\gamma$ $(e^{+}e^{-} \to e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	116	116	1	117
118	$e^{+}e^{-} \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow B^{0}\bar{B}^{0}, B^{0} \rightarrow \rho^{-}\eta\bar{K}^{0}K^{+}\bar{D}^{*0}, \bar{B}^{0} \rightarrow \pi^{-}\eta D^{*+}\gamma^{gFSR}, \rho^{-} \rightarrow \pi^{0}\pi^{-}, \eta \rightarrow \pi^{0}\pi^{0}\pi^{0}, \\ \bar{K}^{0} \rightarrow K_{S}, \bar{D}^{*0} \rightarrow \bar{D}^{0}\gamma, \eta \rightarrow \pi^{0}\pi^{0}\pi^{0}, D^{*+} \rightarrow \pi^{+}D^{0}, K_{S} \rightarrow \pi^{0}\pi^{0}, \bar{D}^{0} \rightarrow \pi^{0}\pi^{-}K^{+}, \\ D^{0} \rightarrow e^{+}\nu_{e}K^{-}\gamma^{gFSR} \\ (e^{+}e^{-} \rightarrow e^{+}\nu_{e}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma$	117	117	1	118
119	$\rho^{+} \to \pi^{0} \pi^{+}, \omega \to \pi^{0} \pi^{+} \pi^{-}, D^{-} \to e^{-} \bar{\nu}_{e} \pi^{-} K^{+} \gamma^{gFSR}, \rho^{0} \to \pi^{+} \pi^{-} (e^{+} e^{-} \to e^{-} \bar{\nu}_{e} \pi^{+} \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} \pi^{-} \pi^{-} K^{+} K^{+} \gamma^{gFSR} \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma)$	118	118	1	119
120	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to K^{0}D^{*+}D^{*-}, B^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, K^{0} \to K_{S}, D^{*+} \to \pi^{0}D^{+},$ $\bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{*+} \to \pi^{+}D^{0}, K_{S} \to \pi^{+}\pi^{-}, D^{+} \to \pi^{+}\pi^{+}K^{-}, \bar{D}^{0} \to \pi^{-}K_{S}K^{+}, D^{0} \to K_{L}\pi^{-}K^{+},$ $K_{S} \to \pi^{+}\pi^{-}$ $(e^{+}e^{-} \to \mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma\gamma)$	119	119	1	120
121	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, D^{*+} \to \pi^{+}\bar{D}^{0}, D^{*+} \to \pi^{+}D^{0},$ $D^{0} \to \pi^{0}\pi^{+}K^{-}, D^{0} \to \rho^{+}K^{*-}, \rho^{+} \to \pi^{0}\pi^{+}, K^{*-} \to \pi^{-}\bar{K}^{0}\gamma^{gFSR}, \bar{K}^{0} \to K_{L}$ $(e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma)$	120	120	1	121

	event tree			_	
index	(event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{+}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{+}\pi^{-}\omega D^{*0}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \omega \to \pi^{0}\pi^{+}\pi^{-},$				
122	$D^{*0} \to \pi^0 D^0, \bar{D}^0 \to \pi^- K_S K^+, D^0 \to \mu^+ \nu_\mu \pi^- \bar{K}^0, K_S \to \pi^+ \pi^-, \bar{K}^0 \to K_L$	121	121	1	122
	$(e^+e^- \to \mu^+\nu_\mu K_L\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma\gamma\gamma\gamma\gamma\gamma)$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}\bar{D}^{*-}\gamma^{gFSR}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{*+} \to \pi^{+}D^{0},$				
123	$\bar{D}^0 \to e^- \bar{\nu}_e K^+, D^0 \to \rho^+ K^{*-}, \rho^+ \to \pi^0 \pi^+, K^{*-}_{\pi GP} \to \pi^0 K^-$	122	122	1	123
	$(e^+e^- \to e^-e^-\bar{\nu}_e\bar{\nu}_e\mu^+\nu_\mu\pi^+\pi^+\pi^-K^+K^-\gamma^{gFSR}\gamma\gamma\gamma\gamma)$				
	$e^{+}e^{-}  o \Upsilon(4S), \Upsilon(4S)  o B^{0}\bar{B}^{0}, B^{0}  o \tau^{+}\nu_{\tau}\bar{D}^{*-}, \bar{B}^{0}  o \pi^{0}\omega K^{*-}D^{+}_{s}, \tau^{+}  o \bar{\nu}_{\tau}\pi^{0}\pi^{+}, \bar{D}^{*-}  o \pi^{0}D^{-},$				
124	$\omega \to \pi^0 \pi^+ \pi^-, K^{*-} \to \pi^- \bar{K}^0, D_s^+ \to \pi^+ f_0(980), D^- \to e^- \bar{\nu}_e K^0, \bar{K}^0 \to K_L, f_0(980) \to \pi^+ \pi^-, K^0 \to K_S, K_S \to \pi^+ \pi^-$	123	123	1	124
	$K^{+}  ightarrow K_{S}, K_{S}  ightarrow \pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-$				
	$e^+e^- \to \Upsilon(4S), \Upsilon(4S) \to B^0\bar{B}^0, B^0 \to \pi^-\bar{K}^0K^+\bar{D}^{*0}, \bar{B}^0 \to \mu^-\bar{\nu}_\mu D^+\gamma^{gFSR}, \bar{K}^0 \to K_L, \bar{D}^{*0} \to \pi^0\bar{D}^0,$				
	$D^+  o K_L K^{*+}, \bar{D}^0  o \omega K_S, K^{*+}  o \pi^+ K^0, \omega  o \pi^0 \pi^+ \pi^-, K_S  o \pi^0 \pi^0, K^0  o K_S,$				
125	$\pi^0  ightarrow e^+ e^- \gamma^{gFSR}, K_S  ightarrow \pi^0 \pi^0$	124	124	1	125
	$\frac{(e^{+}e^{-} \to e^{+}e^{-}\mu^{-}\bar{\nu}_{\mu}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}D_{1}^{\prime}^{\prime}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}\gamma^{gFSR}, D_{1}^{\prime}^{\prime} \to \pi^{-}\bar{D}^{*0}, D^{*+} \to \pi^{0}D^{+},}$				
126	$ar{D}^{*0}  ightarrow \pi^0 ar{D}^0, D^+  ightarrow e^+  u_e ar{K}^* \gamma^{qFSR}, ar{D}^0  ightarrow  ho^- K^{*+}, ar{K}^*  ightarrow \pi^+ K^-,  ho^-  ightarrow \pi^0 \pi^-, K^{*+}  ightarrow \pi^+ K^0,$	125	125	1	126
120	$K^0 o K_S, K_S o \pi^0\pi^0$	125	125	1	120
	$(e^+e^- \to e^+\nu_e\mu^+\mu^-\nu_\mu\bar{\nu}_\mu\pi^+\pi^+\pi^-\pi^-K^-\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				
	$e^+e^-  o \Upsilon(4S), \Upsilon(4S)  o B^0 ar{B}^0, B^0  o \pi^0 \pi^+ \pi^+ \pi^- ar{D}^{*-}, ar{B}^0  o D_z^{*+} D_s^-, \pi^0  o e^+ e^- \gamma^{gFSR}, ar{D}^{*-}  o \pi^- ar{D}^0,$				
127	$D_{2}^{*+}  \pi^{+} D^{0}, D_{s}^{-}  \pi^{0} \pi^{0} \pi^{-}, \bar{D}^{0}  \pi^{0} \pi^{-} K^{+}, D^{0}  \rho^{+} K^{*-}, \rho^{+}  \pi^{0} \pi^{+}, K^{*-}  \pi^{-} \bar{K}^{0}, \\ \bar{K}^{0}  K_{L}, K_{L}  \pi^{0} \pi^{+} \pi^{-}$	126	126	1	127
	$K^{\circ} \to K_L, K_L \to \pi^{\circ}\pi^{\circ}\pi^{\circ}\pi^{\circ}$ $(c^{+}c^{-}) c^{+}c^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\alpha^{gFSR})$				
	$\frac{(e^{+}e^{-} \to e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to \bar{K}^{*}D^{+}D^{-}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}\gamma^{gFSR}, \bar{K}^{*} \to \pi^{+}K^{-}, D^{+} \to e^{+}\nu_{e}\bar{K}^{0},}$				
	$D^{-} \rightarrow e^{-}\bar{\nu}_{e}K^{*}, D^{*+} \rightarrow \pi^{+}D^{0}, \bar{K}^{0} \rightarrow K_{S}, K^{*} \rightarrow \pi^{0}K^{0}, D^{0} \rightarrow \pi^{0}\pi^{+}K^{-}\gamma^{gFSR}, K_{S} \rightarrow \pi^{+}\pi^{-},$				
128	$K^0  ightarrow K_L$	127	127	1	128
	$(e^+e^- \rightarrow e^+e^-e^- \nu_e \bar{\nu}_e \bar{\nu}_e K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- K^- K^- \gamma^{gFSR} \gamma^{gFSR} \gamma \gamma \gamma \gamma)$				
	$e^+e^- \to \Upsilon(4S), \Upsilon(4S) \to B^0\bar{B}^0, B^0 \to e^+\nu_e D_1^{'-}, \bar{B}^0 \to \pi^+ D^0 D_s^-, D_1^{'-} \to \pi^- \bar{D}^{*0} \gamma^{gFSR}, D^0 \to \pi^0 \pi^+ \pi^- K_S \gamma^{gFSR},$				
129	$D_s^- \to \tau^- \bar{\nu}_\tau, \bar{D}^{*0} \to \pi^0 \bar{D}^0, K_S \to \pi^+ \pi^-, \tau^- \to e^- \bar{\nu}_e \nu_\tau \gamma^{gFSR}, \bar{D}^0 \to \pi^+ \pi^- K_S, K_S \to \pi^+ \pi^- \gamma^{gFSR}$	128	128	1	129
	$(e^+e^- \rightarrow e^+e^-\nu_e\bar{\nu}_e\nu_\tau\bar{\nu}_\tau\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma\gamma\gamma})$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \bar{D}^{*-}a_{1}^{+}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}, \bar{D}^{*-} \to \pi^{0}D^{-}, a_{1}^{+} \to \pi^{0}\rho^{+},$				
130	$D^{*+} \to \pi^0 D^+, D^- \to \pi^- \pi^- K^+, \rho^+ \to \pi^0 \pi^+, D^+ \to e^+ \nu_e \bar{K}^0 \gamma^{gFSR}, \bar{K}^0 \to K_L, K_L \to e^- \nu_e \pi^+$	129	129	1	130
	$(e^{+}e^{-} \rightarrow e^{+}e^{-}e^{-}\nu_{e}\nu_{e}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \eta \bar{K}^{0}K^{+}\bar{D}^{*-}, \bar{B}^{0} \to \rho^{-}\eta D^{+}, \eta \to \pi^{0}\pi^{+}\pi^{-}, \bar{K}^{0} \to K_{S}, \\ \bar{D}^{*-} \to \pi^{0}D^{-}, \rho^{-} \to \pi^{0}\pi^{-}, \eta \to \gamma\gamma, D^{+} \to \pi^{0}\pi^{0}\pi^{+}, K_{S} \to \pi^{0}\pi^{0}, D^{-} \to K_{L}a_{1}^{-},$				
131	$D^+  ightarrow \pi^\circ D^-,  ho^-  ightarrow \pi^\circ \pi^-, \eta  ightarrow \gamma \gamma, D^+  ightarrow \pi^\circ \pi^+, K_S  ightarrow \pi^\circ, D^-  ightarrow K_L a_1^-, \ a_1^-  ightarrow  ho^0 \pi^-,  ho^0  ightarrow \pi^+ \pi^-$	130	130	1	131
	$a_1  ightarrow  ho \pi ,  ho  ightarrow \pi \pi \pi $ $(e^+e^-  ightarrow K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ \gamma \gamma)$				
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index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
132	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to \rho^{-}D^{+}, \bar{B}^{0} \to \rho^{0}\pi^{-}\omega D^{+}, \rho^{-} \to \pi^{0}\pi^{-}, D^{+} \to e^{+}\nu_{e}\pi^{+}K^{-}\gamma^{gFSR},$ $\rho^{0} \to \pi^{+}\pi^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{+} \to \pi^{+}\pi^{+}K^{-}$ $(e^{+}e^{-} \to e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma)$ $e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \bar{D}^{*-}D^{*}_{s}, B^{0} \to e^{+}\nu_{e}D^{*-}_{2}, \bar{D}^{*-} \to \pi^{0}D^{-}, D^{+}_{s} \to \mu^{+}\nu_{\mu}\phi,$	131	131	1	132
133	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to D^{*-}D_{s}^{+}, B^{0} \to e^{+}\nu_{e}D_{2}^{*-}, D^{*-} \to \pi^{0}D^{-}, D_{s}^{+} \to \mu^{+}\nu_{\mu}\phi,$ $D_{2}^{*-} \to \pi^{-}\bar{D}^{*0}, D^{-} \to e^{-}\bar{\nu}_{e}\pi^{-}K^{+}\gamma^{gFSR}, \phi \to K^{+}K^{-}, \bar{D}^{*0} \to \bar{D}^{0}\gamma, \bar{D}^{0} \to K^{+}a_{1}^{-}, a_{1}^{-} \to \rho^{0}\pi^{-},$ $\rho^{0} \to \pi^{+}\pi^{-}$ $(e^{+}e^{-} \to e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{+}K^{-}\gamma^{gFSR}\gamma\gamma\gamma)$ $e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\pi^{-}\rho^{+}\bar{D}^{*-}, \bar{B}^{0} \to D_{2}^{*+}D_{s}^{-}, \rho^{+} \to \pi^{0}\pi^{+}\gamma^{gFSR}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0},$	132	132	1	133
134	$D_{2}^{*+} \to \pi^{+}D^{0}, D_{s}^{-} \to \tau^{-}\bar{\nu}_{\tau}, \bar{D}^{0} \to \pi^{0}K_{L}\pi^{+}\pi^{-}, D^{0} \to \rho^{+}K^{*-}, \tau^{-} \to \nu_{\tau}\pi^{0}\pi^{-}\gamma^{gFSR}, \rho^{+} \to \pi^{0}\pi^{+}, K^{*-} \to \pi^{-}\bar{K}^{0}\gamma^{gFSR}, \bar{K}^{0} \to K_{L}$ $(e^{+}e^{-} \to \nu_{\tau}\bar{\nu}_{\tau}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma\gamma\gamma\gamma\gamma\gamma\gamma})$	133	133	1	134
135	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\omega K^{+}D_{s}^{*-}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D_{s}^{*-} \to D_{s}^{-}\gamma,$ $D^{*+} \to \pi^{+}D^{0}, D_{s}^{-} \to \rho^{-}\eta', D^{0} \to \pi^{+}\pi^{+}\pi^{-}K^{-}, \rho^{-} \to \pi^{0}\pi^{-}, \eta' \to \rho^{0}\gamma, \rho^{0} \to \pi^{+}\pi^{-}$ $(e^{+}e^{-} \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	134	134	1	135
136	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to D_{s}^{*+}D_{1}^{\prime-}, \bar{B}^{0} \to \rho^{0}\pi^{-}D^{*+}, D_{s}^{*+} \to D_{s}^{+}\gamma, D_{1}^{\prime-} \to \pi^{-}\bar{D}^{*0},$ $\rho^{0} \to \pi^{+}\pi^{-}, D^{*+} \to \pi^{+}D^{0}, D_{s}^{+} \to K_{L}\pi^{+}\pi^{-}K^{+}, \bar{D}^{*0} \to \bar{D}^{0}\gamma, D^{0} \to K^{-}a_{1}^{+}, \bar{D}^{0} \to \pi^{0}\pi^{+}\pi^{-}K^{*},$ $a_{1}^{+} \to \pi^{+}f_{0}(600), K^{*} \to \pi^{-}K^{+}$ $(e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}f_{0}(600)\gamma\gamma\gamma\gamma)$	135	135	1	136
137	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}\pi^{-}\rho^{+}\rho^{+}K^{0}D^{-}, \bar{B}^{0} \to \pi^{0}\rho^{0}\pi^{-}\eta\omega D^{+}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+},$ $\rho^{+} \to \pi^{0}\pi^{+}, K^{0} \to K_{S}, D^{-} \to K_{L}\pi^{+}\pi^{-}K^{-}, \pi^{0} \to e^{+}e^{-}\gamma^{gFSR}, \rho^{0} \to \pi^{+}\pi^{-}, \eta \to \pi^{+}\pi^{-}\gamma^{gFSR},$ $\omega \to \pi^{0}\pi^{+}\pi^{-}, D^{+} \to K_{L}a_{1}^{+}, K_{S} \to \pi^{+}\pi^{-}, a_{1}^{+} \to \pi^{0}\rho^{+}, \rho^{+} \to \pi^{0}\pi^{+}$ $(e^{+}e^{-} \to e^{+}e^{-}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+$	136	136	1	137
138	$D_s^- \to \rho^- \eta', D^0 \to \pi^+ K^-, \rho^- \to \pi^0 \pi^-, \eta' \to \rho^0 \gamma, \rho^0 \to \pi^+ \pi^-$ $(e^+ e^- \to \pi^+ \pi^+ \pi^- \pi^- K^+ K^- n \bar{n} \gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma)$	137	137	1	138
139	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to K^{+}\Delta^{+}\bar{\Sigma}_{c}^{*}, B^{0} \to e^{+}\nu_{e}D^{-}\gamma^{gFSR}, \Delta^{+} \to \pi^{0}p, \bar{\Sigma}_{c}^{*} \to \pi^{-}\bar{\Lambda}_{c}^{-},$ $D^{-} \to K_{L}\pi^{+}\pi^{-}K^{-}, \bar{\Lambda}_{c}^{-} \to \pi^{0}\pi^{-}\bar{\Delta}^{0}, \bar{\Delta}^{0} \to \pi^{+}\bar{p}$ $(e^{+}e^{-} \to e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}p\bar{p}\gamma^{gFSR}\gamma\gamma\gamma\gamma)$	138	138	1	139
140	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{+}\rho^{+}\rho^{-}\eta\bar{D}^{*-}, \bar{B}^{0} \to \pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\bar{K}^{0}K^{*}K^{+}K^{*-}, \rho^{+} \to \pi^{0}\pi^{+}, \rho^{+} \to \pi^{0}\pi^{+}, \rho^{-} \to \pi^{0}\pi^{-}, \eta \to \pi^{0}\pi^{+}\pi^{-}, \bar{D}^{*-} \to \pi^{0}D^{-}, \bar{K}^{0} \to K_{S}, K^{*} \to \pi^{-}K^{+}, K^{*-} \to \pi^{-}\bar{K}^{0}, \rho^{-} \to e^{-}\bar{\nu}_{e}K^{*}, K_{S} \to \pi^{+}\pi^{-}, \bar{K}^{0} \to K_{S}, K^{*} \to \pi^{-}K^{+}, K_{S} \to \pi^{+}\pi^{-}\gamma^{gFSR}, \rho^{*}(e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-$	139	139	1	140
141	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}\bar{D}^{*-}\gamma^{gFSR}\gamma^{gFSR}, \bar{B}^{0} \to \pi^{0}\rho^{0}\pi^{-}D^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{0} \to \pi^{+}\pi^{-}\gamma^{gFSR}\gamma^{gFSR}, \bar{B}^{0} \to \pi^{0}\rho^{0}\pi^{-}D^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{0} \to \pi^{+}\pi^{-}\gamma^{gFSR}\gamma^{gFSR}, \bar{B}^{0} \to \pi^{0}\rho^{0}\pi^{-}D^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{0} \to \pi^{+}\pi^{-}\gamma^{gFSR}\gamma^{gFS$	140	140	1	141

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
142	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to D^{-}D_{s}^{*+}\gamma, \bar{B}^{0} \to \pi^{+}\pi^{-}\rho^{-}D^{+}, D^{-} \to \pi^{0}\pi^{-}K^{+}K^{-}, D_{s}^{*+} \to D_{s}^{+}\gamma,$ $\rho^{-} \to \pi^{0}\pi^{-}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{*}, D_{s}^{+} \to \bar{K}^{*}K^{*+}, \bar{K}^{*} \to \pi^{+}K^{-}, \bar{K}^{*} \to \pi^{+}K^{-}, K^{*+} \to \pi^{0}K^{+}$ $(e^{+}e^{-} \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	141	141	1	142
143	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{+}n\bar{\Sigma}_{c}^{-}, \bar{B}^{0} \to D^{*+}D_{s1}^{'-}, \rho^{+} \to \pi^{0}\pi^{+}, \bar{\Sigma}_{c}^{-} \to \pi^{0}\bar{\Lambda}_{c}^{-},$ $D^{*+} \to \pi^{+}D^{0}, D_{s1}^{'-} \to \pi^{0}D_{s}^{*-}, \bar{\Lambda}_{c}^{-} \to \bar{K}^{*}\bar{\Sigma}^{-}, D^{0} \to \pi^{0}\pi^{+}K^{-}, D_{s}^{*-} \to D_{s}^{-}\gamma, \bar{K}^{*} \to \pi^{+}K^{-},$ $\bar{\Sigma}^{-} \to \pi^{-}\bar{n}, D_{s}^{-} \to K^{*}K^{-}, K^{*} \to \pi^{-}K^{+}$ $(e^{+}e^{-} \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}n\bar{n}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	142	142	1	143
144	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to \bar{K}^{*}K^{-}D^{*+}\gamma^{gFSR}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{+}\gamma^{gFSR}, \bar{K}^{*} \to \pi^{+}K^{-}, D^{*+} \to \pi^{0}D^{+},$ $D^{+} \to K_{S}K^{*+}, D^{+} \to \pi^{0}\pi^{0}\pi^{+}, K_{S} \to \pi^{+}\pi^{-}\gamma^{gFSR}, K^{*+} \to \pi^{0}K^{+}$ $(e^{+}e^{-} \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma\gamma\gamma\gamma\gamma\gamma\gamma})$	143	143	1	144
145	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\pi^{+}\pi^{-}\omega\bar{D}^{*-}, \bar{B}^{0} \to \pi^{0}\pi^{+}\pi^{-}\pi^{-}D^{*+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0},$ $D^{*+} \to \pi^{+}D^{0}, \bar{D}^{0} \to e^{-}\bar{\nu}_{e}\pi^{+}K^{0}\gamma^{gFSR}, D^{0} \to \rho^{+}K^{*-}, K^{0} \to K_{S}, \rho^{+} \to \pi^{0}\pi^{+}, K^{*-} \to \pi^{-}\bar{K}^{0},$ $K_{S} \to \pi^{+}\pi^{-}, \bar{K}^{0} \to K_{L}$ $(e^{+}e^{-} \to e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-$	144	144	1	145
146	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}K^{0}\bar{K}^{*}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{+}K^{-}D^{-}D^{*+}, K^{0} \to K_{L}, \bar{K}^{*} \to \pi^{+}K^{-}, \bar{D}^{*-}D^{*-$	145	145	1	146
147	$\frac{(e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+$	146	146	1	147
148	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}\pi^{+}\pi^{+}\rho^{-}D^{-}, \bar{B}^{0} \to D_{s}^{*-}D_{1}^{+}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{-} \to \pi^{0}\pi^{-},$ $D^{-} \to \mu^{-}\bar{\nu}_{\mu}K^{0}, D_{s}^{*-} \to D_{s}^{-}\gamma, D_{1}^{+} \to \pi^{+}D^{*0}, K^{0} \to K_{S}, D_{s}^{-} \to \pi^{+}\pi^{-}K_{S}K^{-}, D^{*0} \to D^{0}\gamma,$ $K_{S} \to \pi^{+}\pi^{-}, K_{S} \to \pi^{+}\pi^{-}, D^{0} \to \pi^{+}\omega K^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}$ $(e^{+}e^{-} \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+$	147	147	1	148
149	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\rho^{0}\pi^{+}D^{-}, \bar{B}^{0} \to \pi^{+}\pi^{-}\pi^{-}D^{+}, \rho^{0} \to \pi^{+}\pi^{-}, D^{-} \to \pi^{-}K_{1}^{'0},$ $D^{+} \to K_{S}a_{1}^{+}, K_{1}^{'0} \to \pi^{-}K^{*+}, K_{S} \to \pi^{+}\pi^{-}, a_{1}^{+} \to \pi^{0}\rho^{+}, K^{*+} \to \pi^{0}K^{+}, \rho^{+} \to \pi^{0}\pi^{+}$ $(e^{+}e^{-} \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	148	148	1	149
150	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \tau^{+}\nu_{\tau}D_{0}^{*-}, \bar{B}^{0} \to \pi^{0}\omega K^{*}K^{-}D^{+}, \tau^{+} \to \mu^{+}\nu_{\mu}\bar{\nu}_{\tau}, D_{0}^{*-} \to \pi^{-}\bar{D}^{0},$ $\omega \to \pi^{0}\pi^{+}\pi^{-}, K^{*} \to \pi^{0}K^{0}, D^{+} \to \pi^{+}\pi^{+}K^{-}, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}\gamma^{gFSR}, K^{0} \to K_{L}$ $(e^{+}e^{-} \to \mu^{+}\nu_{\mu}\nu_{\tau}\bar{\nu}_{\tau}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	149	149	1	150
151	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to e^{+}\nu_{e}\pi^{+}\pi^{-}\bar{D}^{*-}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}\gamma^{gFSR}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{*+} \to \pi^{0}D^{+}, \\ \bar{D}^{0} \to \pi^{-}K^{+}, D^{+} \to \mu^{+}\nu_{\mu}\pi^{+}K^{-}\gamma^{gFSR} \\ (e^{+}e^{-} \to e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma^{g})$	150	150	1	151

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
152	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}\bar{D}^{*-}\bar{\Sigma}^{0}\Sigma^{+}, \bar{B}^{0} \to \eta\bar{K}^{0}J/\psi, \rho^{0} \to \pi^{+}\pi^{-}, \bar{D}^{*-} \to \pi^{0}D^{-},$ $\bar{\Sigma}^{0} \to \bar{\Lambda}\gamma, \Sigma^{+} \to \pi^{+}n, \eta \to \pi^{0}\pi^{0}\pi^{0}, \bar{K}^{0} \to K_{L}, J/\psi \to \pi^{-}\eta K_{S}K^{+}, D^{-} \to \mu^{-}\bar{\nu}_{\mu}K^{0},$ $\bar{\Lambda} \to \pi^{+}\bar{p}, K_{L} \to e^{-}\nu_{e}\pi^{+}\gamma^{gFSR}, \eta \to \pi^{0}\pi^{+}\pi^{-}, K_{S} \to \pi^{+}\pi^{-}, K^{0} \to K_{S}, K_{S} \to \pi^{0}\pi^{0}$ $(e^{+}e^{-} \to e^{-}\nu_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}n\bar{p}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	151	151	1	152
153	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}\rho^{0}\rho^{0}\rho^{0}\bar{\rho}^{+}\bar{D}^{*-}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{0} \to \pi^{-}\pi^{-}, \rho^{0} \to \pi^{-}\pi^{-}\pi^{-}, \rho^{0} \to \pi^{-}\pi^{-}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{0} \to \pi^{-}\pi^{-}, \rho^{0} \to \pi^{-$	152	152	1	153
154	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{*+}D^{-}, \bar{B}^{0} \to \pi^{+}K^{-}\chi_{c1}, K^{*+} \to \pi^{0}K^{+}, D^{-} \to \pi^{-}K_{1}^{'0}\gamma^{gFSR},$ $\chi_{c1} \to \pi^{-}\eta\eta\bar{K}^{0}K^{+}, K_{1}^{'0} \to \pi^{-}K^{*+}, \eta \to \gamma\gamma, \eta \to \pi^{0}\pi^{0}, \bar{K}^{0} \to K_{S}, K^{*+} \to \pi^{0}K^{+},$ $K_{S} \to \pi^{+}\pi^{-}$ $(e^{+}e^{-} \to \pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{+}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	153	153	1	154
155	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to K^{*+}D^{-}D^{0}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D_{2}^{*+}\gamma^{gFSR}, K^{*+} \to \pi^{0}K^{+}, D^{-} \to \pi^{0}\pi^{-}K_{S},$ $D^{0} \to \pi^{0}\pi^{0}\pi^{+}\pi^{-}, D_{2}^{*+} \to \pi^{+}D^{0}, K_{S} \to \pi^{+}\pi^{-}, D^{0} \to \pi^{0}\pi^{+}K^{*-}, K^{*-} \to \pi^{0}K^{-}$ $(e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	154	154	1	155
156	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{+}D^{-}, \bar{B}^{0} \to \pi^{-}\pi^{-}\rho^{+}D^{*+}\gamma^{gFSR}, \rho^{+} \to \pi^{0}\pi^{+}, D^{-} \to \rho^{-}K^{*},$ $\rho^{+} \to \pi^{0}\pi^{+}, D^{*+} \to \pi^{+}D^{0}, \rho^{-} \to \pi^{0}\pi^{-}, K^{*} \to \pi^{-}K^{+}, D^{0} \to \pi^{0}\pi^{0}\bar{K}^{*}, \bar{K}^{*} \to \pi^{+}K^{-}\gamma^{gFSR}$ $(e^{+}e^{-} \to \pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma})$	155	155	1	156
157	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to e^{+}\nu_{e}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{0}\rho^{0}\rho^{-}D^{*+}\gamma, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{0} \to \pi^{+}\pi^{-},$ $\rho^{-} \to \pi^{0}\pi^{-}, D^{*+} \to \pi^{+}D^{0}, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}, D^{0} \to e^{+}\nu_{e}\rho^{-}\gamma^{gFSR}\gamma^{gFSR}, \rho^{-} \to \pi^{0}\pi^{-}$ $(e^{+}e^{-} \to e^{+}e^{+}\nu_{e}\nu_{e}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma\rho\gamma\gamma\gamma\gamma\gamma\gamma})$ $e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \pi^{+}\bar{D}^{*-}, B^{0} \to \pi^{0}\rho^{0}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\eta\omega D^{-}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{0} \to \pi^{+}\pi^{-},$	156	156	1	157
158	$ \eta \to \pi^0 \pi^+ \pi^-, \omega \to \pi^0 \pi^+ \pi^-, D^- \to \mu^- \bar{\nu}_\mu \pi^- K^+, \bar{D}^0 \to \pi^0 \pi^- K^+ \\ (e^+ e^- \to \mu^- \bar{\nu}_\mu \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^+ \gamma \gamma \gamma \gamma \gamma \gamma \gamma ) $	157	157	1	158
159	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{-}K^{0}D^{+}\bar{D}^{*0}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{+}, K^{0} \to K_{S}, D^{+} \to K_{S}a_{1}^{+},$ $\bar{D}^{*0} \to \bar{D}^{0}\gamma, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{*}, K_{S} \to \pi^{+}\pi^{-}, K_{S} \to \pi^{+}\pi^{-}, a_{1}^{+} \to \pi^{+}f_{0}(600), \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}\gamma^{gFSR},$ $\bar{K}^{*} \to \pi^{0}\bar{K}^{0}, \bar{K}^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-}\gamma^{gFSR}$ $(e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}f_{0}(600)\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma)$	158	158	1	159
160	$\frac{(e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}f_{0}(600)\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma\gamma\gamma\gamma\gamma})}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}D_{1}^{-}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}, D_{1}^{-} \to \pi^{-}\bar{D}^{*0}, D^{*+} \to \pi^{0}D^{+},}\\ \bar{D}^{*0} \to \pi^{0}\bar{D}^{0}, D^{+} \to e^{+}\nu_{e}\pi^{0}, \bar{D}^{0} \to \pi^{0}K_{S}, K_{S} \to \pi^{+}\pi^{-}\gamma^{gFSR}\\ (e^{+}e^{-} \to e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{-}\pi^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	159	159	1	160
161	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \bar{K}^{0}K^{+}D^{-}, \bar{B}^{0} \to \rho^{0}\pi^{-}D^{*+}, \bar{K}^{0} \to K_{L}, D^{-} \to K^{*}a_{1}^{-},$ $\rho^{0} \to \pi^{+}\pi^{-}, D^{*+} \to \pi^{+}D^{0}, K^{*} \to \pi^{-}K^{+}, a_{1}^{-} \to \pi^{-}f_{0}(600), D^{0} \to \pi^{+}\omega K^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}$ $(e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}f_{0}(600)\gamma\gamma)$	160	160	1	161
162	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to D^{*+}D_{s}^{-}, \bar{B}^{0} \to \pi^{0}\pi^{0}\pi^{-}\omega D^{+}, D^{*+} \to \pi^{+}D^{0}, D_{s}^{-} \to \mu^{-}\bar{\nu}_{\mu}\eta,$ $\omega \to \pi^{+}\pi^{-}, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{*}, D^{0} \to \pi^{0}\pi^{+}K^{-}, \eta \to \pi^{0}\pi^{0}\pi^{0}, \bar{K}^{*} \to \pi^{+}K^{-}$ $(e^{+}e^{-} \to \mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	161	161	1	162

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
163	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\omega\bar{D}^{*-}, \bar{B}^{0} \to D^{*+}D_{s}^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0},$ $D^{*+} \to \pi^{0}D^{+}, D_{s}^{-} \to \mu^{-}\bar{\nu}_{\mu}\eta', \bar{D}^{0} \to \pi^{0}\pi^{+}\pi^{-}K_{S}, D^{+} \to \pi^{+}\pi^{+}K^{-}, \eta' \to \rho^{0}\gamma, K_{S} \to \pi^{+}\pi^{-},$ $\rho^{0} \to \pi^{+}\pi^{-}$ $(e^{+}e^{-} \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$ $e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\Sigma^{0}\bar{\Xi}^{0}_{c}, \bar{B}^{0} \to D^{+}D_{s-}^{*-}, \Sigma^{0} \to \Lambda\gamma, \bar{\Xi}^{c}_{c} \to \pi^{-}K^{+}\bar{\Sigma}^{0},$	162	162	1	163
164	$D^{+} \rightarrow \mu^{+} \nu_{\mu} \bar{K}^{*}, D_{s1}^{'-} \rightarrow \pi^{0} D_{s}^{*-}, \Lambda \rightarrow \pi^{-} p, \bar{\Sigma}^{0} \rightarrow \bar{\Lambda} \gamma, \bar{K}^{*} \rightarrow \pi^{+} K^{-}, D_{s}^{*-} \rightarrow D_{s}^{-} \gamma,$ $\bar{\Lambda} \rightarrow \pi^{+} \bar{p}, D_{s}^{-} \rightarrow \rho^{-} \eta', \rho^{-} \rightarrow \pi^{0} \pi^{-}, \eta' \rightarrow \pi^{+} \pi^{-} \eta, \eta \rightarrow \gamma \gamma$ $(e^{+} e^{-} \rightarrow \mu^{+} \nu_{\mu} \pi^{+} \pi^{+} \pi^{-} \pi^{-} \pi^{-} K^{+} K^{-} p \bar{p} \gamma \gamma \gamma \gamma \gamma \gamma \gamma)$	163	163	1	164
165	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}\eta\omega\bar{D}^{*0}, \bar{B}^{0} \to \pi^{0}\rho^{-}\omega\bar{D}^{*+}, \rho^{0} \to \pi^{+}\pi^{-}, \eta \to \pi^{0}\pi^{+}\pi^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{D}^{*0} \to \pi^{0}\bar{D}^{0}, \rho^{-} \to \pi^{0}\pi^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{*+} \to \pi^{+}D^{0}, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{*+} \to \pi^{+}D^{0}, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}, \bar{D}^{0} \to \pi^{0}\pi^{-$	164	164	1	165
166	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to D^{*-}\Delta^{-}\Delta^{0}, B^{0} \to \rho^{-}D^{+}, D^{*-} \to \pi^{0}D^{-}, \Delta^{-} \to \pi^{+}\bar{n},$ $\Delta^{0} \to \pi^{0}n, \rho^{-} \to \pi^{0}\pi^{-}, D^{+} \to \mu^{+}\nu_{\mu}\pi^{+}K^{-}, D^{-} \to \mu^{-}\bar{\nu}_{\mu}K^{0}, K^{0} \to K_{L}$ $(e^{+}e^{-} \to \mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{-}K^{-}n\bar{n}\gamma\gamma\gamma\gamma\gamma)$	165	165	1	166
167	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{-}p\bar{\Sigma}_{c}^{0}, \bar{B}^{0} \to \tau^{-}\bar{\nu}_{\tau}D^{*+}, \rho^{-} \to \pi^{0}\pi^{-}, \bar{\Sigma}_{c}^{0} \to \pi^{+}\bar{\Lambda}_{c}^{-},$ $\tau^{-} \to \nu_{\tau}\pi^{0}\pi^{-}\gamma^{gFSR}, D^{*+} \to \pi^{+}D^{0}, \bar{\Lambda}_{c}^{-} \to \pi^{-}\eta\bar{\Lambda}, D^{0} \to K_{S}\phi, \eta \to e^{+}e^{-}\gamma^{gFSR}\gamma^{gFSR}, \bar{\Lambda} \to \pi^{0}\bar{n},$ $K_{S} \to \pi^{+}\pi^{-}, \phi \to K^{+}K^{-}$ $(e^{+}e^{-} \to e^{+}e^{-}\nu_{\tau}\bar{\nu}_{\tau}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\bar{n}p\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma)$	166	166	1	167
168	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \pi^{+}K^{*-}J/\psi, B^{0} \to K^{0}D^{*0}D^{*0}, K^{*-} \to \pi^{-}K^{0}, J/\psi \to K^{*}K^{*}\gamma,$ $\bar{K}^{0} \to K_{L}, D^{*0} \to D^{0}\gamma, \bar{D}^{*0} \to \bar{D}^{0}\gamma, \bar{K}^{0} \to K_{L}, K^{*} \to \pi^{-}K^{+}, \bar{K}^{*} \to \pi^{+}K^{-},$ $D^{0} \to \pi^{0}\pi^{+}K^{-}, \bar{D}^{0} \to \pi^{0}\pi^{+}\pi^{-}K^{*}, K^{*} \to \pi^{-}K^{+}$ $(e^{+}e^{-} \to K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	167	167	1	168
169	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{-}K^{*+}D^{0}\bar{D}^{*0}, \bar{B}^{0} \to \pi^{0}\pi^{+}\pi^{-}\pi^{-}D^{*+}, K^{*+} \to \pi^{+}K^{0}, D^{0} \to K^{-}a_{1}^{+},$ $\bar{D}^{*0} \to \pi^{0}\bar{D}^{0}, D^{*+} \to \pi^{+}D^{0}, K^{0} \to K_{S}, a_{1}^{+} \to \pi^{+}\pi^{+}\pi^{-}, \bar{D}^{0} \to \rho^{-}K^{*+}, D^{0} \to \pi^{+}K^{-}\gamma^{gFSR},$ $K_{S} \to \pi^{+}\pi^{-}\gamma^{gFSR}, \rho^{-} \to \pi^{0}\pi^{-}, K^{*+} \to \pi^{0}K^{+}$ $(e^{+}e^{-} \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$ $e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \mu^{+}\nu_{\mu}D^{-}, B^{0} \to \pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}D_{s}^{*-}, D^{-} \to \mu^{-}\bar{\nu}_{\mu}K^{0}, \eta \to \pi^{0}\pi^{+}\pi^{-},$	168	168	1	169
170	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \mu^{+}\nu_{\mu}D^{-}, B^{0} \to \pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\eta K^{+}K^{+}D_{s}^{*-}, D^{-} \to \mu^{-}\bar{\nu}_{\mu}K^{0}, \eta \to \pi^{0}\pi^{+}\pi^{-}, D_{s}^{*-} \to D_{s}^{-}\gamma, K^{0} \to K_{L}, D_{s}^{-} \to \pi^{0}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}$ $(e^{+}e^{-} \to \mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}\gamma\gamma\gamma\gamma\gamma)$ $e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \pi^{0}\bar{K}^{0}D^{-}\Delta^{0}\bar{\Sigma}^{+}, B^{0} \to \pi^{0}\pi^{+}\pi^{+}\pi^{-}\rho^{-}\bar{D}^{0}, \bar{K}^{0} \to K_{L}, D^{-} \to \pi^{0}\pi^{-}K_{S},$	169	169	1	170
171	$\Delta^0 \to \pi^0 n, \bar{\Sigma}^+ \to \pi^+ \bar{n}, \rho^- \to \pi^0 \pi^-, \bar{D}^0 \to \pi^- \rho^+, K_S \to \pi^0 \pi^0, \rho^+ \to \pi^0 \pi^+ \\ (e^+ e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- n \bar{n} \gamma \gamma$	170	170	1	171
172	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{+}\rho^{-}\rho^{-}\omega D^{*+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{-} \to \pi^{0}\pi^{-}, \rho^{-} \to \pi^{0}\pi^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}, D^{*+} \to \pi^{0}D^{+}, \bar{D}^{0} \to \pi^{0}\pi^{+}\pi^{-}K_{S}, D^{+} \to K_{S}K^{*+}, K_{S} \to \pi^{+}\pi^{-}, K_{S} \to \pi^{0}\pi^{0}, K^{*+} \to \pi^{0}K^{+}$ $(e^{+}e^{-} \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	171	171	1	172

index	event tree	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
	(event initial-final states)				
	$e^+e^-  o \Upsilon(4S), \Upsilon(4S)  o B^0 \bar{B}^0, B^0  o \bar{D}^{*-}D_{s1}^{*+}, \bar{B}^0  o \pi^0 \pi^+ \pi^+ K^- D^-, \bar{D}^{*-}  o \pi^- \bar{D}^0, D_{s1}^{*+}  o \pi^0 D_s^{*+},$				
173	$D^{-} \to K_{S}K^{*-}, \bar{D}^{0} \to \omega K_{S}, D_{s}^{*+} \to \bar{D}_{s}^{+}\gamma, K_{S} \to \pi^{0}\pi^{0}, K^{*-} \to \pi^{-}\bar{K}^{0}, \omega \to \pi^{0}\pi^{+}\pi^{-}, K_{S} \to \pi^{+}\pi^{-}, D_{s}^{+} \to \rho^{+}\phi, \bar{K}^{0} \to K_{S}, \rho^{+} \to \pi^{0}\pi^{+}, \phi \to K^{+}K^{-}, K_{S} \to \pi^{0}\pi^{0}$	172	172	1	173
	$(e^{+}e^{-} \rightarrow \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma$				
	$e^+e^- \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow B^0\bar{B}^0, B^0 \rightarrow K^*D^-D^{*+}, \bar{B}^0 \rightarrow \rho^0\rho^-\eta D^{*+}, K^* \rightarrow \pi^-K^+\gamma^{gFSR}, D^- \rightarrow \mu^-\bar{\nu}_\mu K^0,$				
	$D^{*+} \rightarrow \pi^{+}D^{0}  \rho^{0} \rightarrow \pi^{+}\pi^{-}\gamma^{gFSR}  \rho^{-} \rightarrow \pi^{0}\pi^{-}  n \rightarrow \pi^{0}\pi^{+}\pi^{-}  D^{*+} \rightarrow \pi^{+}D^{0}  K^{0} \rightarrow K_{C}$				
174	$D^{*+} \to \pi^{+} D^{0}, \rho^{0} \to \pi^{+} \pi^{-} \gamma^{gFSR}, \rho^{-} \to \pi^{0} \pi^{-}, \eta \to \pi^{0} \pi^{+} \pi^{-}, D^{*+} \to \pi^{+} D^{0}, K^{0} \to K_{S},$ $D^{0} \to K^{-} a_{1}^{+}, D^{0} \to \pi^{0} \rho^{+} K^{-}, K_{S} \to \pi^{+} \pi^{-}, a_{1}^{+} \to \pi^{0} \rho^{+}, \rho^{+} \to \pi^{0} \pi^{+}, \rho^{+} \to \pi^{0} \pi^{+}$	173	173	1	174
	$(e^+e^- \rightarrow \mu^- \bar{\nu}_\mu \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^- K^- \gamma^{gFSR} \gamma^{gFSR} \gamma^{gFSR} \gamma^{\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma})$				
	$e^{+}e^{-}  o \Upsilon(4S), \Upsilon(4S)  o \bar{B}^0 \bar{B}^0, \bar{B}^0  o  ho^- \omega D^+ \gamma, \bar{B}^0  o \pi^0 \pi^0 \pi^+ K^0 K^0 K^- K^- D^{*+},  ho^-  o \pi^0 \pi^-, \omega  o \pi^0 \pi^+ \pi^-,$				
175	$D^+  o \pi^0 \pi^+ ar{K}^*, K^0  o K_L, K^0  o K_L, D^{*+}  o \pi^+ D^0, ar{K}^*  o \pi^+ K^- \gamma^{gFSR}, D^0  o \pi^+ \pi^+ \pi^- \pi^-$	174	174	1	175
	$\frac{(e^{+}e^{-} \to K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}K^{-}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \tau^{+}\nu_{\tau}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{0}\bar{n}\Sigma_{c}^{0}, \tau^{+} \to \bar{\nu}_{\tau}\pi^{0}\pi^{0}\pi^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0},}$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \tau^{+}\nu_{\tau}\bar{D}^{*-}, \bar{B}^{0} \to \pi^{0}\bar{n}\Sigma_{c}^{0}, \tau^{+} \to \bar{\nu}_{\tau}\pi^{0}\pi^{0}\pi^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0},$				
176	$\Sigma_c^0 \to \pi^- \Lambda_c^+, \bar{D}^0 \to \pi^0 \pi^- K^+, \Lambda_c^+ \to \pi^0 \pi^+ K^- p$	175	175	1	176
	$(e^+e^-\to\nu_\tau\bar{\nu}_\tau\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-\bar{n}p\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{-}D^{-}\bar{\Delta}^{0}\Delta^{++}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}, \rho^{-} \to \pi^{0}\pi^{-}, D^{-} \to K_{L}K_{L}K^{-},$				
177	$\bar{\Delta}^0 \to \pi^0 \bar{n}, \Delta^{++} \to \pi^+ p, D^{*+} \to \pi^0 D^+, D^+ \to K_L \pi^+$	176	176	1	177
	$\frac{(e^{+}e^{-} \to e^{-}\bar{\nu}_{e}K_{L}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{-}K^{-}\bar{n}p\gamma\gamma\gamma\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}D^{-}\bar{n}p, \bar{B}^{0} \to \pi^{0}\pi^{0}\pi^{0}\pi^{+}K^{*-}\bar{D}^{*0}, D^{-} \to K_{L}a_{1}^{-}, K^{*-} \to \pi^{0}K^{-},}$				
178	$e^+e^-  o 1 (4S), 1 (4S)  o B^*B^*, B^*  o \pi^*D^- np, B^*  o \pi^*\pi^*\pi^*\pi^*K^*D^-, D^-  o K_L a_1^-, K^+  o \pi^*K^-, \ \bar{D}^{*0}  o \bar{D}^0 \gamma, a_1^-  o \pi^0  ho^-, \bar{D}^0  o K_L K^+K^-,  ho^-  o \pi^0\pi^-, K_L  o \pi^0\pi^0\pi^0$	177	177	1	178
110	$D \to D \gamma, a_1 \to \pi \rho , D \to K_L K K , \rho \to \pi \pi , K_L \to \pi \pi \pi $ $(e^+e^- \to K_L \pi^+ \pi^- K^+ K^- K^- \bar{n} p \gamma \gamma)$	111	177	1	170
	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to \bar{B}^{0}\bar{B}^{0}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, \bar{B}^{0} \to D^{+}\Delta^{-}\bar{n}, D^{*+} \to \pi^{0}D^{+}, D^{+} \to \pi^{+}\pi^{+}K^{-},$				
179	$\Delta^- \rightarrow \pi^- n, D^+ \rightarrow e^+  u_e ar{K}^*, ar{K}^* \rightarrow \pi^+ K^-$	178	178	1	179
110	$(e^+e^-  o e^+ u_e\mu^-ar u_\mu\pi^+\pi^+\pi^+\pi^-K^-K^-nar n\gamma\gamma)$	110	110	_	110
	$e^+e^-  o \Upsilon(4S), \Upsilon(4S)  o B^0 \bar{B}^0, B^0  o \mu^+ \nu_\mu \bar{D}^{*-}, \bar{B}^0  o \pi^0 \pi^+ D^0 D_s^{*-}, \bar{D}^{*-}  o \pi^0 D^-, D^0  o e^+ \nu_e K^{*-},$				
100	$D_s^{*-} \to D_s^- \gamma, D^- \to \pi^0 \pi^- K_S, K^{*-} \to \pi^- \bar{K}^0, D_s^- \to \pi^- \eta, K_S \to \pi^+ \pi^-, \bar{K}^0 \to K_S,$	170	170	1	100
180	$\eta  o \gamma \gamma, K_S  o \pi^+ \pi^-$	179	179	1	180
	$(e^+e^- \to e^+\nu_e\mu^+\nu_\mu\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				
	$e^{+}e^{-} \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow B^{0}\bar{B}^{0}, B^{0} \rightarrow \mu^{+}\nu_{\mu}X_{u}^{-}, \bar{B}^{0} \rightarrow \bar{K}^{*}\bar{\Lambda}\Xi_{c}^{*0}, X_{u}^{-} \rightarrow \pi^{0}\rho^{-}, \bar{K}^{*} \rightarrow \pi^{+}K^{-},$				
181	$\bar{\Lambda} \rightarrow \pi^+ \bar{p}, \Xi_c^{*0} \rightarrow \Xi_c^0 \gamma, \bar{\rho}^- \rightarrow \pi^0 \pi^-, \Xi_c^0 \rightarrow \pi^+ K^{*-} \Sigma^0, K^{*-} \rightarrow \pi^- \bar{K}^0, \Sigma^0 \rightarrow \Lambda \gamma,$	180	180	1	181
101	$\bar{K}^0  o K_S, \Lambda  o \pi^- p, K_S  o \pi^+ \pi^-$	100	100	_	101
	$\frac{(e^{+}e^{-} \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}p\bar{p}\gamma\gamma\gamma\gamma\gamma)}{e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\rho^{0}\pi^{+}\omega\bar{D}^{*-}\gamma^{gFSR}, \bar{B}^{0} \to \pi^{+}\pi^{-}\rho^{-}D^{+}, \rho^{0} \to \pi^{+}\pi^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \omega \to \pi^{0}\pi^{0}\pi^{+}\pi^{-}, \omega \to \pi^{0}\pi^{0}\pi^{0}\pi^{-}, \omega \to \pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}\pi^{0}$				
100	$e^+e^-  ightarrow \Upsilon(4S), \Upsilon(4S)  ightarrow B^o B^o, B^o  ightarrow \pi^o  ho^o \pi^+ \omega D^{*-} \gamma^{grott}, B^o  ightarrow \pi^+ \pi^-  ho^- D^+,  ho^o  ightarrow \pi^+ \pi^-, \omega  ightarrow \pi^o \pi^+ \pi^-, \ \bar{b}^o = \bar{b}^o - $	101	101	1	100
182	$\bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \rho^{-} \to \pi^{0}\pi^{-}, D^{+} \to \mu^{+}\nu_{\mu}\pi^{+}K^{-}, \bar{D}^{0} \to \pi^{-}\omega K^{+}, \omega \to \pi^{0}\pi^{+}\pi^{-}\gamma^{gFSR}$ $(e^{+}e^{-} \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	181	181	1	182
	$(e^+e^- \to \mu^+\nu_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi$				
	$e^{+}e^{-} \rightarrow 1 (4S), 1 (4S) \rightarrow B^{*}B^{*}, B^{*} \rightarrow D^{+}D_{s1}, B^{*} \rightarrow \pi^{-}\eta D^{+}, D^{+} \rightarrow \pi^{*}D^{+}, D_{s1} \rightarrow \pi^{*}D_{s} , \\ \eta \rightarrow \pi^{0}\pi^{0}\pi^{0}, D^{*+} \rightarrow \pi^{+}D^{0}, D^{+} \rightarrow e^{+}\nu_{e}\bar{K}^{*}, D^{*-}_{s} \rightarrow D^{-}_{s}\gamma, D^{0} \rightarrow K_{L}\pi^{+}\pi^{-}, \bar{K}^{*} \rightarrow \pi^{+}K^{-}, $				
183	$\eta \rightarrow \pi \ \pi \ \pi \ , D \rightarrow e \ \nu_e K \ , D_s \rightarrow D_s \ \gamma, D \rightarrow K_L \pi \ \pi \ , K \rightarrow \pi \ K \ , D_s \rightarrow K^* K^-, K^* \rightarrow \pi^0 K^0, K^0 \rightarrow K_S, K_S \rightarrow \pi^+ \pi^-$	182	182	1	183
	$(e^+e^- \to e^+\nu_e K_L\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$				
	(C C / C PETEN N N N N N N N N N N N N N N N N N N				

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
184	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}D_{1}^{\prime-}, \bar{B}^{0} \to \pi^{0}\pi^{+}\pi^{-}\rho^{-}D^{*+}, D_{1}^{\prime-} \to \pi^{0}\bar{D}^{*-}, \rho^{-} \to \pi^{0}\pi^{-},$ $D^{*+} \to \pi^{+}D^{0}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D^{0} \to K_{S}\eta', \bar{D}^{0} \to \pi^{-}K^{+}, K_{S} \to \pi^{0}\pi^{0}, \eta' \to \pi^{0}\pi^{0}\eta,$ $\eta \to \gamma\gamma$ $(e^{+}e^{-} \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$ $e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \mu^{+}\nu_{\mu}\bar{D}^{*-}, B^{0} \to \pi^{0}\omega D^{-}\bar{\Delta}^{-}\Delta^{0}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \omega \to \pi^{0}\pi^{+}\pi^{-},$	183	183	1	184
185	$e^{+}e^{-} \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow B^{0}B^{0}, B^{0} \rightarrow \mu^{+}\nu_{\mu}\bar{D}^{*-}, B^{0} \rightarrow \pi^{0}\omega D^{-}\bar{\Delta}^{-}\Delta^{0}, \bar{D}^{*-} \rightarrow \pi^{-}\bar{D}^{0}, \omega \rightarrow \pi^{0}\pi^{+}\pi^{-},$ $D^{-} \rightarrow e^{-}\bar{\nu}_{e}K^{0}, \bar{\Delta}^{-} \rightarrow \pi^{+}\bar{n}, \Delta^{0} \rightarrow \pi^{0}n, \bar{D}^{0} \rightarrow \pi^{0}K_{S}, K^{0} \rightarrow K_{S}, K_{S} \rightarrow \pi^{0}\pi^{0},$ $K_{S} \rightarrow \pi^{0}\pi^{0}$ $(e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{-}\pi^{-}n\bar{n}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$ $e^{+}e^{-} \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow B^{0}\bar{B}^{0}, B^{0} \rightarrow e^{+}\nu_{e}\bar{D}^{*-}, \bar{B}^{0} \rightarrow \omega\bar{K}^{0}K^{*}\bar{K}^{*}, \bar{D}^{*-} \rightarrow \pi^{0}D^{-}, \omega \rightarrow \pi^{0}\pi^{+}\pi^{-},$	184	184	1	185
186	$\bar{K}^0 \to K_L, K^* \to \pi^- K^+, \bar{K}^* \to \pi^0 \bar{K}^0, D^- \to \pi^0 \pi^- K^*, \bar{K}^0 \to K_L, K^* \to \pi^- K^+ $ $(e^+ e^- \to e^+ \nu_e K_L K_L \pi^+ \pi^- \pi^- \pi^- K^+ K^+ \gamma \gamma \gamma \gamma \gamma \gamma \gamma)$	185	185	1	186
187	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \mu^{+}\nu_{\mu}D_{2}^{*-}\gamma^{gFSR}\gamma^{gFSR}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, D_{2}^{*-} \to \pi^{-}\bar{D}^{*0}, D^{*+} \to \pi^{0}D^{+},$ $\bar{D}^{*0} \to \bar{D}^{0}\gamma, D^{+} \to \mu^{+}\nu_{\mu}\bar{K}^{0}, \bar{D}^{0} \to \rho^{-}K^{*+}, \bar{K}^{0} \to K_{L}, \rho^{-} \to \pi^{0}\pi^{-}, K^{*+} \to \pi^{+}K^{0},$ $K^{0} \to K_{S}, K_{S} \to \pi^{+}\pi^{-}\gamma^{gFSR}$ $(e^{+}e^{-} \to \mu^{+}\mu^{+}\mu^{-}\nu_{\mu}\nu_{\mu}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma\gamma\gamma\gamma})$ $e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\pi^{-}\rho^{+}\rho^{-}\bar{D}^{0}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, \rho^{+} \to \pi^{0}\pi^{+}, \rho^{-} \to \pi^{0}\pi^{-},$	186	186	1	187
188	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\pi^{-}\rho^{+}\rho^{-}\bar{D}^{0}, \bar{B}^{0} \to \mu^{-}\bar{\nu}_{\mu}D^{*+}, \rho^{+} \to \pi^{0}\pi^{+}, \rho^{-} \to \pi^{0}\pi^{-},$ $\bar{D}^{0} \to K^{+}a_{1}^{-}, D^{*+} \to \pi^{+}D^{0}, a_{1}^{-} \to \rho^{0}\pi^{-}, D^{0} \to e^{+}\nu_{e}\pi^{0}K^{-}\gamma^{gFSR}, \rho^{0} \to \pi^{+}\pi^{-}$ $(e^{+}e^{-} \to e^{+}\nu_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma)$	187	187	1	188
189	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \bar{D}^{*-}D'^{*+}_{s1}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}D^{*+}_{2}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, D'^{*+}_{s1} \to \pi^{0}D^{*+}_{s},$ $D^{*+}_{2} \to \pi^{+}D^{*0}, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}, D^{*+}_{s} \to D^{+}_{s}\gamma, D^{*0} \to \pi^{0}D^{0}, D^{+}_{s} \to \bar{K}^{*}K^{*+}, D^{0} \to K_{L}\eta',$ $\bar{K}^{*} \to \pi^{+}K^{-}, K^{*+} \to \pi^{+}K^{0}, \eta' \to \pi^{+}\pi^{-}\eta, K^{0} \to K_{L}, \eta \to \gamma\gamma$ $(e^{+}e^{-} \to e^{-}\bar{\nu}_{e}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	188	188	1	189
190	$e^{+}e^{-} \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow B^{0}\bar{B}^{0}, B^{0} \rightarrow \rho^{+}\eta\eta\bar{D}^{*-}, \bar{B}^{0} \rightarrow \pi^{0}\pi^{+}\eta K^{*-}, \rho^{+} \rightarrow \pi^{0}\pi^{+}, \eta \rightarrow \pi^{0}\pi^{0}\pi^{0}, \eta \rightarrow \pi^{0}\pi^{0}\pi^{0}, \bar{D}^{*-} \rightarrow \pi^{-}\bar{D}^{0}, \eta \rightarrow \pi^{0}\pi^{0}\pi^{0}, K^{*-} \rightarrow \pi^{0}K^{-}, \bar{D}^{0} \rightarrow \pi^{+}\pi^{-}K^{*}, K^{*} \rightarrow \pi^{0}K^{0}, K^{0} \rightarrow K_{L}$ $(e^{+}e^{-} \rightarrow K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma$	189	189	1	190
191	$\frac{(e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma$	190	190	1	191
192	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to e^{+}\nu_{e}D^{-}, \bar{B}^{0} \to \rho^{0}\rho^{-}D^{*+}, D^{-} \to e^{-}\bar{\nu}_{e}K^{0}, \rho^{0} \to \pi^{+}\pi^{-},$ $\rho^{-} \to \pi^{0}\pi^{-}, D^{*+} \to \pi^{+}D^{0}, K^{0} \to K_{L}, D^{0} \to \pi^{+}\eta K^{-}, \eta \to \pi^{0}\pi^{0}\pi^{0}$ $(e^{+}e^{-} \to e^{+}e^{-}\nu_{e}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	191	191	1	192
193	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, \bar{B}^{0} \to \rho^{+}\bar{D}^{*-}, \bar{B}^{0} \to \rho^{0}\pi^{-}K^{0}\bar{K}^{*}D^{+}, \rho^{+} \to \pi^{0}\pi^{+}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0},$ $\rho^{0} \to \pi^{+}\pi^{-}, K^{0} \to K_{S}, \bar{K}^{*} \to \pi^{+}K^{-}\gamma^{gFSR}, D^{+} \to K_{L}a_{1}^{+}, \bar{D}^{0} \to \pi^{0}K_{L}\eta, K_{S} \to \pi^{+}\pi^{-},$ $a_{1}^{+} \to \rho^{0}\pi^{+}, \eta \to \pi^{0}\pi^{+}\pi^{-}, \rho^{0} \to \pi^{+}\pi^{-}$ $(e^{+}e^{-} \to K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma)$	192	192	1	193

index	event tree (event initial-final states)	iEvtTr	iEvtIFSts	nEvts	nCmltEvts
194	$e^{+}e^{-} \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow B^{0}\bar{B}^{0}, B^{0} \rightarrow e^{+}\nu_{e}D^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}, \bar{B}^{0} \rightarrow K^{*-}D^{*+}\bar{D}^{0}, D^{-} \rightarrow K^{*}K^{-}, K^{*-} \rightarrow \pi^{-}\bar{K}^{0}$ $D^{*+} \rightarrow \pi^{+}D^{0}, \bar{D}^{0} \rightarrow \pi^{0}\pi^{-}K^{+}, K^{*} \rightarrow \pi^{-}K^{+}, \bar{K}^{0} \rightarrow K_{L}, D^{0} \rightarrow \pi^{+}\pi^{-}, K_{L} \rightarrow \pi^{0}\pi^{0}\pi^{0}$ $(e^{+}e^{-} \rightarrow e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma \gamma \gamma$	, 193	193	1	194
195	$e^{+}e^{-} \rightarrow \Upsilon(4S), \Upsilon(4S) \rightarrow B^{0}\bar{B}^{0}, B^{0} \rightarrow J/\psi K_{1}^{0}, \bar{B}^{0} \rightarrow \pi^{0}D^{+}D_{s}^{*-}, J/\psi \rightarrow \pi^{0}\eta\eta, K_{1}^{0} \rightarrow \pi^{+}\pi^{-}K^{0},$ $D^{+} \rightarrow e^{+}\nu_{e}\bar{K}^{0}\gamma^{gFSR}, D_{s}^{*-} \rightarrow D_{s}^{-}\gamma, \eta \rightarrow \gamma\gamma, \eta \rightarrow \gamma\gamma, K^{0} \rightarrow K_{S}, \bar{K}^{0} \rightarrow K_{S},$ $D_{s}^{-} \rightarrow \rho^{-}\eta, K_{S} \rightarrow \pi^{0}\pi^{0}, K_{S} \rightarrow \pi^{+}\pi^{-}, \rho^{-} \rightarrow \pi^{0}\pi^{-}, \eta \rightarrow \pi^{0}\pi^{0}\pi^{0}$ $(e^{+}e^{-} \rightarrow e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	194	194	1	195
196	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to K^{*}D^{+}D^{-}, B^{0} \to \bar{D}^{*-}\bar{\Delta}^{-}\Delta^{0}, K^{*} \to \pi^{0}K^{0}, D^{+} \to \pi^{+}\bar{K}_{1}^{'0},$ $D^{-} \to e^{-}\bar{\nu}_{e}K_{2}^{*0}, \bar{D}^{*-} \to \pi^{-}\bar{D}^{0}, \bar{\Delta}^{-} \to \pi^{+}\bar{n}, \Delta^{0} \to \pi^{0}n, K^{0} \to K_{L}, \bar{K}_{1}^{'0} \to \pi^{+}K^{*-},$ $K_{2}^{*0} \to \pi^{0}K^{0}, \bar{D}^{0} \to e^{-}\bar{\nu}_{e}\pi^{+}K^{0}\gamma^{gFSR}, K^{*-} \to \pi^{0}K^{-}, K^{0} \to K_{S}, K^{0} \to K_{L}, K_{S} \to \pi^{+}\pi^{-}$ $(e^{+}e^{-} \to e^{-}e^{-}\bar{\nu}_{e}\bar{\nu}_{e}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}n\bar{n}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	195	195	1	196
197	$\begin{array}{c} e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{0}\pi^{-}\eta\bar{D}^{*0}D_{s}^{*+}, \bar{B}^{0} \to D^{*0}\Delta^{0}\bar{\Delta}^{0}, \eta \to \gamma\gamma, \bar{D}^{*0} \to \bar{D}^{0}\gamma, \\ D_{s}^{*+} \to D_{s}^{+}\gamma, D^{*0} \to \pi^{0}D^{0}, \Delta^{0} \to \pi^{0}n, \bar{\Delta}^{0} \to \pi^{0}\bar{n}, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}, D_{s}^{+} \to \mu^{+}\nu_{\mu}, \\ D^{0} \to e^{+}\nu_{e}\pi^{-}\bar{K}^{0}\gamma^{gFSR}, \pi^{0} \to e^{+}e^{-}\gamma^{gFSR}, \bar{K}^{0} \to K_{S}, K_{S} \to \pi^{0}\pi^{0} \\ (e^{+}e^{-} \to e^{+}e^{+}e^{-}\nu_{e}\mu^{+}\nu_{\mu}\pi^{-}\pi^{-}\pi^{-}K^{+}n\bar{n}\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)) \end{array}$	196	196	1	197
198	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \rho^{0}\pi^{+}\omega\bar{D}^{*-}, \bar{B}^{0} \to D^{0}n\bar{n}, \rho^{0} \to \pi^{+}\pi^{-}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{D}^{0}, D^{0} \to K_{L}\eta, \bar{D}^{0} \to \pi^{0}\pi^{-}K^{+}, \eta \to \gamma\gamma$ $(e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}n\bar{n}\gamma\gamma\gamma\gamma\gamma\gamma)$	197	197	1	198
199	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}B^{0}, B^{0} \to \mu^{+}\nu_{\mu}\bar{D}^{*-}, B^{0} \to \rho^{0}\pi^{+}\pi^{-}\rho^{+}\omega\bar{D}^{*-}, \bar{D}^{*-} \to \pi^{0}D^{-}, \rho^{0} \to \pi^{+}\pi^{-}, \rho^{+} \to \pi^{0}\pi^{+}, \omega \to \pi^{0}\pi^{+}\pi^{-}, \bar{D}^{*-} \to \pi^{0}D^{-}, D^{-} \to e^{-}\bar{\nu}_{e}\pi^{-}K^{+}, D^{-} \to \pi^{0}\pi^{-}K^{*}, K^{*} \to \pi^{-}K^{+}$ $(e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma)$	198	198	1	199
200	$e^{+}e^{-} \to \Upsilon(4S), \Upsilon(4S) \to B^{0}\bar{B}^{0}, B^{0} \to \pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}D^{-}, \bar{B}^{0} \to e^{-}\bar{\nu}_{e}\pi^{+}D^{0}, D^{-} \to \mu^{-}\bar{\nu}_{\mu}K_{1}^{0}, D^{0} \to \pi^{+}\pi^{-}K_{S}, K_{S} \to \pi^{+}K_{S}, K_{S} \to \pi^{+}$	199	199	1	200

Table 2: Event initial-final states.

index	event initial-final states.	iEvtIFSts	nEvts	nCmltEvts
1	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma$	0	1	1
2	$e^+e^- \rightarrow e^+e^-\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^-\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma \gamma \gamma \gamma}$	1	1	2
3	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{gFSR}\gamma$	2	1	3
4	$e^{+}e^{-} \rightarrow e^{+}e^{+}e^{-}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{gFSR}\gamma\gamma\gamma\gamma$	3	1	4
5	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma$	4	1	5
6	$e^+e^- \rightarrow e^+e^+\nu_e\nu_e\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^-\gamma\gamma\gamma\gamma\gamma\gamma$	5	1	6
7	$e^+e^-  o \mu^-ar{ u}_{\mu}\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^+K^-\gamma^{gFSR}\gamma$	6	1	7
8	$e^{+}e^{-} \rightarrow \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma^{gFSR}\gamma$	7	1	8
9	$e^+e^-  o \mu^- \bar{\nu}_\mu K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \gamma^{gFSR} \gamma^{gFSR} \gamma \gamma$	8	1	9
10	$e^+e^-  ightarrow \mu^+ u_\mu K_L\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	9	1	10
11	$e^+e^-  o \mu^+\mu^+\nu_\mu\nu_\mu K_L K_L \pi^+\pi^-\pi^-\pi^- K^+K^-\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma$	10	1	11
12	$e^+e^-  o e^+e^-\mu^- \bar{\nu}_\mu \nu_\tau \bar{\nu}_\tau \pi^+ \pi^- K^+ \gamma^{gFSR} \gamma^{gFSR} \gamma^{\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma}$	11	1	12
13	$e^+e^- o \mu^+ u_\mu K_L\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma^{gFSR}\gamma$	12	1	13
14	$e^+e^- \to \mu^- \bar{\nu}_\mu K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma \gamma$	13	1	14
15	$e^+e^-  ightarrow \pi^+\pi^+\pi^+\pi^-\pi^-K^+K^-K^-\gamma^{gFSR}\gamma$	14	1	15
16	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma$	15	1	16
17	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	16	1	17
18	$e^+e^- \to \mu^+\nu_\mu K_L K_L \pi^+\pi^+\pi^-\pi^-\pi^- K^+ K^+ K^- K^- \gamma \gamma$	17	1	18
19	$e^+e^- \to e^- \bar{\nu}_e \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^- \gamma^{gFSR} \gamma \gamma$	18	1	19
20	$e^+e^- \to \mu^+\nu_\mu K_L \pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	19	1	20
21	$e^+e^- \to \mu^-\bar{\nu}_{\mu}K_LK_L\pi^+K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma$	20	1	21
22	$e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}f_{0}(600)\gamma^{gFSR}\gamma^{gFSR}\gamma$	21	1	22
23	$e^{+}e^{-} \rightarrow \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma$	22	1	23
24	$e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	23	1	24
25	$e^{+}e^{-} \rightarrow e^{+}e^{+}e^{-}\nu_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+$	24	1	25
26	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma$	25	1	26
27	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\mu^{+}\nu_{\mu}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}\gamma\gamma$	26	1	27
28	$e^{+}e^{-} \rightarrow \mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{gFSR}\gamma\gamma\gamma\gamma$	27	1	28
29	$e^+e^- \to e^+\nu_e\nu_\tau\bar{\nu}_\tau K_L\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma\gamma\gamma\gamma\gamma\gamma$	28	1	29
30	$e^+e^- \to K_L K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \gamma^{gFSR} \gamma \gamma$	29	1	30
31	$e^+e^- \to \mu^+\mu^-\nu_\mu\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\gamma\gamma\gamma\gamma\gamma$	30	1	31
32	$e^+e^- \rightarrow e^+e^+e^-\nu_e\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^+K^-\gamma^{gFSR}\gamma^{gFS}\gamma^{gFS}\gamma^{gFS}\gamma^{gFSR$	31	1	32
33	$e^{+}e^{-} \rightarrow \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma^{gFSR}\gamma$	32	1	33
34	$e^{+}e^{-} \rightarrow \mu^{-}\bar{\nu}_{\mu}\nu_{\tau}\bar{\nu}_{\tau}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}\gamma$	33	1	34
35	$e^{+}e^{-} \rightarrow \mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{-}K^{+}K^{-}K^{-}\bar{n}p\gamma\gamma\gamma\gamma\gamma\gamma$	34	1	35
36	$e^+e^- \to e^- \bar{\nu}_e K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^+ n \bar{p} \gamma^{gFSR} \gamma \gamma$	35	1	36
37	$e^{+}e^{-} \rightarrow \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma$	36	1	37
38	$e^{+}e^{-} \rightarrow K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}p\bar{p}\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	37	1	38
39	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma^{gFSR}\gamma$	38	1	39
40	$e^{+}e^{-} \to \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	39	1	40

index	event initial-final states	iEvtIFSts	nEvts	nCmltEvts
41	$e^+e^-  o \mu^-\mu^- \bar{\nu}_\mu \bar{\nu}_\mu \pi^+ \pi^+ \pi^+ K^+ K^- K^- \gamma^{gFSR} \gamma \gamma$	40	1	41
42	$e^+e^- \to \mu^+\nu_\mu\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma$	41	1	42
43	$e^{+}e^{-} \rightarrow \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}K^{-}n\bar{p}\gamma^{gFSR}\gamma$	42	1	43
44	$e^+e^- \to e^- \bar{\nu}_e \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^- \gamma \gamma$	43	1	44
45	$e^+e^-  o \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^+\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	44	1	45
46	$e^+e^-  o e^+e^-\mu^+ u_\mu\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^+\gamma^{gFSR}\gamma$	45	1	46
47	$e^{+}e^{-} \rightarrow K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	46	1	47
48	$e^+e^- o\mu^-\mu^-ar u_\muar u_\mu K_L\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma$	47	1	48
49	$e^+e^- \to e^+\nu_e\mu^-\mu^-\bar{\nu}_\mu\bar{\nu}_\mu K_L\pi^+\pi^+\pi^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	48	1	49
50	$e^+e^-  o e^+e^-\mu^-ar u_\mu K_L\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-K^-\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	49	1	50
51	$e^{+}e^{-} \to e^{+}\nu_{e}\mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}f_{0}(600)\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma}$	50	1	51
52	$e^+e^-  ightarrow e^-ar{ u}_e K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^- \gamma \gamma \gamma \gamma \gamma \gamma$	51	1	52
53	$e^+e^- \to e^+\nu_e K_L\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	52	1	53
54	$e^+e^-  o \pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^+K^-\gamma$	53	1	54
55	$e^+e^- \to \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma$	54	1	55
56	$e^+e^- \to \mu^+\mu^-\nu_\mu\nu_\mu K_L\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-K^-n\bar{p}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	55	1	56
57	$e^+e^-  o e^+ u_e K_L \pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\bar{n}p\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	56	1	57
58	$e^{+}e^{-} \rightarrow \mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma$	57	1	58
59	$e^+e^- \to \mu^+\nu_\mu\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-n\bar{p}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	58	1	59
60	$e^+e^-  o \mu^+ u_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	59	1	60
61	$e^+e^- \rightarrow e^- \bar{\nu} \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^- \gamma^g FSR \gamma^g FSR \gamma^g FSR \gamma^g \gamma^g \gamma^g \gamma^g \gamma^g \gamma^g \gamma^g \gamma^g \gamma^g \gamma^g$	60	1	61
62	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}f_{0}(600)\gamma^{gFSR}\gamma\gamma\gamma\gamma}$ $e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}p\bar{p}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma}$ $e^{+}e^{-} \rightarrow e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma$	61	1	62
63	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+$	62	1	63
64	$e^+e^- \rightarrow e^+\nu_e\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^-\gamma^{gFSR}\gamma^{gFSR}\gamma$	63	1	64
65	$e^{+}e^{-} \to e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+$	64	1	65
66	$e^+e^-  o e^+ u_e\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^-par p\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	65	1	66
67	$e^+e^- \to \mu^+\nu_\mu\nu_\tau\bar{\nu}_\tau\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^-\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma$	66	1	67
68	$e^+e^- \rightarrow K_L K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^- \gamma \gamma$	67	1	68
69	$e^+e^- \to e^-\bar{\nu}_e\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma$	68	1	69
70	$e^+e^- \rightarrow e^+\nu_e\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma$	69	1	70
71	$e^{+}e^{-} \to e^{+}\nu_{e}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFS}\gamma^{gFS}\gamma^{gFS}\gamma^{gFSR}\gamma^{gFS}\gamma^{gFS}\gamma^{gFS}\gamma^{gFS}\gamma^{gFS}\gamma^{gFS}\gamma^{gFS}\gamma^{gFS}\gamma^{gFSR$	70	1	71
72	$e^+e^-  o e^-e^-ar{ u}_ear{ u}_e\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^{gFSR}\gamma$	71	1	72
73	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^+K^-n\bar{p}\gamma^{gFSR}\gamma\gamma\gamma\gamma$	72	1	73
74	$e^{+}e^{-} \rightarrow e^{+}e^{-}\nu_{e}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}\bar{n}pf_{0}(600)\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma$	73	1	74
75	$e^+e^- \to \mu^+\nu_\mu K_L K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- K^+ K^- K^- K^- \gamma \gamma$	74	1	75
76	$e^{+}e^{-} \rightarrow \mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}K^{-}\gamma^{gFSR}\gamma$	75	1	76
77	$e^+e^-  o K_L K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^- \gamma \gamma$	76	1	77
78	$e^+e^- \rightarrow e^- \bar{\nu}_e \mu^+ \nu_\mu \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- K_S \gamma \gamma$	77	1	78
79	$e^{+}e^{-} \rightarrow e^{+}e^{+}e^{-}\nu_{e}\nu_{e}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma$	78	1	79
80	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma$	79	1	80

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81	$e^+e^- \to \mu^+\nu_\mu\nu_\tau\bar{\nu}_\tau K_L\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	80	1	81
82	$e^{+}e^{-} \rightarrow \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma$	81	1	82
83	$e^+e^- \to \mu^-\bar{\nu}_\mu \pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^+K^-\gamma^{gFSR}\gamma$	82	1	83
84	$e^{+}e^{-} \rightarrow \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	83	1	84
85	$e^+e^- \to e^- \bar{\nu}_e \mu^+ \nu_\mu K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma \gamma$	84	1	85
86	$e^+e^- \rightarrow e^-e^-\bar{\nu}_e\bar{\nu}_e\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^+K^-\bar{n}p\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma$	85	1	86
87	$e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma$	86	1	87
88	$e^+e^-  o \mu^+  u_\mu \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^- \gamma \gamma \gamma \gamma \gamma \gamma$	87	1	88
89	$e^{+}e^{-} \rightarrow \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}p\bar{p}\gamma\gamma$	88	1	89
90	$e^+e^- \to \mu^+\nu_\mu\pi^+\pi^-\pi^-\pi^-\pi^-K^+\bar{n}pf_0(600)\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	89	1	90
91	$e^+e^- \to \mu^-\mu^-\bar{\nu}_\mu\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma$	90	1	91
92	$e^+e^- \rightarrow e^+e^+e^-e^-\pi^+\pi^+\pi^-K^+K^-n\bar{p}\gamma^{gFSR}\gamma^{gFSR}\gamma$	91	1	92
93	$e^{+}e^{-} \to \mu^{+}\mu^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}f_{0}(600)\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	92	1	93
94	$e^{+}e^{-} \to K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}f_{0}(600)\gamma^{gFSR}\gamma\gamma$	93	1	94
95	$e^{+}e^{-} \to e^{+}e^{-}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma$	94	1	95
96	$e^{+}e^{-} \rightarrow e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}f_{0}(600)\gamma\gamma$	95	1	96
97	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ n \bar{p} \gamma \gamma \gamma \gamma \gamma$	96	1	97
98	$e^+e^- \to e^-\bar{\nu}_e\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma$	97	1	98
99	$e^+e^- \to K_L K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ \gamma^{gFSR} \gamma \gamma$	98	1	99
100	$e^+e^-  o \pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-K^-\gamma^{gFSR}\gamma$	99	1	100
101	$e^+e^- \rightarrow e^+e^+e^-\nu_e\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma$	100	1	101
102	$e^+e^-  o e^- ar{ u}_e \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- K^+ \gamma^{gFSR} \gamma^{gFSR} \gamma^{gFSR} \gamma^{gFSR} \gamma^{\gamma \gamma $	101	1	102
103	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^-\gamma$	102	1	103
104	$e^+e^- ightarrow\mu^+ u_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^-\gamma^{9FSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	103	1	104
105	$e^+e^- \rightarrow e^-\bar{\nu}_e\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^-\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma$	104	1	105
106	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma}$ $e^{+}e^{-} \rightarrow e^{+}e^{-}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma$ $e^{+}e^{-} \rightarrow e^{+}e^{-}\mu^{-}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{gFSR}\gamma^{gFSR}\gamma$	105	1	106
107	$e^+e^- \rightarrow e^+e^-\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma$	106	1	107
108	$e^+e^- \rightarrow e^+e^-\mu^-\nu_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma^{gFSR}\gamma^{gFSR}\gamma$	107	1	108
109	$e^+e^- \to \mu^- \bar{\nu}_\mu \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ \gamma \gamma \gamma \gamma \gamma \gamma$	108	1	109
110	$e^+e^-  o K_L\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^-p\bar{p}\gamma^{gFSR}\gamma$	109	1	110
111	$e^{+}e^{-} \rightarrow \mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}p\bar{p}\gamma^{gFSR}\gamma$	110	1	111
112	$e^+e^- ightarrow e^+ u_e\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	111	1	112
113	$e^+e^- \to e^+ \nu_e \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ n \bar{n} \gamma^{gFSR} \gamma^{gFSR} \gamma^{\gamma \gamma \gamma \gamma \gamma}$	112	1	113
114	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ K^- K^- \gamma^{gFSR} \gamma^{gFSR} \gamma \gamma$	113	1	114
115	$e^+e^- \rightarrow e^- \bar{\nu}_e K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^+ K^- \gamma^{gFSR} \gamma^{gFSR} \gamma \gamma$	114	1	115
116	$e^+e^- ightarrow \mu^-ar u_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^-\gamma^{gFSR}\gamma$	115	1	116
117	$e^+e^- \rightarrow e^+ u_c K_L \pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^+K^-\gamma^{gFSR}\gamma^{gFSR}\gamma$	116	1	117
118	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma$	117	1	118
119	$e^+e^-  ightarrow e^- ar{ u}_e \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^+ \gamma^{gFSR} \gamma \gamma$	118	1	119
120	$e^{+}e^{-} \rightarrow \mu^{-}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma\gamma$	119	1	120

index	event initial-final states	iEvtIFSts	nEvts	nCmltEvts
121	$e^+e^- \to e^- \bar{\nu}_e \mu^- \bar{\nu}_\mu K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- K^- \gamma^{gFSR} \gamma \gamma \gamma \gamma \gamma$	120	1	121
122	$e^{+}e^{-} \to \mu^{+}\nu_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma$	121	1	122
123	$e^+e^- \rightarrow e^-e^- \bar{\nu}_e \bar{\nu}_e \mu^+ \nu_\mu \pi^+ \pi^+ \pi^- K^+ K^- \gamma^{gFSR} \gamma \gamma \gamma \gamma$	122	1	123
124	$e^+e^-  o e^- \bar{\nu}_e  u_ au \bar{\nu}_ au K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \gamma^\gamma \gamma \gamma \gamma \gamma \gamma$	123	1	124
125	$e^+e^- \to e^+e^-\mu^-\bar{\nu}_\mu K_L K_L \pi^+\pi^+\pi^-\pi^- K^+\gamma^{gFSR} \gamma^{gFSR} \gamma$	124	1	125
126	$e^+e^- \rightarrow e^+\nu_e\mu^+\mu^-\nu_\mu\bar{\nu}_\mu\pi^+\pi^+\pi^-\pi^-K^-\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma}$	125	1	126
127	$e^+e^- o e^+e^-\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	126	1	127
128	$e^+e^-  o e^+e^-e^- u_ear{ u}_ear{ u}_eK_L\pi^+\pi^+\pi^+\pi^+\pi^-K^-K^-\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma$	127	1	128
129	$e^+e^- \rightarrow e^+e^-\nu_e\bar{\nu}_e\nu_\tau\bar{\nu}_\tau\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma\gamma\gamma}$	128	1	129
130	$e^+e^- \to e^+e^-e^-\nu_e\nu_e\bar{\nu}_e\pi^+\pi^+\pi^-\pi^-K^+\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	129	1	130
131	$e^+e^- \to K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ \gamma \gamma$	130	1	131
132	$e^{+}e^{-} \to e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma$	131	1	132
133	$e^{+}e^{-} \rightarrow e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}\gamma^{gFSR}\gamma\gamma\gamma$	132	1	133
134	$e^{+}e^{-} \rightarrow \nu_{\tau}\bar{\nu}_{\tau}K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma\gamma\gamma\gamma\gamma\gamma\gamma}$	133	1	134
135	$e^+e^- \to \mu^-\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	134	1	135
136	$e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}K^{-}f_{0}(600)\gamma\gamma\gamma\gamma\gamma$	135	1	136
137	$e^+e^- \rightarrow e^+e^-K_LK_L\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^-\gamma^{gFSR}\gamma^{gFSR}\gamma$	136	1	137
138	$e^+e^- \to \pi^+\pi^+\pi^-\pi^-K^+K^-n\bar{n}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	137	1	138
139	$e^+e^- \to e^+\nu_e K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^- p\bar{p}\gamma^{gFSR} \gamma\gamma\gamma\gamma$	138	1	139
140	$e^+e^- \rightarrow e^- \bar{\nu}_e \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^+ K^+ \gamma^{gFSR} \gamma \gamma$	139	1	140
141	$e^+e^- \rightarrow e^- \bar{\nu}_e \mu^+ \nu_\mu \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ \gamma^{gFSR} \gamma^{gFSR} \gamma^{gFSR} \gamma^{gFSR} \gamma^{gFSR} \gamma^{gFSR} \gamma^{\gamma \gamma $	140	1	141
142	$e^+e^- \to \mu^+\nu_\mu\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^+K^-K^-K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	141	1	142
143	$e^{+}e^{-} \rightarrow \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}N\bar{n}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	142	1	143
144	$e^{+}e^{-} \rightarrow \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}K^{-}K^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma$	143	1	144
145	$e^{+}e^{-} \to e^{-}\bar{\nu}_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+$	144	1	145
146	$e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+$	145	1	146
147	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- \pi^- K^- \gamma \gamma$	146	1	147
148	$e^{+}e^{-} \to \mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+$	147	1	148
149	$e^+e^- \to \pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	148	1	149
150	$e^{+}e^{-} \rightarrow \mu^{+}\nu_{\mu}\nu_{\tau}\bar{\nu}_{\tau}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma^{gFSR}\gamma$	149	1	150
151	$e^{+}e^{-} \rightarrow e^{+}e^{-}\nu_{e}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma^{gFS}$	150	1	151
152	$e^{+}e^{-} \rightarrow e^{-}\nu_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}n\bar{p}\gamma^{gFSR}\gamma$	151	1	152
153	$e^{+}e^{-} \to e^{-}\bar{\nu}_{e}\mu^{-}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	152	1	153
154	$e^+e^- \to \pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^+K^-\gamma^{gFSR}\gamma$	153	1	154
155	$e^+e^-  o e^- \bar{\nu}_e \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^- \gamma^{gFSR} \gamma \gamma$	154	1	155
156	$e^+e^- o\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^-\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma}$	155	1	156
157	$e^{+}e^{-} \rightarrow e^{+}e^{+}\nu_{e}\nu_{e}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma^{gFSR}\gamma^{gFSR}\gamma$	156	1	157
158	$e^+e^- \rightarrow \mu^-\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^+\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	157	1	158
159	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}f_{0}(600)\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma$	158	1	159
160	$e^+e^- \to e^+e^-\nu_e\bar{\nu}_e\mu^+\nu_\mu\pi^+\pi^-\pi^-\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	159	1	160

index	event initial-final states	iEvtIFSts	nEvts	nCmltEvts
161	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^+ K^- f_0(600) \gamma \gamma$	160	1	161
162	$e^+e^- \to \mu^+\mu^-\nu_\mu\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-K^-K^-\gamma$	161	1	162
163	$e^+e^- \to \mu^-\bar{\nu}_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	162	1	163
164	$e^{+}e^{-} \rightarrow \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}p\bar{p}\gamma$	163	1	164
165	$e^+e^- \rightarrow e^+\nu_e\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+\gamma^{gFSR}\gamma^{gFSR}\gamma$	164	1	165
166	$e^+e^- ightarrow \mu^+\mu^- u_\muar{ u}_\mu K_L\pi^+\pi^+\pi^-K^-nar{n}\gamma\gamma\gamma\gamma\gamma\gamma$	165	1	166
167	$e^{+}e^{-} \rightarrow e^{+}e^{-}\nu_{\tau}\bar{\nu}_{\tau}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\bar{n}p\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	166	1	167
168	$e^+e^- \to K_L K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ K^+ K^- K^- \gamma \gamma \gamma \gamma \gamma \gamma \gamma$	167	1	168
169	$e^+e^- \rightarrow \pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^-K^-\gamma^{gFSR}\gamma^{gFSR}\gamma$	168	1	169
170	$e^{+}e^{-} \to \mu^{+}\mu^{-}\nu_{\mu}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{+}\gamma\gamma\gamma\gamma\gamma$	169	1	170
171	$e^+e^- \to K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- n \bar{n} \gamma \gamma$	170	1	171
172	$e^{+}e^{-} \to \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	171	1	172
173	$e^{+}e^{-} \rightarrow \pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}K^{-}\gamma$	172	1	173
174	$e^+e^- \to \mu^- \bar{\nu}_\mu \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- \pi^- K^+ K^- K^- \gamma^{gFSR} \gamma^{gFSR} \gamma \gamma$	173	1	174
175	$e^{+}e^{-} \rightarrow K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{-}K^{-}K^{-}K^{-}\gamma^{gFSR}\gamma$	174	1	175
176	$e^+e^- \to \nu_{\tau}\bar{\nu}_{\tau}\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-\bar{n}p\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	175	1	176
177	$e^+e^- \to e^-\bar{\nu}_e K_L K_L K_L \pi^+ \pi^+ \pi^- K^- \bar{n} p \gamma \gamma \gamma \gamma \gamma \gamma$	176	1	177
178	$e^+e^- \to K_L \pi^+ \pi^- K^+ K^- K^- \bar{n} p \gamma $	177	1	178
179	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}K^{-}K^{-}n\bar{n}\gamma\gamma$	178	1	179
180	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\gamma$	179	1	180
181	$e^+e^- ightarrow \mu^+ u_\mu\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-par p\gamma\gamma\gamma\gamma\gamma\gamma$	180	1	181
182	$e^+e^- \rightarrow \mu^+\nu_\mu\pi^+\pi^+\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^-\gamma^{gFSR}\gamma^{gFSR}\gamma$	181	1	182
183	$e^+e^- \to e^+\nu_e K_L \pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^-K^-\gamma$	182	1	183
184	$e^{+}e^{-} \rightarrow \mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}\gamma$	183	1	184
185	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\mu^{+}\nu_{\mu}\pi^{+}\pi^{+}\pi^{-}\pi^{-}n\bar{n}\gamma$	184	1	185
186	$e^+e^- \to e^+\nu_e K_L K_L \pi^+\pi^-\pi^-\pi^-K^+K^+\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	185	1	186
187	$e^{+}e^{-} \rightarrow \mu^{+}\mu^{+}\mu^{-}\nu_{\mu}\nu_{\mu}\bar{\nu}_{\mu}K_{L}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma$	186	1	187
188	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}K^{+}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma$	187	1	188
189	$e^+e^- \to e^-\bar{\nu}_e K_L K_L \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^- \gamma \gamma$	188	1	189
190	$e^{+}e^{-} \to K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}K^{-}\gamma$	189	1	190
191	$e^{+}e^{-} \to e^{+}\nu_{e}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{+}p\bar{p}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	190	1	191
192	$e^+e^- \to e^+e^-\nu_e\bar{\nu}_e K_L\pi^+\pi^+\pi^-\pi^-K^-\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	191	1	192
193	$e^{+}e^{-} \to K_{L}K_{L}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}\pi^{-}K^{-}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma$	192	1	193
194	$e^+e^- \rightarrow e^+\nu_e\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-K^+K^+K^-\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{gFSR}\gamma^{\gamma\gamma\gamma\gamma\gamma\gamma\gamma}$	193	1	194
195	$e^{+}e^{-} \rightarrow e^{+}\nu_{e}\pi^{+}\pi^{+}\pi^{-}\pi^{-}\pi^{-}\gamma^{gFSR}\gamma$	194	1	195
196	$e^+e^- o e^-e^-ar{ u}_ear{ u}_eK_LK_L\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-K^-nar{n}\gamma^{gFSR}\gamma\gamma\gamma\gamma\gamma\gamma\gamma\gamma$	195	1	196
197	$e^{+}e^{-} \rightarrow e^{+}e^{+}e^{-}\nu_{e}\mu^{+}\nu_{\mu}\pi^{-}\pi^{-}\pi^{-}K^{+}n\bar{n}\gamma^{gFSR}\gamma^{gFSR}\gamma$	196	1	197
198	$e^+e^- \to K_L \pi^+ \pi^+ \pi^- \pi^- \pi^- \pi^- K^+ n \bar{n} \gamma \gamma \gamma \gamma \gamma \gamma$	197	1	198
199	$e^+e^- \to e^-\bar{\nu}_e\mu^+\nu_\mu\pi^+\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-\pi^-\pi^-K^+K^+\gamma$	198	1	199
200	$e^{+}e^{-} \rightarrow e^{-}\bar{\nu}_{e}\mu^{-}\bar{\nu}_{\mu}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+}\pi^{+$	199	1	200

Table 3: Signal particle final states.

index	signal particle final states	iSigPFSts	nEtrs	nCmltEtrs
1	$D^0 o\pi^0\pi^+K^-$	0	13	13
2	$D^0  o \pi^+ K^-$	1	2	15