

Topology Analysis ^{*†‡§}

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[†]This package is implemented referring to a program called TOPO, which is first developed by Prof. Shuxian Du from Zhengzhou University and later extended and maintained by Prof. Gang Li from Institute of High Energy Physics, Chinese Academy of Sciences. The TOPO program has been widely used by colleagues in BESIII collaboration. Several years ago, when I was a Ph.D. student working on the BESIII experiment, I learned the idea of topology analysis and a lot of programming techniques from the TOPO program. So, I really appreciate the original works of Prof. Du and Prof. Li 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 2017, when I just started my post-doctoral research at Beihang University, my co-supervisor Prof. Chengping Shen reminded me that it could be a useful tool for the Belle II experiment as well. So, I revised and extended it, making it more well-rounded and suitable for the Belle II experiment. Now, it also applies to many other similar high energy physics experiments. Here, I would like to thank Prof. Du and Prof. Li for their original works, and Prof. Shen for his suggestion, guidance, support, and encouragement.

[‡]Besides, I would like to thank all of the people who have helped me in the development of the program. I am particularly grateful to Prof. Xingtao Huang for his comments on the principles and styles of the program, to Remco de Boer for his suggestions on the tex output and the use of GitHub, and to Xi Chen for his discussions on the core algorithms. I am especially indebted to Prof. Xiqing Hao, Longke Li, Xiaoping Qin, Ilya Komarov, Yubo Li, Guanda Gong, Suxian Li, Junhao Yin, Prof. Xiaolong Wang, Yeqi Chen, Hannah Wakeling, Hongrong Qi, Hui Li, Ning Cao, Sanjeeda Bharati Das, Kazuki Kojima, Tingting Han, Fang Yan, Lin Wang, Meiru An, and Noreen Rauls for their advice in extending and perfecting the program. Also, I thank Xi'an Xiong, Runqiu Ma, Wencheng Yan, Sen Jia, Lu Cao, Dong Liu, Hongpeng Wang, Jiawei Zhang, Jiajun Liu, Maoqiang Jing, Yi Zhang, Wei Shan, and Yadi Wang for their efforts in helping me test the program.

[§]The paper on the tool has been published by *Computer Physics Communications*. You can find this paper and the preprint corresponding to it in the links [Comput. Phys. Commun. 258 \(2021\) 107540](#) and [arXiv:2001.04016](#), respectively. If the tool really helps your researches, we would appreciate it very much if you could cite the paper in your publications.

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

rowNo	decay tree (decay initial-final states)	iDcyTr	nEtr	nCEtr
1	$e^+e^- \rightarrow \pi^+ K^0 K^+ K^- K^- \gamma^I, K^0 \rightarrow K_L^0$ ($e^+e^- \rightarrow K_L^0 \pi^+ K^+ K^- K^- \gamma^I$)	353	4	4
2	$e^+e^- \rightarrow \pi^0 \pi^+ \pi^- K^* \bar{K}^* K^+ K^-, K^* \rightarrow \pi^- K^+, \bar{K}^* \rightarrow \pi^+ K^-$ ($e^+e^- \rightarrow \pi^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^+ K^- K^-$)	315	3	7
3	$e^+e^- \rightarrow \pi^0 \pi^0 \pi^+ \pi^+ \pi^- \rho^- \omega K^+ K^-, \rho^- \rightarrow \pi^0 \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^-$)	1127	3	10
4	$e^+e^- \rightarrow \pi^0 \rho^0 \pi^+ \pi^+ \pi^- \rho^- K^+ K^{*-} \gamma^I, \rho^0 \rightarrow \pi^+ \pi^- \gamma^F, \rho^- \rightarrow \pi^0 \pi^-, K^{*-} \rightarrow \pi^0 K^-$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^- \gamma^I \gamma^F$)	34	2	12
5	$e^+e^- \rightarrow \pi^0 \pi^0 \rho^- \omega \bar{K}^0 K^+ K^+ K^-, \rho^- \rightarrow \pi^0 \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-, \bar{K}^0 \rightarrow K_L^0$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^0 \pi^0 K_L^0 \pi^+ \pi^- \pi^- K^+ K^+ K^-$)	36	2	14
6	$e^+e^- \rightarrow \pi^0 \pi^+ \pi^- \pi^- \eta K^+ K^- \bar{\Sigma}^0 \Sigma^+ \gamma^I \gamma^I \gamma^I, \eta \rightarrow \pi^0 \pi^+ \pi^-, \bar{\Sigma}^0 \rightarrow \bar{\Lambda} \gamma, \Sigma^+ \rightarrow \pi^+ n, \bar{\Lambda} \rightarrow \pi^+ \bar{p}$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^- n \bar{p} \gamma^I \gamma^I \gamma^I$)	68	2	16
7	$e^+e^- \rightarrow \pi^0 \pi^0 \pi^0 \pi^+ \pi^- \omega K^+ K^- \gamma^I, \omega \rightarrow \pi^0 \pi^+ \pi^-$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^- \gamma^I$)	102	2	18
8	$e^+e^- \rightarrow \pi^0 \bar{K}^0 K^* K^- K^{*+}, \bar{K}^0 \rightarrow K_L^0, K^* \rightarrow \pi^- K^+, K^{*+} \rightarrow \pi^0 K^+$ ($e^+e^- \rightarrow \pi^0 \pi^0 K_L^0 \pi^- K^+ K^+ K^-$)	149	2	20
9	$e^+e^- \rightarrow \pi^0 \pi^+ \pi^- \bar{K}^* K^+ n \bar{p} \gamma^I, \bar{K}^* \rightarrow \pi^0 \bar{K}^0, \bar{K}^0 \rightarrow K_L^0$ ($e^+e^- \rightarrow \pi^0 \pi^0 K_L^0 \pi^+ \pi^- K^+ n \bar{p} \gamma^I$)	163	2	22
10	$e^+e^- \rightarrow \pi^- \bar{K}^* K^{*+} \eta' \gamma^I, \bar{K}^* \rightarrow \pi^+ K^-, K^{*+} \rightarrow \pi^0 K^+, \eta' \rightarrow \pi^+ \pi^- \eta, \eta \rightarrow \gamma \gamma$ ($e^+e^- \rightarrow \pi^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^- \gamma^I \gamma \gamma$)	167	2	24
11	$e^+e^- \rightarrow \pi^0 \pi^- \rho^+ K^0 \bar{K}^* K^- K^{*+}, \rho^+ \rightarrow \pi^0 \pi^+, K^0 \rightarrow K_L^0, \bar{K}^* \rightarrow \pi^+ K^-, K^{*+} \rightarrow \pi^0 K^+$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^0 K_L^0 \pi^+ \pi^+ \pi^- K^+ K^- K^-$)	171	2	26
12	$e^+e^- \rightarrow \pi^0 \pi^0 \pi^0 \pi^0 \pi^0 \rho^0 \pi^- \bar{K}^* K^+ \gamma^I, \rho^0 \rightarrow \pi^+ \pi^-, \bar{K}^* \rightarrow \pi^+ K^-$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^- \gamma^I$)	186	2	28
13	$e^+e^- \rightarrow \pi^0 K^0 K^+ K^+ K^- \bar{n} \Xi^-, K^0 \rightarrow K_L^0, \Xi^- \rightarrow \pi^- \Lambda, \Lambda \rightarrow \pi^- p$ ($e^+e^- \rightarrow \pi^0 K_L^0 \pi^- \pi^- K^+ K^+ K^- \bar{n} p$)	194	2	30
14	$e^+e^- \rightarrow \pi^0 \pi^0 \pi^- \rho^+ K^* \bar{K}^* K^+ K^- \gamma^I \gamma^I, \rho^+ \rightarrow \pi^0 \pi^+, K^* \rightarrow \pi^- K^+, \bar{K}^* \rightarrow \pi^+ K^-$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ \pi^- K^+ K^+ K^- K^- \gamma^I \gamma^I$)	274	2	32
15	$e^+e^- \rightarrow \omega K^+ K^- K^{*+} K^{*-}, \omega \rightarrow \pi^0 \pi^+ \pi^-, K^{*+} \rightarrow \pi^0 K^+, K^{*-} \rightarrow \pi^0 K^-$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^0 \pi^+ \pi^- K^+ K^+ K^- K^-$)	292	2	34
16	$e^+e^- \rightarrow \rho^+ \rho^- K^+ K^- p \bar{p} \gamma^I \gamma^I, \rho^+ \rightarrow \pi^0 \pi^+, \rho^- \rightarrow \pi^0 \pi^-$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^+ \pi^- K^+ K^- p \bar{p} \gamma^I \gamma^I$)	294	2	36
17	$e^+e^- \rightarrow \pi^0 \pi^+ \pi^+ \rho^- K^* K^- \gamma^I, \rho^- \rightarrow \pi^0 \pi^-, K^* \rightarrow \pi^- K^+$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^- \gamma^I$)	311	2	38

rowNo	decay tree (decay initial-final states)	iDcyTr	nEtr	nCEtr
18	$e^+e^- \rightarrow \pi^0 \rho^+ K^* K^- K^- K^{*+}, \rho^+ \rightarrow \pi^0 \pi^+, K^* \rightarrow \pi^- K^+, K^{*+} \rightarrow \pi^+ K^0 \gamma^F, K^0 \rightarrow K_S^0, K_S^0 \rightarrow \pi^0 \pi^0$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^0 \pi^0 \pi^+ \pi^- K^+ K^- K^- \gamma^F$)	357	2	40
19	$e^+e^- \rightarrow \rho^0 \rho^0 \pi^+ \pi^- \pi^- \bar{K}^* K^{*+}, \rho^0 \rightarrow \pi^+ \pi^-, \rho^0 \rightarrow \pi^+ \pi^- \gamma^F, \bar{K}^* \rightarrow \pi^+ K^-, K^{*+} \rightarrow \pi^+ K^0, K^0 \rightarrow K_S^0,$ $K_S^0 \rightarrow \pi^0 \pi^0$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^+ \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^- \gamma^F$)	362	2	42
20	$e^+e^- \rightarrow \pi^0 \pi^+ \rho^+ \rho^- K^* K^- \gamma^I, \rho^+ \rightarrow \pi^0 \pi^+, \rho^- \rightarrow \pi^0 \pi^-, K^* \rightarrow \pi^- K^+$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ \pi^- K^+ K^- \gamma^I$)	368	2	44
21	$e^+e^- \rightarrow \pi^- \rho^+ \bar{K}^0 K^+ K^- p \bar{\Sigma}^- \gamma^I \gamma^I \gamma^I \gamma^I, \rho^+ \rightarrow \pi^0 \pi^+, \bar{K}^0 \rightarrow K_L^0, \bar{\Sigma}^- \rightarrow \pi^0 \bar{p}$ ($e^+e^- \rightarrow \pi^0 \pi^0 K_L^0 \pi^+ \pi^- K^+ K^- p \bar{p} \gamma^I \gamma^I \gamma^I \gamma^I$)	392	2	46
22	$e^+e^- \rightarrow \pi^0 \pi^+ \pi^- \rho^- \bar{K}^* K^+, \rho^- \rightarrow \pi^0 \pi^-, \bar{K}^* \rightarrow \pi^0 \bar{K}^0, \bar{K}^0 \rightarrow K_S^0, K_S^0 \rightarrow \pi^+ \pi^-$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^-$)	413	2	48
23	$e^+e^- \rightarrow \pi^0 \pi^+ K^0 K^+ K^- K^- \phi \gamma^I, K^0 \rightarrow K_L^0, \phi \rightarrow K^+ K^- \gamma^F$ ($e^+e^- \rightarrow \pi^0 K_L^0 \pi^+ K^+ K^+ K^- K^- \gamma^I \gamma^F$)	423	2	50
24	$e^+e^- \rightarrow \pi^0 \rho^0 \pi^+ K^0 K^{*-} \phi, \rho^0 \rightarrow \pi^+ \pi^- \gamma^F, K^0 \rightarrow K_S^0, K^{*-} \rightarrow \pi^- \bar{K}^0, \phi \rightarrow K^+ K^-, K_S^0 \rightarrow \pi^0 \pi^0,$ $\bar{K}^0 \rightarrow K_S^0, K_S^0 \rightarrow \pi^+ \pi^-$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^- \gamma^F$)	440	2	52
25	$e^+e^- \rightarrow \pi^0 \pi^0 \rho^0 \omega K^+ K^-, \rho^0 \rightarrow \pi^+ \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ \pi^- K^+ K^-$)	496	2	54
26	$e^+e^- \rightarrow \pi^+ \pi^- \rho^+ K^0 K^- \phi, \rho^+ \rightarrow \pi^0 \pi^+, K^0 \rightarrow K_S^0, \phi \rightarrow K^+ K^-, K_S^0 \rightarrow \pi^0 \pi^0$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ \pi^- K^+ K^- K^-$)	507	2	56
27	$e^+e^- \rightarrow K^0 \bar{K}^0 \phi \phi, K^0 \rightarrow K_S^0, \bar{K}^0 \rightarrow K_S^0, \phi \rightarrow K^+ K^-, \phi \rightarrow K^+ K^-, K_S^0 \rightarrow \pi^0 \pi^0,$ $K_S^0 \rightarrow \pi^0 \pi^0$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^0 \pi^0 K^+ K^+ K^- K^-$)	569	2	58
28	$e^+e^- \rightarrow \rho^0 \pi^+ \pi^+ K^* K^- \Lambda \bar{\Sigma}^{*-} \gamma^I, \rho^0 \rightarrow \pi^+ \pi^-, K^* \rightarrow \pi^- K^+, \Lambda \rightarrow e^- \bar{\nu}_e p, \bar{\Sigma}^{*-} \rightarrow \pi^- \bar{\Lambda}, \bar{\Lambda} \rightarrow \pi^0 \bar{n}$ ($e^+e^- \rightarrow e^- \bar{\nu}_e \pi^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^- \bar{n} p \gamma^I$)	578	2	60
29	$e^+e^- \rightarrow \pi^0 \pi^0 \pi^+ \pi^- \rho^+ K^* K^-, \rho^+ \rightarrow \pi^0 \pi^+, K^* \rightarrow \pi^- K^+$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ \pi^- K^+ K^-$)	586	2	62
30	$e^+e^- \rightarrow \pi^+ \pi^+ \pi^- \pi^- \omega K^+ K^-, \omega \rightarrow \pi^0 \pi^+ \pi^-$ ($e^+e^- \rightarrow \pi^0 \pi^+ \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ K^-$)	592	2	64
31	$e^+e^- \rightarrow \pi^0 \pi^0 \pi^+ \pi^- \pi^- \omega \bar{K}^0 K^+ \gamma^I \gamma^I, \omega \rightarrow \pi^0 \pi^+ \pi^-, \bar{K}^0 \rightarrow K_S^0, K_S^0 \rightarrow \pi^+ \pi^-$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ \pi^- \pi^- \pi^- K^+ \gamma^I \gamma^I$)	601	2	66
32	$e^+e^- \rightarrow \pi^0 \pi^+ \rho^- \omega K^+ K^-, \rho^- \rightarrow \pi^0 \pi^-, \omega \rightarrow \pi^0 \pi^+ \pi^-$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^0 \pi^+ \pi^+ \pi^- K^+ K^-$)	733	2	68
33	$e^+e^- \rightarrow \pi^0 \pi^- \pi^- \omega K^+ K^- \bar{\Delta}^+ p \gamma^I, \omega \rightarrow \pi^0 \pi^+ \pi^-, \bar{\Delta}^+ \rightarrow \pi^+ \bar{n}$ ($e^+e^- \rightarrow \pi^0 \pi^0 \pi^+ \pi^+ \pi^- \pi^- K^+ K^- \bar{n} p \gamma^I$)	772	2	70
34	$e^+e^- \rightarrow \rho^- \eta \eta \bar{K}^0 K^+ K^- K^{*+}, \rho^- \rightarrow \pi^0 \pi^-, \eta \rightarrow \gamma \gamma, \eta \rightarrow \gamma \gamma, \bar{K}^0 \rightarrow K_L^0, K^{*+} \rightarrow \pi^0 K^+$ ($e^+e^- \rightarrow \pi^0 \pi^0 K_L^0 \pi^- K^+ K^+ K^- \gamma \gamma \gamma \gamma$)	779	2	72

rowNo	decay tree (decay initial-final states)	iDcyTr	nEtr	nCEtr
35	$e^+e^- \rightarrow \pi^0\pi^0\pi^+\pi^-\rho^-K^+K^-, \rho^- \rightarrow \pi^0\pi^-$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-$)	780	2	74
36	$e^+e^- \rightarrow \pi^0\pi^+K^0K^-\phi\phi\gamma^I, K^0 \rightarrow K_L^0, \phi \rightarrow K^+K^-, \phi \rightarrow K^+K^-$ ($e^+e^- \rightarrow \pi^0K_L^0\pi^+K^+K^+K^-K^-K^-\gamma^I$)	806	2	76
37	$e^+e^- \rightarrow \pi^0\pi^0K^+K^+K^-K^-K^{*+}K^{*-}, K^{*+} \rightarrow \pi^+K^0, K^{*-} \rightarrow \pi^0K^-, K^0 \rightarrow K_L^0$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0K_L^0\pi^+K^+K^+K^-K^-$)	807	2	78
38	$e^+e^- \rightarrow \pi^+\rho^-K^0\bar{K}^0K^+K^-\phi\gamma^I\gamma^I, \rho^- \rightarrow \pi^0\pi^-, K^0 \rightarrow K_S^0, \bar{K}^0 \rightarrow K_L^0, \phi \rightarrow K^+K^-, K_S^0 \rightarrow \pi^+\pi^-$ ($e^+e^- \rightarrow \pi^0K_L^0\pi^+\pi^+\pi^-\pi^-K^+K^+K^-K^-\gamma^I\gamma^I$)	810	2	80
39	$e^+e^- \rightarrow \pi^+\pi^-K^+K^-p\bar{p}\gamma^I$ ($e^+e^- \rightarrow \pi^+\pi^-K^+K^-p\bar{p}\gamma^I$)	832	2	82
40	$e^+e^- \rightarrow \pi^0\rho^0\pi^+\pi^-K^*\bar{K}^*, \rho^0 \rightarrow \pi^+\pi^-\gamma^F, K^* \rightarrow \pi^-K^+, \bar{K}^* \rightarrow \pi^+K^-$ ($e^+e^- \rightarrow \pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^+K^-\gamma^F$)	834	2	84
41	$e^+e^- \rightarrow \pi^+\pi^-\pi^-\bar{K}^*K^+K^-K^{*+}\gamma^I\gamma^I\gamma^I, \bar{K}^* \rightarrow \pi^+K^-, K^{*+} \rightarrow \pi^0K^+$ ($e^+e^- \rightarrow \pi^0\pi^+\pi^+\pi^-\pi^-K^+K^+K^-K^-\gamma^I\gamma^I\gamma^I$)	840	2	86
42	$e^+e^- \rightarrow \pi^+\pi^+\pi^-K^*K^-, K^* \rightarrow \pi^-K^+$ ($e^+e^- \rightarrow \pi^+\pi^+\pi^-\pi^-K^+K^-$)	841	2	88
43	$e^+e^- \rightarrow \pi^0\pi^+\omega K^*K^-\phi\gamma^I, \omega \rightarrow \pi^0\pi^+\pi^-, K^* \rightarrow \pi^0K^0, \phi \rightarrow K^+K^-, K^0 \rightarrow K_L^0$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+K^-K^-\gamma^I$)	862	2	90
44	$e^+e^- \rightarrow \pi^0\rho^0\pi^+\omega K^*K^-, \rho^0 \rightarrow \pi^+\pi^-, \omega \rightarrow \pi^0\pi^+\pi^-, K^* \rightarrow \pi^-K^+$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-$)	867	2	92
45	$e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^-\rho^+\eta K^-K^{*+}\gamma^I, \rho^+ \rightarrow \pi^0\pi^+, \eta \rightarrow \pi^0\pi^+\pi^-, K^{*+} \rightarrow \pi^0K^+$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^-K^-\gamma^I$)	873	2	94
46	$e^+e^- \rightarrow \pi^+\pi^-\pi^-\bar{K}^*K^+K^-K^{*+}\gamma^I, \bar{K}^* \rightarrow \pi^0\bar{K}^0, K^{*+} \rightarrow \pi^0K^+, \bar{K}^0 \rightarrow K_L^0$ ($e^+e^- \rightarrow \pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+K^+K^-\gamma^I$)	881	2	96
47	$e^+e^- \rightarrow \pi^0\pi^+\pi^-\rho^+K^*K^+K^-K^{*-}\gamma^I\gamma^I, \rho^+ \rightarrow \pi^0\pi^+, K^* \rightarrow \pi^-K^+, K^{*-} \rightarrow \pi^0K^-$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^+K^-K^-\gamma^I\gamma^I$)	911	2	98
48	$e^+e^- \rightarrow \pi^+K^+K^-K^-n\bar{\Lambda}, \bar{\Lambda} \rightarrow \pi^0\bar{n}$ ($e^+e^- \rightarrow \pi^0\pi^+K^+K^-K^-n\bar{n}$)	934	2	100
49	$e^+e^- \rightarrow \pi^0\pi^0\pi^0\bar{K}^0K^*K^-K^{*+}\gamma^I\gamma^I, \bar{K}^0 \rightarrow K_S^0, K^* \rightarrow \pi^-K^+, K^{*+} \rightarrow \pi^+K^0, K_S^0 \rightarrow \pi^+\pi^-, K^0 \rightarrow K_L^0$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+K^-K^-\gamma^I\gamma^I$)	939	2	102
50	$e^+e^- \rightarrow \pi^+\pi^-\rho^-K^+K^+K^-n\bar{\Lambda}\gamma^I, \rho^- \rightarrow \pi^0\pi^-, \Lambda \rightarrow \pi^0n$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^+\pi^-\pi^-K^+K^+K^-n\bar{n}\gamma^I$)	946	2	104
51	$e^+e^- \rightarrow \pi^0\rho^0\pi^+\pi^-K^+K^+K^-K^{*-}, \rho^0 \rightarrow \pi^+\pi^-, K^{*-} \rightarrow \pi^0K^-$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^+K^-K^-$)	980	2	106
52	$e^+e^- \rightarrow \pi^+\pi^+\pi^-\rho^+\rho^-K^*K^-\gamma^I\gamma^I, \rho^+ \rightarrow \pi^0\pi^+, \rho^- \rightarrow \pi^0\pi^-, K^* \rightarrow \pi^0K^0, K^0 \rightarrow K_L^0$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-\pi^-K^-\gamma^I\gamma^I$)	981	2	108

rowNo	decay tree (decay initial-final states)	iDcyTr	nEtr	nCEtr
53	$e^+e^- \rightarrow \pi^0\pi^0\pi^0\eta\eta K^+K^-\gamma^I, \eta \rightarrow \gamma\gamma, \eta \rightarrow \pi^0\pi^0\pi^0, \pi^0 \rightarrow e^+e^-\gamma^F$ ($e^+e^- \rightarrow e^+e^-\pi^0\pi^0\pi^0\pi^0\pi^0 K^+K^-\gamma^I\gamma^F\gamma\gamma$)	991	2	110
54	$e^+e^- \rightarrow \pi^+\pi^+\pi^-\pi^-\rho^-\bar{K}^0 K^+\gamma^I\gamma^I, \rho^- \rightarrow \pi^0\pi^-, \bar{K}^0 \rightarrow K_S^0, K_S^0 \rightarrow \pi^0\pi^0$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^- K^+\gamma^I\gamma^I$)	1017	2	112
55	$e^+e^- \rightarrow \pi^0\pi^+\pi^- K^{*+}K^{*-}\gamma^I\gamma^I, K^{*+} \rightarrow \pi^+K^0, K^{*-} \rightarrow \pi^0K^-, K^0 \rightarrow K_L^0$ ($e^+e^- \rightarrow \pi^0\pi^0 K_L^0\pi^+\pi^+\pi^- K^-\gamma^I\gamma^I$)	1063	2	114
56	$e^+e^- \rightarrow \pi^0 K^{*+}K^{*-}\phi, K^{*+} \rightarrow \pi^0 K^+, K^{*-} \rightarrow \pi^-\bar{K}^0, \phi \rightarrow K^+K^-, \pi^0 \rightarrow e^+e^-\gamma^F, \bar{K}^0 \rightarrow K_L^0$ ($e^+e^- \rightarrow e^+e^-\pi^0 K_L^0\pi^- K^+K^+K^-\gamma^F$)	1077	2	116
57	$e^+e^- \rightarrow \pi^+\rho^+\rho^- K^0 K^+K^-K^-, \rho^+ \rightarrow \pi^0\pi^+, \rho^- \rightarrow \pi^0\pi^-, K^0 \rightarrow K_L^0, K_L^0 \rightarrow \pi^0\pi^0\pi^0$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^- K^+K^-K^-$)	1078	2	118
58	$e^+e^- \rightarrow \pi^-\rho^-\bar{K}^0\bar{K}^0 K^+K^{*+}\gamma^I, \rho^- \rightarrow \pi^0\pi^-, \bar{K}^0 \rightarrow K_L^0, \bar{K}^0 \rightarrow K_L^0, K^{*+} \rightarrow \pi^+K^0, K^0 \rightarrow K_S^0,$ $K_S^0 \rightarrow \pi^0\pi^0$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0 K_L^0 K_L^0\pi^+\pi^-\pi^- K^+\gamma^I$)	1089	2	120
59	$e^+e^- \rightarrow \pi^0\pi^0\pi^-\rho^+\rho^+ K^*K^-, \rho^+ \rightarrow \pi^0\pi^+, \rho^+ \rightarrow \pi^0\pi^+, K^* \rightarrow \pi^-K^+$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^- K^+K^-$)	1100	2	122
60	$e^+e^- \rightarrow K^0\bar{K}^0 K^+K^-K^-K^{*+}, K^0 \rightarrow K_L^0, \bar{K}^0 \rightarrow K_L^0, K^{*+} \rightarrow \pi^0 K^+$ ($e^+e^- \rightarrow \pi^0 K_L^0 K_L^0 K^+K^+K^-K^-$)	1102	2	124
61	$e^+e^- \rightarrow \pi^0\pi^0\pi^-\rho^+ K^{*+}K^{*-}\phi\gamma^I\gamma^I, \rho^+ \rightarrow \pi^0\pi^+, K^{*+} \rightarrow \pi^+K^0, K^{*-} \rightarrow \pi^0K^-, \phi \rightarrow K^+K^-, K^0 \rightarrow K_L^0$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^0 K_L^0\pi^+\pi^+\pi^- K^+K^-K^-\gamma^I\gamma^I\gamma^I$)	1111	2	126
62	$e^+e^- \rightarrow \pi^0\pi^+\pi^-\pi^-\rho^+ K^+K^+K^-K^-\gamma^I, \rho^+ \rightarrow \pi^0\pi^+$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^+\pi^+\pi^-\pi^- K^+K^+K^-K^-\gamma^I$)	1142	2	128
63	$e^+e^- \rightarrow \pi^0\pi^0\rho^0\rho^0\pi^+K^0 K^+K^-K^-\gamma^I\gamma^I, \rho^0 \rightarrow \pi^+\pi^-, \rho^0 \rightarrow \pi^+\pi^-, K^0 \rightarrow K_S^0, K_S^0 \rightarrow \pi^0\pi^0$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^- K^+K^-K^-\gamma^I\gamma^I$)	1204	2	130
64	$e^+e^- \rightarrow \pi^0\pi^0\pi^+\omega K^0 K^+K^-K^-, \omega \rightarrow \pi^0\pi^+\pi^-, K^0 \rightarrow K_S^0, K_S^0 \rightarrow \pi^0\pi^0$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^- K^+K^-K^-$)	1210	2	132
65	$e^+e^- \rightarrow \pi^+K^0 K^0\bar{K}^* K^-\phi\gamma^I, K^0 \rightarrow K_L^0, K^0 \rightarrow K_S^0, \bar{K}^* \rightarrow \pi^+K^-, \phi \rightarrow K^+K^-, K_S^0 \rightarrow \pi^0\pi^0$ ($e^+e^- \rightarrow \pi^0\pi^0 K_L^0\pi^+\pi^+ K^+K^-K^-K^-\gamma^I$)	1271	2	134
66	$e^+e^- \rightarrow \pi^+\pi^-\pi^-\pi^-\rho^+ \bar{K}^* K^+\gamma^I, \rho^+ \rightarrow \pi^0\pi^+, \bar{K}^* \rightarrow \pi^+K^-$ ($e^+e^- \rightarrow \pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^- K^+K^-\gamma^I$)	1287	2	136
67	$e^+e^- \rightarrow \pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\rho^- K^+K^-\gamma^I\gamma^I, \rho^- \rightarrow \pi^0\pi^-$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^- K^+K^-\gamma^I\gamma^I$)	1311	2	138
68	$e^+e^- \rightarrow \pi^-\bar{K}^* K^+K^+K^- K^{*+}K^{*-}, \bar{K}^* \rightarrow \pi^+K^-, K^{*+} \rightarrow \pi^+K^0, K^{*-} \rightarrow \pi^-\bar{K}^0, K^0 \rightarrow K_L^0, \bar{K}^0 \rightarrow K_L^0$ ($e^+e^- \rightarrow K_L^0 K_L^0\pi^+\pi^+\pi^-\pi^- K^+K^+K^-K^-$)	1388	2	140
69	$e^+e^- \rightarrow \pi^0\rho^0 K^0\bar{K}^0 K^+K^-\gamma^I\gamma^I, \rho^0 \rightarrow \pi^+\pi^-, K^0 \rightarrow K_S^0, \bar{K}^0 \rightarrow K_L^0, K_S^0 \rightarrow \pi^+\pi^-$ ($e^+e^- \rightarrow \pi^0 K_L^0\pi^+\pi^+\pi^-\pi^- K^+K^-\gamma^I\gamma^I$)	1454	2	142
70	$e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^+\rho^-\eta K^+K^-\phi\gamma^I, \rho^- \rightarrow \pi^0\pi^-, \eta \rightarrow \pi^0\pi^0\pi^0, \phi \rightarrow K^+K^-$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^0\pi^0\pi^0\pi^+\pi^- K^+K^+K^-K^-\gamma^I$)	1455	2	144

rowNo	decay tree (decay initial-final states)	iDcyTr	nEtr	nCEtr
71	$e^+e^- \rightarrow \pi^+\pi^-\rho^-\bar{K}^0K^+\phi, \rho^- \rightarrow \pi^0\pi^-, \bar{K}^0 \rightarrow K_L^0, \phi \rightarrow K^+K^-$ ($e^+e^- \rightarrow \pi^0K_L^0\pi^+\pi^-\pi^-K^+K^+K^-$)	1464	2	146
72	$e^+e^- \rightarrow \rho^0\pi^+\pi^-\pi^-\rho^+\omega K^+K^-, \rho^0 \rightarrow \pi^+\pi^-\gamma^F, \rho^+ \rightarrow \pi^0\pi^+\gamma^F, \omega \rightarrow \pi^0\gamma$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-\gamma^F\gamma^F\gamma$)	3	1	147
73	$e^+e^- \rightarrow \pi^0\pi^0\pi^+\pi^-\pi^-\rho^+\bar{K}^0K^*, \rho^+ \rightarrow \pi^0\pi^+, \bar{K}^0 \rightarrow K_S^0, K^* \rightarrow \pi^-K^+$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^+\pi^-\pi^-\pi^-K_S^0K^+$)	4	1	148
74	$e^+e^- \rightarrow \pi^0\pi^+\pi^-\bar{K}^0K^*\gamma^I\gamma^I, \bar{K}^0 \rightarrow K_L^0, K^* \rightarrow \pi^-K^+$ ($e^+e^- \rightarrow \pi^0K_L^0\pi^+\pi^-\pi^-K^+\gamma^I\gamma^I$)	5	1	149
75	$e^+e^- \rightarrow \pi^0\pi^+\pi^+\pi^-\rho^-K^+K^{*-}\phi, \rho^- \rightarrow \pi^0\pi^-, K^{*-} \rightarrow \pi^0K^-, \phi \rightarrow K^+K^-$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^+K^-K^-$)	6	1	150
76	$e^+e^- \rightarrow \rho^-\bar{K}^*K^+K^+K^-K^-\gamma^I\gamma^I, \rho^- \rightarrow \pi^0\pi^-, \bar{K}^* \rightarrow \pi^+K^-$ ($e^+e^- \rightarrow \pi^0\pi^+\pi^-K^+K^+K^-K^-\gamma^I\gamma^I$)	7	1	151
77	$e^+e^- \rightarrow \pi^0\pi^-\rho^+\bar{K}^*K^+\gamma^I, \rho^+ \rightarrow \pi^0\pi^+, \bar{K}^* \rightarrow \pi^+K^-$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^-\gamma^I$)	8	1	152
78	$e^+e^- \rightarrow \bar{K}^0K^*K^+K^{*-}\phi\gamma^I, \bar{K}^0 \rightarrow K_S^0, K^* \rightarrow \pi^-K^+, K^{*-} \rightarrow \pi^0K^-, \phi \rightarrow K^+K^-, K_S^0 \rightarrow \pi^0\pi^0$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^-K^+K^+K^+K^-\gamma^I$)	9	1	153
79	$e^+e^- \rightarrow \pi^0\pi^0\pi^0\rho^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-\gamma^I\gamma^I, \rho^0 \rightarrow \pi^+\pi^-$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-\gamma^I\gamma^I$)	10	1	154
80	$e^+e^- \rightarrow \rho^+\eta K^0K^-K^{*+}K^{*-}, \rho^+ \rightarrow \pi^0\pi^+, \eta \rightarrow \gamma\gamma, K^0 \rightarrow K_S^0, K^{*+} \rightarrow \pi^0K^+, K^{*-} \rightarrow \pi^0K^-,$ $K_S^0 \rightarrow \pi^0\pi^0$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^0\pi^+\pi^+K^+K^-K^-\gamma\gamma$)	11	1	155
81	$e^+e^- \rightarrow \eta K^0\bar{K}^*\phi\gamma^I\gamma^I, \eta \rightarrow \gamma\gamma, K^0 \rightarrow K_L^0, \bar{K}^* \rightarrow \pi^+K^-, \phi \rightarrow K^+K^-$ ($e^+e^- \rightarrow K_L^0\pi^+K^+K^-K^-\gamma^I\gamma^I\gamma\gamma$)	12	1	156
82	$e^+e^- \rightarrow \rho^0\pi^+\pi^+\pi^-\bar{K}^0K^+K^-K^-, \rho^0 \rightarrow \pi^+\pi^-, K^0 \rightarrow K_L^0$ ($e^+e^- \rightarrow K_L^0\pi^+\pi^+\pi^-\pi^-K^+K^-K^-$)	13	1	157
83	$e^+e^- \rightarrow \pi^+\pi^-K^-K^-K^{*+}K^{*+}\gamma^I\gamma^I\gamma^I, K^{*+} \rightarrow \pi^0K^+, K^{*+} \rightarrow \pi^0K^+$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^+\pi^-K^+K^+K^-K^-\gamma^I\gamma^I\gamma^I$)	14	1	158
84	$e^+e^- \rightarrow \pi^0\pi^0\pi^+K^0\bar{K}^0K^*K^-\gamma^I, \pi^0 \rightarrow e^+e^-\gamma^F, K^0 \rightarrow K_L^0, \bar{K}^0 \rightarrow K_L^0, K^* \rightarrow \pi^-K^+, K_L^0 \rightarrow \pi^0\pi^+\pi^-$ ($e^+e^- \rightarrow e^+e^-\pi^0\pi^0K_L^0\pi^+\pi^-\pi^-K^+K^-\gamma^I\gamma^F$)	15	1	159
85	$e^+e^- \rightarrow \pi^0\pi^-\bar{K}^*K^+K^+K^{*-}\gamma^I, \bar{K}^* \rightarrow \pi^+K^-, K^{*-} \rightarrow \pi^-\bar{K}^0, \bar{K}^0 \rightarrow K_S^0, K_S^0 \rightarrow \pi^+\pi^-$ ($e^+e^- \rightarrow \pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^+K^-\gamma^I$)	16	1	160
86	$e^+e^- \rightarrow \pi^0\pi^0\rho^-\bar{K}^*K^+, \rho^- \rightarrow \pi^0\pi^-, \bar{K}^* \rightarrow \pi^+K^-$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^+\pi^-K^+K^-$)	17	1	161
87	$e^+e^- \rightarrow \pi^0\pi^0\pi^-\omega\bar{K}^0K^+\phi\gamma^I\gamma^I, \omega \rightarrow \pi^0\pi^+\pi^-, \bar{K}^0 \rightarrow K_S^0, \phi \rightarrow K^+K^-, K_S^0 \rightarrow \pi^+\pi^-$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+K^+K^-\gamma^I\gamma^I$)	18	1	162
88	$e^+e^- \rightarrow \pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\rho^-\rho^-\bar{K}^0K^+\gamma^I, \rho^- \rightarrow \pi^0\pi^-, \rho^- \rightarrow \pi^0\pi^-, \bar{K}^0 \rightarrow K_S^0, K_S^0 \rightarrow \pi^+\pi^-$ ($e^+e^- \rightarrow \pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^I$)	19	1	163

rowNo	decay tree (decay initial-final states)	iDcyTr	nEtr	nCEtr
89	$e^+e^- \rightarrow \pi^0\pi^-\pi^-\rho^+\bar{K}^0K^+K^-K^{*+}\gamma^I\gamma^I, \rho^+ \rightarrow \pi^0\pi^+, \bar{K}^0 \rightarrow K_S^0, K^{*+} \rightarrow \pi^0K^+, K_S^0 \rightarrow \pi^+\pi^-$ ($e^+e^- \dashrightarrow \pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^+K^-\gamma^I\gamma^I$)	20	1	164
90	$e^+e^- \rightarrow \pi^+\rho^-K^0K^0\bar{K}^*\bar{K}^*\gamma^I, \rho^- \rightarrow \pi^0\pi^-, K^0 \rightarrow K_S^0, K^0 \rightarrow K_S^0, \bar{K}^* \rightarrow \pi^+K^-, \bar{K}^* \rightarrow \pi^+K^-,$ $K_S^0 \rightarrow \pi^+\pi^-, K_S^0 \rightarrow \pi^0\pi^0$ ($e^+e^- \dashrightarrow \pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-K^-K^-\gamma^I$)	21	1	165
91	$e^+e^- \rightarrow \pi^0\rho^0\rho^0\pi^-\bar{K}^*K^+\gamma^I, \rho^0 \rightarrow \pi^+\pi^-, \rho^0 \rightarrow \pi^+\pi^-, \bar{K}^* \rightarrow \pi^0\bar{K}^0, \bar{K}^0 \rightarrow K_S^0, K_S^0 \rightarrow \pi^0\pi^0$ ($e^+e^- \dashrightarrow \pi^0\pi^0\pi^0\pi^0\pi^+\pi^+\pi^-\pi^-K^+\gamma^I$)	22	1	166
92	$e^+e^- \rightarrow \pi^0\rho^0\pi^0\pi^-\bar{K}^*K^{*+}\phi, \bar{K}^* \rightarrow \pi^0\bar{K}^0, K^{*+} \rightarrow \pi^0K^+, \phi \rightarrow K^+K^-, \bar{K}^0 \rightarrow K_L^0$ ($e^+e^- \dashrightarrow \pi^0\pi^0\pi^0\pi^0\pi^+\pi^-\pi^-K^+K^+K^-$)	23	1	167
93	$e^+e^- \rightarrow \pi^0\rho^0K^0\bar{K}^0K^-K^{*+}\gamma^I, \rho^0 \rightarrow \pi^+\pi^-, K^0 \rightarrow K_L^0, \bar{K}^0 \rightarrow K_S^0, K^{*+} \rightarrow \pi^0K^+, K_S^0 \rightarrow \pi^0\pi^0$ ($e^+e^- \dashrightarrow \pi^0\pi^0\pi^0\pi^0K_L^0\pi^+\pi^-K^+K^-\gamma^I$)	24	1	168
94	$e^+e^- \rightarrow \pi^0\pi^+\pi^+\rho^-K^0K^{*-}\gamma^I\gamma^I, \rho^- \rightarrow \pi^0\pi^-, K^0 \rightarrow K_L^0, K^{*-} \rightarrow \pi^0K^-$ ($e^+e^- \dashrightarrow \pi^0\pi^0\pi^0K_L^0\pi^+\pi^+\pi^-K^-\gamma^I\gamma^I$)	25	1	169
95	$e^+e^- \rightarrow \pi^0\pi^+\pi^+\pi^-\rho^-\omega K^*\bar{K}^*\gamma^I\gamma^I, \rho^- \rightarrow \pi^0\pi^-, \omega \rightarrow \pi^0\pi^+\pi^-, K^* \rightarrow \pi^-K^+, \bar{K}^* \rightarrow \pi^+K^-$ ($e^+e^- \dashrightarrow \pi^0\pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+K^-\gamma^I\gamma^I$)	26	1	170
96	$e^+e^- \rightarrow \pi^0\pi^0\rho^0\pi^+\pi^-\bar{K}^0K^*, \rho^0 \rightarrow \pi^+\pi^-, \bar{K}^0 \rightarrow K_S^0, K^* \rightarrow \pi^-K^+$ ($e^+e^- \dashrightarrow \pi^0\pi^0\pi^+\pi^+\pi^-\pi^-\pi^-K_S^0K^+$)	27	1	171
97	$e^+e^- \rightarrow \pi^+\omega K^0K^*\bar{K}^*K^-\gamma^I, \omega \rightarrow \pi^0\pi^+\pi^-, K^0 \rightarrow K_L^0, K^* \rightarrow \pi^-K^+, \bar{K}^* \rightarrow \pi^+K^-$ ($e^+e^- \dashrightarrow \pi^0K_L^0\pi^+\pi^+\pi^+\pi^-\pi^-K^+K^-K^-\gamma^I$)	28	1	172
98	$e^+e^- \rightarrow \rho^0\pi^-\bar{K}^0K^+K^+K^-\gamma^I, \rho^0 \rightarrow \pi^+\pi^-, \bar{K}^0 \rightarrow K_L^0$ ($e^+e^- \dashrightarrow K_L^0\pi^+\pi^-\pi^-K^+K^+K^-\gamma^I$)	29	1	173
99	$e^+e^- \rightarrow \rho^0\pi^-\omega\bar{K}^*K^+\gamma^I, \rho^0 \rightarrow \pi^+\pi^-, \omega \rightarrow \pi^0\pi^+\pi^-, \bar{K}^* \rightarrow \pi^0\bar{K}^0, \bar{K}^0 \rightarrow K_S^0, K_S^0 \rightarrow \pi^+\pi^-$ ($e^+e^- \dashrightarrow \pi^0\pi^0\pi^+\pi^+\pi^+\pi^-\pi^-\pi^-K^+\gamma^I$)	30	1	174
100	$e^+e^- \rightarrow K^+K^+K^-K^{*-}\phi\gamma^I, K^{*-} \rightarrow \pi^0K^-, \phi \rightarrow \pi^-\rho^+, \rho^+ \rightarrow \pi^0\pi^+\gamma^F$ ($e^+e^- \dashrightarrow \pi^0\pi^0\pi^+\pi^-K^+K^+K^-K^-\gamma^I\gamma^F$)	31	1	175
rest	$e^+e^- \rightarrow$ others (1382 in total) ($e^+e^- \dashrightarrow$ corresponding to others)	—	1382	1557