

Table 5 Character table of the G_{480} group of Zundel cation. Class names are defined in Table 6.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
A_1^+	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A_2^+	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
A_3^+	1	-1	1	1	-1	1	1	-1	1	1	-1	1	-1	1	1	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	1
A_4^+	1	-1	1	1	-1	1	1	-1	1	1	-1	1	-1	1	1	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	1
G_1^+	4	2	1	0	0	-1	-1	4	2	1	0	0	-1	-1	0	1	0	1	-2	-1	-4	0	1	0	1	-2	-1	-4
G_2^+	4	2	1	0	0	-1	-1	4	2	1	0	0	-1	-1	0	-1	0	-1	2	1	4	0	-1	0	-1	2	1	4
G_3^+	4	-2	1	0	0	1	-1	4	-2	1	0	0	1	-1	0	1	0	-1	-2	1	4	0	1	0	-1	-2	1	4
G_4^+	4	-2	1	0	0	1	-1	4	-2	1	0	0	1	-1	0	-1	0	1	-2	1	4	0	1	0	-1	-2	1	4
H_1^+	5	1	-1	1	-1	1	0	5	1	-1	1	-1	1	0	1	1	-1	0	1	-1	5	1	1	-1	0	1	-1	5
H_2^+	5	1	-1	1	-1	1	0	5	1	-1	1	-1	1	0	-1	-1	1	0	-1	-1	5	-1	-1	1	0	-1	-1	5
H_3^+	5	-1	-1	1	1	-1	0	5	-1	-1	1	1	-1	0	1	-1	1	0	-1	-1	5	1	-1	1	0	-1	-1	5
H_4^+	5	-1	-1	1	1	-1	0	5	-1	-1	1	1	-1	0	-1	-1	1	0	-1	-1	5	-1	-1	1	0	-1	-1	5
I_1^+	6	0	0	-2	0	0	1	6	0	0	-2	0	0	1	2	0	0	-1	0	0	-6	2	0	0	-1	0	1	-5
I_2^+	6	0	0	-2	0	0	1	6	0	0	-2	0	0	1	-2	0	0	-1	0	0	-6	2	0	0	-1	0	1	-5
A_1^-	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1
A_2^-	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1
A_3^-	1	-1	1	1	-1	1	1	-1	-1	1	-1	1	-1	1	1	-1	1	-1	-1	-1	-1	1	1	1	1	1	1	1
A_4^-	1	-1	1	1	-1	1	1	-1	-1	1	-1	1	-1	1	1	-1	1	-1	-1	-1	-1	1	1	1	1	1	1	1
G_1^-	4	2	1	0	0	1	-1	4	2	1	0	0	1	-1	0	-1	0	1	-2	-1	-4	0	1	0	-1	0	-1	-4
G_2^-	4	2	1	0	0	1	-1	4	2	1	0	0	1	-1	0	-1	0	-1	2	1	-4	0	1	0	-1	0	-1	-4
G_3^-	4	-2	1	0	0	-1	1	4	-2	1	0	0	-1	1	0	-1	0	1	-2	1	-4	0	1	0	-1	0	-1	-4
G_4^-	4	-2	1	0	0	-1	1	4	-2	1	0	0	-1	1	0	-1	0	1	-2	1	-4	0	1	0	-1	0	-1	-4
H_1^-	5	1	-1	1	-1	1	0	5	-1	1	-1	1	-1	0	1	1	-1	0	1	-1	5	-1	-1	1	0	-1	1	-5
H_2^-	5	1	-1	1	-1	1	0	5	-1	1	-1	1	-1	0	1	1	-1	0	1	-1	5	-1	-1	1	0	-1	1	-5
H_3^-	5	-1	-1	1	1	-1	0	5	-1	-1	1	1	-1	0	-1	-1	1	0	-1	-1	5	1	-1	1	0	-1	1	-5
H_4^-	5	-1	-1	1	1	-1	0	5	-1	-1	1	1	-1	0	-1	-1	1	0	-1	-1	5	1	-1	1	0	-1	1	-5
I_1^-	6	0	0	-2	0	0	1	6	0	0	-2	0	0	1	2	0	0	-1	0	0	-6	2	0	0	-1	0	1	-5
I_2^-	6	0	0	-2	0	0	1	6	0	0	-2	0	0	1	-2	0	0	-1	0	0	-6	2	0	0	-1	0	1	-5

Table 6 Definitions of classes in the G_{480} group of Zundel cation. Class name, number of elements in the class and a representative symmetry element of the class are in columns 1–3, respectively.

Class	size	element
1	1	E
2	10	(45)
3	20	(345)
4	15	(23)(45)
5	30	(2345)
6	20	(12)(345)
7	24	(12345)
8	1	E^*
9	10	(45)*
10	20	(345)*
11	15	(23)(45)*
12	30	(2345)*
13	20	(12)(345)*
14	24	(12345)*
15	15	(AB)(14)(23)
16	20	(AB)(154)(23)
17	30	(AB)(1324)
18	24	(AB)(15324)
19	10	(AB)(14)
20	20	(AB)(154)
21	1	(AB)
22	15	(AB)(14)(23)*
23	20	(AB)(154)(23)*
24	30	(AB)(1324)*
25	24	(AB)(15324)*
26	10	(AB)(14)*
27	20	(AB)(154)*
28	1	(AB)*