No. 23 C_{6h} 6/m [hexagonal] (polar)

表 1 rank 0

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
1	A_g	Ag	_	_	$\mathbb{Q}_0^{(h,A_g)}$	$\mathtt{Qh}(\mathtt{0},\mathtt{Ag},,)$	C_0

表 2 rank 1

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
2	A_u	Au	_	-	$\mathbb{Q}_1^{(h,A_u)}$	$\mathtt{Qh}(\mathtt{1},\mathtt{Au},,)$	C_0
3	E_{1u}	E1u	_	0	$\mathbb{Q}_{1,0}^{(h,E_{1u})}$	$\mathtt{Qh}(\mathtt{1},\mathtt{E1u},,\mathtt{0})$	C_1
4	E_{1u}	E1u	_	1	$\mathbb{Q}_{1,1}^{(h,E_{1u})}$	$\mathtt{Qh}(\mathtt{1},\mathtt{E1u},\mathtt{,1})$	S_1

表 3 rank 2

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
5	A_g	Ag	-	-	$\mathbb{Q}_2^{(h,A_g)}$	$\mathtt{Qh}(\mathtt{2},\mathtt{Ag},,)$	C_0
6	E_{1g}	E1g	_	0	$\mathbb{Q}_{2,0}^{(h,E_{1g})}$	$\mathtt{Qh}(\mathtt{2},\mathtt{E1g},,\mathtt{0})$	C_1
7	E_{1g}	E1g	_	1	$\mathbb{Q}_{2,1}^{(h,E_{1g})}$	$\mathtt{Qh}(\mathtt{2},\mathtt{E1g},,\mathtt{1})$	S_1
8	E_{2g}	E2g	_	0	$\mathbb{Q}_{2,0}^{(h,E_{2g})}$	$\mathtt{Qh}(\mathtt{2},\mathtt{E2g},,\mathtt{0})$	C_2
9	E_{2g}	E2g	_	1	$\mathbb{Q}_{2,1}^{(h,E_{2g})}$	$\mathtt{Qh}(\mathtt{2},\mathtt{E2g},,\mathtt{1})$	$-S_2$

表 4 rank 3

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
10	A_u	Au	_	-	$\mathbb{Q}_3^{(h,A_u)}$	$\mathtt{Qh}(\mathtt{3},\mathtt{Au},,)$	C_0
11	B_u	Bu	1	_	$\mathbb{Q}_3^{(h,B_u,1)}$	$\mathtt{Qh}(\mathtt{3},\mathtt{Bu},\mathtt{1},)$	S_3
12	B_u	Bu	2	_	$\mathbb{Q}_3^{(h,B_u,2)}$	$\mathtt{Qh}(\mathtt{3},\mathtt{Bu},\mathtt{2},)$	C_3
13	E_{1u}	E1u	_	0	$\mathbb{Q}_{3,0}^{(h,E_{1u})}$	$\mathtt{Qh}(\mathtt{3},\mathtt{E1u},,\mathtt{0})$	C_1
14	E_{1u}	E1u	_	1	$\mathbb{Q}_{3,1}^{(h,E_{1u})}$	$\mathtt{Qh}(\mathtt{3},\mathtt{E1u},\mathtt{,1})$	S_1
15	E_{2u}	E2u	_	0	$\mathbb{Q}_{3,0}^{(h,E_{2u})}$	$\mathtt{Qh}(\mathtt{3},\mathtt{E2u},,\mathtt{0})$	C_2
16	E_{2u}	E2u	_	1	$\mathbb{Q}_{3,1}^{(h,E_{2u})}$	$\mathtt{Qh}(\mathtt{3},\mathtt{E2u},,\mathtt{1})$	$-S_2$

表 5 rank 4

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
17	A_g	Ag	_	_	$\mathbb{Q}_4^{(h,A_g)}$	$\mathtt{Qh}(\mathtt{4},\mathtt{Ag},,)$	C_0
18	B_g	Bg	1	_	$\mathbb{Q}_4^{(h,B_g,1)}$	$\mathtt{Qh}(\mathtt{4},\mathtt{Bg},\mathtt{1},)$	C_3
19	B_g	Bg	2	_	$\mathbb{Q}_4^{(h,B_g,2)}$	$\mathtt{Qh}(\mathtt{4},\mathtt{Bg},\mathtt{2},)$	S_3
20	E_{1g}	E1g	_	0	$\mathbb{Q}_{4,0}^{(h,E_{1g})}$	$\mathtt{Qh}(\mathtt{4},\mathtt{E1g},,\mathtt{0})$	C_1
21	E_{1g}	E1g	_	1	$\mathbb{Q}_{4,1}^{(h,E_{1g})}$	$\mathtt{Qh}(\mathtt{4},\mathtt{E1g},,\mathtt{1})$	S_1
22	E_{2g}	E2g	1	0	$\mathbb{Q}_{4,0}^{(h,E_{2g},1)}$	$\mathtt{Qh}(\mathtt{4},\mathtt{E2g},\mathtt{1},\mathtt{0})$	C_4
23	E_{2g}	E2g	1	1	$\mathbb{Q}_{4,1}^{(h,E_{2g},1)}$	$\mathtt{Qh}(\mathtt{4},\mathtt{E2g},\mathtt{1},\mathtt{1})$	S_4
24	E_{2g}	E2g	2	0	$\mathbb{Q}_{4,0}^{(h,E_{2g},2)}$	$\mathtt{Qh}(\mathtt{4},\mathtt{E2g},\mathtt{2},\mathtt{0})$	C_2
25	E_{2g}	E2g	2	1	$\mathbb{Q}_{4,1}^{(h,E_{2g},2)}$	$\mathtt{Qh}(4,\mathtt{E2g},2,1)$	$-S_2$

表 6 rank 5

No.	irron	(tog)	mul.	aomn	harmonics	(tog)	definition
110.	irrep.	(tag)	mui.	comp.		(tag)	demitton
26	A_u	Au	_	_	$\mathbb{Q}_5^{(h,A_u)}$	$\mathtt{Qh}(\mathtt{5},\mathtt{Au},,)$	C_0
27	B_u	Bu	1	_	$\mathbb{Q}_{5}^{(h,B_{u},1)}$	$\mathtt{Qh}(\mathtt{5},\mathtt{Bu},\mathtt{1},)$	S_3
28	B_u	Bu	2	_	$\mathbb{Q}_{5}^{(h,B_{u},2)}$	$\mathtt{Qh}(\mathtt{5},\mathtt{Bu},\mathtt{2},)$	C_3
29	E_{1u}	E1u	1	0	$\mathbb{Q}_{5,0}^{(h,E_{1u},1)}$	$\mathtt{Qh}(\mathtt{5},\mathtt{E1u},\mathtt{1},\mathtt{0})$	C_5
30	E_{1u}	E1u	1	1	$\mathbb{Q}_{5,1}^{(h,E_{1u},1)}$	$\mathtt{Qh}(\mathtt{5},\mathtt{E1u},\mathtt{1},\mathtt{1})$	$-S_5$
31	E_{1u}	E1u	2	0	$\mathbb{Q}_{5,0}^{(h,E_{1u},2)}$	$\mathtt{Qh}(\mathtt{5},\mathtt{E1u},\mathtt{2},\mathtt{0})$	C_1
32	E_{1u}	E1u	2	1	$\mathbb{Q}_{5,1}^{(h,E_{1u},2)}$	$\mathtt{Qh}(\mathtt{5},\mathtt{E1u},\mathtt{2},\mathtt{1})$	S_1
33	E_{2u}	E2u	1	0	$\mathbb{Q}_{5,0}^{(h,E_{2u},1)}$	$\mathtt{Qh}(\mathtt{5},\mathtt{E2u},\mathtt{1},\mathtt{0})$	C_4
34	E_{2u}	E2u	1	1	$\mathbb{Q}_{5,1}^{(h,E_{2u},1)}$	$\mathtt{Qh}(\mathtt{5},\mathtt{E2u},\mathtt{1},\mathtt{1})$	S_4
35	E_{2u}	E2u	2	0	$\mathbb{Q}_{5,0}^{(h,E_{2u},2)}$	$\mathtt{Qh}(\mathtt{5},\mathtt{E2u},\mathtt{2},\mathtt{0})$	C_2
36	E_{2u}	E2u	2	1	$\mathbb{Q}_{5,1}^{(h,E_{2u},2)}$	$\mathtt{Qh}(5,\mathtt{E2u},2,1)$	$-S_2$

表 7 rank 6

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
37	A_g	Ag	1	_	$\mathbb{Q}_{6}^{(h,A_{g},1)}$	Qh(6, Ag, 1,)	C_0
38	A_g	Ag	2	-	$\mathbb{Q}_6^{(h,A_g,2)}$	$\mathtt{Qh}(6,\mathtt{Ag},2,)$	C_6
39	A_g	Ag	3	_	$\mathbb{Q}_6^{(h,A_g,3)}$	$\mathtt{Qh}(6,\mathtt{Ag},\mathtt{3},)$	S_6
40	B_g	Bg	1	-	$\mathbb{Q}_6^{(h,B_g,1)}$	$\mathtt{Qh}(6,\mathtt{Bg},1,)$	C_3
41	B_g	Bg	2	_	$\mathbb{Q}_6^{(h,B_g,2)}$	$\mathtt{Qh}(6,\mathtt{Bg},2,)$	S_3
42	E_{1g}	E1g	1	0	$\mathbb{Q}_{6,0}^{(h,E_{1g},1)}$	$\mathtt{Qh}(6,\mathtt{E1g},1,0)$	C_5
43	E_{1g}	E1g	1	1	$\mathbb{Q}_{6,1}^{(h,E_{1g},1)}$	$\mathtt{Qh}(6,\mathtt{E1g},1,1)$	$-S_5$
44	E_{1g}	E1g	2	0	$\mathbb{Q}_{6,0}^{(h,E_{1g},2)}$	$\mathtt{Qh}(6,\mathtt{E1g},2,0)$	C_1
45	E_{1g}	E1g	2	1	$\mathbb{Q}_{6,1}^{(h,E_{1g},2)}$	$\mathtt{Qh}(6,\mathtt{E1g},2,1)$	S_1
46	E_{2g}	E2g	1	0	$\mathbb{Q}_{6,0}^{(h,E_{2g},1)}$	$\mathtt{Qh}(6,\mathtt{E2g},1,0)$	C_4
47	E_{2g}	E2g	1	1	$\mathbb{Q}_{6,1}^{(h,E_{2g},1)}$	$\mathtt{Qh}(6,\mathtt{E2g},1,1)$	S_4
48	E_{2g}	E2g	2	0	$\mathbb{Q}_{6,0}^{(h,E_{2g},2)}$	$\mathtt{Qh}(6,\mathtt{E2g},2,0)$	C_2
49	E_{2g}	E2g	2	1	$\mathbb{Q}_{6,1}^{(h,E_{2g},2)}$	$\mathtt{Qh}(6,\mathtt{E2g},2,1)$	$-S_2$

表 8 rank 7

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
50	A_u	Au	1		$\mathbb{Q}_7^{(h,A_u,1)}$	Qh(7, Au, 1,)	S_6
51	A_u	Au	2	_	$\mathbb{Q}_7^{(h,A_u,2)}$	Qh(7, Au, 2,)	C_0
52	A_u	Au	3	_	$\mathbb{Q}_7^{(h,A_u,3)}$	Qh(7, Au, 3,)	C_6
53	B_u	Bu	1	_	$\mathbb{Q}_7^{(h,B_u,1)}$	Qh(7, Bu, 1,)	S_3
54	B_u	Bu	2	_	$\mathbb{Q}_7^{(h,B_u,2)}$	Qh(7, Bu, 2,)	C_3
55	E_{1u}	E1u	1	0	$\mathbb{Q}_{7.0}^{(h,E_{1u},1)}$	Qh(7, E1u, 1, 0)	C_7
56	E_{1u}	E1u	1	1	$\mathbb{Q}_{7.1}^{(h,E_{1u},1)}$	Qh(7, E1u, 1, 1)	S_7
57	E_{1u}	E1u	2	0	$\mathbb{Q}_{7.0}^{(h,E_{1u},2)}$	Qh(7,E1u,2,0)	C_5
58	E_{1u}	E1u	2	1	$\mathbb{Q}_{7.1}^{(h,E_{1u},2)}$	Qh(7,E1u,2,1)	$-S_5$
59	E_{1u}	E1u	3	0	$\mathbb{Q}_{7.0}^{(h,E_{1u},3)}$	Qh(7,E1u,3,0)	C_1
60	E_{1u}	E1u	3	1	$\mathbb{Q}_{7,1}^{(h,E_{1u},3)}$	Qh(7,E1u,3,1)	S_1
61	E_{2u}	E2u	1	0	$\mathbb{Q}_{7,0}^{(h,E_{2u},1)}$	Qh(7,E2u,1,0)	C_4
62	E_{2u}	E2u	1	1	$\mathbb{Q}_{7.1}^{(h,E_{2u},1)}$	Qh(7, E2u, 1, 1)	S_4
63	E_{2u}	E2u	2	0	$\mathbb{Q}_{7,0}^{(h,E_{2u},2)}$	$\mathtt{Qh}(7,\mathtt{E2u},2,0)$	C_2
64	E_{2u}	E2u	2	1	$\mathbb{Q}_{7,1}^{(h,E_{2u},2)}$	$\mathtt{Qh}(7,\mathtt{E2u},2,1)$	$-S_2$

表 9 rank 8

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
65	A_g	Ag	1	_	$\mathbb{Q}_8^{(h,A_g,1)}$	$\mathtt{Qh}(8,\mathtt{Ag},1,)$	C_0
66	A_g	Ag	2	_	$\mathbb{Q}_8^{(h,A_g,2)}$	$\mathtt{Qh}(8,\mathtt{Ag},2,)$	C_6
67	A_g	Ag	3	-	$\mathbb{Q}_8^{(h,A_g,3)}$	$\mathtt{Qh}(8,\mathtt{Ag},3,)$	S_6
68	B_g	Bg	1	-	$\mathbb{Q}_8^{(h,B_g,1)}$	$\mathtt{Qh}(\mathtt{8},\mathtt{Bg},\mathtt{1},)$	C_3
69	B_g	Bg	2	_	$\mathbb{Q}_8^{(h,B_g,2)}$	$\mathtt{Qh}(8,\mathtt{Bg},2,)$	S_3
70	E_{1g}	E1g	1	0	$\mathbb{Q}_{8,0}^{(h,E_{1g},1)}$	$\mathtt{Qh}(8,\mathtt{E1g},1,0)$	C_7
71	E_{1g}	E1g	1	1	$\mathbb{Q}_{8,1}^{(h,E_{1g},1)}$	$\mathtt{Qh}(8,\mathtt{E1g},1,1)$	S_7
72	E_{1g}	E1g	2	0	$\mathbb{Q}_{8,0}^{(h,E_{1g},2)}$	$\mathtt{Qh}(8,\mathtt{E1g},2,0)$	C_5
73	E_{1g}	E1g	2	1	$\mathbb{Q}_{8,1}^{(h,E_{1g},2)}$	$\mathtt{Qh}(8,\mathtt{E1g},2,1)$	$-S_5$
74	E_{1g}	E1g	3	0	$\mathbb{Q}_{8,0}^{(h,E_{1g},3)}$	$\mathtt{Qh}(8,\mathtt{E1g},3,0)$	C_1
75	E_{1g}	E1g	3	1	$\mathbb{Q}_{8,1}^{(h,E_{1g},3)}$	$\mathtt{Qh}(8,\mathtt{E1g},3,1)$	S_1
76	E_{2g}	E2g	1	0	$\mathbb{Q}_{8,0}^{(h,E_{2g},1)}$	$\mathtt{Qh}(8,\mathtt{E2g},1,0)$	C_8
77	E_{2g}	E2g	1	1	$\mathbb{Q}_{8,1}^{(h,E_{2g},1)}$	$\mathtt{Qh}(8,\mathtt{E2g},1,1)$	$-S_8$
78	E_{2g}	E2g	2	0	$\mathbb{Q}_{8,0}^{(h,E_{2g},2)}$	$\mathtt{Qh}(8,\mathtt{E2g},2,0)$	C_4
79	E_{2g}	E2g	2	1	$\mathbb{Q}_{8,1}^{(h,E_{2g},2)}$	$\mathtt{Qh}(8,\mathtt{E2g},2,1)$	S_4
80	E_{2g}	E2g	3	0	$\mathbb{Q}_{8,0}^{(h,E_{2g},3)}$	$\mathtt{Qh}(8,\mathtt{E2g},3,0)$	C_2
81	E_{2g}	E2g	3	1	$\mathbb{Q}_{8,1}^{(h,E_{2g},3)}$	$\mathtt{Qh}(8,\mathtt{E2g},3,1)$	$-S_2$

表 10 rank 9

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
82	A_u	Au	1	_	$\mathbb{Q}_9^{(h,A_u,1)}$	Qh(9, Au, 1,)	S_6
83	A_u	Au	2	_	$\mathbb{Q}_9^{(h,A_u,2)}$	$\mathtt{Qh}(9,\mathtt{Au},2,)$	C_0
84	A_u	Au	3	_	$\mathbb{Q}_9^{(h,A_u,3)}$	$\mathtt{Qh}(9,\mathtt{Au},3,)$	C_6
85	B_u	Bu	1	-	$\mathbb{Q}_9^{(h,B_u,1)}$	$\mathtt{Qh}(9,\mathtt{Bu},1,)$	S_9
86	B_u	Bu	2	_	$\mathbb{Q}_9^{(h,B_u,2)}$	$\mathtt{Qh}(9,\mathtt{Bu},2,)$	S_3
87	B_u	Bu	3	_	$\mathbb{Q}_9^{(h,B_u,3)}$	$\mathtt{Qh}(9,\mathtt{Bu},3,)$	C_9
88	B_u	Bu	4	_	$\mathbb{Q}_9^{(h,B_u,4)}$	$\mathtt{Qh}(9,\mathtt{Bu},4,)$	C_3
89	E_{1u}	E1u	1	0	$\mathbb{Q}_{9,0}^{(h,E_{1u},1)}$	$\mathtt{Qh}(9,\mathtt{E1u},1,0)$	C_7
90	E_{1u}	E1u	1	1	$\mathbb{Q}_{9,1}^{(h,E_{1u},1)}$	$\mathtt{Qh}(9,\mathtt{E1u},1,1)$	S_7
91	E_{1u}	E1u	2	0	$\mathbb{Q}_{9,0}^{(h,E_{1u},2)}$	$\mathtt{Qh}(9,\mathtt{E1u},2,0)$	C_5
92	E_{1u}	E1u	2	1	$\mathbb{Q}_{9,1}^{(h,E_{1u},2)}$	$\mathtt{Qh}(9,\mathtt{E1u},2,1)$	$-S_5$
93	E_{1u}	E1u	3	0	$\mathbb{Q}_{9,0}^{(h,E_{1u},3)}$	$\mathtt{Qh}(9,\mathtt{E1u},3,0)$	C_1
94	E_{1u}	E1u	3	1	$\mathbb{Q}_{9,1}^{(h,E_{1u},3)}$	$\mathtt{Qh}(9,\mathtt{E1u},3,1)$	S_1
95	E_{2u}	E2u	1	0	$\mathbb{Q}_{9,0}^{(h,E_{2u},1)}$	$\mathtt{Qh}(9,\mathtt{E2u},1,0)$	C_8
96	E_{2u}	E2u	1	1	$\mathbb{Q}_{9,1}^{(h,E_{2u},1)}$	$\mathtt{Qh}(9,\mathtt{E2u},1,1)$	$-S_8$
97	E_{2u}	E2u	2	0	$\mathbb{Q}_{9,0}^{(h,E_{2u},2)}$	$\mathtt{Qh}(9,\mathtt{E2u},2,0)$	C_4
98	E_{2u}	E2u	2	1	$\mathbb{Q}_{9,1}^{(h,E_{2u},2)}$	$\mathtt{Qh}(9,\mathtt{E2u},2,1)$	S_4
99	E_{2u}	E2u	3	0	$\mathbb{Q}_{9,0}^{(h,E_{2u},3)}$	$\mathtt{Qh}(9,\mathtt{E2u},3,0)$	C_2
100	E_{2u}	E2u	3	1	$\mathbb{Q}_{9,1}^{(h,E_{2u},3)}$	Qh(9, E2u, 3, 1)	$-S_2$

表 11 rank 10

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
101	A_g	Ag	1	_	$\mathbb{Q}_{10}^{(h,A_g,1)}$	Qh(10, Ag, 1,)	C_0
102	A_g	Ag	2	_	$\mathbb{Q}_{10}^{(h,A_g,2)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{Ag},\mathtt{2},)$	C_6
103	A_g	Ag	3	_	$\mathbb{Q}_{10}^{(h,A_g,3)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{Ag},\mathtt{3},)$	S_6
104	B_g	Bg	1	_	$\mathbb{Q}_{10}^{(h,B_g,1)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{Bg},\mathtt{1},)$	C_9
105	B_g	Bg	2	_	$\mathbb{Q}_{10}^{(h,B_g,2)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{Bg},\mathtt{2},)$	C_3
106	B_g	Bg	3	_	$\mathbb{Q}_{10}^{(h,B_g,3)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{Bg},\mathtt{3},)$	S_9
107	B_g	Bg	4	_	$\mathbb{Q}_{10}^{(h,B_g,4)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{Bg},\mathtt{4},)$	S_3
108	E_{1g}	E1g	1	0	$\mathbb{Q}_{10,0}^{(h,E_{1g},1)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E1g},\mathtt{1},\mathtt{0})$	C_7
109	E_{1g}	E1g	1	1	$\mathbb{Q}_{10,1}^{(h,E_{1g},1)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E1g},\mathtt{1},\mathtt{1})$	S_7
110	E_{1g}	E1g	2	0	$\mathbb{Q}_{10,0}^{(h,E_{1g},2)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E1g},\mathtt{2},\mathtt{0})$	C_5
111	E_{1g}	E1g	2	1	$\mathbb{Q}_{10,1}^{(h,E_{1g},2)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E1g},\mathtt{2},\mathtt{1})$	$-S_5$
112	E_{1g}	E1g	3	0	$\mathbb{Q}_{10,0}^{(h,E_{1g},3)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E1g},\mathtt{3},\mathtt{0})$	C_1
113	E_{1g}	E1g	3	1	$\mathbb{Q}_{10,1}^{(h,E_{1g},3)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E1g},\mathtt{3},\mathtt{1})$	S_1
114	E_{2g}	E2g	1	0	$\mathbb{Q}_{10,0}^{(h,E_{2g},1)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E2g},\mathtt{1},\mathtt{0})$	C_{10}
115	E_{2g}	E2g	1	1	$\mathbb{Q}_{10,1}^{(h,E_{2g},1)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E2g},\mathtt{1},\mathtt{1})$	S_{10}
116	E_{2g}	E2g	2	0	$\mathbb{Q}_{10,0}^{(h,E_{2g},2)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E2g},\mathtt{2},\mathtt{0})$	C_8
117	E_{2g}	E2g	2	1	$\mathbb{Q}_{10,1}^{(h,E_{2g},2)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E2g},\mathtt{2},\mathtt{1})$	$-S_8$
118	E_{2g}	E2g	3	0	$\mathbb{Q}_{10,0}^{(h,E_{2g},3)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E2g},\mathtt{3},\mathtt{0})$	C_4
119	E_{2g}	E2g	3	1	$\mathbb{Q}_{10,1}^{(h,E_{2g},3)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E2g},\mathtt{3},\mathtt{1})$	S_4
120	E_{2g}	E2g	4	0	$\mathbb{Q}_{10,0}^{(h,E_{2g},4)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E2g},\mathtt{4},\mathtt{0})$	C_2
121	E_{2g}	E2g	4	1	$\mathbb{Q}_{10,1}^{(h,E_{2g},4)}$	Qh(10, E2g, 4, 1)	$-S_2$

表 12 rank 11

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
122	A_u	Au	1	_	$\mathbb{Q}_{11}^{(h,A_u,1)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{Au},\mathtt{1},)$	S_6
123	A_u	Au	2	_	$\mathbb{Q}_{11}^{(h,A_u,2)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{Au},\mathtt{2},)$	C_0
124	A_u	Au	3	-	$\mathbb{Q}_{11}^{(h,A_u,3)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{Au},\mathtt{3},)$	C_6
125	B_u	Bu	1	_	$\mathbb{Q}_{11}^{(h,B_u,1)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{Bu},\mathtt{1},)$	S_9
126	B_u	Bu	2	_	$\mathbb{Q}_{11}^{(h,B_u,2)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{Bu},\mathtt{2},)$	S_3
127	B_u	Bu	3	_	$\mathbb{Q}_{11}^{(h,B_u,3)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{Bu},\mathtt{3},)$	C_9
128	B_u	Bu	4	_	$\mathbb{Q}_{11}^{(h,B_u,4)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{Bu},\mathtt{4},)$	C_3
129	E_{1u}	E1u	1	0	$\mathbb{Q}_{11,0}^{(h,E_{1u},1)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E1u},\mathtt{1},\mathtt{0})$	C_{11}
130	E_{1u}	E1u	1	1	$\mathbb{Q}_{11,1}^{(h,E_{1u},1)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E1u},\mathtt{1},\mathtt{1})$	$-S_{11}$
131	E_{1u}	E1u	2	0	$\mathbb{Q}_{11,0}^{(h,E_{1u},2)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E1u},\mathtt{2},\mathtt{0})$	C_7
132	E_{1u}	E1u	2	1	$\mathbb{Q}_{11,1}^{(h,E_{1u},2)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E1u},\mathtt{2},\mathtt{1})$	S_7
133	E_{1u}	E1u	3	0	$\mathbb{Q}_{11,0}^{(h,E_{1u},3)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E1u},\mathtt{3},\mathtt{0})$	C_5
134	E_{1u}	E1u	3	1	$\mathbb{Q}_{11,1}^{(h,E_{1u},3)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E1u},\mathtt{3},\mathtt{1})$	$-S_5$
135	E_{1u}	E1u	4	0	$\mathbb{Q}_{11,0}^{(h,E_{1u},4)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E1u},\mathtt{4},\mathtt{0})$	C_1
136	E_{1u}	E1u	4	1	$\mathbb{Q}_{11,1}^{(h,E_{1u},4)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E1u},\mathtt{4},\mathtt{1})$	S_1
137	E_{2u}	E2u	1	0	$\mathbb{Q}_{11,0}^{(h,E_{2u},1)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E2u},\mathtt{1},\mathtt{0})$	C_{10}
138	E_{2u}	E2u	1	1	$\mathbb{Q}_{11,1}^{(h,E_{2u},1)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E2u},\mathtt{1},\mathtt{1})$	S_{10}
139	E_{2u}	E2u	2	0	$\mathbb{Q}_{11,0}^{(h,E_{2u},2)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E2u},\mathtt{2},\mathtt{0})$	C_8
140	E_{2u}	E2u	2	1	$\mathbb{Q}_{11,1}^{(h,E_{2u},2)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E2u},\mathtt{2},\mathtt{1})$	$-S_8$
141	E_{2u}	E2u	3	0	$\mathbb{Q}_{11,0}^{(h,E_{2u},3)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E2u},\mathtt{3},\mathtt{0})$	C_4
142	E_{2u}	E2u	3	1	$\mathbb{Q}_{11,1}^{(h,E_{2u},3)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E2u},\mathtt{3},\mathtt{1})$	S_4
143	E_{2u}	E2u	4	0	$\mathbb{Q}_{11,0}^{(h,E_{2u},4)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E2u},\mathtt{4},\mathtt{0})$	C_2
144	E_{2u}	E2u	4	1	$\mathbb{Q}_{11,1}^{(h,E_{2u},4)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E2u},\mathtt{4},\mathtt{1})$	$-S_2$