j_1	j_2	h	$Y_{\ell_1}^{m_1}(\theta_1, -\varphi) Y_{\ell_2}^{m_2}(\pi - \theta_2, 0)$	$\Theta_h^{j_1 j_2}(\cos\theta_1, \cos\theta_2, \varphi)$
0	0	0	$\sqrt{\pi} Y_0^0 Y_0^0$	$\frac{1}{2\sqrt{2\pi}}$
0	1	0	$\sqrt{\pi} Y_0^0 Y_1^0$	$-\frac{\sqrt{3}}{2\sqrt{2\pi}} \cos\theta_2$
1	0	0	$\sqrt{\pi} Y_1^0 Y_0^0$	$\frac{\sqrt{3}}{2\sqrt{2\pi}} \cos\theta_1$
0	2	0	$\sqrt{\pi} Y_0^0 Y_2^0$	$\frac{\sqrt{5}}{4\sqrt{2\pi}} (3\cos^2\theta_2 - 1)$
2	0	0	$\sqrt{\pi} Y_2^0 Y_0^0$	$\frac{\sqrt{5}}{4\sqrt{2\pi}} (3\cos^2\theta_1 - 1)$
1	1	0	$\sqrt{\pi} Y_1^0 Y_1^0$	$-\frac{3}{2\sqrt{2\pi}} \cos\theta_1 \cos\theta_2$
1	1	$\parallel$	$\frac{\sqrt{\pi}}{\sqrt{2}} (Y_1^{-1} Y_1^{+1} + Y_1^{+1} Y_1^{-1})$	$-\frac{3}{4\sqrt{\pi}} \sin\theta_1 \sin\theta_2 \cos\varphi$
1	1	$\perp$	$\frac{\sqrt{\pi}}{\sqrt{2}} (Y_1^{-1} Y_1^{+1} - Y_1^{+1} Y_1^{-1})$	$-i\frac{3}{4\sqrt{\pi}} \sin\theta_1 \sin\theta_2 \sin\varphi$
1	2	0	$\sqrt{\pi} Y_1^0 Y_2^0$	$\frac{\sqrt{15}}{4\sqrt{2\pi}} \cos\theta_1 (3\cos^2\theta_2 - 1)$
1	2	$\parallel$	$\frac{\sqrt{\pi}}{\sqrt{2}} (Y_1^{-1} Y_2^{+1} + Y_1^{+1} Y_2^{-1})$	$\frac{3\sqrt{5}}{4\sqrt{\pi}} \sin\theta_1 \sin\theta_2 \cos\theta_2 \cos\varphi$
1	2	$\perp$	$\frac{\sqrt{\pi}}{\sqrt{2}} (Y_1^{-1} Y_2^{+1} - Y_1^{+1} Y_2^{-1})$	$i\frac{3\sqrt{5}}{4\sqrt{\pi}} \sin\theta_1 \sin\theta_2 \cos\theta_2 \sin\varphi$
2	1	0	$\sqrt{\pi} Y_2^0 Y_1^0$	$-\frac{\sqrt{15}}{4\sqrt{2\pi}} (3\cos^2\theta_1 - 1) \cos\theta_2$
2	1	$\parallel$	$\frac{\sqrt{\pi}}{\sqrt{2}} (Y_2^{-1} Y_1^{+1} + Y_2^{+1} Y_1^{-1})$	$-\frac{3\sqrt{5}}{4\sqrt{\pi}} \sin\theta_1 \cos\theta_1 \sin\theta_2 \cos\varphi$
2	1	$\perp$	$\frac{\sqrt{\pi}}{\sqrt{2}} (Y_2^{-1} Y_1^{+1} - Y_2^{+1} Y_1^{-1})$	$-i\frac{3\sqrt{5}}{4\sqrt{\pi}} \sin\theta_1 \cos\theta_1 \sin\theta_2 \sin\varphi$
2	2	0	$\sqrt{\pi} Y_2^0 Y_2^0$	$\frac{5}{8\sqrt{2\pi}} (3\cos^2\theta_1 - 1)(3\cos^2\theta_2 - 1)$
2	2	$\parallel_1$	$\frac{\sqrt{\pi}}{\sqrt{2}} (Y_2^{-1} Y_2^{+1} + Y_2^{+1} Y_2^{-1})$	$\frac{15}{4\sqrt{\pi}} \sin\theta_1 \cos\theta_1 \sin\theta_2 \cos\theta_2 \cos\varphi$
2	2	$\perp_1$	$\frac{\sqrt{\pi}}{\sqrt{2}} (Y_2^{-1} Y_2^{+1} - Y_2^{+1} Y_2^{-1})$	$i\frac{15}{4\sqrt{\pi}} \sin\theta_1 \cos\theta_1 \sin\theta_2 \cos\theta_2 \sin\varphi$
2	2	$\parallel_2$	$\frac{\sqrt{\pi}}{\sqrt{2}} (Y_2^{-2} Y_2^{+2} + Y_2^{+2} Y_2^{-2})$	$\frac{15}{16\sqrt{\pi}} \sin^2\theta_1 \sin^2\theta_2 \cos(2\varphi)$
2	2	$\perp_2$	$\frac{\sqrt{\pi}}{\sqrt{2}} (Y_2^{-2} Y_2^{+2} - Y_2^{+2} Y_2^{-2})$	$i\frac{15}{16\sqrt{\pi}} \sin^2\theta_1 \sin^2\theta_2 \sin(2\varphi)$