$$\mathbf{J}_o(q) = \begin{bmatrix} \dfrac{\partial \omega_x}{\partial q_1} & \dfrac{\partial \omega_x}{\partial q_2} & \cdots & \dfrac{\partial \omega_x}{\partial q_n} \\[2em] \dfrac{\partial \omega_y}{\partial q_1} & \dfrac{\partial \omega_y}{\partial q_2} & \cdots & \dfrac{\partial \omega_y}{\partial q_n} \\[2em] \dfrac{\partial \omega_z}{\partial q_1} & \dfrac{\partial \omega_z}{\partial q_2} & \cdots & \dfrac{\partial \omega_z}{\partial q_n} \end{bmatrix}$$