"A Simple Derivation of the Gauss-Bonet Theorem Using Euler Angles," R. Mukherjee and M. D. Shuster, *The Journal of the Astronautical Sciences*, Vol. 53, No. 2, April–June pp. 185–191.

In 1999, Ranjan Mukherjee and a student published a paper which used Euler angles to prove the Gauss-Bonet theorem. That work required the explicit evaluation of elements of the direction-cosine matrix in terms of Euler angles. 2005a used the methods of 1993i to prove the result more directly without any such explicit evaluations.