

Probing Molecular Conformations with Electron Momentum Spectroscopy: The Case of *n*-Butane [*J. Am. Chem. Soc.* 2001, *123*, 4049–4061]. M. S. Deleuze,* W. N. Pang, A. Salam, and R. C. Shang

Page 4054, Figure 3. The correlations displayed between the lowest four outer-valence orbitals of *n*-butane in its all-staggered (C_{2h}) and gauche (C_2) forms are erroneous. Orbitals $1a_u$, $5a_g$, $5b_u$, and $1b_g$ correctly relate to orbitals 5a, 6a, 5b, and 6b, respectively. These correlations are shown in the figure below which should replace that given in the paper.

All-staggered (C_{2h})

Gauche (C₂)



The strongest energy variations induced by torsion of the carbon backbone arise therefore with the $5b_u$ and $1b_g$ orbitals of the all-staggered form (-1.30 and +0.91 eV, respectively). Correspondingly, opposite variations in the topology of the related momentum densities are seen (Figures 5b and 5c) upon conversion of these orbitals into the 5b and 6a ones. The $1a_u$ orbital gets destabilized by 0.28 eV upon conversion into the 5a orbital. Both the $1a_u$ and 5a electron densities display a p-type profile in momentum space.

Page 4057, right column, lines 13-33. The discussion of the electron momentum profiles provided in Figure 4c pertains to orbitals $4a_g$ and 4a, rather than orbitals $3a_g$ and 3a. Thus, in this paragraph, the $3a_g$ and 3a labels should be systematically replaced by the $4a_g$ and 4a labels, respectively.

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