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Correction: General optimization procedure towards the design of a new family of minimal parameter spin-component-scaled double-hybrid density functional theory[†]

Loïc M. Roch^{‡ab} and Kim K. Baldridge^{§*ab}

Correction for 'General optimization procedure towards the design of a new family of minimal parameter spin-component-scaled double-hybrid density functional theory' by Loïc M. Roch and Kim K. Baldridge, *Phys. Chem. Chem. Phys.*, 2017, **19**, 26191–26200.

In eqn (1) and (3), C_X should be defined as the coefficient scaling the exact HF exchange, and, thus, $(1 - C_X)$ as the coefficient scaling the approximate GGA exchange. Consequently, eqn (1) should read:

$$E_{XC}^{\text{DSD-DFT}} = (1 - C_X)E_X^{\text{GGA}} + C_X E_X^{\text{HF}} + C_C E_C^{\text{GGA}} + C_O E_O^{\text{MP2}} + C_S E_S^{\text{MP2}} + S_6 E_D \quad (1)$$

and eqn (3) should read:

$$E_{XC}^{\text{mSD-DFT}} = (1 - C_X)E_X^{\text{GGA}} + C_X E_X^{\text{HF}} + C_C E_C^{\text{GGA}} + (1 - C_C)E_{(2)}^{\text{SCS-MP2}} \quad (3)$$

Note that C_{HF} , which is not formally introduced although used in the manuscript, in Fig. 2–4 and in the ESI, scales the HF exchange of the mSD-DF. As such, C_{HF} is equivalent to C_X .

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

^a Department of Chemistry, University of Zurich, Winterthurerstrasse 190, 8057 Zurich, Switzerland. E-mail: kimb@tju.edu.cn

^b Health Sciences Platform, University of Tianjin, 92 Weijing Road, Nankai District, Tianjin-3000072, P. R. China

[†] Electronic supplementary information (ESI) available: Basis set considerations, tabulation of interaction energies of the complexes included in the training set, grid refinement and scaled RMSD. See DOI: 10.1039/c8cp90025f

[‡] Present address: Department of Chemistry and Chemical Biology, Harvard University, 12 Oxford Street, Cambridge, MA, USA.

[§] Present address: Health Sciences Platform, Tianjin University, 92 Weijing Road, Nankai District, Tianjin-3000072, P. R. China.