

Erratum to: Hyperfine spin qubits in irradiated malonic acid: heat-bath algorithmic cooling

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In subsection 3.2, “Continuous-wave ESR results”, the Gaussian computer program should be cited as:

M.J. Frisch, G.W. Trucks, H.B. Schlegel, G.E. Scuseria, M.A. Robb, J.R. Cheeseman, G. Scalmani, V. Barone, B. Mennucci, G.A. Petersson, H. Nakatsuji, M. Caricato, X. Li, H.P. Hratchian, A.F. Izmaylov, J. Bloino, G. Zheng, J.L. Sonnenberg, M. Hada, M. Ehara, K. Toyota, R. Fukuda, J. Hasegawa, M. Ishida, T. Nakajima, Y. Honda, O. Kitao, H. Nakai, T. Vreven, J. A. Montgomery, Jr., J.E. Peralta, F. Ogliaro, M. Bearpark, J.J. Heyd, E. Brothers, K.N. Kudin, V.N. Staroverov, R. Kobayashi, J. Normand, K. Raghavachari, A. Rendell, J.C. Burant, S.S. Iyengar, J. Tomasi, M. Cossi, N. Rega, J.M. Millam, M. Klene, J.E. Knox, J.B. Cross, V. Bakken, C. Adamo, J. Jaramillo, R. Gomperts, R.E. Stratmann, O. Yazyev, A.J. Austin, R. Cammi, C. Pomelli, J.W. Ochterski, R.L. Martin, K. Morokuma, V.G. Zakrzewski, G.A. Voth, P. Salvador,

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J.J. Dannenberg, S. Dapprich, A.D. Daniels, Ö. Farkas, J.B. Foresman, J.V. Ortiz, J. Cioslowski, and D.J. Fox, *Gaussian 09, Revision A.02* (Gaussian, Inc., Wallingford CT, 2009)

Figure 7 and its caption should be replaced by the following:

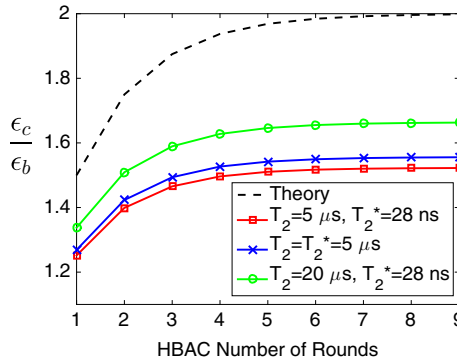


Fig. 7 Simulation results for 3-qubit HBAC using AHC. The plot shows the ratio of the C_m polarization (ϵ_c) and the electron bath polarization (ϵ_b) at the end of each HBAC round, up to 9 rounds. The dashed curve is the theoretical (ideal) value. The red (open squares) curve is obtained by incorporating all experimentally determined (room temperature) relaxation parameters. The blue (crosses) curve is obtained by allowing the T_2^* of the electron to equal T_2^e . The green (open circles) curve is obtained by allowing T_2^e to be $20 \mu\text{s}$, 4 times longer than the measured value, in order to test the consequence of a longer electronic T_2

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