LIST OF PIOTR PIECUCH'S PUBLICATIONS[†]

1. Monographs, Book Chapters, and Feature Articles[††]

1. P. Piecuch, "Cartesian-Spherical Transformation Formalism and the Theoretical Insight into Many-Body Long-Range Forces of the Electrostatic Origin in Multimolecular Systems," in: *Interactions of Water in Ionic and Nonionic Hydrates*, edited by H. Kleeberg (Springer, Berlin, 1987), pp. 299-302 [invited book chapter].
2. P. Piecuch, "Towards Classification and Analytical Description of Molecular Interactions Including Quantum-Mechanical Many-Body Effects," in: *Molecules in Physics, Chemistry and Biology, Topics in Molecular Organization and Engineering*, Vol. 2, *Physical Aspects of Molecular Systems*, edited by J. Maruani (Kluwer, Dordrecht, 1988), pp. 417-505 [monograph, invited book chapter].
3. J. Paldus, P. Piecuch, B. Jeziorski, and L. Pylypow, "Extension of Coupled Cluster Methodology to Open Shells: State Universal Approach," in: *Recent Progress in Many-Body Theories*, Vol. 3, edited by T. L. Ainsworthy, C. E. Campbell, B. E. Clements, and E. Krotschek (Plenum Press, New York, 1992), pp. 287-303 [invited book chapter].
4. P. Piecuch and R.J. Bartlett, "EOMXCC: A New Coupled-Cluster Method for Electronic Excited States," *Adv. Quantum Chem.* **34**, 295-380 (1999) [invited book chapter].
5.* P. Piecuch and K. Kowalski, "In Search of the Relationship between Multiple Solutions Characterizing Coupled-Cluster Theories," in: *Computational Chemistry: Reviews of Current Trends*, Vol. 5, edited by J. Leszczynski (World Scientific, Singapore, 2000), pp. 1-104 [monograph, invited book chapter].
6.* P. Piecuch, K. Kowalski, I.S.O. Pimienta, and S.A. Kucharski, "Method of Moments of Coupled-Cluster Equations: A New Theoretical Framework for Designing "Black-Box" Approaches for Molecular Potential Energy Surfaces," in: *Low-Lying Potential Energy Surfaces*, ACS Symposium Series, Vol. 828, edited by M.R. Hoffmann and K.G. Dyall (American Chemical Society, Washington, D.C., 2002), pp. 31-64 [invited book chapter].
7.** P. Piecuch, K. Kowalski, I.S.O. Pimienta, and M.J. McGuire, "Recent Advances in Electronic Structure Theory: Method of Moments of Coupled-Cluster Equations and Renormalized Coupled-Cluster Approaches," *Int. Rev. Phys. Chem.* **21**, 527-655 (2002) [invited advanced review].

[†] Papers written at Michigan State University before submitting the tenure promotion package in the Fall of 2001 are marked by $*$. Papers written at Michigan State University after submitting the tenure promotion package in the Fall of 2001 are marked by $**$. Clickable hyperlinks to listed publications are marked by blue color.

[††] All other invited papers are listed with the remaining original articles.

8.** P. Piecuch, K. Kowalski, P.-D. Fan, and I.S.O. Pimienta, "New Alternatives for Electronic Structure Calculations: Renormalized, Extended, and Generalized Coupled-Cluster Theories," in: *Progress in Theoretical Chemistry and Physics*, Vol. 12, *Advanced Topics in Theoretical Chemical Physics*, edited by J. Maruani, R. Lefebvre, and E. Brändas (Kluwer, Dordrecht, 2003), pp. 119-206 [invited advanced review book chapter].

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10.** P. Piecuch, M. Włoch, J.R. Gour, D.J. Dean, M. Hjorth-Jensen, and T. Papenbrock, "Bridging Quantum Chemistry and Nuclear Structure Theory: Coupled-Cluster Calculations for Closed- and Open-Shell Nuclei," in: *Nuclei and Mesoscopic Physics: Workshop on Nuclei and Mesoscopic Physics WNMP 2004*, AIP Conference Proceedings, Vol. 777, edited by V. Zelevinsky (American Institute of Physics, Melville, NY, 2005), pp. 28-45 [invited book chapter in conference proceedings].

11.** D.J. Dean, M. Hjorth-Jensen, K. Kowalski, T. Papenbrock, M. Włoch, and P. Piecuch, "Coupled Cluster Approaches to Nuclei, Ground States and Excited States," in: *Key Topics in Nuclear Structure*, *Proceedings of the 8th International Spring Seminar on Nuclear Physics*, edited by A. Covello (World Scientific, Singapore, 2005), pp. 147-157.

12.** D.J. Dean, M. Hjorth-Jensen, K. Kowalski, P. Piecuch, and M. Włoch, "Coupled-Cluster Theory for Nuclei," in: *Condensed Matter Theories*, Vol. 20, edited by J.W. Clark, R.M. Panoff, and H. Li (Nova Science Publishers, 2006), pp. 89-97 [invited book chapter].

13.** T. Papenbrock, D.J. Dean, J.R. Gour, G. Hagen, M. Hjorth-Jensen, P. Piecuch, and M. Włoch, "Coupled-Cluster Theory for Nuclei," in: *Recent Progress in Many-Body Theories*, Vol. 10, edited by S. Hernández and H. Cataldo (World Scientific, Singapore, 2006), pp. 385-392 [invited book chapter].

14.** P. Piecuch, M. Włoch, M. Lodriguito, and J.R. Gour, "Noniterative Coupled-Cluster Methods for Excited Electronic States," in: *Progress in Theoretical Chemistry and Physics*, Vol. 15, "Recent Advances in the Theory of Chemical and Physical Systems," edited by J.-P. Julien, J. Maruani, D. Mayou, S. Wilson, and G. Delgado-Barrio (Springer, Dordrecht, 2006), pp. 45-106 [invited advanced review book chapter].

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16.** P. Piecuch, M. Włoch, and A.J.C. Varandas, "Renormalized Coupled-Cluster Methods: Theoretical Foundations and Application to Potential Function of Water," in: *Progress in Theoretical Chemistry and Physics*, Vol. 16, "Topics in the Theory of Chemical and Physical Systems," edited by S. Lahmar, J. Maruani, S. Wilson, and G. Delgado-Barrio (Springer, Dordrecht, 2007), pp. 63-121 [invited book chapter].

17.** P. Piecuch, I.S.O. Pimienta, P.-D. Fan, and K. Kowalski, "New Alternatives for Accurate Electronic Structure Calculations of Potential Energy Surfaces Involving Bond Breaking," in: *Electron Correlation Methodology*, ACS Symposium Series, Vol. 958, edited by A.K. Wilson and K.A. Peterson (American Chemican Society, Washington, D.C., 2007), pp. 37–73 [invited book chapter].

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22.** G. Fradelos, J.J. Lutz, T.A. Wesołowski, P. Piecuch, and M. Włoch "Shifts in Excitation Energies Induced by Hydrogen Bonding: A Comparison of the Embedding and Supermolecular Time-Dependent Density Functional Theory Calculations with the Equation-of-Motion Coupled-Cluster Results," in: *Progress in Theoretical Chemistry and Physics*, Vol. 22, "Advances in the Theory of Quantum Systems in Chemistry and Physics," edited by P.E. Hoggan, E. Brändas, J. Maruani, P. Piecuch, and G. Delgado-Barrio (Springer, Dordrecht, 2012), pp. 219-248 [invited book chapter].

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LIST OF JOURNAL ISSUES AND BOOKS EDITED BY PIOTR PIECUCH

1. *International Journal of Quantum Chemistry*, Volume 107, Issue 14 (2007). Special Issue: Proceedings from the Eleventh European Workshop on Quantum Systems in Chemistry and Physics (St. Petersburg, Russia, August 20-25, 2006). Issue Edited by Oleg Vasyutinskii, Jean Maruani, Piotr Piecuch, Gerardo Delgado-Barrio, and Stephen Wilson. Preface: *Int. J. Quantum Chem.* **107** (14), 2565-2566 (2007). List of Participants: *Int. J. Quantum Chem.* **107** (14), 2567-2574 (2007).

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3. *Nuclei and Mesoscopic Physics, Workshop on Nuclei and Mesoscopic Physics, WNMP 2007*, AIP Conference Proceedings, Vol. 995, edited by P. Danielewicz, P. Piecuch, and V. Zelevinsky (American Institute of Physics, Melville, NY, 2008). Preface: p. vii.

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6. *International Journal of Quantum Chemistry*, Volume 111, Issue 2 (2011). Special Issue: Proceedings from the Fourteenth European Workshop on Quantum Systems in Chemistry and Physics (San Lorenzo de El Escorial, Madrid, Spain, September 13-19, 2009). Issue Edited by Gerardo Delgado-Barrio, Jean Maruani, Piotr Piecuch, and Erkki Brändas. Preface: *Int. J. Quantum Chem.* **111** (2), 203-204 (2011). List of Participants: *Int. J. Quantum Chem.* **111** (2), 205-212 (2011).

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