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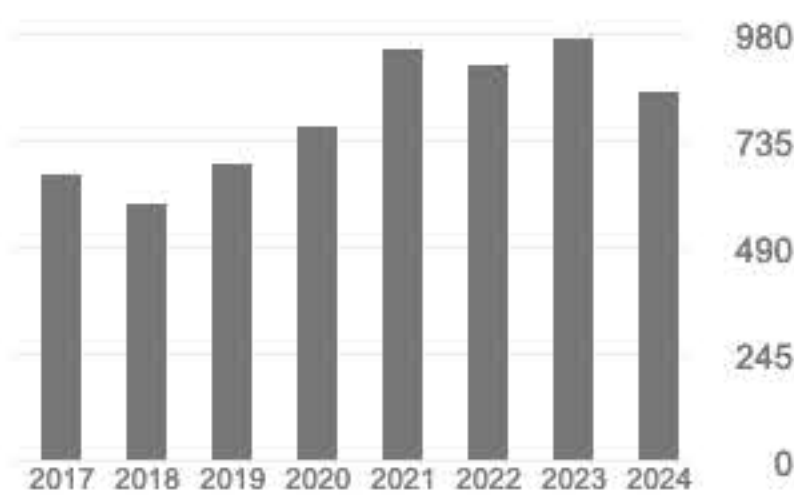
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TITLE	CITED BY	YEAR
Recent developments in the general atomic and molecular electronic structure system GMJ Barca, C Bertoni, L Carrington, D Datta, N De Silva, JE Deustua, ... The Journal of Chemical Physics 152 (15), 154102	1022	2020
Efficient computer implementation of the renormalized coupled-cluster methods: the R-CCSD[T], R-CCSD(T), CR-CCSD[T], and CR-CCSD(T) approaches P Piecuch, SA Kucharski, K Kowalski, M Musial Computer Physics Communications 149 (2), 71-96	557	2002
The method of moments of coupled-cluster equations and the renormalized CCSD[T], CCSD(T), CCSD(TQ), and CCSDT(Q) approaches K Kowalski, P Piecuch The Journal of Chemical Physics 113 (1), 18-35	481	2000
Renormalized coupled-cluster methods exploiting left eigenstates of the similarity-transformed Hamiltonian P Piecuch, M Wloch The Journal of Chemical Physics 123 (22), 224105	478	2005
A state-selective multireference coupled-cluster theory employing the single-reference formalism P Piecuch, N Oliphant, L Adamowicz The Journal of Chemical Physics 99 (3), 1875-1900	381	1993
New coupled-cluster methods with singles, doubles, and noniterative triples for high accuracy calculations of excited electronic states K Kowalski, P Piecuch The Journal of Chemical Physics 120 (4), 1715-1738	376	2004
Recent advances in electronic structure theory: Method of moments of coupled-cluster equations and renormalized coupled-cluster approaches P Piecuch, K Kowalski, ISO Pimienta, MJ Mcguire International Reviews in Physical Chemistry 21 (4), 527-655	334	2002
The active-space equation-of-motion coupled-cluster methods for excited electronic states: Full EOMCCSDt K Kowalski, P Piecuch The Journal of Chemical Physics 115 (2), 643-651	326	2001
Coupled-cluster methods with internal and semi-internal triply and quadruply excited clusters: CCSDt and CCSDtq approaches P Piecuch, SA Kucharski, RJ Bartlett The Journal of Chemical Physics 110 (13), 6103-6122	285	1999
Application of Hilbert-space coupled-cluster theory to simple (H2)2 model systems: Planar models J Paldus, P Piecuch, L Pylypow, B Jeziorski Physical Review A 47 (4), 2738-2782	282	1993
Renormalized CCSD(T) and CCSD(TQ) approaches: Dissociation of the N2 triple bond K Kowalski, P Piecuch Journal of Chemical Physics 113 (14), 5644-5652	254	2000
Local correlation calculations using standard and renormalized coupled-cluster approaches W Li, P Piecuch, JR Gour, S Li The Journal of Chemical Physics 131 (11), 114109	253	2009
State-selective multireference coupled-cluster theory employing the single-reference formalism: Implementation and application to the H8 model system P Piecuch, L Adamowicz The Journal of Chemical Physics 100 (8), 5792-5809	252	1994
Theoretical models on the Cu2O2 torture track: Mechanistic implications for oxytyrosinase and small-molecule analogues (vol 110A, pg 1991, 2006) CJ Cramer, M Wloch, P Piecuch, C Puzzarini, L Gagliardi Journal of Physical Chemistry A 111 (22), 4871-4871	229 *	2007
Theoretical models on the Cu2O2 torture track: Mechanistic implications for oxytyrosinase and small-molecule analogues CJ Cramer, M Wloch, P Piecuch, C Puzzarini, L Gagliardi Journal of Physical Chemistry A 110 (5), 1991-2004	229	2006
Coupled-cluster theory for three-body Hamiltonians G Hagen, T Papenbrock, DJ Dean, A Schwenk, A Nogga, M Wloch, ... Physical Review C 76 (3), 034302	228 *	2007
Method of moments of coupled-cluster equations: a new formalism for designing accurate electronic structure methods for ground and excited states P Piecuch, K Kowalski, ISO Pimienta, PD Fan, M Lodriguito, MJ McGuire, ... Theoretical Chemistry Accounts 112 (5-6), 349-393	228	2004
Where does the planar-to-nonplanar turnover occur in small gold clusters? RM Olson, S Varganov, MS Gordon, H Metiu, S Chretien, P Piecuch, ... Journal of the American Chemical Society 127 (3), 1049-1052	227	2005
Single-reference, size-extensive, non-iterative coupled-cluster approaches to bond breaking and biradicals P Piecuch, M Wloch, JR Gour, A Kinal Chemical physics letters 418 (4), 467-474	216	2006
Extension of the renormalized coupled-cluster methods exploiting left eigenstates of the similarity-transformed Hamiltonian to open-shell systems: A benchmark study M Wloch, JR Gour, P Piecuch The Journal of Physical Chemistry A 111 (44), 11359-11382	211	2007

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