

1. Papers in Refereed Journals

1. "Theory and calculation of excited state wave functions and properties",
D.R. Beck and C.A. Nicolaides,
Int. J. Quantum Chem. Suppl. Y-10, 119 (1976).
2. "Collective excitations in atoms and molecules",
C.A. Nicolaides and D.R. Beck,
J. Phys. B 9, L259 (1976).
3. "Calculation of induced electric and magnetic moments of atoms and molecules",
D.R. Beck and C.A. Nicolaides,
Chem. Phys. Lett. 48, 135 (1977).
4. "Lower bounds to static polarizabilities",
D.R. Beck and C.A. Nicolaides,
Chem. Phys. Lett. 49, 357 (1977).
5. "Comment on mean-square deviation formula for autoionizing states",
C.A. Nicolaides,
Phys. Rev. A 15, 1787 (1977).
6. "Variational method for calculating energies and widths of resonances",
C.A. Nicolaides and D.R. Beck,
Phys. Lett. A 60, 92 (1977).
7. "High-spin and mixed states in BI and BII",
D.R. Beck and C.A. Nicolaides,
Phys. Lett. A 61, 227 (1977).
8. "Continuum and its effect on cascades in beam-foil spectroscopy",
C.A. Nicolaides,
Phys. Lett. A 63, 209 (1977).
9. "Possibility of observing nonexponential decays in autoionizing states",
C.A. Nicolaides and D.R. Beck,
Phys. Rev. Lett. 38, 683 (1977).
10. "Transfer of oscillator strength in regions of (avoided) crossings - 2-state approximation",
C.A. Nicolaides and D.R. Beck,
Chem. Phys. Lett. 53, 87 (1978).
11. "Transfer of oscillator strength in regions of avoided crossings. Atomic spectra for non-

- integer values of Z . Application to the Ni $4S^0-4P$ sequences ",
D.R. Beck and C.A. Nicolaides,
Chem. Phys. Lett. 53, 91 (1978).
12. "Methods for improving spin-densities obtained from unrestricted Hartree-Fock wavefunctions",
A.T. Amos, D.R. Beck and I.L. Cooper,
Chem. Phys. Lett. 56, 95 (1978).
13. "How many bound-states do H^- and H^{2-} have",
D.R. Beck and C.A. Nicolaides,
Chem. Phys. Lett. 59, 525 (1978).
14. "Variational calculation of energies and widths of resonances",
C.A. Nicolaides and D.R. Beck,
Phys. Lett. A 65, 11 (1978).
15. "Transition-probabilities for Vuv resonance lines of Mg-like and Zn-like molybdenum ions",
D.R. Beck and C.A. Nicolaides,
Phys. Lett. A 65, 293 (1978).
16. "Time-dependence, complex scaling, and calculation of resonances in many-electron systems",
C.A. Nicolaides and D.R. Beck,
Int. J. Quantum Chem. 14, 457 (1978).
17. "Comment on the lifetime of the Li $1s2p^2\ ^2P$ state: How probable is radiative autoionization?",
C.A. Nicolaides and D.R. Beck,
Phys. Rev. A 17, 2116 (1978).
18. "Theory of atomic structures including electron correlation. 5. Excited-states not lowest of their symmetry and oscillator strengths in neutral and singly ionized atoms - comment",
C.A. Nicolaides and D.R. Beck,
Phys. Rev. A 18, 1307 (1978).
19. "Analysis of maximum entropy principle debate",
J.F. Cyranski,
Found. Phys. 8, 493 (1978).
20. "Quantum measurement as a communication with nature",
J.F. Cyranski,
Found. Phys. 8, 805 (1978).
21. "One-electron binding and Auger energies in atomic and molecular states"

G. Theodorakopoulos, C.A. Nicolaides and D.R. Beck,
Int. J. Quantum Chem. Symp. 13, 671 (1979).

22. "Configuration interaction methods for improving unrestricted Hartree-Fock spin-densities",

A.T. Amos, D.R. Beck and I.L. Cooper,
Theor. Chim. Acta 52, 329 (1979).

23. "Measurement theory for physics",

J.F. Cyranski,
Found. Phys. 9, 641 (1979).

24. "Measurement, theory, and information",

J.F. Cyranski,
Inform. and Control 41, 275 (1979).

2. Book Chapters

1. "Theory of the electronic structure of excited states with numerical applications to atomic states",

D.R. Beck and C.A. Nicolaides,
Excited States in Quantum Chemistry, C.A. Nicolaides and D.R. Beck, Co-editors,
D. Reidel (1978), pp.105-142.

2. "Many body theory of photoabsorption in atoms and molecules",

C.A. Nicolaides and D.R. Beck,
Excited States in Quantum Chemistry, C.A. Nicolaides and D.R. Beck, Co-editors,
D. Reidel (1978), pp. 143-182.

3. "Theory of one electron binding energies including correlation, relativistic and radiative effects: application to free atoms and metals",

D.R. Beck and C.A. Nicolaides,
Excited States in Quantum Chemistry, C.A. Nicolaides and D.R. Beck, Co-editors,
D. Reidel (1978), pp. 329-360.

4. "Theory of atomic and molecular non-stationary states within the coordinate rotation method",

C.A. Nicolaides and D.R. Beck,
Excited States in Quantum Chemistry, C.A. Nicolaides and D.R. Beck, Co-editors,
D. Reidel (1978), pp. 383-402.