

## Prof. İLKER ÖZKAN

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### Advising Theses

ÖZKAN İ., Theoretical study of thermal rearrangements of 2-alkylidenecyclopenta-1,3-diyi biradicals, Doctorate, U.BOZKAYA(Student), 2011

ÖZKAN İ., Quantum chemical investigation of reactions of atomic carbon with water and methanol, Doctorate, Y.DEDE(Student), 2007

ÖZKAN İ., Quantum chemical study of geometrical and electronic structures of aromatic five membered heterocyclic oligomers in the ground and lowest singlet excited states, Postgraduate, N.Öksüz(Student), 2004

TOPPARE L. K., ÖZKAN İ., Quantum chemical study of geometries and electronic structures of aromatic five-membered heterocyclic oligomers in the ground and lowest singlet excited states, Postgraduate, N.ÖKSÜZ(Student), 2004

ÖZKAN İ., Theoretical investigation of unimolecular reactions of cyclic C<sub>5</sub>H<sub>6</sub> compounds by AB initio quantum chemical methods, Postgraduate, A.KINAL(Student), 2004

ÖZKAN İ., Theoretical investigation of unimolecular reactions of cyclic c<sub>5</sub>h<sub>6</sub> compounds by initio quantum chemical methods, Doctorate, A.Kinal(Student), 2004

ZORA M., ÖZKAN İ., Theorehical study of unimolecular rearrangement reachons of 1,2-divinylcyclopropane and 1-cyclopropyl-1,3-butadiene, Postgraduate, M.FATİH(Student), 2000

ÖZKAN İ., ZORA M., Theoretical study of unimolecular rearrangement reactions of 1,2-divinylcyclopropane and 1-cyclopropyl-1,3-butadiene, Postgraduate, M.Fatih(Student), 2000

ÖZKAN İ., Effect of instruction of students understanding of electric current concept using conceptual change text at 6th grade, Postgraduate, B.YALVAÇ(Student), 1998

ÖZKAN İ., Effect on instruction on students' understanding of electric current concept using conceptual change text at 6th grade, Postgraduate, B.Yalvaç(Student), 1998

ÖZKAN İ., Effect of activity based instructional strategy on students' understanding of light and its properties at 6th grade, Postgraduate, H.Topkaya(Student), 1996

ÖZKAN İ., Effects of computer assisted instruction on students chemistry achievement, attitude toward cai and chemistry and their perception about the cai environment at the secondary school level, Postgraduate, S.YALÇINALP(Student), 1993

ÖZKAN İ., Effect of computer assited instruction on students' chemistry achievement toward CAI and chemistry and their perceptions about the CAI environment at the secondary school level., Postgraduate, S.Yalçalnp(Student), 1993

ÖZKAN İ., Computation of resonance states of anions by standard CI techniques, Postgraduate, A.GEORGE(Student), 1990

ÖZKAN İ., Effects of two different instructional treatments on the students' chemistry achievement, science process skills, and attitudes towards chemistry at the high school level, Doctorate, Ö.Geban(Student), 1990

### Published journal articles indexed by SCI, SSCI, and AHCI

- Spectroelectrochemical investigations of pyrimidine-2-thionato-bridged binuclear platinum(III) complexes**

Ozbek O., ÖZALP YAMAN Ş., ÖZKAN İ., ÖNAL A. M., İŞÇİ H.

POLYHEDRON, vol.74, pp.122-128, 2014 (SCI-Expanded)

- II. **Thermal Aromatizations of 2-Vinylmethylenecyclopropane and 3-Vinylcyclobutene**  
Bozkaya U., ÖZKAN İ.  
JOURNAL OF ORGANIC CHEMISTRY, vol.77, no.13, pp.5714-5723, 2012 (SCI-Expanded)
- III. **Thermal Rearrangements of 1-Ethynyl-2-methylcyclopropane: A Computational Study**  
Bozkaya U., ÖZKAN İ.  
JOURNAL OF PHYSICAL CHEMISTRY A, vol.116, no.12, pp.3274-3281, 2012 (SCI-Expanded)
- IV. **Potential Energy Surfaces for Rearrangements of Berson Trimethylenemethanes**  
Bozkaya U., ÖZKAN İ.  
JOURNAL OF PHYSICAL CHEMISTRY A, vol.116, no.9, pp.2309-2321, 2012 (SCI-Expanded)
- V. **Theoretical Study of Thermal Rearrangements of 1-Hexen-5-yne, 1,2,5-Hexatriene, and 2-Methylenebicyclo[2.1.0]pentane**  
Bozkaya U., ÖZKAN İ.  
JOURNAL OF ORGANIC CHEMISTRY, vol.77, no.5, pp.2337-2344, 2012 (SCI-Expanded)
- VI. **Reactions of 1S, 1D, and 3P carbon atoms with water. Oxygen abstraction and intermolecular formaldehyde generation mechanisms; An MCSCF study**  
ÖZKAN İ., Dede Y.  
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, vol.112, no.4, pp.1165-1184, 2012 (SCI-Expanded)
- VII. **Thermal denitrogenation of 7-isopropylidene-2,3-diaza-norbornene: formation of substituted 3-methylene-(1,4)-pentadienes**  
Bozkaya U., ÖZKAN İ.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, vol.14, no.41, pp.14282-14292, 2012 (SCI-Expanded)
- VIII. **Intermolecular acetaldehyde and dimethoxymethane formation mechanisms via ethenol and methoxymethylene precursors in reactions of atomic carbon with methanol: a computational study**  
DEDE Y., ÖZKAN İ.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, vol.14, no.7, pp.2326-2332, 2012 (SCI-Expanded)
- IX. **Energy spectrum and thermodynamics of anisotropic spin-1/2 two-leg ladder**  
Cheranovskii V. O., Chovpan A. A., Ezerskaya E. V., Ozkan I.  
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, vol.106, no.10, pp.2254-2261, 2006 (SCI-Expanded)
- X. **Competing pathways in the [2+2] cycloadditions of cyclopentyne and benzyne. A DFT and ab initio study**  
Ozkan I., Kinal A.  
JOURNAL OF ORGANIC CHEMISTRY, vol.69, no.16, pp.5390-5394, 2004 (SCI-Expanded)
- XI. **Isomerizations of bicyclo[2.1.0]pent-2-ene and tricyclo[2.1.0.0(2,5)]pentane into cyclopenta-1,3-diene: A computational study by DFT and high-level ab initio methods**  
Ozkan I., Kinal A., Balci M.  
JOURNAL OF PHYSICAL CHEMISTRY A, vol.108, no.3, pp.507-514, 2004 (SCI-Expanded)
- XII. **Transition structures, energetics, and secondary kinetic isotope effects for cope rearrangements of cis-1,2-divinylcyclobutane and cis-1,2-divinylcyclopropane: A DFT study**  
Ozkan I., Zora M.  
JOURNAL OF ORGANIC CHEMISTRY, vol.68, no.25, pp.9635-9642, 2003 (SCI-Expanded)
- XIII. **Nucleus-independent chemical shift evaluation for benzo- and dibenzo-fused pyrrole, furan and thiophene derivatives**  
ZORA M., ÖZKAN İ.  
Journal of Molecular Structure: THEOCHEM, vol.638, pp.157-162, 2003 (SCI-Expanded)
- XIV. **Transition structures and energetics for the Cope rearrangement of cis-1,2-divinylcyclopropane: an ab initio study**  
Zora M., Ozkan I., Danisman M.  
JOURNAL OF MOLECULAR STRUCTURE-THEOCHEM, vol.636, pp.9-13, 2003 (SCI-Expanded)
- XV. **Transition structures and energetics for the Cope rearrangement of cis-1,2-divinylcyclobutane: an ab initio study**

- Zora M., Ozkan I.  
JOURNAL OF MOLECULAR STRUCTURE-THEOCHEM, vol.625, pp.251-256, 2003 (SCI-Expanded)
- XVI. **Energy spectrum of extended Hubbard model with spin-dependent hopping and related spin ladder model**  
Cheranovskii V., Ezerskaya E., Ozkan I.  
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, vol.88, no.4, pp.398-402, 2002 (SCI-Expanded)
- XVII. **The energy spectrum of a spin-1/2 ladder with mixed interactions**  
Cheranovskii V., Ezerskaya E., Ozkan I.  
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.13, no.20, pp.4525-4534, 2001 (SCI-Expanded)
- XVIII. **Modeling the behavior of longwall coal mine gate roadways subjected to dynamic loading**  
Unal E., Ozkan I., Cakmakci G.  
INTERNATIONAL JOURNAL OF ROCK MECHANICS AND MINING SCIENCES, vol.38, no.2, pp.181-197, 2001 (SCI-Expanded)
- XIX. **The ground state spin ordering and lowest energy excitations of a model organic ferrimagnet-polyallyl spin chain**  
Cheranovskii V., Ozkan I.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.223, no.2, pp.156-162, 2001 (SCI-Expanded)
- XX. **EFFECTS OF COMPUTER-SIMULATIONS AND PROBLEM-SOLVING APPROACHES ON HIGH-SCHOOL-STUDENTS**  
Geban O., Askar P., Ozkan I.  
JOURNAL OF EDUCATIONAL RESEARCH, vol.86, pp.5-10, 1992 (SSCI)
- XXI. **FRANCK-CONDON PRINCIPLE FOR POLYATOMIC-MOLECULES - AXIS-SWITCHING EFFECTS AND TRANSFORMATION OF NORMAL COORDINATES**  
OZKAN I.  
JOURNAL OF MOLECULAR SPECTROSCOPY, vol.139, no.1, pp.147-162, 1990 (SCI-Expanded)

## Metrics

Publication: 22

Citation (WoS): 435

Citation (Scopus): 442

H-Index (WoS): 11

H-Index (Scopus): 11