

## Asst. Prof. ELİF SOMUNCU

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, Tokat Gaziosmanpaşa University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey 2010 - 2014

Postgraduate, Tokat Gaziosmanpaşa University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), Turkey 2006 - 2010

Undergraduate, Tokat Gaziosmanpaşa University, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey 2002 - 2006

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, İkinci ve üçüncü virial katsayılarının farklı potansiyeller için hesaplanması ve bazı moleküllere uygulamaları, Tokat Gaziosmanpaşa University, Fen Bilimleri Enstitüsü, Fizik (Dr), 2014

Postgraduate, Gramm-Schmidt yöntemi kullanılarak Slater tipi atom orbitallerinin ortanormalleştirilmesi, Tokat Gaziosmanpaşa University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), 2010

### Research Areas

Physics

### Academic Titles / Tasks

Associate Professor, Usak University, TIBBİ HİZMETLER VE TEKNİKLER BÖLÜMÜ, TIBBİ HİZMETLER VE TEKNİKLER BÖLÜMÜ, 2022 - Continues

Usak University, TIBBİ HİZMETLER VE TEKNİKLER BÖLÜMÜ, TIBBİ HİZMETLER VE TEKNİKLER BÖLÜMÜ, 2021 - Continues

### Academic and Administrative Experience

Usak University, 2021 - Continues

Usak University, 2021 - Continues

## Courses

KALİTE YÖNETİM SİSTEMLERİ, Associate Degree, 2022 - 2023  
TOPLUMA HİZMET UYGULAMALARI, Associate Degree, 2022 - 2023  
Göz Anatomisi ve Fizyolojisi, Associate Degree, 2022 - 2023, 2021 - 2022  
Kariyer Planlama, Associate Degree, 2022 - 2023  
OPTİSYENLİK UYGULAMALARI-III, Associate Degree, 2022 - 2023  
Optisyenlik Uygulamaları II, Associate Degree, 2022 - 2023  
Fizik, Associate Degree, 2021 - 2022  
Optisyenlik Uygulamaları I, Associate Degree, 2021 - 2022

## Advising Theses

ELİF S., Debye yaklaşımına göre yarıiletkenlerin termodinamik özelliklerinin hesaplanması ve bazı reel sistemlere uygulanması, Postgraduate, A.SEVİNDİK(Student), 2022  
ELİF S., Güneş pili yapımında kullanılan Si, GaAs, CdTe gibi anorganik yarı iletken malzemelerin ısı kapasitelerinin sıcaklığa göre değişiminin debye yaklaşımına göre incelenmesi, Postgraduate, A.BULUT(Student), 2022

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

- I. **A general approximation method for accurate evaluation of the intermolecular potential parameters by using density functional theory**  
Mamedov B. A., SOMUNCU E., Karatas E.  
Kuwait Journal of Science, vol.51, no.1, 2024 (SCI-Expanded)
- II. **Theoretical determination of speed of sound and fourth virial coefficient by using Kihara (12-6) potential**  
SOMUNCU E., Mamedov B. A.  
Zeitschrift fur Naturforschung - Section A Journal of Physical Sciences, vol.78, no.10, pp.975-982, 2023 (SCI-Expanded)
- III. **Accurate Analytical Evaluation of Fugacity Coefficient of Gases**  
SOMUNCU E., Mamedov B.  
Russian Journal of Physical Chemistry A, vol.97, no.5, pp.878-882, 2023 (SCI-Expanded)
- IV. **Analysis of the second virial coefficient, and application to rare gas mixtures**  
SOMUNCU E., Mamedov B. A.  
Zeitschrift fur Naturforschung - Section A Journal of Physical Sciences, vol.77, no.4, pp.403-408, 2022 (SCI-Expanded)
- V. **Evaluation of specific heat capacity and speed of sound of fluids by using the quantum correction to second virial coefficient with Kihara potential**  
SOMUNCU E., Mamedov B. A.  
European Physical Journal Plus, vol.137, no.3, 2022 (SCI-Expanded)
- VI. **Derivation of analytical expressions for optical gain coefficient in bulk semiconductors**  
SOMUNCU E.  
Journal of Optoelectronics and Advanced Materials, vol.23, no.9-10, pp.457-462, 2021 (SCI-Expanded)
- VII. **Boyle temperature and boyle volume of refrigeration gases**  
Mamedov B., Somuncu E.  
Journal of Thermophysics and Heat Transfer, vol.34, no.3, pp.601-604, 2020 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Accurate Assessment of Joule-Thomson Inversion Temperature at Zero Pressure of Imperfect Gases**

MEHMETOĞLU B., SOMUNCU E.

Current Physical Chemistry, vol.11, no.3, pp.179-183, 2021 (Peer-Reviewed Journal)

**II. Ab Initio Study on Optimization of Bisphenol A and Phosgene to Manufacture Polycarbonate**

MEHMETOĞLU B., SOMUNCU E., Karatas E.

JOURNAL OF SCIENCE AND ARTS, vol.20, no.4, pp.995-998, 2020 (ESCI)

**III. Analytical Evaluation of Second Virial Coefficient Using Sutherland Potential and Its Application to Real Gases**

SOMUNCU E.

Afyon Kocatepe University Journal of Sciences and Engineering, vol.18, no.1, pp.83-89, 2018 (Peer-Reviewed Journal)

## **Refereed Congress / Symposium Publications in Proceedings**

**I. Numerical Calculation Second Virial Coefficient over HFDHE2 Potential**

SOMUNCU E., MEHMETOĞLU B.

3rd International Conference on Frontiers in Academic Research, Konya, Turkey, 15 - 16 June 2024

**II. Calculation of Using Third Virial Coefficient over Hard-Core-Lennard- Jones Potential**

SOMUNCU E., MEHMETOĞLU B.

3rd International Conference on Frontiers in Academic Research, Konya, Turkey, 15 - 16 June 2024

**III. Numerical Analysis of Second Virial Coefficient over Sposito Potential**

SOMUNCU E., MEHMETOĞLU B.

3rd International Conference on Engineering, Natural and Social Sciences ICENSOS 2024, Turkey, 16 - 17 May 2024

**IV. Numerical Evaluation of Third Virial Coefficient with Morse Potential**

SOMUNCU E., MEHMETOĞLU B.

3rd International Conference on Engineering, Natural and Social Sciences ICENSOS 2024, Turkey, 16 - 17 May 2024

**V. Theoretical evaluation of thermal conductivity and its application of BaUO3**

GÖKBULUT M., SOMUNCU E.

3rd International Conference on Innovative Academic Studies, Turkey, 26 - 28 September 2023

**VI. Orthonormalizations of the Slater-type atom orbitals n 6 from to 7 using the Gramm-Schmidt method**

MEHMETOĞLU B., SOMUNCU E.

3rd International Conference on Innovative Academic Studies, Turkey, 26 - 28 September 2023

**VII. CALCULATION of JOULE THOMSON INVERSION TEMPERATURE using SECOND VIRIAL COEFFICIENT with STOCKMAYER POTENTIAL**

SOMUNCU E., MEHMETOĞLU B.

2. ÇANKAYA INTERNATIONAL CONGRESS OF SCIENTIFIC RESEARCH, Ankara, Turkey, 28 - 29 September 2023

**VIII. NUMERICAL EVALUATION of SECOND VIRIAL COEFFICIENT with KEESOM POTENTIAL**

SOMUNCU E., MEHMETOĞLU B.

2. ÇANKAYA INTERNATIONAL CONGRESS OF SCIENTIFIC RESEARCH, Ankara, Turkey, 28 - 29 September 2023

**IX. CALCULATION of FUGACITY COEFFICIENT using SECOND VIRIAL COEFFICIENT with STOCKMAYER POTENTIAL**

SOMUNCU E., MEHMETOĞLU B.

1st International Conference on Modern and Advanced Research, Konya, Turkey, 29 - 31 July 2023

**X. CALCULATION of COMPRESSIBILITY COEFFICIENT using THIRD VIRIAL COEFFICIENT over KIHARA POTENTIAL**

SOMUNCU E., MEHMETOĞLU B.

1st International Conference on Modern and Advanced Research, Konya, Turkey, 29 - 31 July 2023

**XI. Calculation of Second Virial Coefficient of DNA**

MEHMETOĞLU B., SOMUNCU E., Karatas E.

ICAENS 2023 CONFERENCE, Turkey, 10 July 2023

- XII. **Calculation of the Second Virial Coefficient of The TMGa Molecule**  
MEHMETOĞLU B., Karatas E., SOMUNCU E.  
ICAENS 2023 CONFERENCE, Turkey, 10 July 2023
- XIII. **CALCULATION SPECIFIC HEAT CAPACITY OF SI AND CUINSE 2 SOLAR CELL MATERIALS**  
ASKEROĞLU İ., SOMUNCU E., BULUT A.  
9. Internatinal Congress on Innovative Scientific Approaches, Samsun, Turkey, 17 May 2023
- XIV. **Theoretical Calculation of Lennard-Jones (12-6-4) Intermolecular Interaction Energy for TSPP**  
SOMUNCU E., MEHMETOĞLU B.  
4th International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 10 November 2022
- XV. **A Calculation of the Speed of Sound by using ab Initio Method for the TMGa**  
MEHMETOĞLU B., SOMUNCU E., Karatas E.  
1st International Conference on Innovative Academic Studies, Konya, Turkey, 10 September 2022
- XVI. **NUMERIC ANALYSIS OF SPEED OF SOUND USING FOURTH VIRIAL COEFFICIENT AND ITS APPLICATION TO MOLECULE**  
SOMUNCU E., MEHMETOĞLU B.  
ATLAS INTERNATIONAL CONFERENCE ON RESEARCH IN APPLIED SCIENCES, Barcelona, Spain, 9 - 10 July 2022
- XVII. **Calculation of Thermal Conductivity of Materials using Einstein-Debye Method**  
SOMUNCU E.  
3rd International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 22 July 2022
- XVIII. **THEORETICAL ANALYSIS OF SECOND VIRIAL COEFFICIENT OF CARBON DIOXIDE-WATER MIXTURES**  
SOMUNCU E., MEHMETOĞLU B.  
EJONS 14th INTERNATIONAL CONFERENCE ON MATHEMATICS, ENGINEERING, NATURAL & MEDICAL SCIENCES, Paris, France, 06 July 2022
- XIX. **Numerical Analysis of Moments of Collision-Induced Scattering with Exp-6 Potential**  
SOMUNCU E.  
3rd International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 22 July 2022
- XX. **NUMERIC CALCULATION OF FOURTH VIRIAL COEFFICIENT WITH KIHARA POTENTIAL**  
SOMUNCU E., MEHMETOĞLU B.  
EJONS 14th INTERNATIONAL CONFERENCE ON MATHEMATICS, ENGINEERING, NATURAL & MEDICAL SCIENCES, Paris, France, 06 July 2022
- XXI. **NUMERIC CALCULATION OF THIRD VIRIAL COEFFICIENT OF GAS MIXTURES**  
SOMUNCU E., MEHMETOĞLU B.  
ATLAS INTERNATIONAL CONFERENCE ON RESEARCH IN APPLIED SCIENCES, Barcelona, Spain, 9 - 10 July 2022
- XXII. **Calculation of Heat Capacity of Gas N<sub>2</sub> using Third Virial Coefficient**  
MEHMETOĞLU B., SOMUNCU E.  
3. International Baku Scientific Researches Conference, Baku, Azerbaijan, 15 - 16 October 2021
- XXIII. **Analytical Calculation of Specific Heat Capacities of Transition Metals in Tungsten**  
SOMUNCU E., GÖKBULUT M.  
1st International Conference of Physics, Ankara, Turkey, 17 August 2021
- XXIV. **Numerical Calculation of Moments of Collision-Induced Scattering with Morse Potential**  
GÖKBULUT M., SOMUNCU E.  
1st International Conference of Physics, Ankara, Turkey, 17 August 2021
- XXV. **Theoretical Calculation of Specific Heat Capacity of Tungsten-Technetium Alloy**  
GÖKBULUT M., SOMUNCU E.  
Ejons 12 th International Congress on Mathematic Engineering and Natural Sciences, Paris, France, 9 - 11 July 2021
- XXVI. **Calculation of Compressibility Coefficient with Fourth Virial Coefficient**  
SOMUNCU E., MEHMETOĞLU B.  
5. Asia Pacific International Congress on Contemporary Studies, Sydney, Australia, 16 - 18 July 2021
- XXVII. **Calculation of speed of sound of n-pentane using third virial coefficient with Kihara potential**

- SOMUNCU E., MEHMETOĞLU B.  
International Asian Congress on Contemporary Sciences-V, Nakhchivan, Azerbaijan, 1 - 02 June 2021
- XXVIII. **Calculation of Fugacity Coefficient of Some Real Gases using Fourth Virial Coefficient**  
MEHMETOĞLU B., SOMUNCU E.  
International Asian Congress on Contemporary Sciences-V, Nakhchivan, Azerbaijan, 1 - 02 June 2021
- XXIX. **Optimization of Phosgene Using Ab Initio Basis Set**  
SOMUNCU E., Karatas E., Gokbulut M.  
8. Uluslararası Bilimsel Araştırma Kongresi (UBAK), Çorum, Turkey, 22 - 23 August 2020
- XXX. **Calculation of the Heat Capacity of Silver Chloride which is used in the Manufacture of Photochromic Lenses**  
SOMUNCU E., Karatas E., Gokbulut M.  
8. Uluslararası Bilimsel Araştırma Kongresi (UBAK), Çorum, Turkey, 22 - 23 August 2020
- XXXI. **OPTIMIZATION OF GA(CH<sub>3</sub>)<sub>3</sub> GASES USING AB INITIO BASIS SET**  
MEHMETOĞLU B., Karatas E., SOMUNCU E.  
IX. UMTEB INTERNATIONAL CONGRESS ON VOCATIONAL & TECHNICAL SCIENCES, Gaziantep, Turkey, 7 - 08 February 2020
- XXXII. **CALCULATION OF LENNARD-JONES (12-6) INTERACTION ENERGY FOR F<sub>2</sub>-F<sub>2</sub> SYSTEM**  
SOMUNCU E., Karatas E.  
IX. UMTEB INTERNATIONAL CONGRESS ON VOCATIONAL & TECHNICAL SCIENCES, Gaziantep, Turkey, 7 - 08 February 2020
- XXXIII. **Performance analysis of second virial coefficient with Sutherland potential: VIII. an analytical evaluation of fugacity coefficient of gases**  
SOMUNCU E., ASKEROĞLU İ.  
2 nd International Turkish Word Engineering and Science Congress, Antalya, Turkey, 7 - 10 November 2019
- XXXIV. **Performance analysis of second virial coefficient with Sutherland potential: X. an analytical evaluation of Joule-Thomson inversion temperature of gases**  
MEHMETOĞLU B., SOMUNCU E.  
2 nd International Turkish Word Engineering and Science Congress, Antalya, Turkey, 7 - 10 November 2019
- XXXV. **Performance analysis of second virial coefficient with Sutherland potential: VI. an analytical evaluation of enthalpy of gases**  
SOMUNCU E., ASKEROĞLU İ., MEHMETOĞLU B.  
V. Uluslararası Mesleki ve Teknik Bilimler Kongresi (UMTEB-V), Kahire, Egypt, 24 - 27 January 2019
- XXXVI. **Calculation of Lennard-Jones (12-6-4) potential interaction energy for Tetra Sodium Meso-Tetrakis (P Sulphonatophenly) Porphyrin**  
MEHMETOĞLU B., SOMUNCU E., ÇAÇAN A. H.  
Turkish Physical Society 35. International Physics Congress, Muğla, Turkey, 4 - 08 September 2019
- XXXVII. **Theoretical determination of the energy and the wave functions for Klein Gordon Equation with Yukawa potential**  
GÖKBULUT M., SOMUNCU E.  
Turkish Physical Society 35. International Physics Congress, Muğla, Turkey, 4 - 08 September 2019
- XXXVIII. **Theoretical evaluation of moments of the two-body collision induced scattering distribution of gases with Lennard-Jones (2n-n) potential**  
SOMUNCU E., GÖKBULUT M.  
Turkish Physical Society 35. International Physics Congress, Muğla, Turkey, 4 - 08 September 2019
- XXXIX. **Performance analysis of second virial coefficient with Sutherland potential: IX. an analytical evaluation of Joule-Thomson coefficient of gases**  
MEHMETOĞLU B., SOMUNCU E., ASKEROĞLU İ.  
Uluslararası 19 Mayıs Multidisipliner Çalışmalar Kongresi, Samsun, Turkey, 17 - 19 May 2019
- XL. **Performance analysis of second virial coefficient with Sutherland potential: VII. an analytical evaluation of compressibility coefficient**  
SOMUNCU E., ASKEROĞLU İ., EMEK M.

Uluslararası 19 Mayıs Multidisipliner Çalışmalar Kongresi, Samsun, Turkey, 17 - 19 May 2019

- XLII. **Performance analysis of second virial coefficient with Sutherland potential: VII. an analytical evaluation of compressibility coefficient of gases**  
SOMUNCU E., ASKEROĞLU İ., EMEK M.  
Uluslararası 19 Mayıs Multidisipliner Çalışmalar Kongresi, Samsun, Turkey, 17 - 19 May 2019
- XLIII. **Performance analysis of second virial coefficient with Sutherland potential: V. an analytical evaluation of internal energy of gases**  
ASKEROĞLU İ., SOMUNCU E., MEHMETOĞLU B.  
V. Uluslararası Mesleki ve Teknik Bilimler Kongresi (UMTEB-V), Kahire, Egypt, 24 - 27 January 2019
- XLIII. **Virial Equation of State and its Application in Study of Thermodynamic Properties of Gases and Fluids**  
ASKEROĞLU İ., SOMUNCU E., EMEK M.  
V. Uluslararası Mesleki ve Teknik Bilimler Kongresi (UMTEB-V), Kahire, Egypt, 24 - 27 January 2019
- XLIV. **Performance analysis of second virial coefficient with Sutherland potential: III . An analytical evaluation of Gibbs energy of gases**  
ASKEROĞLU İ., MEHMETOĞLU B., SOMUNCU E.  
5. Ejons International Journal On Mathematics, Engineering & Natural Sciences, Gaziantep, Turkey, 22 - 25 November 2018
- XLV. **Performance analysis of second virial coefficient with Sutherland potential: IV . An analytical evaluation of entropy of gases**  
MEHMETOĞLU B., SOMUNCU E., ASKEROĞLU İ.  
5. Ejons International Journal On Mathematics, Engineering Natural Sciences, Gaziantep, Turkey, 22 - 25 November 2018
- XLVI. **Analytical evaluation of speed of sound by using second virial coefficient with Morse-Morse-Spline-Van Der Waals (MMSV) potential**  
MEHMETOĞLU B., SOMUNCU E.  
2. Uluslararası İpekyolu Akademik Çalışmalar Sempozyumu, Nevşehir, Turkey, 20 - 22 September 2018
- XLVII. **A calculation procedure for quantum correction to second virial coefficient with Rice and Hirschfelder modified Buckingham (Exp-6) potential**  
SOMUNCU E., MEHMETOĞLU B.  
2. Uluslararası İpekyolu Akademik Çalışmalar Sempozyumu, Nevşehir, Turkey, 20 - 22 September 2018
- XLVIII. **Calculation of Specific Heat Capacities for R-134a Using Second Virial Coefficient**  
SOMUNCU E., ASKEROĞLU İ.  
UMTEB 3. International Congress on Vocational and Technical Sciences, Gaziantep, Turkey, 21 - 22 June 2018
- XLIX. **Evaluation of Joule-Thomson coefficient of Refrigeration Gases Using Second Virial Coefficient**  
ASKEROĞLU İ., SOMUNCU E.  
UMTEB 3. Uluslararası Mesleki ve Teknik Bilimler Kongresi, Gaziantep, Turkey, 21 - 22 June 2018
- L. **Evaluation of Relative Permittivity Using Second Virial Coefficients**  
ASKEROĞLU İ., SOMUNCU E.  
EJONS International Congress on Mathematic, Engineering and Natural Science-III, Mardin, Turkey, 21 - 22 April 2018
- LI. **Calculation of Second and Third Virial Coefficients for Some Alternative Fuels**  
SOMUNCU E., ASKEROĞLU İ.  
EJONS International Congress on Mathematic, Engineering and Natural Science-III, Mardin, Turkey, 21 - 22 April 2018
- LII. **Calculation of Second Virial Coefficient of UF<sub>6</sub> Using Lennard-Jones (12-6) and Morse-Morse-Spline-Van der Waals Potentials**  
SOMUNCU E., ASKEROĞLU İ., MEHMETOĞLU T.  
1 st International Turkish Word Engineering and Science Congress, Antalya, Turkey, 7 - 10 December 2017
- LIII. **Calculation of Third Virial Coefficient of UF<sub>4</sub>, UF<sub>5</sub> and UF<sub>6</sub> Using Lennard-Jones (12-6) Potential**  
SOMUNCU E., MEHMETOĞLU B., ASKEROĞLU İ.

1 st International Turkish Word Engineering and Science Congress, Antalya, Turkey, 07 December 0017 - 10 December 2017

- LIV. **Theoretical study of third virial coefficient with Kihara potential**  
SOMUNCU E., MEHMETOĞLU B., ASKEROĞLU İ.  
Turkish Physical Society 33. International Physics Congress, Bodrum, Turkey, 6 - 10 September 2017
- LV. **Accurate assessment of Joule-Thomson inversion temperature at zero pressure by using second virial coefficient**  
MEHMETOĞLU B., SOMUNCU E., ASKEROĞLU İ.  
Turkish Physical Society 33rd International Physics Congress, Bodrum, Turkey, 6 - 10 September 2017
- LVI. **On The Evaluation of Cold and Hot Plasma Energies**  
MEHMETOĞLU B., ÇOPUROĞLU E., SOMUNCU E.  
3 rd International Conference on Science, Ecology and Technology, Rome, Italy, 14 - 16 August 2017
- LVII. **Analytical Evaluation of the Uehling Potential Using Binomial Expansion Theorems**  
ÇOPUROĞLU E., MEHMETOĞLU B., SOMUNCU E.  
International Workshop on Mathematical Methods in Engineering, Ankara, Turkey, 27 - 29 April 2017
- LVIII. **Quantum Corrections to Second Virial Coefficient with Lennard-Jones (12-6) Potential**  
MEHMETOĞLU B., SOMUNCU E., ÇOPUROĞLU E.  
International Workshop on Mathematical Methods in Engineering, Ankara, Turkey, 27 - 29 April 2017
- LIX. **Calculation of Compressibility Factor of Gases by using Second Virial Coefficient**  
MEHMETOĞLU B., SOMUNCU E., ASKEROĞLU İ.  
2nd International Conference on Advances in Natural and Applied Sciences, Antalya, Turkey, 18 - 21 March 2017
- LX. **Theoretical calculation of heat capacity by using third virial coefficient**  
MEHMETOĞLU B., SOMUNCU E.  
Turkish Physical Society 32nd International Physics Congress, Bodrum, Turkey, Turkey, 6 - 09 September 2016, vol.1815
- LXI. **Theoretical calculation of Joule-Thomson coefficient by using third virial coefficient**  
MEHMETOĞLU B., SOMUNCU E., ASKEROĞLU İ.  
Turkish Physical Society 32nd International Physics Congress, Bodrum, Turkey, Turkey, 6 - 09 September 2016, vol.1815
- LXII. **Evaluation of Quantum Corrections to Second Virial Coefficient with Lennard-Jones (12-6)**  
MEHMETOĞLU B., SOMUNCU E.  
International Conference on Quantum Science and Applications (ICQSA-2016), Eskişehir, Turkey, 25 - 27 May 2016, vol.766, pp.12010
- LXIII. **An efficient method for the determination of fourth virial coefficient with Lennard-Jones (12-6) potential and its application**  
MEHMETOĞLU B., SOMUNCU E., ASKEROĞLU İ.  
International Conference on Analysis and Applied Mathematics (ICAAM), Almaty, Kazakhstan, Kazakhstan, 7 - 10 September 2016
- LXIV. **Mathematical Modeling in the Evaluation of Second Virial Coefficient with Sutherland Potential and Its Applications**  
MEHMETOĞLU B., SOMUNCU E.  
International Conferences on Mathematics and Mathematics Education (ICMME), Elazığ, Turkey, 12 - 14 May 2016
- LXV. **Calculation of Heat Capacity Ratios of Uranium Hexafluoride Using Second Virial Coefficient**  
MEHMETOĞLU B., SOMUNCU E.  
International Workshop on Theoretical and Experimental Studies in Nuclear Applications and Technology (TESNAT-2016), Hatay, Turkey, 28 - 30 April 2016
- LXVI. **Calculation of Internal Energy Entropy and Enthalpy of Uranium Hexafluoride Using Second Virial Coefficient**  
MEHMETOĞLU B., SOMUNCU E.  
International Workshop on Theoretical and Experimental Studies in Nuclear Applications and Technology (TESNAT-2016), Hatay, Turkey, 28 - 30 April 2016

- LXVII. **Analytical evaluation of third virial coefficient with Lennard-Jones (12-6) potential its applications**  
MEHMETOĞLU B., SOMUNCU E.  
International Conference on Advances in Natural and Applied Sciences (ICANAS-2016), Antalya, Turkey, 21 April 2016 - 23 April 2019
- LXVIII. **Calculation of the Zero-Pressure Joule-Thomson Coefficient for Some Non-Polar Molecules**  
MEHMETOĞLU B., SOMUNCU E., Can M.  
9th International Physics Conference of the Balkan Physical Union (BPU-9), İstanbul, Turkey, 24 - 27 August 2015
- LXIX. **Calculation of Second Virial Coefficient Using Stockmayer Potential for Molecules CH<sub>3</sub>OH, CCl<sub>2</sub>F<sub>2</sub>, CH<sub>2</sub>F<sub>2</sub> and CH<sub>3</sub>OCH<sub>3</sub>**  
SOMUNCU E., ASKEROĞLU İ., MEHMETOĞLU B.  
9th International Physics Conference of the Balkan Physical Union (BPU-9), İstanbul, Turkey, 24 - 27 August 2015
- LXX. **Calculation of Second Virial Coefficient of UF<sub>6</sub> Using Exp-6 and Lennard-Jones (12-6) Potentials**  
MEHMETOĞLU B., SOMUNCU E.  
Theoretical and Experimental Studies in Nuclear Applications and Technology (TESNAT), Osmaniye, Turkey, 23 - 26 April 2015
- LXXI. **Analytical Evaluation Of The Static Effective Dielectric Permittivity And Effective Dust Charge Using The Tsyrovich-Angelis Dust-Dust Collision Functions**  
SOMUNCU E., Dardem S. C., Özen D.  
Turkish Physical Society 31. International Physics Conference, 21 - 24 July 2014
- LXXII. **Analytical Evaluation of Virial Coefficients Using Modified Buckingham Potential and Its Application**  
SOMUNCU E., MEHMETOĞLU B.  
Turkish Physical Society 31st. International Physics Conference, İstanbul, Turkey, 21 - 24 July 2014
- LXXIII. **Use of Binomial Expansion Theorem in Accurate Evaluations of Tsyrovich- Angelis Dust-Dust Plasma Collision Functions**  
MEHMETOĞLU B., SOMUNCU E., ÇOPUROĞLU E.  
I. International Middle East Plasma Science Conference, Antalya, Turkey, 21 - 25 April 2014
- LXXIV. **İkinci Virial Katsayısının Lennard-Jones Potansiyeli İçin Hesaplanması ve Bazı Atom ve Moleküllere Uygulanması**  
MEHMETOĞLU B., SOMUNCU E.  
Turkish Physical Society 30. International Physics Conference, İstanbul, Turkey, 2 - 05 September 2013
- LXXV. **Calculation of Entropy Using Third Virial Coefficient with Kihara Potential**  
MEHMETOĞLU B., SOMUNCU E.  
5. Asia Pacific International Congress on Contemporary Studies, Sydney, Australia, 16 - 18 July 2021
- LXXVI. **Calculation of Two-Center Nuclear Attraction Integrals of Slater Type Orbitals with Noninteger Principal Quantum Numbers Using Guseinov's One-Center Expansion Formulas and Löwdin- Radial Function**  
MEHMETOĞLU B., ÇOPUROĞLU E., KURT P., SOMUNCU E.  
Turkish Physical Society 28. International Physics Conference, Muğla, Turkey, 06 September 2011
- LXXVII. **Derivatin of orthonormalized and orthgonalized slater type orbitals by using gramm-schmidt method**  
MEHMETOĞLU B., SOMUNCU E., ÇOPUROĞLU E.  
Türk Fizik Derneği 27. Uluslararası Fizik Kongresi, İstanbul, Turkey, 14 - 17 September 2010

## Metrics

Publication: 87

Citation (Scopus): 8

H-Index (WoS): 1

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