

## Asst. Prof. Ayşe Peker

### Personal Information

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**Address:** İstanbul teknik üniversitesi fen-edebiyat fakültesi matematik bölümü Maslak İstanbul

### International Researcher IDs

ORCID: 0000-0002-5228-7694

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### Education Information

Doctorate, İstanbul Technical University, Fen-Edebiyat Fakültesi, Matematik Bölümü, Turkey 1994 - 2002

Undergraduate, Turkey 1982 - 1994

Postgraduate, Marmara University, Fen Bilimleri Enstitüsü, Mühendislik Yönetimi (YI) (Tezli), Turkey 1991 - 1992

### Dissertations

Doctorate, Algebraic structures related to some deformed oscillators, İstanbul Teknik Üniversitesi, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2002

Postgraduate, Material requirements planning (MRP) manufacturing resource planning (MRP II) and the implementation of a dynamic production and inventory control system in a manufacturing company, Marmara Üniversitesi, Fen Bilimleri Enstitüsü, Mühendislik Yönetimi (YI) (Tezli), 1992

### Research Areas

Mechanical Engineering, Mechanical, Continuous Mechanics, Mathematics, Algebraic Geometry, Differential Equations, Physics, Natural Sciences, Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, İstanbul Technical University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2004 - Continues

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

- I. **Susceptible-infectious-susceptible (SIS) model with virus mutation in a variable population size**  
Dobie A.  
ECOLOGICAL COMPLEXITY, vol.50, 2022 (SCI-Expanded)
- II. **-deformed multi-dimensional fermion algebras**  
Dobie A.

EPL, vol.132, no.4, 2020 (SCI-Expanded)

**III. On the Time Shift Phenomena in Epidemic Models**

Peker-Dobie A., Demirci A., Bilge A. H., Ahmetolan S.

FRONTIERS IN PHYSICS, vol.8, 2020 (SCI-Expanded)

**IV. What Can We Estimate From Fatality and Infectious Case Data Using the Susceptible-Infected-Removed (SIR) Model? A Case Study of Covid-19 Pandemic**

Ahmetolan S., Bilge A. H., Demirci A., Peker-Dobie A., Ergonul O.

FRONTIERS IN MEDICINE, vol.7, 2020 (SCI-Expanded)

**V. On the propagation of nonlinear SH waves in a two-layered compressible elastic medium**

Ahmetolan S., Peker-Dobie A., Demirci A.

ZEITSCHRIFT FUR ANGEWANDTE MATHEMATIK UND PHYSIK, vol.70, 2019 (SCI-Expanded)

**VI. Decomposition of tensor product representations of the unitary matrix quantum group  $SU_q(2)$**

Arik M., Peker-Dobie A.

JOURNAL OF MATHEMATICAL PHYSICS, vol.45, no.3, pp.1150-1155, 2004 (SCI-Expanded)

## Metrics

Publication: 19

Citation (WoS): 7

Citation (Scopus): 36

H-Index (WoS): 1

H-Index (Scopus): 3