

Res. Asst. PhD İREM ÇAY

Personal Information

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Education Information

Doctorate, Kocaeli Üniversitesi, Fen Bilimleri Enstitüsü, Matematik, Turkey 2012 - 2018

Post Graduate, Kocaeli Üniversitesi, Fen Bilimleri Enstitüsü, Matematik Anabilim Dalı, Turkey 2009 - 2012

Under Graduate, Kocaeli Üniversitesi, Fen-Edebiyat Fakültesi, Matematik, Turkey 2005 - 2009

Foreign Languages

English, B2 Upper Intermediate

Academic Titles / Tasks

Research Assistant, Kocaeli Üniversitesi, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2010 - Continues

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **A NUMERICAL PROOF THAT CERTAIN CELLS FOLLOW the TRAILS of the DIFFUSIONS of SOME CHEMICALS in the EXTRACELLULAR MATRIX**
ÇAY İ., PAMUK S.
Journal of Mechanics in Medicine and Biology, 2021 (Journal Indexed in SCI Expanded)
- II. **A 2D mathematical model for tumor angiogenesis: The roles of certain cells in the extra cellular matrix**
PAMUK S., ÇAY İ., SAZCI A.
MATHEMATICAL BIOSCIENCES, vol.306, pp.32-48, 2018 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Turing Analysis of a Mathematical Model for Interaction between Tumor Cell and Its Inhibitor**
PAMUK S., ÇAY İ.
Academic Journal of Applied Mathematical Sciences, 2017 (Refereed Journals of Other Institutions)
- II. **Self Similar Asymptotics for Linear and Nonlinear Mathematical Models of Tumor Angiogenesis: A Review**
PAMUK S., ÇAY İ.
COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, 2014 (Refereed Journals of Other Institutions)
- III. **The method of lines for the numerical solution of a mathematical model in the initiation of angiogenesis**
PAMUK S., çay i.
TWMS J. App. Eng, vol.3, 2013 (Refereed Journals of Other Institutions)

- IV. **On the Stability of the Steady-State Solutions of Cell Equations in a Tumor Growth Model**
ÇAY İ., PAMUK S.
AIP Conference Proceedings, 2012 (Refereed Journals of Other Institutions)

Refereed Congress / Symposium Publications in Proceedings

- I. **A Mathematical Analysis of a Model in Capillary Formation: The Roles of Endothelial, Pericyte and Macrophages in the Initiation of Angiogenesis**
Pamuk S., Çay I.
20th World Academy of Science, Engineering and Technology Conference, Paris, France, 19 - 20 February 2018, vol.20, pp.1600
- II. **A Mathematical Analysis of a 2D Model for Tumor Angiogenesis: An Initial Data Perturbation Approximation**
PAMUK S., ÇAY İ.
International Conference on Applied Analysis and Mathematical Modelling, 3 - 07 July 2017
- III. **A 2D Mathematical Model for Tumor Angiogenesis: The Roles of Endothelials, Pericytes and Macrophages in the ECM**
Pamuk S., Çay İ., Sazcı A.
BIT's 10th Annual World Cancer Congress-2017, Barcelona, Spain, 19 - 21 May 2017
- IV. **Stability and Hopf Bifurcation Analysis of a Mathematical Model in Tumor Angiogenesis**
ÇAY İ., PAMUK S.
INTERNATIONAL CONFERENCE ON MATHEMATICS AND ENGINEERING, 10 - 12 May 2017
- V. **Self Similar Asymptotics for Linear and Nonlinear Mathematical Models of Tumor Angiogenesis: A Review**
PAMUK S., ÇAY İ.
International Conference on Nonlinear Differential and Difference Equations: Recent Developments and Applications, 27 - 30 May 2014
- VI. **On the Stability of the Steady-State Solutions of Cell Equations in a Tumor Growth Model**
Atac I., PAMUK S.
1st International Conference on Analysis and Applied Mathematics (ICAAM), Gümüşhane, Turkey, 18 - 21 October 2012, vol.1470, pp.172-175
- VII. **The Method of Lines for the Numerical Solutions of a Mathematical Model for Capillary Formation The Roles of Endothelial Pericytes and Macrophage Cells in the Capillary**
PAMUK S., çay i.
5th Annual International Conference on Mathematics, Statistics Mathematical Education, Atina, Greece, 13 - 16 June 2011