

VİRAİ

YAKIN DOĞU ÜNİVERSİTESİ



DESAM ARAŞTIRMA ENSTİTÜSÜ

DİNAMİKLER
ARAŞTIRMA
GRUBU

Ekibimiz...



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Misyon ve Vizyonumuz

- HIV, HBV ve HCV
- **SARS-CoV-2 , vektör kaynaklı enfeksiyonlar**
- Enfeksiyonlarının epidemik karakterlerini ortaya çıkarmak, filogenetik analizler ile dağılım dinamiklerini incelemek
- Tanı ve tedavi alternatiflerini belirlemek
- Matematiksel modelleme, yapay zeka, bulanık mantık uygulamaları ile simülasyonlar yapmak
- Kontrol analizleri genişletmek

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- **Uluslararası hakemli dergilerde yayınlanan makaleler: 17**
- Journal of Medical Virology (IF: 20.693; Q1)
- Viruses (IF: 5.818;Q1)
- Diagnostics (IF:3.992; Q2)
- HIV Medicine (IF: 3.094; Q1)
- Future Virology (IF:3.015; Q3)
- Eastern Mediternean Health Journal (IF: 2.087; Q3)
- Journal of Comparative Effectiveness Research (IF:2.040; Q3)

A.Arikan, M.Sayan. Investigation of SARS-CoV-2 Variants and Their Effect on SARS-CoV-2 Monoclonal Antibodies, Convalescent and Vaccine Plasma by a Novel Web Tool. *Diagnostics* 2022; 12(11):2869; <https://doi.org/10.3390/diagnostics12112869>

A.Arikan, T.Sanlidag, M.Sayan, B.Uzun, D.U.Ozsahin. Fuzzy-Based PROMETHEE Method for Performance Ranking of SARS-CoV-2 IgM Antibody Tests. *Diagnostics* 2022;12(11):2830. <https://doi.org/10.3390/diagnostics12112830>

M.Sayan, A. Arikan, M. Isbilen. Circulating Dynamics of SARS-CoV-2 Variants Between April 2021 - February 2022 in Turkey. *Canadian Journal of Infectious Diseases and Medical Microbiology* 2022; 4677720. DOI: <https://doi.org/10.1155/1970/4677720>

FS.Yıldırım, M.Sayan. Implications of Hepatitis B and C on the Human Immunodeficiency Virus Infections. *Viral Hepatitis Journal* 2022;28(2):72-78 DOI: 10.4274/vhd.galenos.2022.2022-3-1

N.Duman, G.Tuncel, A.Bisgin, ST.Bozdogan, SO.Sag, S.Gul, A.Kiraz, B.Balta, M.Erdogan, B.Uyanik, S.Canbek, P.Ata, BB.Geckinli, EA.Ates, C.Alavanda, SY.Ozdemir, O.Sezer, GO. Ozgon, H.Gurkan, K.Guler, I.Boga, N.Kaya, A.Alemdar, M.Sayan, M.Dundar, MC.Ergoren, SG.Temel. Analysis of ACE2 and TMPRSS2 coding variants by whole-exome sequencing in Turkish Population. *Journal of Medical Virology* 2022;94(11):5225–5243 DOI: <https://onlinelibrary.wiley.com/doi/full/10.1002/jmv.27976>.

G.Tuncel, MC.Ergoren, B.Baddal, P.Tulay, CS.Ozverel, E.Guler, HK.Suer, M.Sayan, T.Sanlidag. Detection of SARS-CoV-2 N501Y mutation among SARS-CoV-2 variants of concern circulating in Northern Cyprus. *Future Virology* 2022;17(8):523-528 DOI: <https://doi.org/10.2217/fvl-2021-0273>

N.Öze, M.Sayan. Social Network Dynamics in Transmission of HIV by Sexual Contact. *5th International Conference on Gender Research*. 2022; 5:1. DOI: 10.34190/icgr.5.1.81

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- M.T.Deniz, S.Akhan, M.Sayan. Evaluation of HCV Core Antigen in Diagnosis of Chronic Hepatitis C Patients under Direct-Acting Antiviral Treatment. *Viral Hepatitis Journal* 2022;28(1):25-31 DOI: 10.4274/vhd.galenos.2022.2021-3-2
- B.Rossetti, M.Fabbiani, D.Di Carlo, F.Incardona, A.Abecasis, P.Gomes, A.M.Geretti, C.S.Devaux, F.Garcia, R.Kaiser, S.Modica, A.Shallvari, A.Sönerborg, M.Zazzi, EuResist Network, INTEGRATE study group. Effectiveness of integrase strand transfer inhibitors in HIV- infected treatment-experienced individuals across Europe. *HIV Medicine* 2022;23(7):774-789 DOI:10.1111/hiv.13262
- A.Y.M.Howe, C.Rodrigo, E.Cunningham, M.W.Douglas, J.Dietz, J.Grebely, S.Popping, J.Al.Sfalcin, M.Parczewski, C.Sarrazin, A.de Salazar, A.Fuentes, M.Sayan, J.Quer, M.Kjellin, H.Kileng, O.Mor, J.Lennerstrand, S.Fourati, V.C.di Maio, V.Chulanov, J.M.Pawlotsky, P.R.Harrigan, F.C.Silberstein, F.Garcia, and SHARED Collaborators. Characteristics of Hepatitis C Virus Resistance From An International Cohort After A Decade of Direct-Acting Antivirals. *JHEP Reports* 2022;4(5)100462 DOI: <https://doi.org/10.1016/j.jhepr.2022.100462>
- N.Sultanoğlu, F.Saad, T.Şanlıdağ, E.Hıncal, M.Sayan, B.Kaymakamzade, K.Süer. Analysis of HIV Epidemic in Cyprus using a Mathematical Model. *Erciyes Medical Journal* 2022;44(1):63–7. DOI: 10.14744/etd.2021.32855
- E.Güler, A.Arikan, M.Abobakr, M.Sayan, K.Süer, T.Şanlıdağ. Positive Anti-HIV ELISA Results in Pregnancy: Is it Reliable? *Infectious Diseases in Obstetrics and Gynecology* 2022;1157793 DOI: <https://doi.org/10.1155/2022/1157793>
- M.Sayan, F.S.Yildirim, S.Akhan, I.Karaoglan, H.Akalin. Integrase strand transfer inhibitor (INSTI) genotypic resistance analysis in treatment-naive, INSTI-free antiretroviral-experienced, and INSTI-experienced Turkish patients infected with HIV-Current *HIV Research* 2022;20(2):184-192 DOI: 10.2174/1570162X20666220303104509
- U.Gazi, A.A.Sarioglu, E.Ruh, B.Sanlidag, C.Dalkan, I.Beyitler, K.Suer, N.Cakir, M.Sayan, T.Sanlidag. The Paediatric Asymptomatic SARS-CoV-2 IgG Seropositivity in Turkish Republic of Northern Cyprus. *Turkish Journal of Pediatrics* 2022; 64(1):179-185 DOI: 10.24953/turkjped.2021.1330
- S.Popping, V.Cento, C.S.-Devaux, C.A.Boucher, A.de Salazar, R.Kaiser, O.Mor, M.Sayan, D.Salmon, N.Weis, R.J.de Knecht, O.Sandulescu, V.Chulanov, D.van de Vijver, F.García, F.C.Silberstein. The European prevalence of resistance-associated substitutions among direct-acting antiviral failures. *Viruses* 2022;14(1):16 DOI: <https://doi.org/10.3390/v1401001>
- M.Sayan, A.Arikan, M.Isbilen. Comparative Evaluation of the Variant Analysis of SARS-CoV-2 Strains with Phylogenetic Analysis and Coronavirus Antiviral and Resistance Database (CoV-RDB). *Journal of Comparative Effectiveness Research* 2022;11(3):157-167 DOI: <https://doi.org/10.2217/cer-2021-0208>

■2023 yılı

Ayşe Arıkan, Nedim Cakir. Climate Change and Infectious Diseases. A Growing Threat. *New Microbes and New Infections*. In Press <https://doi.org/10.1016/j.nmni.2023101088>

N.Sultanoglu, B.Uzun, F.S.Yildirim, T.Sanlidag, D.U.Ozsahin, M.Sayan. Usability Evaluation of the Integrase Strand Transfer Inhibitors via Fuzzy Multi-Criteria Decision Analysis in HIV Infected Patients. *Journal of Healthcare Engineering* 2023;

K.Süer, M.Güvenir, A.Aykaç, E.Güler, M.Sayan, T.Şanlıdağ, S. Erdenliğ. Investigation of Brucella canis and Brucella abortus seropositivity by In-House rapid slide agglutination test and In-House ELISA in Northern Cyprus. *Tohoku Journal of Experimental Medicine* 2023; <https://doi.org/10.1620/tjem.2022.J096>

M.Sayan, N.Sultanoglu, T.Sanlidag. Dynamics of Rilpivirine Resistance Associated Mutation - E138 in Reverse Transcriptase among Antiretroviral-Naive HIV-1 Infected Individuals in Turkey. *AIDS Research and Human Retroviruses* 2023; <https://doi.org/10.1089/AID.2022.0065>

A.Arıkan, O.Doluca, S.Akhan, T.Şanlıdağ, M.Sayan. Evaluation of SARS-CoV-2 Immunochromatographic Lateral Flow and ELISA Techniques for IgG and IgM Antibodies in COVID-19 Cases, Türkiye. *Eastern Mediterranean Health Journal* 2023;28(x):xxx–xxx. <https://doi.org/10.26719/emhj.23.011>

H.S.Vatansever, M.Sayan, M.O.Onal, S.Akhan, S.Ozel, T.Sanlidag. The relationship between coronavirus disease-2019-positive patients and plasma interleukins and transforming growth factor- β levels. *Journal of Nature and Science of Medicine* 2023; 6(1): 32-37 doi:10.4103/jnsm.jnsm_37_22

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■ Ulusal hakemli dergilerde yayınlanan makaleler: 1

A.Arikan, M. Sayan, T. Sanlidag. Bir Anaokulunda Maske Takmanın Koruyucu Rolü. *Flora Dergisi* 2022;27(4):654-658 doi: 10.5578/flora.20229615

■ Uluslararası bilimsel toplantılarda sunulan ve basılan bildiriler: 1

N.Öze, M.Sayan. Social Network Dynamics in Transmission of HIV by Sexual Contact. 5th International Conference on Gender Research (ICGR) 2022. The University of Aveiro, Portugal, 28 - 29 April, 2022

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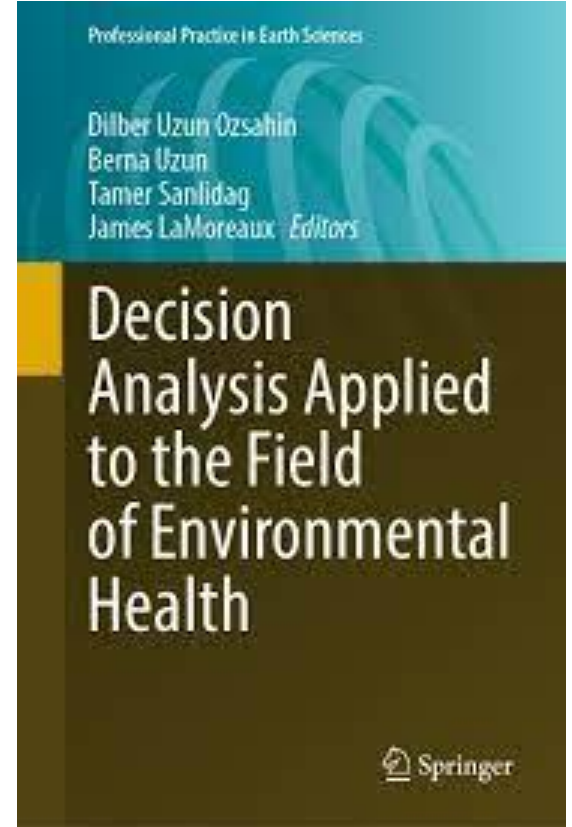
■ Yazılan uluslararası kitaplar veya kitap bölümleri: 3

Springer Yayınevi

Kaymakamzade, B., Sanlidag, T., Sultanoglu, N., Sa'ad, F.T., Sayan, M., Hincal, E. (2022). Analysis and Simulation of HIV Infected Children Transmission Dynamics in Turkey Using a Mathematical Model. In: Uzun Ozsahin, D., Uzun, B., Sanlidag, T., LaMoreaux, J. (eds) *Decision Analysis Applied to the Field of Environmental Health*. Professional Practice in Earth Sciences. ISBN: 978-3-030-96681-2 Springer, Cham. https://doi.org/10.1007/978-3-030-96682-9_11

Sultanoglu, N., Saad, F.T., Sanlidag, T., Kaymakamzade, B., Hincal, E., Sayan, M. (2022). Determination of the Epidemic Character of HIV Infections in Children in Turkey Using a Mathematical Model. In: Uzun Ozsahin, D., Uzun, B., Sanlidag, T., LaMoreaux, J. (eds) *Decision Analysis Applied to the Field of Environmental Health*. Professional Practice in Earth Sciences. ISBN: 978-3-030-96681-2 Springer, Cham. https://doi.org/10.1007/978-3-030-96682-9_10

Gokbulut, N., Sultanoglu, N., Sanlidag, T., Sayan, M., Hincal, E. (2022). Reliability of Covid-19 PCR Test Results with Statistical Distributions. In: Uzun Ozsahin, D., Uzun, B., Sanlidag, T., LaMoreaux, J. (eds) *Decision Analysis Applied to the Field of Environmental Health*. Professional Practice in Earth Sciences. ISBN: 978-3-030-96681-2 Springer, Cham. h



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■ Patent: 1

- **Publication Number:** WO/2022/079498.
COMPOSITION FOR THE PREVENTION OF INFECTION BY SARS-CoV-2.
Publication Date 21.04.2022.
International Application No.PCT/IB2021/052900.
- Inventors: BERTELLI Matteo, FARRONATO Giampietro, FARRONATO Marco, TARTAGLIA Gianluca Martino, PAOLACCI Stefano, ANPILOGOV Kyrylo, MANARA Elena, DAUTAJ Astrit, MALTESE Paolo Enrico, DHULI Kristjana, ERGOREN Mahmut Cerkez, DUNDAR Munis, SANLIDAG Tamer, MALACARNE Daniele, GUNSEL Irfan S., SUER Huseyin Kaya, SAYAN Murat, TUNCEL Gulden, SULTANOGLU Nazife. Agents: MÜNCHOW, Vera Ute Barbara.
https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2022079498&_cid=P11-L2H82S-55916-2

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■ Ödüller: 2

- Yakın Dođu Üniversitesi, 2021 Yılı Yayın Ödülü, Haziran 2022

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■ Projeler: 6

1. Kronik Hepatit B Hastalarında Nükleoz(t)id Analogları Tedavisinin Mitokondrial DNA'da Epigenetik Etkileri İle Nefrotoksisite ve **İlaç Direncinin Araştırılması**: Adnan Menderes Üniv- BAP-Tamamlandı
2. Kocaeli Bölgesi Covid-19 Pozitif Hastalarda SARS-CoV-2 Koronavirüs **Genomunun Haritalanması**: KOÜ BAP/TCD 2021-2225-Tamamlandı
3. Hepatit D Virus Real-Time PCR **Tanı Kitinin Geliştirilmesi**: Manisa CBÜ BAP-2022-086-Devam ediyor
4. Dermatolojik siğil lezyonlarında **HPV tanısı ve tiplendirilmesi**: Kocaeli KOÜ BAP-2022-Devam ediyor
5. EuResist **HIV INTEGRATE Study**- Devam ediyor.
6. Global HCV SHARED **Drug Resistance Project**- Devam ediyor.

Gelecekteki hedeflerimiz...

- Dergi tabanını genişletmeye devam etmek.
- IF ve Q seviyesini yükseltmeye devam etmek.
- Uluslararası işbirliklerini geliştirmek.
- Bioinformatik uygulamalarından yararlanarak yeni bakış açlarına odaklanmak.



İşbirliklerine her zaman açığız...