



Sistema Integral de Información Académica

Coordinación de Planeación, Evaluación y Simplificación de la Gestión Institucional

Reporte individual



ESTEBAN ABELARDO HERNANDEZ VARGAS

Datos Generales

Nombre: ESTEBAN ABELARDO HERNANDEZ VARGAS

Máximo nivel de estudios: DOCTORADO

Antigüedad académica en la UNAM: 2 años

Nombramientos

Último: INVESTIGADOR ASOCIADO C TC No Definitivo

Instituto de Matemáticas

Desde 16-02-2021 hasta 15-11-2022

Estímulos, programas, premios y reconocimientos

SNI II 2020 - 2023

EQUIVALENCIA PRIDE B 2020 - 2022

ESTEBAN ABELARDO HERNANDEZ VARGAS

DOCUMENTOS EN REVISTAS

Histórico de Documentos



| # | Título | Autores | Revista | Año |
|---|---|---|---|------|
| 1 | Cyclic control equilibria for switched systems with applications to ecological systems | ESTEBAN ABELARDO HERNANDEZ VARGAS Alejandro L. Anderson Pablo Abuin et al. | INTERNATIONAL JOURNAL OF ROBUST AND NONLINEAR CONTROL | 2023 |
| 2 | Topological data analysis of antibody dynamics of severe and non-severe patients with COVID-19 | RODOLFO GUADALUPE BLANCO RODRIGUEZ GUSTAVO CHINNEY HERRERA ESTEBAN ABELARDO HERNANDEZ VARGAS et al. | MATHEMATICAL BIOSCIENCES | 2023 |
| 3 | A new computational approach, based on images trajectories, to identify the subjacent heterogeneity of sperm to the effects of ketanserin | MARIA ELENA AYALA ESCOBAR RODOLFO GUADALUPE BLANCO RODRIGUEZ ESTEBAN ABELARDO HERNANDEZ VARGAS et al. | CYTOMETRY PART A | 2023 |
| 4 | Development of Deep Learning Architectures for Forecasting Distillation Columns Dynamic Behavior of Biobutanol Purification | ESTEBAN ABELARDO HERNANDEZ VARGAS de la Fuente A.R. Sanchez-Ramirez E. et al. | Computer Aided Chemical Engineering | 2022 |
| 5 | Modeling SARS-CoV-2: Mitigation Interventions and Increased Mobility Events | MARIO SANTANA CIBRIAN MARCO TULIO ANGULO BALLESTEROS ESTEBAN ABELARDO HERNANDEZ VARGAS et al. | Studies in Systems Decision and Control | 2022 |

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|----|--|---|--|------|
| 6 | Inverse Optimal Impulsive Neural Control for Complex Networks Applied to Epidemic Diseases | ESTEBAN ABELARDO HERNANDEZ VARGAS Nancy F. Ramirez Daniel Rios-Rivera et al. | Systems | 2022 |
| 7 | Minimizing the epidemic final size while containing the infected peak prevalence in SIR systems | ESTEBAN ABELARDO HERNANDEZ VARGAS Sereno J. Anderson A. et al. | Automatica | 2022 |
| 8 | Editorial: Multiscale computational approaches in infectious diseases | ESTEBAN ABELARDO HERNANDEZ VARGAS JORGE XICOTENCATL VELASCO HERNANDEZ Dunja Bruder | FRONTIERS IN MICROBIOLOGY | 2022 |
| 9 | Inverse optimal control for positive impulsive systems toward personalized therapeutic regimens | ESTEBAN ABELARDO HERNANDEZ VARGAS Gustavo Hernandez-Mejia Miguel Hernandez-Gonzalez | OPTIMAL CONTROL APPLICATIONS & METHODS | 2022 |
| 10 | Optimal single-interval control for SIR-type systems | ESTEBAN ABELARDO HERNANDEZ VARGAS A. H. Gonzalez A. Ferramosca | IFAC PAPERSONLINE | 2022 |
| 11 | Parameter Estimation in Hybrid Machine Learning and Mechanistic Models of Infectious Diseases | ESTEBAN ABELARDO HERNANDEZ VARGAS Suneet Singh Jhutty | IFAC PAPERSONLINE | 2022 |
| 12 | Permanence regions for switched linear systems under waiting-time constraints | ESTEBAN ABELARDO HERNANDEZ VARGAS Mara Perez Alejandro Anderson et al. | IFAC PAPERSONLINE | 2022 |
| 13 | Discrete-time high-order neural network identifier trained with high-order sliding mode observer and unscented Kalman filter | ESTEBAN ABELARDO HERNANDEZ VARGAS M. Hernandez-Gonzalez M. V. Basin | Neurocomputing | 2021 |
| 14 | Stability analysis in COVID-19 within-host model with immune response | ESTEBAN ABELARDO HERNANDEZ VARGAS Alexis Erich S. Almocera Griselda Quiroz | COMMUNICATIONS IN NONLINEAR SCIENCE AND NUMERICAL SIMULATION | 2021 |
| 15 | Discrete-time MPC for switched systems with applications to biomedical problems | ESTEBAN ABELARDO HERNANDEZ VARGAS A. Anderson A. H. Gonzalez et al. | COMMUNICATIONS IN NONLINEAR SCIENCE AND NUMERICAL SIMULATION | 2021 |
| 16 | Bounded input impulsive control for scheduling therapies | ESTEBAN ABELARDO HERNANDEZ VARGAS Gustavo Hernandez-Mejia Xin Du et al. | JOURNAL OF PROCESS CONTROL | 2021 |
| 17 | Uncovering antibody cross-reaction dynamics in influenza A infections | ESTEBAN ABELARDO HERNANDEZ VARGAS Gustavo Hernandez-Mejia | Bioinformatics | 2021 |



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|----|--|--|--|------|
| 18 | Discrete-time super-twisting controller using neural networks | ESTEBAN ABELARDO HERNANDEZ VARGAS M. Hernandez-Gonzalez | Neurocomputing | 2021 |
| 19 | Serum Concentration of the Phytohormone Abscisic Acid Is Associated With Immune-Regulatory Mediators and Is a Potential Biomarker of Disease Severity in Chronic Obstructive Pulmonary Disease | ESTEBAN ABELARDO HERNANDEZ VARGAS Hoang Q.T.M. Nguyen V.K. et al. | Frontiers in Medicine | 2021 |
| 20 | Neural Control for Epidemic Model of Covid-19 with a Complex Network Approach | ESTEBAN ABELARDO HERNANDEZ VARGAS Alma Y. Alanis Nancy F. Ramirez et al. | IEEE LATIN AMERICA TRANSACTIONS | 2021 |
| 21 | Second special section on systems and control research efforts against COVID-19 and future pandemics | ESTEBAN ABELARDO HERNANDEZ VARGAS Giulia Giordano Eduardo Sontag et al. | ANNUAL REVIEWS IN CONTROL | 2021 |
| 22 | Network models to evaluate vaccine strategies towards herd immunity in COVID-19 | ESTEBAN ABELARDO HERNANDEZ VARGAS Tetteh J.N.A. Nguyen V.K. | JOURNAL OF THEORETICAL BIOLOGY | 2021 |
| 23 | Y Computational simulations to dissect the cell immune response dynamics for severe and critical cases of SARS-CoV-2 infection | RODOLFO GUADALUPE BLANCO RODRIGUEZ ESTEBAN ABELARDO HERNANDEZ VARGAS DU X. | COMPUTER METHODS AND PROGRAMS IN BIOMEDICINE | 2021 |
| 24 | Dynamical characterization of antiviral effects in COVID-19 | ESTEBAN ABELARDO HERNANDEZ VARGAS Abuin P. Anderson A. et al. | ANNUAL REVIEWS IN CONTROL | 2021 |
| 25 | Model predictive control for optimal social distancing in a type SIR-switched model | ESTEBAN ABELARDO HERNANDEZ VARGAS J. E. Sereno A. D'Jorge et al. | IFAC PAPERSONLINE | 2021 |
| 26 | Third special section on systems and control research efforts against COVID-19 and future pandemics | ESTEBAN ABELARDO HERNANDEZ VARGAS Giordano G. Sontag E. et al. | ANNUAL REVIEWS IN CONTROL | 2021 |
| 27 | Neural inverse optimal control applied to design therapeutic options for patients with COVID-19 | ESTEBAN ABELARDO HERNANDEZ VARGAS Victor M. Chan Edgar N. Sanchez | Ieee International Joint Conference On Neural Networks (ijcnn) | 2021 |
| 28 | Switching Logistic Maps to Design Cycling Approaches Against Antimicrobial Resistance | ESTEBAN ABELARDO HERNANDEZ VARGAS Parra-Rojas C. Olaru S. | IEEE Conference on Decision and Control | 2021 |

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| | | | | |
|----|--|--|---|------|
| 29 | Artificial Neural Network to capture the Dynamics of a Dividing Wall Column | ESTEBAN ABELARDO HERNANDEZ VARGAS Eduardo Sanchez-Ramirez Juan Gabriel Segovia-Hernandez | Computer Aided Chemical Engineering | 2020 |
| 30 | Discrete-time switching MPC with applications to mitigate resistance in viral infections | ESTEBAN ABELARDO HERNANDEZ VARGAS Alejandro Anderson Alejandro H. Gonzalez et al. | IFAC PAPERSONLINE | 2020 |
| 31 | Lyapunov-based Switching to Mitigate Antimicrobial Resistance | ESTEBAN ABELARDO HERNANDEZ VARGAS Josephine N. A. Tetteh Sorin Olaru et al. | IFAC PAPERSONLINE | 2020 |
| 32 | PK/PD-Based Impulsive Control to Tailor Therapies in Infectious Diseases | ESTEBAN ABELARDO HERNANDEZ VARGAS Gustavo Hernandez-Mejia | IFAC PAPERSONLINE | 2020 |
| 33 | Quantitative modeling of the function of kinetically driven transcriptional riboswitches | ESTEBAN ABELARDO HERNANDEZ VARGAS Cesar Parra-Rojas Boris Fuertig et al. | JOURNAL OF THEORETICAL BIOLOGY | 2020 |
| 34 | When is SARS-CoV-2 in your shopping list? | ESTEBAN ABELARDO HERNANDEZ VARGAS Gustavo Hernandez-Mejia | MATHEMATICAL BIOSCIENCES | 2020 |
| 35 | A survey of within-host and between-hosts modelling for antibiotic resistance | ESTEBAN ABELARDO HERNANDEZ VARGAS Josephine N. A. Tetteh Franziska Matthaeus | Biosystems | 2020 |
| 36 | Epidemiological Characteristics of COVID-19 in Mexico and the Potential Impact of Lifting Confinement Across Regions | CRISTY LEONOR AZANZA RICARDO ESTEBAN ABELARDO HERNANDEZ VARGAS | Frontiers In Physics | 2020 |
| 37 | In-host Mathematical Modelling of COVID-19 in Humans | ESTEBAN ABELARDO HERNANDEZ VARGAS JORGE XICOTENCATL VELASCO HERNANDEZ | ANNUAL REVIEWS IN CONTROL | 2020 |
| 38 | Characterization of SARS-CoV-2 dynamics in the host | ESTEBAN ABELARDO HERNANDEZ VARGAS Pablo Abuin Alejandro Anderson et al. | ANNUAL REVIEWS IN CONTROL | 2020 |
| 39 | Passivity-Based Inverse Optimal Impulsive Control for Influenza Treatment in the Host | ESTEBAN ABELARDO HERNANDEZ VARGAS Hernandez-Mejia G. Alanis A.Y. et al. | IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY | 2020 |
| 40 | Pinning Control for the p53-Mdm2 Network Dynamics Regulated by p14ARF | ESTEBAN ABELARDO HERNANDEZ VARGAS Suarez O.J. Vega C.J. et al. | FRONTIERS IN PHYSIOLOGY | 2020 |
| 41 | First special section on systems and control research efforts against COVID-19 and future pandemics | ESTEBAN ABELARDO HERNANDEZ VARGAS Giordano G. Sontag E. et al. | ANNUAL REVIEWS IN CONTROL | 2020 |
| 42 | Special section on modeling, identification and control of nonlinear systems | ESTEBAN ABELARDO HERNANDEZ VARGAS Alanis A.Y. | ANNUAL REVIEWS IN CONTROL | 2019 |



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|----|---|--|--|------|
| 43 | Modeling quorum sensing dynamics and interference on escherichia coli | ESTEBAN ABELARDO HERNANDEZ VARGAS Torres-Cerna C.E. Alejandro Morales J. | FRONTIERS IN MICROBIOLOGY | 2019 |
| 44 | In vivo neutralization of pro-inflammatory cytokines during secondary streptococcus pneumoniae infection post influenza a virus infection | ESTEBAN ABELARDO HERNANDEZ VARGAS Sharma-Chawla N. Stegemann-Koniszewski S. et al. | FRONTIERS IN IMMUNOLOGY | 2019 |
| 45 | Mathematical Modeling of the Quorum Sensing in Vibrio harveyi | ESTEBAN ABELARDO HERNANDEZ VARGAS Torres-Cerna C.E. | Revista Mexicana De Ingeniería Biomédica | 2019 |
| 46 | Editorial: Integrative computational systems biology approaches in immunology and medicine | ESTEBAN ABELARDO HERNANDEZ VARGAS Kaderali L. Theis F. et al. | FRONTIERS IN MICROBIOLOGY | 2019 |
| 47 | Coupling multiscale within-host dynamics and between-host transmission with recovery (SIR) dynamics | ESTEBAN ABELARDO HERNANDEZ VARGAS Almocera A.E.S. | MATHEMATICAL BIOSCIENCES | 2019 |
| 48 | Adjuvanted influenza vaccine dynamics | ESTEBAN ABELARDO HERNANDEZ VARGAS Parra-Rojas C. Messling V. | SCIENTIFIC REPORTS | 2019 |
| 49 | The trichotomy of pneumococcal infection outcomes in the Host | ESTEBAN ABELARDO HERNANDEZ VARGAS Almocera A.E.S. Hernandez-Mejia G. et al. | COMMUNICATIONS IN NONLINEAR SCIENCE AND NUMERICAL SIMULATION | 2019 |
| 50 | Impulsive MPC for Influenza Infection Treatment at Variable Time | ESTEBAN ABELARDO HERNANDEZ VARGAS Vega-Magdaleno G.D. Alanis A.Y. et al. | IFAC PAPERSONLINE | 2018 |
| 51 | Discrete-time Neural Network Identification of Quorum Sensing Escherichia coli Regulators | ESTEBAN ABELARDO HERNANDEZ VARGAS Torres-Cerna C.E. Morales J.A. et al. | IFAC PAPERSONLINE | 2018 |
| 52 | A stochastic Markov branching process framework to evaluate HIV eradication | ESTEBAN ABELARDO HERNANDEZ VARGAS Boianelli A. | IFAC PAPERSONLINE | 2018 |
| 53 | Parameter Estimation in Mathematical Models of Viral Infections Using R | ESTEBAN ABELARDO HERNANDEZ VARGAS Nguyen V.K. | Methods in Molecular Biology | 2018 |
| 54 | Bacterial Pneumonia Fate Decisions? | ESTEBAN ABELARDO HERNANDEZ VARGAS Boianelli A. Hernandez-Mejia G. | IFAC PAPERSONLINE | 2018 |
| 55 | Special issue on new trends on complex systems: Adaptation and control | ESTEBAN ABELARDO HERNANDEZ VARGAS Alanis A.Y. Chen G. et al. | Kybernetika | 2018 |

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|----|---|--|---|------|
| 56 | The 2017 plague outbreak in Madagascar: Data descriptions and epidemic modelling | ESTEBAN ABELARDO HERNANDEZ VARGAS Nguyen V.K. Parra-Rojas C. | EPIDEMICS | 2018 |
| 57 | High-resolution epidemic simulation using within-host infection and contact data | ESTEBAN ABELARDO HERNANDEZ VARGAS Nguyen V.K. Mikolajczyk R. | Bmc Public Health | 2018 |
| 58 | Neuraminidase inhibitors in influenza treatment and prevention? Is it time to call it a day? | ESTEBAN ABELARDO HERNANDEZ VARGAS Parra-Rojas C. Nguyen V.K. et al. | Viruses-Basel | 2018 |
| 59 | Multiscale model within-host and between-host for viral infectious diseases | ESTEBAN ABELARDO HERNANDEZ VARGAS Almocera A.E.S. Nguyen V.K. | JOURNAL OF MATHEMATICAL BIOLOGY | 2018 |
| 60 | Germinal center optimization algorithm | ESTEBAN ABELARDO HERNANDEZ VARGAS Villaseñor C. Arana-Daniel N. et al. | INTERNATIONAL JOURNAL OF COMPUTATIONAL INTELLIGENCE SYSTEMS | 2018 |
| 61 | PK/PD-based adaptive tailoring of oseltamivir doses to treat within-host influenza viral infections | ESTEBAN ABELARDO HERNANDEZ VARGAS Montaseri G. Boianelli A. et al. | PROGRESS IN BIOPHYSICS & MOLECULAR BIOLOGY | 2018 |
| 62 | Neural inverse optimal control for discrete-time impulsive systems | ESTEBAN ABELARDO HERNANDEZ VARGAS Hernandez-Mejia G. Alanis A.Y. | Neurocomputing | 2018 |
| 63 | Inverse Optimal Impulsive Control Based Treatment of Influenza Infection | ESTEBAN ABELARDO HERNANDEZ VARGAS Hernandez-Mejia G. Alanis A.Y. | IFAC PAPERSONLINE | 2017 |
| 64 | Modeling kick-kill strategies toward HIV cure | ESTEBAN ABELARDO HERNANDEZ VARGAS | FRONTIERS IN IMMUNOLOGY | 2017 |
| 65 | Windows of opportunity for Ebola virus infection treatment and vaccination | ESTEBAN ABELARDO HERNANDEZ VARGAS Nguyen V.K. | SCIENTIFIC REPORTS | 2017 |
| 66 | Germinal center optimization applied to neural inverse optimal control for an all-terrain tracked robot | ESTEBAN ABELARDO HERNANDEZ VARGAS Villaseñor C. Rios J.D. et al. | APPLIED SCIENCES-BASEL | 2017 |
| 67 | Batch cultivation model for biopolymer production | ESTEBAN ABELARDO HERNANDEZ VARGAS Torres-Cerna C.E. Alanis A.Y. et al. | CHEM BIOCHEM ENG Q | 2017 |
| 68 | Hierarchical effects of pro-inflammatory cytokines on the post-influenza susceptibility to pneumococcal coinfection | ESTEBAN ABELARDO HERNANDEZ VARGAS Duvigneau S. Sharma-Chawla N. et al. | SCIENTIFIC REPORTS | 2016 |



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|----|---|--|--|------|
| 69 | Oseltamivir PK/PD modeling and simulation to evaluate treatment strategies against influenza-pneumococcus coinfection | ESTEBAN ABELARDO HERNANDEZ VARGAS Boianelli A. Sharma-Chawla N. et al. | FRONTIERS IN CELLULAR AND INFECTION MICROBIOLOGY | 2016 |
| 70 | Ebola virus infection modeling and identifiability problems | ESTEBAN ABELARDO HERNANDEZ VARGAS Nguyen V.K. Binder S.C. et al. | FRONTIERS IN MICROBIOLOGY | 2015 |
| 71 | Identifiability Challenges in Mathematical Models of Viral Infectious Diseases | ESTEBAN ABELARDO HERNANDEZ VARGAS Nguyen V.K. | IFAC PAPERSONLINE | 2015 |
| 72 | Reducing complexity: An iterative strategy for parameter determination in biological networks | ESTEBAN ABELARDO HERNANDEZ VARGAS Binder S.C. Meyer-Hermann M. | COMPUTER PHYSICS COMMUNICATIONS | 2015 |
| 73 | Progressive contraction of the latent HIV reservoir around a core of less-differentiated CD4 + memory T cells | ESTEBAN ABELARDO HERNANDEZ VARGAS Jaafoura S. De Goer De Herve M.G. et al. | NATURE COMMUNICATIONS | 2014 |
| 74 | Effects of aging on influenza virus infection dynamics | ESTEBAN ABELARDO HERNANDEZ VARGAS Wilk E. Canini L. et al. | JOURNAL OF VIROLOGY | 2014 |
| 75 | Computational study to determine when to initiate and alternate therapy in HIV infection | ESTEBAN ABELARDO HERNANDEZ VARGAS Haering M. Hördt A. et al. | BIOMED RESEARCH INTERNATIONAL | 2014 |
| 76 | Switching strategies to mitigate HIV mutation | ESTEBAN ABELARDO HERNANDEZ VARGAS Colaneri P. Middleton R.H. | IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY | 2014 |
| 77 | Observers for biological systems | ESTEBAN ABELARDO HERNANDEZ VARGAS Alanis A.Y. Hernandez-Gonzalez M. | APPLIED SOFT COMPUTING | 2014 |
| 78 | A mathematical model of T lymphocyte calcium dynamics derived from single transmembrane protein properties | ESTEBAN ABELARDO HERNANDEZ VARGAS Schmeitz C. Fliegert R. et al. | FRONTIERS IN IMMUNOLOGY | 2013 |
| 79 | Optimal therapy scheduling for a simplified HIV infection model | ESTEBAN ABELARDO HERNANDEZ VARGAS Colaneri P. Middleton R.H. | Automatica | 2013 |
| 80 | Decentralized discrete-time neural control for a Quanser 2-DOF helicopter | ESTEBAN ABELARDO HERNANDEZ VARGAS Hernandez-Gonzalez M. Alanis A.Y. | APPLIED SOFT COMPUTING | 2012 |
| 81 | Discrete-time neural observer for HIV infection dynamics | ESTEBAN ABELARDO HERNANDEZ VARGAS Alanis A.Y. Sanchez E.N. | World Automation Congress Proceedings | 2012 |



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|----|--|--|--|
| 82 | Sub-optimal switching with dwell time constraints for control of viral mutation | ESTEBAN ABELARDO HERNANDEZ VARGAS Colaneri P. Middleton R.H. | IEEE Conference 2012 on Decision and Control |
| 83 | Innate immune system dynamics to influenza virus | ESTEBAN ABELARDO HERNANDEZ VARGAS Meyer-Hermann M. | IFAC Proceedings Volumes (IFAC-PapersOnline) |
| 84 | Control properties and thermodynamic analysis of two alternatives to thermally coupled distillation systems with side columns | ESTEBAN ABELARDO HERNANDEZ VARGAS Segovia-Hernández J.G. Márquez-Muñoz J.A. et al. | CHEM BIOCHEM 2005 ENG Q |
| 85 | Eficiencia termodinámica de secuencias de destilación térmicamente acopladas: Efecto de los reciclados en la separación de mezclas de tres y cinco componentes | ESTEBAN ABELARDO HERNANDEZ VARGAS McConville C.J.C. Zamora M.B.R. et al. | ING QUIM 2005 |



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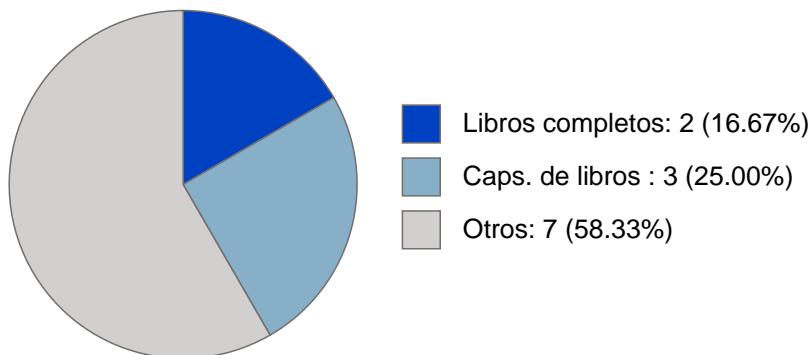


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LIBROS Y CAPITULOS CON ISBN

Obras con registro ISBN



| # | Título | Autores | Alcance | Año | ISBN |
|---|---|--|-------------------------|------|---------------|
| 1 | Preface | ESTEBAN ABELARDO HERNANDEZ VARGAS | Editorial Material | 2022 | 9780323901710 |
| 2 | Optimal control strategies to tailor antivirals for acute infectious diseases in the host: a study case of COVID-19 | ESTEBAN ABELARDO HERNANDEZ VARGAS Pérez M. Abuin P. et al. | Capítulo de un Libro | 2022 | 9780323901710 |
| 3 | Closing the loop in personalized medicine | ESTEBAN ABELARDO HERNANDEZ VARGAS | Capítulo de un Libro | 2022 | 9780323901710 |
| 4 | Feedback Control for Personalized Medicine | ESTEBAN ABELARDO HERNANDEZ VARGAS | Libro Completo | 2022 | 9780323901710 |
| 5 | Inverse Impulsive Optimal Neural Control for Complex Networks Applied to Epidemic Influenza Type A Model | ESTEBAN ABELARDO HERNANDEZ VARGAS Ramirez N.F. Alanis A.Y. et al. | Proceedings Paper | 2021 | 9781728188645 |
| 6 | Modeling Viral Infections | ESTEBAN ABELARDO HERNANDEZ VARGAS | Capítulo de un Libro | 2020 | 9780128160770 |
| 7 | Discrete-Time Neural Identification of a SIR Epidemic Model | ESTEBAN ABELARDO HERNANDEZ VARGAS Covarrubias R. Alanis A.Y. et al. | Conferenc e Paper | 2019 | 9781538646250 |
| 8 | Modeling and control of infectious diseases in the host: With MATLAB and R | ESTEBAN ABELARDO HERNANDEZ VARGAS Sánchez E. | Libro Completo | 2019 | 9780128130520 |



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|----|---|--|----------------------|------|---------------|
| 9 | State estimation for stochastic nonlinear systems with applications to viral infections | ESTEBAN ABELARDO HERNANDEZ VARGAS Hernandez-Gonzalez M. Hernandez-Mejia G. et al. | Conferenc e Paper | 2019 | 9783907144008 |
| 10 | Recurrent High Order Neural Networks Identification for Infectious Diseases | ESTEBAN ABELARDO HERNANDEZ VARGAS Hernandez-Mejia G. Alanis A.Y. et al. | Conferenc e Paper | 2018 | 9781509060146 |
| 11 | Inverse Optimal Impulsive Control for a SIR Epidemic Model | ESTEBAN ABELARDO HERNANDEZ VARGAS Sanchez E.N. Covarrubias R. et al. | Conferenc e Paper | 2018 | 9781538670323 |
| 12 | A comparative study of differential evolution algorithms for parameter fitting procedures | ESTEBAN ABELARDO HERNANDEZ VARGAS Torres-Cerna C.E. Alanis A.Y. et al. | Conferenc e Paper | 2016 | 9781509006229 |



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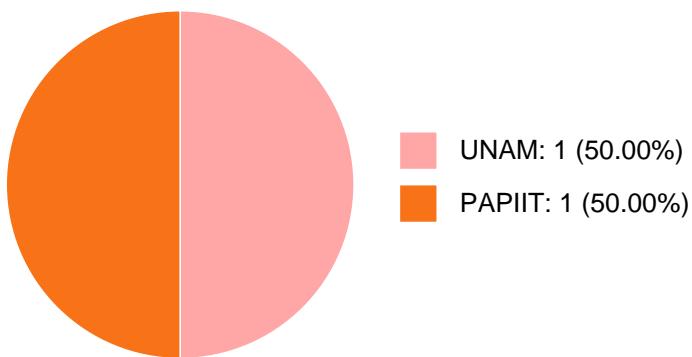
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ESTEBAN ABELARDO HERNANDEZ VARGAS

PARTICIPACIÓN EN PROYECTOS

Histórico de participación en proyectos



| # | Nombre | Participantes | Fuente | Fecha inicio | Fecha fin |
|---|---|--------------------------------------|--|--------------|------------|
| 1 | Modelado matemático de enfermedades infecciosas. | ESTEBAN ABELARDO HERNANDEZ VARGAS | Presupuesto de la UNAM asignado a la Dependencia | 01-01-2020 | 31-12-2022 |
| 2 | Desarrollo de Modelos Matemáticos para enfermedades infecciosas y su Análisis Numérico. | ESTEBAN ABELARDO HERNANDEZ VARGAS | Recursos PAPIIT | 01-01-2021 | 31-12-2023 |



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PARTICIPACIÓN EN TESIS

No se encuentran registros en la base de datos de TESIUNAM asociados a:

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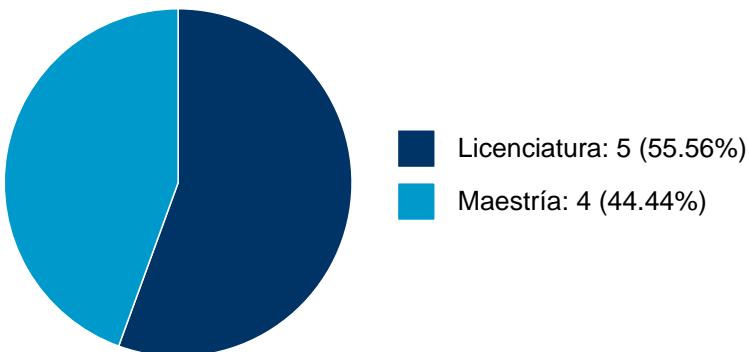


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DOCENCIA IMPARTIDA

Histórico de docencia



| # | Nivel titulación | Asignatura | Entidad | Alumnos | Semestre |
|---|------------------|---|---|---------|----------|
| 1 | Licenciatura | ESTANCIA DE INVESTIGACION VI | ESCUELA NACIONAL DE ESTUDIOS SUPERIORES, UNIDAD JURIQUILLA, QRTO. | 15 | 2022-2 |
| 2 | Maestría | TEMAS SELECTOS DE ANÁLISIS NUMÉRICO Y COMPUTACIÓN CIENTÍFICA (INCLUYENDO MODELACIÓN) II | Instituto de Matemáticas | 14 | 2022-1 |
| 3 | Licenciatura | SEMI. DE ANALISIS NUMERICO | Facultad de Ciencias | 9 | 2021-2 |
| 4 | Licenciatura | ESTANCIA DE INVESTIGACION VI | ESCUELA NACIONAL DE ESTUDIOS SUPERIORES, UNIDAD JURIQUILLA, QRTO. | 14 | 2021-2 |
| 5 | Licenciatura | PRACTICA PROFESIONAL SUPERVISADA | Facultad de Ciencias | 15 | 2021-1 |
| 6 | Licenciatura | CALCULO I | ESCUELA NACIONAL DE ESTUDIOS SUPERIORES, UNIDAD JURIQUILLA, QRTO. | 29 | 2021-1 |
| 7 | Maestría | CURSO AVANZADO DE ANÁLISIS NUMÉRICO Y COMPUTACIÓN CIENTÍFICA (INCLUYENDO MODELACIÓN) INTELIGENCIA ARTIFICIAL AL ANALISIS SUPERVISADO DE DATOS | Instituto de Matemáticas | 15 | 2021-1 |
| 8 | Maestría | ALGORITMOS Y MÉTODOS COMPUTACIONALES | Instituto de Investigaciones en Materiales | 2 | 2021-1 |



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| 9 | Maestría | CURSO AVANZADO DE ANÁLISIS NUMÉRICO Y COMPUTACIÓN CIENTÍFICA (INCLUYENDO MODELACIÓN) INTELIGENCIA ARTIFICIAL AL ANALISIS SUPERVISADO DE DATOS | Instituto de Matemáticas | 1 | 2020-2 |
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Sistema Integral de Información Académica

Coordinación de Planeación, Evaluación y
Simplificación de la Gestión Institucional

Reporte individual



ESTEBAN ABELARDO HERNANDEZ VARGAS

PATENTES

No se encuentran registros en la base de datos de patentes asociados a:

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FUENTES DE INFORMACIÓN

Internos

| # | Información | Fuente | Sistema | Periodo |
|---|--|--------|-------------|-----------|
| 1 | Grupos ordinarios y resumen de historias académicas | DGAE | SIAE | 2008-2025 |
| 2 | Nombramientos, datos generales, estímulos, premios y reconocimientos | DGAPA | RUPA | 2008-2025 |
| 3 | Producción Académica | CH | Humanindex | 2008-2021 |
| 4 | Producción Académica | CIC | SCIC | 2000-2017 |
| 5 | Proyectos | DGPO | SISEPRO | 2018-2022 |
| 6 | Tesis | DGB | TESIUNAM | 2008-2025 |
| 7 | Tutorías en Posgrado | CGEP | SIIPosgrado | 2008-2021 |

Externos

| # | Información | Fuente | Sistema | Periodo |
|----|-------------------------|-----------------|--------------|-----------|
| 8 | Documentos Indexados | Elsevier | Scopus | 2008-2025 |
| 9 | Documentos Indexados | Thomson Reuters | WoS | 2008-2025 |
| 10 | Obras con registro ISBN | INDAUTOR | Agencia ISBN | 2008-2025 |
| 11 | Patentes | IMPI | SIGA | 2008-2024 |