



## **ACHIM MAX LOSKE MEHLING**

### **Datos Generales**

**Nombre:** ACHIM MAX LOSKE MEHLING

**Máximo nivel de estudios:** DOCTORADO

**Antigüedad académica en la UNAM:** 37 años

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### **Nombramientos**

**Vigente:** INVESTIGADOR TITULAR C TC Definitivo  
Centro de Física Aplicada y Tecnología Avanzada  
Desde 16-06-2019

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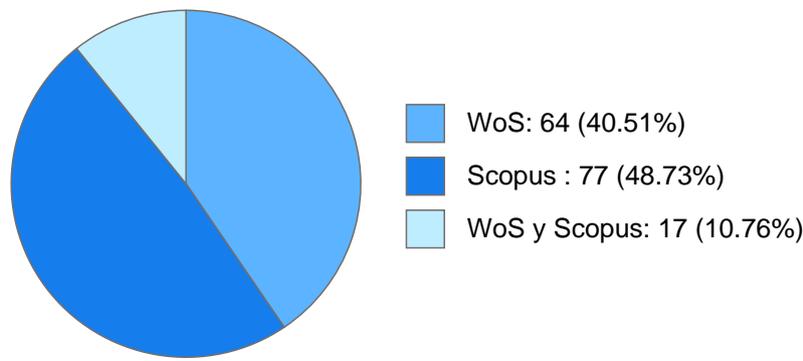
### **Estímulos, programas, premios y reconocimientos**

SNI III 2016 - VIGENTE  
SNI II 2012 - 2015  
SNI I - 2011  
PRIDE D 2016 - 2024  
PRIDE C - 2016

## ACHIM MAX LOSKE MEHLING

### DOCUMENTOS EN REVISTAS

#### Histórico de Documentos



| # | Título  | Autores   | Revista                                | Año  |
|---|---|---|--|------|
| 1 | Underwater Shock Wave-Enhanced Cavitation to Induce Morphological Changes and Cell Permeabilization in Microscopic Fungi  | BLANCA EDITH MILLAN CHIU ACHIM MAX LOSKE MEHLING Martínez-Maldonado M.A. et al.           | Fluids                                 | 2024 |
| 2 | Simulations of the optical diffraction patterns produced by the pressure field of a clinical shock wave source  | ACHIM MAX LOSKE MEHLING REMY FERNAND AVILA FOUCAT Fernando E. Garcia-Ramirez              | PHYSICA SCRIPTA                        | 2024 |
| 3 | Metabolic engineering of <i>Aspergillus niger</i> to enhance production of ethanol  | BLANCA EDITH MILLAN CHIU ACHIM MAX LOSKE MEHLING Ara Itzel de los Santos Mondragon et al. | BIOTECHNOLOGY AND APPLIED BIOCHEMISTRY | 2023 |
| 4 | Green Synthesis and Antiproliferative Activity of Gold Nanoparticles of a Controlled Size and Shape Obtained Using Shock Wave Extracts from <i>Amphipterygium adstringens</i> | ACHIM MAX LOSKE MEHLING RODRIGO ALONSO ESPARZA MUÑOZ MIRIAM ROCIO ESTEVEZ GONZALEZ et al. | BIOENGINEERING-G-BASEL                 | 2023 |
| 5 | Violin vibration state determined from laser streak patterns  | CARLOS TORRES TORRES FRANCISCO FERNANDEZ ESCOBAR MIGUEL DE ICAZA HERRERA et al.           | APPLIED ACOUSTICS                      | 2022 |
| 6 | Highly dispersible and fluorescent graphene-based materials obtained by underwater shock wave-induced oxidative cleavage  | ACHIM MAX LOSKE MEHLING ANDRES DE LUNA BUGALLO PEDRO SALAS CASTILLO et al.                | FlatChem                               | 2022 |

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|    |   |  |  |      |
|----|---|--|--|------|
| 7  | Effect of Shock Waves on the Growth of <i>Aspergillus niger</i> Conidia: Evaluation of Germination and Preliminary Study on Gene Expression                                       | BLANCA EDITH MILLAN CHIU ACHIM MAX LOSKE MEHLING Larrañaga-Ordaz D. et al.                   | Journal Of Fungi                                 | 2022 |
| 8  | Weak shock wave-mediated fucoxanthin extraction from <i>Sargassum</i> spp. and its electrochemical quantification   | ACHIM MAX LOSKE MEHLING FRANCISCO FERNANDEZ ESCOBAR MIRIAM ROCIO ESTEVEZ GONZALEZ et al.     | ALGAL RESEARCH-BIO MASS BIOFUELS AND BIOPRODUCTS | 2022 |
| 9  | Nanotoxicology in Plants  | BLANCA EDITH MILLAN CHIU ACHIM MAX LOSKE MEHLING del Pilar Rodríguez-Torres M.               | Nanotechnology and In The Life Sciences          | 2020 |
| 10 | Shock wave-assisted extraction of phenolic acids and flavonoids from <i>Eysenhardtia polystachya</i> heartwood: A novel method and its comparison with conventional methodologies | GUSTAVO ANDRES MOLINA LABASTIDA ACHIM MAX LOSKE MEHLING MIRIAM ROCIO ESTEVEZ GONZALEZ et al. | ULTRASONICS SONOCHEMISTRY                        | 2020 |
| 11 | Enhancing the yield of human erythropoietin in <i>Aspergillus niger</i> by introns and CRISPR-Cas9  | BLANCA EDITH MILLAN CHIU ACHIM MAX LOSKE MEHLING Rojas-Sánchez U. et al.                     | PROTEIN EXPRESSION AND PURIFICATION              | 2020 |
| 12 | Shock Wave Application Increases the Antineoplastic Effect of Molecular Iodine Supplement in Breast Cancer Xenografts   | EVANGELINA DELGADO GONZALEZ LUZ MARIA LOPEZ MARIN BLANCA EDITH MILLAN CHIU et al.            | ULTRASOUND IN MEDICINE AND BIOLOGY               | 2020 |
| 13 | The influence of the number of shock waves and the energy flux density on the Raman spectrum of collagen type I from rat  | ACHIM MAX LOSKE MEHLING Cárcamo-Vega J.J. Brañes M.R. et al.                                 | Shock Waves                                      | 2020 |
| 14 | Nanoparticles and Their Applications in DNA Technology  | BLANCA EDITH MILLAN CHIU ACHIM MAX LOSKE MEHLING del Pilar Rodríguez-Torres M.               | Nanotechnology and In The Life Sciences          | 2020 |
| 15 | Kriging model to study the dynamics of a bubble subjected to tandem shock waves as used in biomedical applications  | MIGUEL DE ICAZA HERRERA ACHIM MAX LOSKE MEHLING Gutiérrez-Prieto Á. et al.                   | Ultrasonics                                      | 2019 |
| 16 | Shock waves: A non-shocking way for targeted therapies?: Reply to comments on ?Shock wave-induced permeabilization of mammalian cells?  | LUZ MARIA LOPEZ MARIN ANA LEONOR RIVERA LOPEZ ACHIM MAX LOSKE MEHLING et al.                 | PHYSICS OF LIFE REVIEWS                          | 2018 |
| 17 | Extracellular Expression in <i>Aspergillus niger</i> of an Antibody Fused to <i>Leishmania</i> sp. Antigens   | FRANCISCO FERNANDEZ ESCOBAR ACHIM MAX LOSKE MEHLING Denis Magana-Ortiz et al.                | CURRENT MICROBIOLOGY                             | 2018 |

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|    |   |   |   |      |
|----|---|---|---|------|
| 18 | Enhanced delignification of lignocellulosic biomass by recombinant fungus phanerochaete chrysosporium overexpressing laccases and peroxidases                         | FRANCISCO FERNANDEZ ESCOBAR<br>ACHIM MAX LOSKE MEHLING Coconi<br>Linares N. et al.            | JOURNAL OF<br>MOLECULAR<br>MICROBIOLOGY<br>AND<br>BIOTECHNOLOG<br>Y | 2018 |
| 19 | pMEX01, a 70 kb plasmid isolated from Escherichia coli that confers resistance to multiple beta-lactam antibiotics  | FRANCISCO FERNANDEZ ESCOBAR<br>ACHIM MAX LOSKE MEHLING<br>Hernandez-Flores J.L. et al.        | BRAZILIAN<br>JOURNAL OF<br>MICROBIOLOGY                             | 2018 |
| 20 | Shock wave-induced permeabilization of mammalian cells  | LUZ MARIA LOPEZ MARIN ANA<br>LEONOR RIVERA LOPEZ FRANCISCO<br>FERNANDEZ ESCOBAR et al.        | PHYSICS OF LIFE<br>REVIEWS  | 2018 |
| 21 | Erratum to: Shock Wave-Induced Damage and Poration in Eukaryotic Cell Membranes (The Journal of Membrane Biology, (2017), 250, 1, (41-52), 10.1007/s00232-016-9921-2) | LUZ MARIA LOPEZ MARIN BLANCA<br>EDITH MILLAN CHIU CARMEN<br>YOLANDA ACEVES VELASCO et al.     | JOURNAL OF<br>MEMBRANE<br>BIOLOGY                                   | 2017 |
| 22 | Shock Wave- Induced Damage and Poration in Eukaryotic Cell Membranes  | LUZ MARIA LOPEZ MARIN BLANCA<br>EDITH MILLAN CHIU CARMEN<br>YOLANDA ACEVES VELASCO et al.     | JOURNAL OF<br>MEMBRANE<br>BIOLOGY                                   | 2017 |
| 23 | Dynamic light scattering: A fast and reliable method to analyze bacterial growth during the lag phase   | SUSANA VARGAS MUÑOZ BLANCA<br>EDITH MILLAN CHIU ACHIM MAX<br>LOSKE MEHLING et al.             | JOURNAL OF<br>MICROBIOLOGIC<br>AL METHODS                           | 2017 |
| 24 | Tandem shock waves in medicine and biology: a review of potential applications and successes  | FRANCISCO FERNANDEZ ESCOBAR<br>ACHIM MAX LOSKE MEHLING Lukes P.<br>et al.                     | Shock Waves   | 2016 |
| 25 | Biomimetic coat enables the use of sonoporation to assist delivery of silica nanoparticle-cargoes into human cells  | LUZ MARIA LOPEZ MARIN FRANCISCO<br>FERNANDEZ ESCOBAR PEDRO SALAS<br>CASTILLO et al.           | Biointerphases  | 2016 |
| 26 | Combined short and long-delay tandem shock waves to improve shock wave lithotripsy according to the Gilmore-Akulichev theory  | MIGUEL DE ICAZA HERRERA<br>FRANCISCO FERNANDEZ ESCOBAR<br>ACHIM MAX LOSKE MEHLING             | Ultrasonics   | 2015 |
| 27 | Isolation of a conjugative F-like plasmid from a multidrug-resistant Escherichia coli strain CM6 using tandem shock wave-mediated transformation                      | ANGEL LUIS RODRIGUEZ MORALES<br>FRANCISCO FERNANDEZ ESCOBAR<br>ACHIM MAX LOSKE MEHLING et al. | JOURNAL OF<br>MICROBIOLOGIC<br>AL METHODS                           | 2015 |
| 28 | Recombinant expression of four oxidoreductases in Phanerochaete chrysosporium improves degradation of phenolic and non-phenolic substrates                            | FRANCISCO FERNANDEZ ESCOBAR<br>ACHIM MAX LOSKE MEHLING<br>Coconilinares, Nancy et al.         | JOURNAL OF<br>BIOTECHNOLOG<br>Y                                     | 2015 |

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|----|--|--|---|------|
| 29 | Efficient transformation of <i>Mycosphaerella fijiensis</i> by underwater shock waves  | FRANCISCO FERNANDEZ ESCOBAR<br>ACHIM MAX LOSKE MEHLING<br>EscobarTovar, Lina et al.                | JOURNAL OF<br>MICROBIOLOGIC<br>AL METHODS                 | 2015 |
| 30 | Transformation of Fungi Using Shock Waves  | FRANCISCO FERNANDEZ ESCOBAR<br>ACHIM MAX LOSKE MEHLING<br>Gomez-Lim, Miguel A. et al.              | Fungal<br>Biology-Us                                      | 2015 |
| 31 | Physical methods for genetic transformation of fungi and yeast   | ANA LEONOR RIVERA LOPEZ<br>FRANCISCO FERNANDEZ ESCOBAR<br>ACHIM MAX LOSKE MEHLING et al.           | PHYSICS OF LIFE<br>REVIEWS                                | 2014 |
| 32 | When the boundaries between physics and biology blur: A promising future for fungi as producers of valuable recombinant proteins. Reply to comments on: "Physical methods for genetic transformation of fungi and yeast" | ANA LEONOR RIVERA LOPEZ<br>FRANCISCO FERNANDEZ ESCOBAR<br>ACHIM MAX LOSKE MEHLING et al.           | PHYSICS OF LIFE<br>REVIEWS                                | 2014 |
| 33 | Tandem shock waves to enhance genetic transformation of <i>Aspergillus niger</i>   | ACHIM MAX LOSKE MEHLING<br>FRANCISCO FERNANDEZ ESCOBAR<br>Magana-Ortiz, Denis et al.               | Ultrasonics   | 2014 |
| 34 | <i>Escherichia coli</i> viability determination using dynamic light scattering: A comparison with standard methods   | ACHIM MAX LOSKE MEHLING SUSANA<br>VARGAS MUÑOZ JOSE ROGELIO<br>RODRIGUEZ TALAVERA et al.           | ARCHIVES OF<br>MICROBIOLOGY                               | 2014 |
| 35 | High-yield production of manganese peroxidase, lignin peroxidase, and versatile peroxidase in <i>Phanerochaete chrysosporium</i>   | FRANCISCO FERNANDEZ ESCOBAR<br>ACHIM MAX LOSKE MEHLING<br>Coconi-Linares, Nancy et al.             | APPLIED<br>MICROBIOLOGY<br>AND<br>BIOTECHNOLOG<br>Y       | 2014 |
| 36 | Erratum to: High-yield production of manganese peroxidase, lignin peroxidase, and versatile peroxidase in <i>Phanerochaete chrysosporium</i>   | FRANCISCO FERNANDEZ ESCOBAR<br>ACHIM MAX LOSKE MEHLING<br>Coconi-Linares, Nancy et al.             | APPLIED<br>MICROBIOLOGY<br>AND<br>BIOTECHNOLOG<br>Y       | 2014 |
| 37 | Shock waves and DNA-cationic lipid assemblies: A synergistic approach to express exogenous genes in human cells  | BLANCA EDITH MILLAN CHIU ALFREDO<br>VARELA ECHAVARRIA ELISA<br>HORTENSIA TAMARIZ DOMINGUEZ et al.  | ULTRASOUND IN<br>MEDICINE AND<br>BIOLOGY                  | 2014 |
| 38 | Bio-packaged transponder MEMS implanted in rats  | JOSE ROGELIO RODRIGUEZ TALAVERA<br>ACHIM MAX LOSKE MEHLING MIRIAM<br>ROCIO ESTEVEZ GONZALEZ et al. | JOURNAL OF<br>BIOMATERIALS<br>SCIENCE-POLYM<br>ER EDITION | 2013 |

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|----|---|--|--|------|
| 39 | Out-of-focus low pressure pulse pretreatment to the whole kidney to reduce renal injury during shockwave lithotripsy: An in vivo study using a rabbit model | FRANCISCO FERNANDEZ ESCOBAR<br>Alejandra Dominguez ACHIM MAX LOSKE MEHLING et al.                | JOURNAL OF<br>ENDOUROLOGY                                | 2013 |
| 40 | A novel and highly efficient method for genetic transformation of fungi employing shock waves   | FRANCISCO FERNANDEZ ESCOBAR<br>ACHIM MAX LOSKE MEHLING<br>Magana-Ortiz, Denis et al.             | FUNGAL<br>GENETICS AND<br>BIOLOGY                        | 2013 |
| 41 | RELATIONSHIP BETWEEN PLASMID SIZE AND SHOCK WAVE-MEDIATED BACTERIAL TRANSFORMATION  | FRANCISCO FERNANDEZ ESCOBAR<br>ACHIM MAX LOSKE MEHLING<br>Campos-Guillen, Juan et al.            | ULTRASOUND IN<br>MEDICINE AND<br>BIOLOGY                 | 2012 |
| 42 | Physical methods for genetic plant transformation   | ANA LEONOR RIVERA LOPEZ<br>FRANCISCO FERNANDEZ ESCOBAR<br>ACHIM MAX LOSKE MEHLING et al.         | PHYSICS OF LIFE<br>REVIEWS                               | 2012 |
| 43 | Physical methods for genetic transformation in plants   | ANA LEONOR RIVERA LOPEZ<br>FRANCISCO FERNANDEZ ESCOBAR<br>ACHIM MAX LOSKE MEHLING et al.         | PHYSICS OF LIFE<br>REVIEWS                               | 2012 |
| 44 | ENHANCED SHOCK WAVE-ASSISTED TRANSFORMATION OF ESCHERICHIA COLI   | ACHIM MAX LOSKE MEHLING<br>FRANCISCO FERNANDEZ ESCOBAR<br>Campos-Guillen, Juan et al.            | ULTRASOUND IN<br>MEDICINE AND<br>BIOLOGY                 | 2011 |
| 45 | Modified shock waves for extracorporeal shock wave lithotripsy: A simulation based on the Gilmore formulation   | Guillermo Canseco MIGUEL DE<br>ICAZA HERRERA FRANCISCO<br>FERNANDEZ ESCOBAR et al.               | Ultrasonics  | 2011 |
| 46 | In vivo evaluation of implanthost tissue interaction using morphology-controlled hydroxyapatite-based biomaterials  | JOSE ROGELIO RODRIGUEZ TALAVERA<br>ACHIM MAX LOSKE MEHLING<br>FRANCISCO FERNANDEZ ESCOBAR et al. | JOURNAL OF<br>BIOMATERIALS<br>SCIENCE-POLYMER<br>EDITION | 2011 |
| 47 | The role of energy density and acoustic cavitation in shock wave lithotripsy  | ACHIM MAX LOSKE MEHLING  | Ultrasonics  | 2010 |
| 48 | Percutaneous Renal Access: The Learning Curve of a Simplified Approach  | ACHIM MAX LOSKE MEHLING<br>Negrete-Pulido, Oscar<br>Molina-Torres, Marnes et al.                 | JOURNAL OF<br>ENDOUROLOGY                                | 2010 |
| 49 | Interaction of Intracorporeal Lithotripters with Proteus mirabilis Inoculated Inside Artificial Calcium and Struvite Stones                                 | Ulises M. Alvarez FRANCISCO<br>FERNANDEZ ESCOBAR ACHIM MAX<br>LOSKE MEHLING et al.               | JOURNAL OF<br>ENDOUROLOGY                                | 2009 |
| 50 | The Importance of an Expansion Chamber During Standard and Tandem Extracorporeal Shock Wave Lithotripsy   | Gilberto Fernandez ACHIM MAX<br>LOSKE MEHLING Fernandez, F                                       | JOURNAL OF<br>ENDOUROLOGY                                | 2009 |
| 51 | Treatment Time Reduction Using Tandem Shockwaves for Lithotripsy: An Vivo Study   | FRANCISCO FERNANDEZ ESCOBAR<br>Gilberto Fernandez ACHIM MAX<br>LOSKE MEHLING                     | JOURNAL OF<br>ENDOUROLOGY                                | 2009 |

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|----|---|--|---|------|
| 52 | Inactivation of bacteria inoculated inside urinary stone-phantoms using intracorporeal lithotripters  | Ulises M. Alvarez FRANCISCO FERNANDEZ ESCOBAR ACHIM MAX LOSKE MEHLING et al.               | UROL RES  | 2008 |
| 53 | The influence of single-pulse and tandem shock waves on bacteria  | Ulises M. Alvarez FRANCISCO FERNANDEZ ESCOBAR ACHIM MAX LOSKE MEHLING et al.               | Shock Waves   | 2008 |
| 54 | Interaction of shockwaves with infected kidney stones: Is there a bactericidal effect?  | Maria Del Sol Quintero Ulises M. Alvarez MARIA DEL CARMEN WACHER RODARTE et al.            | JOURNAL OF ENDOUROLOGY  | 2008 |
| 55 | In-vivo relation between CT attenuation value and shockwave fragmentation   | ACHIM MAX LOSKE MEHLING Hurtado F. Gutiérrez J. et al.                                     | JOURNAL OF ENDOUROLOGY  | 2007 |
| 56 | Percutaneous renal access: A simplified approach  | ACHIM MAX LOSKE MEHLING Mues E. Gutiérrez J.   | JOURNAL OF ENDOUROLOGY  | 2007 |
| 57 | Bacteria inactivation during lithotripsy  | JORGE ALBERTO GUTIERREZ GALLEGOS FERNANDO FERNANDEZ RAMIREZ ACHIM MAX LOSKE MEHLING et al. | AIP Conference Proceedings  | 2006 |
| 58 | Computed tomography of kidney stones for extracorporeal shock wave lithotripsy  | ACHIM MAX LOSKE MEHLING Rodríguez A.O. Cadena M. et al.                                    | IEEE Engineering in Medicine and Biology Society Conference Proceedings | 2006 |
| 59 | Computed tomography of kidney stones for extracorporeal shock wave lithotripsy.   | ACHIM MAX LOSKE MEHLING Rodríguez A.O. Cadena M. et al.                                    | IEEE Engineering in Medicine and Biology Society Conference Proceedings | 2006 |
| 60 | CT attenuation value and shockwave fragmentation  | ACHIM MAX LOSKE MEHLING Favela R. Gutierrez J. et al.                                      | JOURNAL OF ENDOUROLOGY  | 2005 |
| 61 | Dual pulse shock wave lithotripsy: In vitro and in vivo study   | ACHIM MAX LOSKE MEHLING Fernandez F. Zendejas H. et al.                                    | JOURNAL OF UROLOGY  | 2005 |
| 62 | Increased fragmentation efficiency by enhancement of cavitation for extracorporeal shock wave lithotripsy [Steigerung der fragmentationseffizienz durch verstärkung von kavitation zur berührungsfreien nierensteinzertrümmerung] | ACHIM MAX LOSKE MEHLING Fernández F. Gutiérrez J.  | Z MED PHYS  | 2005 |
| 63 | Evaluation of a Bifocal Reflector on a Clinical Lithotripter  | ACHIM MAX LOSKE MEHLING Prieto F.E. Gutierrez J. et al.                                    | JOURNAL OF ENDOUROLOGY  | 2004 |

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|----|---|--|---|------|
| 64 | Out-of-focus shockwaves: A new tissue-protecting therapy?   | ACHIM MAX LOSKE MEHLING<br>Gutierrez J. Di Grazia E.D. et al.            | ARCHIVIO ITALIANO DI UROLOGIA E ANDROLOGIA          | 2004 |
| 65 | Inactivation of Escherichia coli O157:H7, Salmonella Typhimurium and Listeria monocytogenes by underwater shock waves   | ACHIM MAX LOSKE MEHLING Alvarez U.M. Castaño-Tostado E. et al.           | INNOVATIVE FOOD SCIENCE & EMERGING TECHNOLOGIES     | 2004 |
| 66 | Conversion of an HM3 Lithotripter into a Research Device  | ACHIM MAX LOSKE MEHLING Méndez A. Fernández F. et al.                    | JOURNAL OF ENDOUROLOGY                              | 2003 |
| 67 | Bactericidal effect of underwater shock waves on Escherichia coli ATCC 10536 suspensions  | ACHIM MAX LOSKE MEHLING Alvarez U.M. Hernández-Galicia C. et al.         | INNOVATIVE FOOD SCIENCE & EMERGING TECHNOLOGIES     | 2002 |
| 68 | Piezoelectric tandem shock wave generation for extracorporeal shock wave lithotripters  | ACHIM MAX LOSKE MEHLING Prieto F.E. Van Cauwelaert J. et al.             | Physica Medica-Europe an Journal of Medical Physics | 2002 |
| 69 | Pressure-release versus rigid reflector for extracorporeal shockwave lithotripsy  | ACHIM MAX LOSKE MEHLING Prieto F.E.                                      | JOURNAL OF ENDOUROLOGY                              | 2002 |
| 70 | Tandem shock wave cavitation enhancement for extracorporeal lithotripsy   | ACHIM MAX LOSKE MEHLING Prieto F.E. Fernández F. et al.                  | PHYSICS IN MEDICINE AND BIOLOGY                     | 2002 |
| 71 | Dual-phase reflectors for extracorporeal shock wave lithotripsy   | ACHIM MAX LOSKE MEHLING Prieto F.E.                                      | Physica Medica-Europe an Journal of Medical Physics | 2001 |
| 72 | Two-dimensional optical filtering with a phase space correlator   | ACHIM MAX LOSKE MEHLING VICTOR MANUEL CASTAÑO MENESES Avilés R.          | Optik   | 1999 |
| 73 | Bifocal reflector for electrohydraulic lithotripters  | ACHIM MAX LOSKE MEHLING Prieto F.E.                                      | JOURNAL OF ENDOUROLOGY                              | 1999 |
| 74 | Repeated application of shock waves as a possible method for food preservation  | ACHIM MAX LOSKE MEHLING Prieto F.E. Zavala M.L. et al.                   | Shock Waves   | 1999 |
| 75 | Two-dimensional spatial correlator for lens-free image processing   | ACHIM MAX LOSKE MEHLING VICTOR MANUEL CASTAÑO MENESES Ballesteros L.     | Optik   | 1996 |
| 76 | Structural studies of a gallosilicate of the ZSM-5 type zeolite using high resolution electron microscopy, optical diffractometry and linear image processing | DWIGHT ROBERTO ACOSTA NAJARRO ACHIM MAX LOSKE MEHLING Schifter I. et al. | MICROPOROUS MATER                                   | 1993 |



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|----|--|---|----------------------------------|------|
| 77 | The influence of electrode shape on the performance of electrohydraulic lithotripters. | ACHIM MAX LOSKE MEHLING Prieto F.E.             | The Journal Of Stone Disease     | 1993 |
| 78 | An underwater shock wave research device   | ACHIM MAX LOSKE MEHLING Prieto F.E. Yarger F.L. | REVIEW OF SCIENTIFIC INSTRUMENTS | 1991 |

## ACHIM MAX LOSKE MEHLING

### LIBROS Y CAPITULOS CON ISBN

#### Obras con registro ISBN

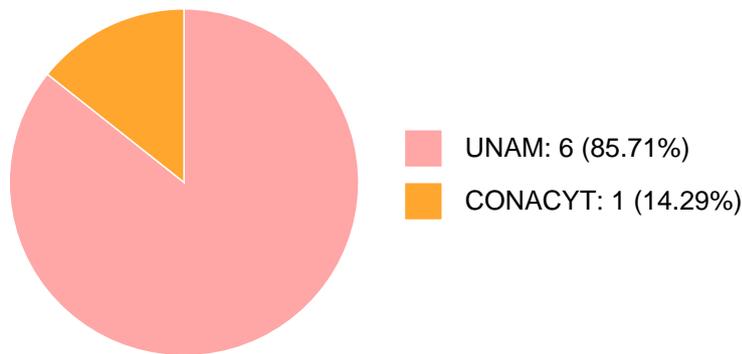


| # | Título  | Autores  | Alcance                 | Año  | ISBN          |
|---|---|--|-------------------------|------|---------------|
| 1 | El reloj solar  | ACHIM MAX LOSKE<br>MEHLING   | Libro<br>Completo       | 2022 | 9786073061834 |
| 2 | Medical and Biomedical Applications of Shock Waves                  | ACHIM MAX LOSKE<br>MEHLING   | Libro<br>Completo       | 2016 | 9783319475707 |
| 3 | Transformation of Fungi Using Shock Waves                           | ACHIM MAX LOSKE<br>MEHLING   | Capítulo<br>de un Libro | 2015 | 9783319101415 |
| 4 | New Trends in Shock Wave Applications to Medicine and Biotechnology | ACHIM MAX LOSKE<br>MEHLING Achim M. Loske  | Libro<br>Completo       | 2011 | 9788130803876 |
| 5 | Infected Urinary Stones, Endotoxins and Urosepsis                   | FRANCISCO FERNANDEZ<br>ESCOBAR LUZ MARIA<br>LOPEZ MARIN ACHIM MAX<br>LOSKE MEHLING | Capítulo<br>de un Libro | 2011 | 9789533073934 |
| 6 | The development of tandem extracorporeal shock wave lithotripsy     | ACHIM MAX LOSKE<br>MEHLING FRANCISCO<br>FERNANDEZ ESCOBAR                          | Capítulo<br>de un Libro | 2011 | 9788130803876 |
| 7 | Bactericidal Effect of Shock Waves: State of the Art                | ACHIM MAX LOSKE<br>MEHLING   | Capítulo<br>de un Libro | 2011 | 9788130803876 |
| 8 | What are shock waves?   | ACHIM MAX LOSKE<br>MEHLING   | Capítulo<br>de un Libro | 2011 | 9781848003613 |

## ACHIM MAX LOSKE MEHLING

### PARTICIPACIÓN EN PROYECTOS

#### Histórico de participación en proyectos



| # | Nombre  | Participantes           | Fuente   | Fecha inicio | Fecha fin  |
|---|---|-------------------------|--|--------------|------------|
| 1 | Evaluación del daño renal post aplicación de ondas de choque mono-pulso y tándem, mediante resonancia magnética y análisis histopatológico  | ACHIM MAX LOSKE MEHLING | Presupuesto de la UNAM asignado a la Dependencia | 01-01-2015   | 06-12-2019 |
| 2 | Transformación de bacterias de interés clínico con ondas de choque  | ACHIM MAX LOSKE MEHLING | Presupuesto de la UNAM asignado a la Dependencia | 01-10-2016   | 01-12-2021 |
| 3 | Transfección in vitro e in vivo de células de tumores de mama usando ondas de choque.   | ACHIM MAX LOSKE MEHLING | Presupuesto de la UNAM asignado a la Dependencia | 01-01-2015   | 30-12-2022 |
| 4 | Métodos físicos de transformación genética para microorganismos de importancia médica y tecnológica   | ACHIM MAX LOSKE MEHLING | Presupuesto de la UNAM asignado a la Dependencia | 20-10-2014   | 19-10-2019 |
| 5 | Expresión de genes de señalización involucrados en el mantenimiento de la integridad de la pared celular y respuesta al estrés producido por ondas de choque en el hongo aspergillus niger. | ACHIM MAX LOSKE MEHLING | Recursos CONACYT                                 | 01-10-2019   | 31-10-2022 |



**Sistema Integral de Información Académica**  
**Coordinación de Planeación, Evaluación y**  
**Simplificación de la Gestión Institucional**  
**Reporte individual**



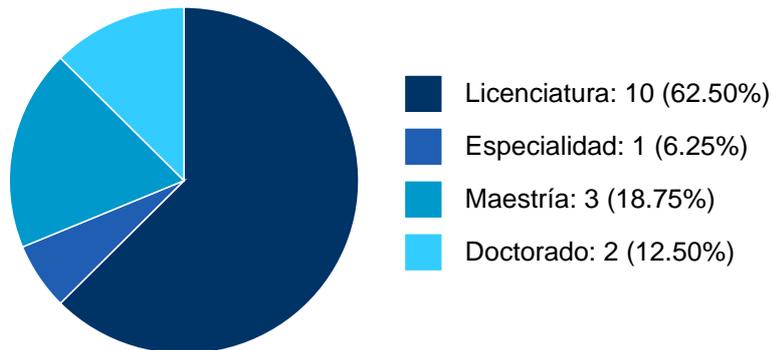
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|---|---|-------------------------|--|------------|------------|
| 6 | Expresión de genes de señalización involucrados en el mantenimiento de la integridad de la pared celular y respuesta al estrés producido por ondas de choque en el hongo aspergillus niger. | ACHIM MAX LOSKE MEHLING | Presupuesto de la UNAM asignado a la Dependencia | 01-01-2023 | 31-12-2024 |
| 7 | Transformación de hongos filamentosos con ondas de choque para aplicaciones industriales.   | ACHIM MAX LOSKE MEHLING | Presupuesto de la UNAM asignado a la Dependencia | 01-08-2011 | 31-12-2025 |

## ACHIM MAX LOSKE MEHLING

### PARTICIPACIÓN EN TESIS

#### Histórico de Colaboraciones en Tesis



| # | Título del documento  | Tipo de Tesis         | Sinodales                    | Autores  | Entidad  | Año  |
|---|---|-----------------------|------------------------------|--|--|------|
| 1 | Efecto de ondas de choque monopolso y tándem sobre la pared celular de conidios del hongo aspergillus niger | Tesis de Doctorado    | ACHIM MAX LOSKE MEHLING,     | Larrañaga Ordaz, Daniel,                               | Centro de Física Aplicada y Tecnología Avanzada,   | 2022 |
| 2 | Influencia de las ondas de choque en células pulpares y osteoblastos  | Tesis de Especialidad | FRANCISCO FERNANDEZ ESCOBAR, | RENE GARCIA CONTRERAS, GISEL GARCIA GARCIA, et al.     | Centro de Física Aplicada y Tecnología Avanzada, Escuela Nacional de Estudios Superiores, Unidad León, Guanajuato, | 2021 |
| 3 | Preparación de liposomas unilaminares y encapsulación simultánea de DNA mediante ondas de choque            | Tesis de Licenciatura | LUZ MARIA LOPEZ MARIN,       | ACHIM MAX LOSKE MEHLING, Sánchez Téllez, Alma Athenas, | Centro de Física Aplicada y Tecnología Avanzada,   | 2020 |

**Reporte individual**

**ACHIM MAX LOSKE MEHLING**

|    |   |                       |                              |  |  |      |
|----|---|-----------------------|------------------------------|--|--|------|
| 4  | Estudio de la interacción de ondas de choque con embriones de <i>Drosophila melanogaster</i> empleando nanopartículas como marcadores | Tesis de Licenciatura | ACHIM MAX LOSKE MEHLING,     | JUAN RAFAEL RIESGO ESCOVAR, Tapia Merino, Daniel,      | Centro de Física Aplicada y Tecnología Avanzada, Instituto de Neurobiología en Querétaro, Querétaro, | 2019 |
| 5  | Evaluación de un generador de ondas de choque de doble cabezal para aplicaciones biomédicas   | Tesis de Licenciatura | FRANCISCO FERNANDEZ ESCOBAR, | ACHIM MAX LOSKE MEHLING, Cortés González, José Germán, | Centro de Física Aplicada y Tecnología Avanzada,   | 2017 |
| 6  | Efectos y mecanismos de la aplicación de ondas de choque en células humanas   | Tesis de Licenciatura | LUZ MARIA LOPEZ MARIN,       | ACHIM MAX LOSKE MEHLING, Castaño González, Karen,      | Centro de Física Aplicada y Tecnología Avanzada,   | 2015 |
| 7  | Hidrodinámica de una burbuja expuesta a ondas de choque novedosas : videograbaciones de alta velocidad                                | Tesis de Licenciatura | FRANCISCO FERNANDEZ ESCOBAR, | ACHIM MAX LOSKE MEHLING, López Roa, Carlos,            | Centro de Física Aplicada y Tecnología Avanzada,   | 2014 |
| 8  | Temporalidad de los fenómenos físicos involucrados en la generación electrohidráulica de ondas de choque                              | Tesis de Licenciatura | ACHIM MAX LOSKE MEHLING,     | Fernandez Domínguez, Eduardo,                          | Centro de Física Aplicada y Tecnología Avanzada,   | 2012 |
| 9  | Detección y control de cavitación en un generador de ondas de choque tándem multifuncional  | Tesis de Doctorado    | ACHIM MAX LOSKE MEHLING,     | Canseco López, Guillermo,                              | Centro de Física Aplicada y Tecnología Avanzada,   | 2012 |
| 10 | Elaboración y estandarización de cálculos renales artificiales infectados   | Tesis de Licenciatura | ACHIM MAX LOSKE MEHLING,     | Luna Suárez, Armando,                                  | Centro de Física Aplicada y Tecnología Avanzada,   | 2011 |

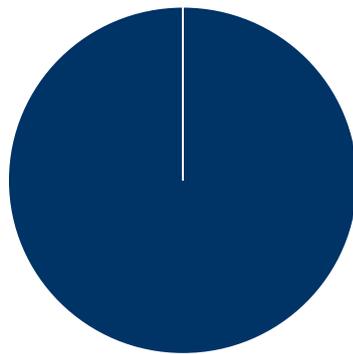
### ACHIM MAX LOSKE MEHLING

|    |   |                       |                          |                                      |  |      |
|----|---|-----------------------|--------------------------|--------------------------------------|--|------|
| 11 | Estudios en vivo sobre la fragmentación de urolitos mediante litotricia extracorpórea tándem  | Tesis de Licenciatura | ACHIM MAX LOSKE MEHLING, | Fernández Domínguez, Gilberto,       | Centro de Física Aplicada y Tecnología Avanzada, | 2008 |
| 12 | Interaccion de ondas de choque con calculos renales artificiales inoculados con una cepa de Salmonella Typhimurium                  | Tesis de Maestría     | ACHIM MAX LOSKE MEHLING, | Quintero Castelan, Maria del Sol,    |  | 2006 |
| 13 | Evaluacion histopatologica de lesiones renales provocadas por un generador de ondas de choque tandem para litotripsia extracorporal | Tesis de Maestría     | ACHIM MAX LOSKE MEHLING, | Zendejas Martínez, Horacio,          |  | 2005 |
| 14 | Cavitacion controlada por dos ondas de choque y su aplicacion a litotripsia extracorporal   | Tesis de Licenciatura | ACHIM MAX LOSKE MEHLING, | Van Cauwelaert Amuchastegui, Javier, |  | 2001 |
| 15 | Diseño de un dispositivo de tomografía óptica   | Tesis de Maestría     | ACHIM MAX LOSKE MEHLING, | García Guerrero, Jorge Jaime,        |  | 2001 |
| 16 | Aplicacion de ondas de choque a Escherichia coli como alternativa a la conservacion de alimentos                                    | Tesis de Licenciatura | ACHIM MAX LOSKE MEHLING, | Hernandez Galicia, Claudia,          |  | 1999 |

## ACHIM MAX LOSKE MEHLING

### DOCENCIA IMPARTIDA

#### Histórico de docencia



■ Licenciatura: 12 (100.00%)

| #  | Nivel titulación | Asignatura                   | Entidad   | Alumnos | Semestre |
|----|------------------|------------------------------|---|---------|----------|
| 1  | Licenciatura     | ECUACIONES DIFERENCIALES I   | Centro de Física Aplicada y Tecnología Avanzada | 15      | 2018-1   |
| 2  | Licenciatura     | CALCULO II                   | Centro de Física Aplicada y Tecnología Avanzada | 14      | 2017-2   |
| 3  | Licenciatura     | CALCULO I                    | Centro de Física Aplicada y Tecnología Avanzada | 16      | 2017-1   |
| 4  | Licenciatura     | ESTANCIA DE INVESTIGACION VI | Centro de Física Aplicada y Tecnología Avanzada | 20      | 2014-2   |
| 5  | Licenciatura     | CALCULO II                   | Centro de Física Aplicada y Tecnología Avanzada | 24      | 2014-2   |
| 6  | Licenciatura     | ECUACIONES DIFERENCIALES I   | Centro de Física Aplicada y Tecnología Avanzada | 18      | 2014-1   |
| 7  | Licenciatura     | CALCULO II                   | Centro de Física Aplicada y Tecnología Avanzada | 19      | 2013-2   |
| 8  | Licenciatura     | CALCULO I                    | Centro de Física Aplicada y Tecnología Avanzada | 20      | 2013-1   |
| 9  | Licenciatura     | CALCULO II                   | Centro de Física Aplicada y Tecnología Avanzada | 20      | 2012-2   |
| 10 | Licenciatura     | ECUACIONES DIFERENCIALES I   | Centro de Física Aplicada y Tecnología Avanzada | 23      | 2012-1   |
| 11 | Licenciatura     | ECUACIONES DIFERENCIALES I   | Centro de Física Aplicada y Tecnología Avanzada | 13      | 2011-1   |
| 12 | Licenciatura     | ESTANCIA DE INVESTIGACION II | Centro de Física Aplicada y Tecnología Avanzada | 28      | 2008-2   |



**Sistema Integral de Información Académica**  
**Coordinación de Planeación, Evaluación y**  
**Simplificación de la Gestión Institucional**  
**Reporte individual**



**ACHIM MAX LOSKE MEHLING**

**PATENTES**

| # | Título   | Inventores  | Sección               | Año  |
|---|--|---|-----------------------|------|
| 1 | METODO DE TRANSFORMACION DE HONGOS FILAMENTOSOS POR MEDIO DEONDAS DE CHOQUE. | ACHIM MAX LOSKE MEHLING, FRANCISCO FERNANDEZ ESCOBAR, | CHEMISTRY; METALLURGY | 2016 |

**ACHIM MAX LOSKE MEHLING**

**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 |