



## **HORACIO MARTINEZ VALENCIA**

### **Datos Generales**

**Nombre:** HORACIO MARTINEZ VALENCIA

**Máximo nivel de estudios:** DOCTORADO

**Antigüedad académica en la UNAM:** 44 años

---

### **Nombramientos**

**Vigente:** INVESTIGADOR TITULAR C TC Definitivo  
Instituto de Ciencias Físicas  
Desde 01-01-2008 (fecha inicial de registros en el SIIA)

---

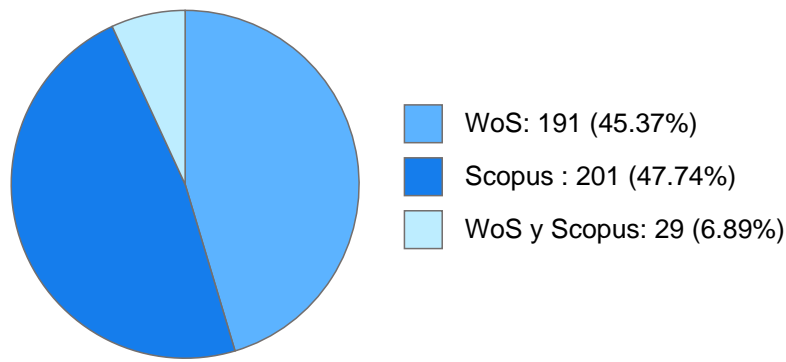
### **Estímulos, programas, premios y reconocimientos**

SNI Emérito 2024  
SNI III 2009 - 2023  
SNI II 2008  
PRIDE D - 2024

## HORACIO MARTINEZ VALENCIA

### DOCUMENTOS EN REVISTAS

#### Histórico de Documentos



| # | Título  | Autores  | Revista  | Año  |
|---|---|--|--|------|
| 1 | Obtaining microparticles of Cu <sub>2</sub> O by means of a pulsed discharge of CH <sub>3</sub> CH <sub>2</sub> OH-N <sub>2</sub> | HORACIO MARTINEZ VALENCIA<br>González M.C. Reyes P.G. et al.                       | REVISTA<br>MEXICANA DE<br>FISICA                           | 2024 |
| 2 | Superficial Modification of the Mg?Zn Biomaterials via Ion Nitriding for Biomedical Applications                                  | HORACIO MARTINEZ VALENCIA EDNA<br>VAZQUEZ VELEZ Gonzaga S. et al.                  | METALS   | 2024 |
| 3 | Corrosion behavior and mechanical properties of hot-rolled ultrahigh-strength steel alloys in alkaline and acidic environments    | HORACIO MARTINEZ VALENCIA<br>Torres-Islas A. Torres-Macias D. et al.               | INTERNATIONAL<br>JOURNAL OF<br>ELECTROCHEMI<br>CAL SCIENCE | 2024 |
| 4 | Corrosion behavior of Mg?Bi?Ca alloys prepared via high vacuum melting as biodegradable materials in Hank solution                | HORACIO MARTINEZ VALENCIA<br>Torres-Islas A. Bedolla-Jacuinde A. et al.            | INTERNATIONAL<br>JOURNAL OF<br>ELECTROCHEMI<br>CAL SCIENCE | 2024 |
| 5 | Atmospheric Plasma Treatment to Improve PHB Coatings on 316L Stainless Steel  | HORACIO MARTINEZ VALENCIA<br>BERNARDO FABIAN CAMPILLO ILLANES<br>Radilla J. et al. | POLYMERS   | 2024 |
| 6 | Plasma-modified cerium oxide nanocatalyst for atmospheric pressure plasma degradation of methylene blue                           | EDNA VAZQUEZ VELEZ HORACIO<br>MARTINEZ VALENCIA LAZARO HUERTA<br>ARCOS et al.      | Journal of<br>Water Process<br>Engineering                 | 2024 |

## HORACIO MARTINEZ VALENCIA

|    |  |   |  |      |
|----|--|---|--|------|
| 7  | Life Cycle Assessment of Green Synthesis of TiO <sub>2</sub> Nanoparticles vs. Chemical Synthesis  | EDNA VAZQUEZ VELEZ HORACIO MARTINEZ VALENCIA Maria del Pilar Rodriguez-Rojas et al.     | SUSTAINABILITY                                   | 2024 |
| 8  | Evaluating a Fe-Based Metallic Glass Powder as a Novel Negative Electrode Material for Applications in Ni-MH Batteries                                     | OSCAR SOTELO MAZON BERNARDO FABIAN CAMPILLO ILLANES HORACIO MARTINEZ VALENCIA et al.    | BATTERIES-BASE L                                 | 2024 |
| 9  | Synthesis of Magnesium-Based Alloys by Mechanical Alloying for Implant Applications  | HORACIO MARTINEZ VALENCIA EDNA VAZQUEZ VELEZ Gonzaga S. et al.                          | Coatings   | 2023 |
| 10 | Effect of plasma treatment of copper on its corrosion behaviour in 3.5 % NaCl solution   | HORACIO MARTINEZ VALENCIA JOSE GONZALO GONZALEZ RODRIGUEZ O. A. Gonzalez Noriega et al. | INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE | 2023 |
| 11 | Gentamicin Release Study in Uniaxial and Coaxial Polyhydroxybutyrate-Polyethylene Glycol-Gentamicin Microfibers Treated with Atmospheric Plasma            | EDNA VAZQUEZ VELEZ HORACIO MARTINEZ VALENCIA BERNARDO FABIAN CAMPILLO ILLANES et al.    | POLYMERS   | 2023 |
| 12 | Microbiological study of the effect of a dielectric barrier discharge interaction on processed orange juices exposed to the environment                    | HORACIO MARTINEZ VALENCIA Ocaña De Jesús R.L. Ibáñez A.T.G. et al.                      | FOOD SCIENCE AND TECHNOLOGY                      | 2022 |
| 13 | Studies on the effect of long-chain and head groups of nonionic surfactants synthesized from palm and coconut oil on the formation of silver nanoparticles | EDNA VAZQUEZ VELEZ HORACIO MARTINEZ VALENCIA MOHAN KUMAR KESARLA et al.                 | JOURNAL OF SURFACTANTS AND DETERGENTS            | 2022 |
| 14 | Removal efficiency of Rhodamine B dye by atmospheric plasma  | HORACIO MARTINEZ VALENCIA Sánchez J.V. Segundo C.T. et al.                              | DESALINATION AND WATER TREATMENT                 | 2022 |
| 15 | Effect of atmospheric plasma treatment on the wettability of UHMWPE  | MARAOLINA DOMINGUEZ DIAZ HORACIO MARTINEZ VALENCIA I Dominguez-Lopez et al.             | MATERIALS LETTERS                                | 2021 |
| 16 | Calibration of the underground muon detector of the Pierre Auger Observatory   | GUILLERMINA AVILA RAMIREZ HORACIO MARTINEZ VALENCIA GUSTAVO ADOLFO MEDINA TANCO et al.  | JOURNAL OF INSTRUMENTATION                       | 2021 |
| 17 | Influence of physical and chemical parameters in the treatment of basic red dye 46 by atmospheric plasma   | HORACIO MARTINEZ VALENCIA Albarrán M.J.R. Díaz A.G. et al.                              | DESALINATION AND WATER TREATMENT                 | 2021 |
| 18 | The FRAM robotic telescope for atmospheric monitoring at the Pierre Auger Observatory  | JUAN CARLOS D'OLIVO SAEZ BENJAMIN GARCIA PAEZ NANCY LETICIA GONZALEZ MORALES et al.     | JOURNAL OF INSTRUMENTATION                       | 2021 |

## HORACIO MARTINEZ VALENCIA

|    |   |   |  |      |
|----|---|---|--|------|
| 19 | Discoloration and mineralization of Direct Orange 39 textile dye in water by atmospheric plasma and ferrous ion   | JOSEFINA VERGARA SANCHEZ<br>HORACIO MARTINEZ VALENCIA Cesar Torres Segundo et al.             | DESALINATION AND WATER TREATMENT               | 2021 |
| 20 | Extraction of the muon signals recorded with the surface detector of the Pierre Auger Observatory using recurrent neural networks                               | JUAN CARLOS D'OLIVO SAEZ<br>HORACIO MARTINEZ VALENCIA<br>GUSTAVO ADOLFO MEDINA TANCO et al.   | JOURNAL OF INSTRUMENTATION                     | 2021 |
| 21 | Corrosion Resistance of a Plasma-Oxidized Ti6Al4V Alloy for Dental Applications   | HORACIO MARTINEZ VALENCIA<br>Velazquez-Torres N.<br>Porcayo-Calderon J. et al.                | Coatings                                       | 2021 |
| 22 | The energy spectrum of cosmic rays beyond the turn-down around 1017 eV as measured with the surface detector of the Pierre Auger Observatory                    | JUAN CARLOS D'OLIVO SAEZ<br>BENJAMIN GARCIA PAEZ NANCY<br>LETICIA GONZALEZ MORALES et al.     | EUROPEAN PHYSICAL JOURNAL C                    | 2021 |
| 23 | Degradation of Acid Red 1 Catalyzed by Peroxidase Activity of Iron Oxide Nanoparticles and Detected by SERS   | EDNA VAZQUEZ VELEZ HORACIO MARTINEZ VALENCIA FERMIN CASTILLO MEJIA                            | NANOMATERIALS                                  | 2021 |
| 24 | Comparative studies of the mechanical and thermal properties of clay / copolymer nanocomposites synthesized by two in-situ methods and solution blending method | BERNARDO FABIAN CAMPILLO ILLANES<br>HORACIO MARTINEZ VALENCIA Oscar Hernandez-Guerrero et al. | JOURNAL OF POLYMER RESEARCH                    | 2020 |
| 25 | Electrospinning of polyacrylonitrile nanofibers embedded with zerovalent iron and cerium oxide nanoparticles, as Cr(VI) adsorbents for water treatment          | EDNA VAZQUEZ VELEZ HORACIO MARTINEZ VALENCIA L. Lopez-Zarate                                  | JOURNAL OF APPLIED POLYMER SCIENCE             | 2020 |
| 26 | Search for magnetically-induced signatures in the arrival directions of ultra-high-energy cosmic rays measured at the Pierre Auger Observatory                  | GUILLERMINA AVILA RAMIREZ JUAN CARLOS D'OLIVO SAEZ HORACIO MARTINEZ VALENCIA et al.           | JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS | 2020 |
| 27 | Langmuir probe, optical, and mass characterization of a DC CO <sub>2</sub> -H <sub>2</sub> plasma   | HORACIO MARTINEZ VALENCIA<br>PEDRO GUILLERMO REYES ROMERO<br>JOSEFINA VERGARA SANCHEZ et al.  | PHYSICS OF PLASMAS                             | 2020 |
| 28 | Direct measurement of the muonic content of extensive air showers between 2× 10 <sup>17</sup> and 2×10 <sup>18</sup> eV at the Pierre Auger Observatory         | JESUS ALVAREZ CASTILLO ALDO BLANCO JARVIO JUAN CARLOS D'OLIVO SAEZ et al.                     | EUROPEAN PHYSICAL JOURNAL C                    | 2020 |
| 29 | Measurement of the cosmic-ray energy spectrum above 2.5 x 10 <sup>(18)</sup> eV using the Pierre Auger Observatory  | JESUS ALVAREZ CASTILLO<br>GUILLERMINA AVILA RAMIREZ JUAN CARLOS D'OLIVO SAEZ et al.           | PHYSICAL REVIEW D                              | 2020 |

## HORACIO MARTINEZ VALENCIA

|    |   |  |   |      |
|----|---|--|---|------|
| 30 | Features of the Energy Spectrum of Cosmic Rays above $2.5 \times 10^{18}$ eV Using the Pierre Auger Observatory                             | JUAN CARLOS D'OLIVO SAEZ<br>HORACIO MARTINEZ VALENCIA<br>GUSTAVO ADOLFO MEDINA TANCO<br>et al.                 | PHYSICAL<br>REVIEW LETTERS  | 2020 |
| 31 | Discoloration of a textile dyes mixture in an aqueous solution using a corona discharge   | HORACIO MARTINEZ VALENCIA<br>Josefina Vergara Sanchez Cesar<br>Torres Segundo et al.                           | DESALINATION<br>AND WATER<br>TREATMENT  | 2020 |
| 32 | Development and Corrosion Characterization of Ultra-High-Strength Steels  | SERGIO ALONSO SERNA BARQUERA<br>BERNARDO FABIAN CAMPILLO ILLANES<br>HORACIO MARTINEZ VALENCIA et al.           | INTERNATIONAL<br>JOURNAL OF<br>ELECTROCHEMI<br>CAL SCIENCE  | 2020 |
| 33 | The impact of heat input on the microstructures, fatigue behaviors, and stress lives of TIG-welded 6061-T6 alloy joints                     | SOCORRO DEL CARMEN VALDEZ<br>RODRIGUEZ BERNARDO FABIAN<br>CAMPILLO ILLANES HORACIO<br>MARTINEZ VALENCIA et al. | MATERIALS<br>RESEARCH<br>EXPRESS  | 2020 |
| 34 | Crystallinity and hardness enhancement of polypropylene using atmospheric pressure plasma discharge treatment                               | HORACIO MARTINEZ VALENCIA<br>BERNARDO FABIAN CAMPILLO ILLANES<br>Xosocotla O.                                  | Advances In<br>Science,<br>Technology<br>And<br>Engineering<br>Systems  | 2020 |
| 35 | Microhardness modification of ultrahigh-molecular-weight polyethylene by oxygen plasma: Effect of the polymer crosslinking                  | MARAOLINA DOMINGUEZ DIAZ<br>HORACIO MARTINEZ VALENCIA<br>García A. et al.                                      | NUCLEAR<br>INSTRUMENTS &<br>METHODS IN<br>PHYSICS<br>RESEARCH<br>SECTION<br>B-BEAM<br>INTERACTIONS<br>WITH MATERIALS<br>AND ATOMS | 2019 |
| 36 | Absolute total ionization and dissociative ionization cross sections for H + impact on N <sub>2</sub> O within the energy range of 2?10 keV | JORGE LOPEZ PATIÑO BEATRIZ<br>ELIZABETH FUENTES MADARIAGA<br>FAROOK BASHIR YOUSIF et al.                       | INTERNATIONAL<br>JOURNAL OF<br>MASS<br>SPECTROMETRY   | 2019 |
| 37 | Measurement of the average shape of longitudinal profiles of cosmic-ray air showers at the Pierre Auger Observatory                         | JUAN CARLOS D'OLIVO SAEZ<br>HORACIO MARTINEZ VALENCIA<br>GUSTAVO ADOLFO MEDINA TANCO<br>et al.                 | JOURNAL OF<br>COSMOLOGY<br>AND<br>ASTROPARTICLE<br>PHYSICS  | 2019 |

## HORACIO MARTINEZ VALENCIA

|    |   |   |   |      |
|----|---|---|---|------|
| 38 | Influence of the crystalline structure stability in the wettability of poly- $\beta$ -hydroxybutyrate:polyethylene glycol 6000 fiber mats treated by atmospheric-pressure plasma  | MARAOLINA DOMINGUEZ DIAZ<br>HORACIO MARTINEZ VALENCIA<br>Escorcia-García J.                     | NUCLEAR<br>INSTRUMENTS &<br>METHODS IN<br>PHYSICS<br>RESEARCH<br>SECTION<br>B-BEAM<br>INTERACTIONS<br>WITH MATERIALS<br>AND ATOMS | 2019 |
| 39 | Elimination of AB210 dye in residual textile water by glow-discharge plasma application   | HORACIO MARTINEZ VALENCIA<br>Josefina Vergara Sanchez Cesar<br>Torres Segundo et al.            | DESALINATION<br>AND WATER<br>TREATMENT  | 2019 |
| 40 | Electrophoretic Deposition of Chitosan Films Doped with Nd <sub>2</sub> Ti <sub>2</sub> O <sub>7</sub> Nanoparticles as Protective Coatings against Corrosion in Saline Solutions | MARGARITA MARTINEZ GOMEZ<br>MARAOLINA DOMINGUEZ DIAZ<br>HORACIO MARTINEZ VALENCIA et al.        | INTERNATIONAL<br>JOURNAL OF<br>POLYMER<br>SCIENCE   | 2019 |
| 41 | Multi-Messenger Physics With the Pierre Auger Observatory   | JUAN CARLOS D'OLIVO SAEZ<br>HORACIO MARTINEZ VALENCIA<br>GUSTAVO ADOLFO MEDINA TANCO<br>et al.  | Frontiers In<br>Astronomy And<br>Space Sciences   | 2019 |
| 42 | Pathways in the molecular fragmentation for the C <sub>2</sub> H <sub>5</sub> OH/He electrical discharge  | HORACIO MARTINEZ VALENCIA<br>VICTOR ULISES LEV CONTRERAS<br>LOERA A. Gomez et al.               | RADIATION<br>EFFECTS AND<br>DEFECTS IN<br>SOLIDS  | 2019 |
| 43 | Photo-Detachment of Nitrous Oxide in DC Plasma Discharge  | FAROOK BASHIR YOUSIF BEATRIZ<br>ELIZABETH FUENTES MADARIAGA<br>HORACIO MARTINEZ VALENCIA et al. | IEEE<br>TRANSACTIONS<br>ON PLASMA<br>SCIENCE  | 2019 |
| 44 | Effect on discoloration by nonthermal plasma in dissolved textile dyes: Acid black 194  | HORACIO MARTINEZ VALENCIA<br>Torres-Segundo C.<br>Vergara-Sánchez J. et al.                     | REVISTA<br>MEXICANA DE<br>INGENIERIA<br>QUIMICA   | 2019 |
| 45 | Ionization and electron capture for H <sup>+</sup> collisions at low keV energy with a water-vapor target   | BEATRIZ ELIZABETH FUENTES<br>MADARIAGA FAROOK BASHIR YOUSIF<br>HORACIO MARTINEZ VALENCIA et al. | INTERNATIONAL<br>JOURNAL OF<br>MASS<br>SPECTROMETRY   | 2019 |
| 46 | Electrochemical and Optical Behavior of Microalloyed Steel in Near-Neutral Aqueous Solution   | HORACIO MARTINEZ VALENCIA J.<br>Castrellon-Uribe A. Torres-Islas et al.                         | INTERNATIONAL<br>JOURNAL OF<br>ELECTROCHEMI<br>CAL SCIENCE  | 2019 |

## HORACIO MARTINEZ VALENCIA

|    |   |   |   |      |
|----|---|---|---|------|
| 47 | Comparative study of the degradation process of Azo textile dyes AB52 and AB210 in water using a type-Corona electric discharge | HORACIO MARTINEZ VALENCIA Cesar Torres Segundo Josefina Vergara Sanchez et al.            | DESALINATION AND WATER TREATMENT                    | 2019 |
| 48 | Defects analysis on the strengthening of solid solution Nb additions in Mo3Si alloys  | HORACIO MARTINEZ VALENCIA Rosales I. Garcia-Ramirez M.J. et al.                           | JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-J MR&T | 2019 |
| 49 | Experimental Study of Ethanol and Helium Mixture Glow Discharge   | HORACIO MARTINEZ VALENCIA Perusquia S. Reyes P.G. et al.                                  | IEEE TRANSACTIONS ON PLASMA SCIENCE                 | 2019 |
| 50 | Stress corrosion cracking of microalloyed pipeline steel in biofuels E-10 and E-85  | HORACIO MARTINEZ VALENCIA BERNARDO FABIAN CAMPILLO ILLANES Del-Pozo A. et al.             | CORROSION ENGINEERING SCIENCE AND TECHNOLOGY        | 2019 |
| 51 | Electronegativity Measurements and Analysis for CO <sub>2</sub> and CO in DC Plasma Discharge                                   | JUAN LOPEZ PATIÑO BEATRIZ ELIZABETH FUENTES MADARIAGA HORACIO MARTINEZ VALENCIA et al.    | IEEE TRANSACTIONS ON PLASMA SCIENCE                 | 2019 |
| 52 | Corrosion behavior of nitrated Ni <sub>3</sub> Al intermetallic alloy in 0.5 M H <sub>2</sub> SO <sub>4</sub>                   | HORACIO MARTINEZ VALENCIA JOSE GONZALO GONZALEZ RODRIGUEZ LORENZO MARTINEZ GOMEZ et al.   | INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE    | 2018 |
| 53 | Phase Shift Measurements Between Intensity and Frequency Modulations of a Self-Mixing Interferometer                            | VICTOR ULISES LEV CONTRERAS LOERA HORACIO MARTINEZ VALENCIA Michele Norgia                | IEEE PHOTONICS TECHNOLOGY LETTERS                   | 2018 |
| 54 | Effect of plasma pre-oxidation on the Cu corrosion inhibition in 3.5% NaCl by an environmentally friendly amide                 | HORACIO MARTINEZ VALENCIA EDNA VAZQUEZ VELEZ BERNARDO FABIAN CAMPILLO ILLANES et al.      | INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE    | 2018 |
| 55 | Antimony Sulfide Thin Films Obtained by Chemical Bath Deposition using Tartaric Acid as Complexing Agent                        | JOSE ESCORCIA GARCIA MARAOLINA DOMINGUEZ DIAZ HORACIO MARTINEZ VALENCIA et al.            | Mrs Advances  | 2018 |
| 56 | Combined fit of spectrum and composition data as measured by the Pierre Auger Observatory (vol 4, 038, 2017)                    | JESUS ALVAREZ CASTILLO JUAN CARLOS D'OLIVO SAEZ HORACIO MARTINEZ VALENCIA et al.          | JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS      | 2018 |
| 57 | Photo-detachment of negative ions in Ar-CO <sub>2</sub> dc discharge employing Langmuir probe                                   | FAROOK BASHIR YOUSIF BEATRIZ ELIZABETH FUENTES MADARIAGA HORACIO MARTINEZ VALENCIA et al. | PHYSICS OF PLASMAS                                  | 2018 |

## HORACIO MARTINEZ VALENCIA

|    |   |   |  |      |
|----|---|---|--|------|
| 58 | Use of an amide-type corrosion inhibitor synthesized from the coffee bagasse oil on the corrosion of Cu in NaCl   | HORACIO MARTINEZ VALENCIA EDNA VAZQUEZ VELEZ LORENZO MARTINEZ GOMEZ et al.                | GREEN CHEMISTRY LETTERS AND REVIEWS            | 2018 |
| 59 | Chemical elemental analysis of single acoustic-levitated water droplets by laser-induced breakdown spectroscopy   | VICTOR ULISES LEV CONTRERAS LOERA HUGO MARTIN SOBRAL HORACIO MARTINEZ VALENCIA et al.     | OPTICS LETTERS                                 | 2018 |
| 60 | Observation of a large-scale anisotropy in the arrival directions of cosmic rays above $8 \times 10^{18}$ eV  | JESUS ALVAREZ CASTILLO JUAN CARLOS D'OLIVO SAEZ HORACIO MARTINEZ VALENCIA et al.          | Science  | 2017 |
| 61 | Degradation of textile dye AB 52 in an aqueous solution by applying a plasma at atmospheric pressure  | HORACIO MARTINEZ VALENCIA Vergara Sanchez, Josefina Torres Segundo, Cesar et al.          | IEEE TRANSACTIONS ON PLASMA SCIENCE            | 2017 |
| 62 | Search for photons with energies above $10^{18}$ eV using the hybrid detector of the Pierre Auger Observatory   | JESUS ALVAREZ CASTILLO JUAN CARLOS D'OLIVO SAEZ HORACIO MARTINEZ VALENCIA et al.          | JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS | 2017 |
| 63 | Enhanced self-mixing interferometry based on volume Bragg gratings and laser diodes emitting at 405-nm wavelengths  | HORACIO MARTINEZ VALENCIA VICTOR ULISES LEV CONTRERAS LOERA Toivonen, Juha                | OPTICS LETTERS                                 | 2017 |
| 64 | Plasma diagnostics of glow discharges in mixtures of CO <sub>2</sub> with noble gases   | HORACIO MARTINEZ VALENCIA Reyes, P. G. Gomez, A. et al.                                   | REVISTA MEXICANA DE FISICA                     | 2017 |
| 65 | Physical-chemical characterization of the textile dye Azo Ab52 degradation by corona plasma   | HORACIO MARTINEZ VALENCIA Gomez, A. Torres-Arenas, A. J. et al.                           | AIP ADVANCES                                   | 2017 |
| 66 | Inferences on mass composition and tests of hadronic interactions from 0.3 to 100 EeV using the water-Cherenkov detectors of the Pierre Auger Observatory | JUAN CARLOS D'OLIVO SAEZ HORACIO MARTINEZ VALENCIA GUSTAVO ADOLFO MEDINA TANCO et al.     | PHYSICAL REVIEW D                              | 2017 |
| 67 | Ionization and electron capture for H <sup>+</sup> collisions with CO at low keV energy   | BEATRIZ ELIZABETH FUENTES MADARIAGA FAROOK BASHIR YOUSIF HORACIO MARTINEZ VALENCIA et al. | Physics Procedia                               | 2017 |
| 68 | Mechanical performance of thermally post-treated ion-nitrided steels  | IVONNE ROSALES CHAVEZ HORACIO MARTINEZ VALENCIA Guardian, R.                              | APPLIED SURFACE SCIENCE                        | 2016 |
| 69 | Nanosecond-level time synchronization of autonomous radio detector stations for extensive air showers   | JUAN CARLOS D'OLIVO SAEZ HORACIO MARTINEZ VALENCIA GUSTAVO ADOLFO MEDINA TANCO et al.     | JOURNAL OF INSTRUMENTATION                     | 2016 |



## HORACIO MARTINEZ VALENCIA

|    |   |   |  |      |
|----|---|---|--|------|
| 70 | Search for correlations between the arrival directions of IceCube neutrino events and ultrahigh-energy cosmic rays detected by the Pierre Auger Observatory and the Telescope Array | AMELIA OLIVAS SARABIA JUAN<br>CARLOS D'OLIVO SAEZ HORACIO MARTINEZ VALENCIA et al.                  | JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS | 2016 |
| 71 | The Hydrophilic to Superhydrophilic Change Induced by Polyhydroxybutyrate in Polyethylene glycol:Polyhydroxybutyrate Electrospun Samples by Plasma Treatment                        | HORACIO MARTINEZ VALENCIA<br>Guadalupe Rojano-Molina, Ma Dominguez-Diaz, Maraolina et al.           | Mrs Advances                                   | 2016 |
| 72 | Search for ultrarelativistic magnetic monopoles with the Pierre Auger observatory   | JESUS ALVAREZ CASTILLO JUAN<br>CARLOS D'OLIVO SAEZ HORACIO MARTINEZ VALENCIA et al.                 | PHYSICAL REVIEW D                              | 2016 |
| 73 | Effects of Na incorporation and plasma treatment on Bi <sub>2</sub> S <sub>3</sub> ultra-thin layers  | HORACIO MARTINEZ VALENCIA<br>Moreno-Garcia, H. Messina, S. et al.                                   | Thin Solid Films                               | 2016 |
| 74 | Characterization of Ar-O <sub>2</sub> DC Discharge Employing Langmuir Probe in Conjunction with Photodetachment   | HORACIO MARTINEZ VALENCIA<br>Rodriguez Legorreta, Jannet Yousif, Farook Bashir et al.               | IEEE TRANSACTIONS ON PLASMA SCIENCE            | 2016 |
| 75 | Low energy ionization and fragmentation cross sections for H <sup>+</sup> impact on N <sub>2</sub> and O <sub>2</sub>   | JUAN LOPEZ PATIÑO BEATRIZ<br>ELIZABETH FUENTES MADARIAGA<br>HORACIO MARTINEZ VALENCIA et al.        | INTERNATIONAL JOURNAL OF MASS SPECTROMETRY     | 2016 |
| 76 | Ionization and fragmentation of CH <sub>4</sub> by proton impact  | BEATRIZ ELIZABETH FUENTES<br>MADARIAGA JUAN LOPEZ PATIÑO<br>HORACIO MARTINEZ VALENCIA et al.        | INTERNATIONAL JOURNAL OF MASS SPECTROMETRY     | 2016 |
| 77 | Characterization of Ethanol Plasma Glow Discharge, Decomposition in Several Species and Solid Film Formation  | HORACIO MARTINEZ VALENCIA<br>OSVALDO FLORES CEDILLO Reyes, P. G. et al.                             | IEEE TRANSACTIONS ON PLASMA SCIENCE            | 2016 |
| 78 | Search for gamma-rays from the unusually bright GRB 130427a with the hawc gamma-ray observatory   | JOSE RUBEN ALFARO MOLINA JESUS<br>ALVAREZ CASTILLO NISSIM ILLICH<br>FRAIJA CABRERA et al.           | ASTROPHYSICAL JOURNAL                          | 2015 |
| 79 | Optical Emission Spectroscopy of H $\alpha$ , H $\beta$ , and H $\gamma$ in a Glow Discharge Mixture of Ar/H <sub>2</sub>   | HORACIO MARTINEZ VALENCIA JAIME<br>VERGARA PRADO Tones, Juana et al.                                | IEEE TRANSACTIONS ON PLASMA SCIENCE            | 2015 |
| 80 | Bicarbonate enhances the in vitro antibiotic activity of kanamycin in Escherichia coli  | HORACIO MARTINEZ VALENCIA<br>VICTOR HUMBERTO BUSTAMANTE<br>SANTILLAN JOSE LUIS PUENTE GARCIA et al. | LETTERS IN APPLIED MICROBIOLOGY                | 2015 |

## HORACIO MARTINEZ VALENCIA

|    |   |  |   |      |
|----|---|--|---|------|
| 81 | VAMOS: A pathfinder for the HAWC gamma-ray observatory  | JOSE RUBEN ALFARO MOLINA JESUS<br>ALVAREZ CASTILLO FERNANDO<br>ANGELES URIBE et al.                            | ASTROPARTICLE<br>PHYSICS  | 2015 |
| 82 | Milagro limits and HAWC sensitivity for the rate-density of evaporating Primordial Black Holes                                      | JOSE RUBEN ALFARO MOLINA JESUS<br>ALVAREZ CASTILLO ERNESTO JOSE<br>MARIA DE LA SALETE BELMONT<br>MORENO et al. | ASTROPARTICLE<br>PHYSICS  | 2015 |
| 83 | Muons in air showers at the Pierre Auger Observatory: Mean number in highly inclined events   | BERNARDO VARGAS CARDENAS<br>JESUS ALVAREZ CASTILLO JUAN<br>CARLOS D'OLIVO SAEZ et al.                          | PHYSICAL<br>REVIEW D  | 2015 |
| 84 | Large scale distribution of ultra high energy cosmic rays detected at the Pierre Auger observatory with zenith angles up to 80°     | BERNARDO VARGAS CARDENAS<br>JESUS ALVAREZ CASTILLO JUAN<br>CARLOS D'OLIVO SAEZ et al.                          | ASTROPHYSICAL<br>JOURNAL  | 2015 |
| 85 | Searches for anisotropies in the arrival directions of the highest energy cosmic rays detected by the pierre auger observatory      | B. Vargas Cardenas J. Alvarez<br>Castillo JUAN CARLOS D'OLIVO SAEZ<br>et al.                                   | ASTROPHYSICAL<br>JOURNAL  | 2015 |
| 86 | Improved limit to the diffuse flux of ultrahigh energy neutrinos from the Pierre Auger observatory                                  | B. Vargas Cardenas J. Alvarez<br>Castillo JUAN CARLOS D'OLIVO SAEZ<br>et al.                                   | PHYSICAL<br>REVIEW D  | 2015 |
| 87 | Search for patterns by combining cosmic-ray energy and arrival directions at the Pierre Auger Observatory                           | BERNARDO VARGAS CARDENAS<br>JESUS ALVAREZ CASTILLO JUAN<br>CARLOS D'OLIVO SAEZ et al.                          | EUROPEAN<br>PHYSICAL<br>JOURNAL C   | 2015 |
| 88 | The Pierre Auger Cosmic Ray Observatory   | BERNARDO VARGAS CARDENAS<br>JESUS ALVAREZ CASTILLO C. D'Olivo<br>et al.  | NUCLEAR<br>INSTRUMENTS &<br>METHODS IN<br>PHYSICS<br>RESEARCH<br>SECTION<br>A-ACCELERATO<br>RS<br>SPECTROMETER<br>S DETECTORS<br>AND<br>ASSOCIATED<br>EQUIPMENT | 2015 |
| 89 | Measurement of the cosmic ray spectrum above $4 \times 10^{18}$ eV using inclined events detected with the Pierre Auger Observatory | BERNARDO VARGAS CARDENAS<br>JESUS ALVAREZ CASTILLO JUAN<br>CARLOS D'OLIVO SAEZ et al.                          | JOURNAL OF<br>COSMOLOGY<br>AND<br>ASTROPARTICLE<br>PHYSICS  | 2015 |

## HORACIO MARTINEZ VALENCIA

|     |  |  |   |      |
|-----|--|--|---|------|
| 90  | Optical and electrical characterization of C <sub>3</sub> H <sub>6</sub> O/Ar glow discharge                                       | FERMIN CASTILLO MEJIA OSVALDO FLORES CEDILLO HORACIO MARTINEZ VALENCIA et al.            | XLII SYMPOSIUM ON NUCLEAR PHYSICS 2019  | 2015 |
| 91  | Striations in an ethyl alcohol glow discharge  | HORACIO MARTINEZ VALENCIA FERMIN CASTILLO MEJIA Reyes P.G. et al.                        | XLII SYMPOSIUM ON NUCLEAR PHYSICS 2019  | 2015 |
| 92  | Study of N <sub>2</sub> /He DC glow discharge  | OSVALDO FLORES CEDILLO FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA et al.            | XLII SYMPOSIUM ON NUCLEAR PHYSICS 2019  | 2015 |
| 93  | Electrical and optical characterization of CO <sub>2</sub> /He glow discharge  | HORACIO MARTINEZ VALENCIA Reyes P.G. Torres C. et al.                                    | XLII SYMPOSIUM ON NUCLEAR PHYSICS 2019  | 2015 |
| 94  | Study of the Rogowski coil response in a plasma focus device   | FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA Perusquía S. et al.                      | XLII SYMPOSIUM ON NUCLEAR PHYSICS 2019  | 2015 |
| 95  | Characterization a low pressure of plasma of methanol (CH <sub>4</sub> O) alcohol  | FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA Villa M. et al.                          | XLII SYMPOSIUM ON NUCLEAR PHYSICS 2019  | 2014 |
| 96  | Low-pressure plasma discharge of Ar/N <sub>2</sub> /CH <sub>4</sub> ternary mixture: Experimental simulation of Titan's atmosphere | FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA Salazar-Flores L. et al.                 | XLII SYMPOSIUM ON NUCLEAR PHYSICS 2019  | 2014 |
| 97  | Analysis of the different zones of glow discharge of ethyl alcohol (C <sub>2</sub> H <sub>6</sub> O)                               | FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA Torres C. et al.                         | XLII SYMPOSIUM ON NUCLEAR PHYSICS 2019  | 2014 |
| 98  | Experimental study of a glow discharge of CH <sub>2</sub> -C <sub>12</sub>   | HORACIO MARTINEZ VALENCIA FERMIN CASTILLO MEJIA Gomez A. et al.                          | XLII SYMPOSIUM ON NUCLEAR PHYSICS 2019  | 2014 |
| 99  | Molecular changes in asphaltenes within H <sub>2</sub> plasma  | HORACIO MARTINEZ VALENCIA OSVALDO FLORES CEDILLO BERNARDO FABIAN CAMPILLO ILLANES et al. | ENERGY & FUELS                          | 2014 |
| 100 | Electron temperature and ion density measurements in a glow discharge of an Ar-N <sub>2</sub> mixture                              | HORACIO MARTINEZ VALENCIA Reyes, P. G. Torres, C.  | RADIATION EFFECTS AND DEFECTS IN SOLIDS | 2014 |
| 101 | Interpretations of langmuir probe data for positive ion number density of N <sub>2</sub> O DC plasma discharge                     | FAROOK BASHIR YOUSIF Elizabeth Beatriz Fuentes HORACIO MARTINEZ VALENCIA et al.          | IEEE TRANSACTIONS ON PLASMA SCIENCE     | 2014 |
| 102 | Characterization of direct current He-N <sub>2</sub> mixture plasma using optical emission spectroscopy and mass spectrometry      | OSVALDO FLORES CEDILLO FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA et al.            | PHYSICS OF PLASMAS                      | 2014 |

## HORACIO MARTINEZ VALENCIA

|     |  |   |  |      |
|-----|--|---|--|------|
| 103 | Physical properties of chemically deposited Bi <sub>2</sub> S <sub>3</sub> thin films using two post-deposition treatments | H. Moreno Garcia HORACIO MARTINEZ VALENCIA Messina, S. et al.   | APPLIED SURFACE SCIENCE  | 2014 |
| 104 | Single electron capture measurements in collisions of K <sup>+</sup> on N <sub>2</sub>                                     | FIDEL BENJAMIN ALARCON HERNANDEZ BEATRIZ ELIZABETH FUENTES MADARIAGA HORACIO MARTINEZ VALENCIA et al. | NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS | 2014 |
| 105 | Study of ions and neutrons from a dense plasma focus instrument by means of nuclear tracks detectors                       | FERMIN CASTILLO MEJIA JOSE JULIO EMILIO HERRERA VELAZQUEZ HORACIO MARTINEZ VALENCIA et al.            | AIP Conference Proceedings   | 2014 |
| 106 | MEASUREMENTS OF FAST NEUTRONS BY BUBBLE DETECTORS  | FERMIN CASTILLO MEJIA BENJAMIN LEAL ACEVEDO HORACIO MARTINEZ VALENCIA et al.                          | AIP Conference Proceedings   | 2013 |
| 107 | Effect of double source Titanium deposited in nitriding steels on their mechanical properties                              | HORACIO MARTINEZ VALENCIA Rosales, I. Guardian, R. et al.   | APPLIED SURFACE SCIENCE  | 2013 |
| 108 | Electron transfer in collisions of keV potassium ions with methane molecules   | FIDEL BENJAMIN ALARCON HERNANDEZ HORACIO MARTINEZ VALENCIA  | NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS | 2013 |
| 109 | Modification of optical and electrical properties of chemical bath deposited SnS using O <sub>2</sub> plasma treatments    | HORACIO MARTINEZ VALENCIA OSVALDO FLORES CEDILLO Gomez, A. et al.                                     | APPLIED SURFACE SCIENCE  | 2013 |
| 110 | K <sup>+</sup> charge transfer in H <sub>2</sub> at low keV collisions   | FIDEL BENJAMIN ALARCON HERNANDEZ HORACIO MARTINEZ VALENCIA BEATRIZ ELIZABETH FUENTES MADARIAGA et al. | PHYSICA SCRIPTA  | 2013 |
| 111 | Electronegativity of hollow cathode DC discharge in O <sub>2</sub> employing electrostatic probe diagnostics               | BEATRIZ ELIZABETH FUENTES MADARIAGA HORACIO MARTINEZ VALENCIA Berenice Mondragon, Aidee et al.        | IEEE TRANSACTIONS ON PLASMA SCIENCE  | 2013 |

## HORACIO MARTINEZ VALENCIA

|     |  |  |   |      |
|-----|--|--|---|------|
| 112 | Single electron capture for $K^+-H_2$  | BEATRIZ ELIZABETH FUENTES<br>MADARIAGA FIDEL BENJAMIN<br>ALARCON HERNANDEZ HORACIO<br>MARTINEZ VALENCIA et al. | AIP Conference<br>Proceedings   | 2013 |
| 113 | Modifications in SnS thin films by plasma treatments   | HORACIO MARTINEZ VALENCIA<br>Avellaneda, D.  | NUCLEAR<br>INSTRUMENTS &<br>METHODS IN<br>PHYSICS<br>RESEARCH<br>SECTION<br>B-BEAM<br>INTERACTIONS<br>WITH MATERIALS<br>AND ATOMS | 2012 |
| 114 | Asphaltene Erosion Process in Air Plasma: Emission Spectroscopy and Surface Analysis for Air-Plasma Reactions  | HORACIO MARTINEZ VALENCIA<br>OSVALDO FLORES CEDILLO J. C.<br>Poveda et al.                                     | PLASMA SCI<br>TECHNOL   | 2012 |
| 115 | CH <sub>2</sub> Cl <sub>2</sub> thin film formation on low-pressure DC plasma discharge  | HORACIO MARTINEZ VALENCIA<br>OSVALDO FLORES CEDILLO<br>BERNARDO FABIAN CAMPILLO ILLANES<br>et al.              | RADIATION<br>EFFECTS AND<br>DEFECTS IN<br>SOLIDS  | 2012 |
| 116 | Paschen law for argon glow discharge   | FERMIN CASTILLO MEJIA HORACIO<br>MARTINEZ VALENCIA Torres C. et al.  | XLII SYMPOSIUM<br>ON NUCLEAR<br>PHYSICS 2019  | 2012 |
| 117 | Diagnostics of parameters by optical emission spectroscopy and Langmuir probe in a discharge of Ar/N <sub>2</sub> /CH <sub>4</sub> ternary mixture                 | HORACIO MARTINEZ VALENCIA<br>FERMIN CASTILLO MEJIA Guerrero A.<br>et al.                                       | XLII SYMPOSIUM<br>ON NUCLEAR<br>PHYSICS 2019  | 2012 |
| 118 | Optimal operation conditions for a single-stage heat transformer by means of an artificial neural network inverse  | WILFRIDO RIVERA GOMEZ FRANCO<br>HORACIO MARTINEZ VALENCIA<br>Colorado, D. et al.                               | APPLIED ENERGY  | 2011 |
| 119 | Exergy analysis of an experimental heat transformer for water purification   | WILFRIDO RIVERA GOMEZ FRANCO<br>HORACIO MARTINEZ VALENCIA<br>Huicochea, A. et al.                              | Energy  | 2011 |
| 120 | Exergy analysis of an experimental single-stage heat transformer operating with single water/lithium bromide and using additives (1-octanol and 2-ethyl-1-hexanol) | WILFRIDO RIVERA GOMEZ FRANCO<br>HORACIO MARTINEZ VALENCIA<br>Cerezo, J. et al.                                 | APPLIED<br>THERMAL<br>ENGINEERING   | 2011 |

## HORACIO MARTINEZ VALENCIA

|     |   |   |   |      |
|-----|---|---|---|------|
| 121 | DC discharge experiment in an Ar/N-2/CO <sub>2</sub> ternary mixture: A laboratory simulation of the Martian ionosphere's plasma environment        | C. Garcia Cosio HORACIO MARTINEZ VALENCIA M. Calixto Rodriguez et al.         | JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER                     | 2011 |
| 122 | AC plasma induced modifications in Sb <sub>2</sub> S <sub>3</sub> thin films  | FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA AARON SANCHEZ JUAREZ et al.   | XLII SYMPOSIUM ON NUCLEAR PHYSICS 2019  | 2010 |
| 123 | A comparative study of the physical properties of Sb <sub>2</sub> S <sub>3</sub> thin films treated with N-2 AC plasma and thermal annealing in N-2 | M. Calixto Rodriguez HORACIO MARTINEZ VALENCIA OSVALDO FLORES CEDILLO et al.  | APPLIED SURFACE SCIENCE   | 2010 |
| 124 | Asphaltene Surface Erosion in Air Plasma  | M. Calixto Rodriguez HORACIO MARTINEZ VALENCIA J. C. Poveda et al.            | PLASMA SCI TECHNOL  | 2010 |
| 125 | Langmuir Probe and Optical Emission Spectroscopy Studies of Low-Pressure Gas Mixture of CO <sub>2</sub> and N-2                                     | FERMIN CASTILLO MEJIA HORACIO MARTINEZ VALENCIA Mendez-Martinez, E. F. et al. | PLASMA SCI TECHNOL  | 2010 |
| 126 | Exergy analysis of a heat transformer for water purification increasing heat source temperature   | WILFRIDO RIVERA GOMEZ FRANCO HORACIO MARTINEZ VALENCIA Siqueiros, J. et al.   | APPLIED THERMAL ENGINEERING   | 2010 |
| 127 | Energy and exergy analysis of an experimental single-stage heat transformer operating with the water/lithium bromide mixture                        | WILFRIDO RIVERA GOMEZ FRANCO J. Cerezo HORACIO MARTINEZ VALENCIA              | INTERNATIONAL JOURNAL OF ENERGY RESEARCH                                      | 2010 |
| 128 | Optical and electrical characterization of AgInS <sub>2</sub> thin films deposited by spray pyrolysis   | M. Calixto Rodriguez HORACIO MARTINEZ VALENCIA Dalia Martinez Escobar et al.  | MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS | 2010 |
| 129 | Absolute differential and total cross sections for neutral fragments from dissociative collisions of triatomic hydrogen like ions on He             | BEATRIZ ELIZABETH FUENTES MADARIAGA HORACIO MARTINEZ VALENCIA Yousif, F. B.   | JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS                     | 2010 |
| 130 | Plasma induced modifications in TiO <sub>2</sub> films  | HORACIO MARTINEZ VALENCIA Gutiérrez D.A. Avila F.J. et al.                    | Materials Research Society Symposium Proceedings                              | 2010 |

## HORACIO MARTINEZ VALENCIA

|     |   |  |  |      |
|-----|---|--|--|------|
| 131 | Effect of the mechanical and microstructural characteristics on the hydrogen diffusion in pipeline steels   | OSVALDO FLORES CEDILLO ANDRES<br>AGUILAR NEGRETE HORACIO<br>MARTINEZ VALENCIA et al.   | Materials Science And Technology Conference And Exhibition 2010, Ms And T'10 | 2010 |
| 132 | Measurements of electron temperature, and ion density, in a mixture of O <sub>2</sub> and Ar plasma   | FERMIN CASTILLO MEJIA HORACIO<br>MARTINEZ VALENCIA Reyes G. et al.                     | XLII SYMPOSIUM ON NUCLEAR PHYSICS 2019                                       | 2010 |
| 133 | Differential, partial and total electron capture cross sections in p-Ar collisions  | ALEJANDRO AMAYA TAPIA ARMANDO<br>ANTILLON DIAZ REMIGIO CABRERA<br>TRUJILLO et al.      | XLII SYMPOSIUM ON NUCLEAR PHYSICS 2019                                       | 2009 |
| 134 | Electron transfer in p-Ar collisions at keV energies  | FIDEL BENJAMIN ALARCON<br>HERNANDEZ HORACIO MARTINEZ<br>VALENCIA FERMIN CASTILLO MEJIA | AIP Conference Proceedings   | 2009 |
| 135 | Absolute differential and total cross sections for the production of neutral fragments from dissociative collisions of triatomic hydrogen like ions in he | BEATRIZ ELIZABETH FUENTES<br>MADARIAGA HORACIO MARTINEZ<br>VALENCIA                    | AIP Conference Proceedings   | 2009 |
| 136 | AC plasma induced modifications in beta-In <sub>2</sub> S <sub>3</sub> thin films prepared by spray pyrolysis   | M. Calixto Rodriguez HORACIO<br>MARTINEZ VALENCIA AARON<br>SANCHEZ JUAREZ              | Thin Solid Films   | 2009 |
| 137 | Structural, optical, and electrical properties of tin sulfide thin films grown by spray pyrolysis   | M. Calixto Rodriguez HORACIO<br>MARTINEZ VALENCIA AARON<br>SANCHEZ JUAREZ et al.       | Thin Solid Films   | 2009 |
| 138 | Oxidation performance of Mo <sub>3</sub> Si with Al additions   | HORACIO MARTINEZ VALENCIA RENE<br>GUARDIAN TAPIA JORGE ALBERTO<br>COLIN ROJAS et al.   | CORROSION SCIENCE  | 2009 |
| 139 | Energy and exergy analysis of a double absorption heat transformer operating with water/lithium bromide   | HORACIO MARTINEZ VALENCIA<br>WILFRIDO RIVERA GOMEZ FRANCO                              | INTERNATIONAL JOURNAL OF ENERGY RESEARCH                                     | 2009 |
| 140 | Properties of CuS thin films treated in air plasma  | Y. Rodriguez Lazcano HORACIO<br>MARTINEZ VALENCIA M. Calixto<br>Rodriguez et al.       | Thin Solid Films   | 2009 |
| 141 | Electrical and optical characterization of pulsed plasma of N-2-H-2   | HORACIO MARTINEZ VALENCIA<br>FAROOK BASHIR YOUSIF                                      | EUROPEAN PHYSICAL JOURNAL D  | 2008 |
| 142 | Double capture cross sections in p-Ar collisions  | HORACIO MARTINEZ VALENCIA FIDEL<br>BENJAMIN ALARCON HERNANDEZ<br>ALEJANDRO AMAYA TAPIA | PHYSICAL REVIEW A  | 2008 |

## HORACIO MARTINEZ VALENCIA

|     |   |  |  |      |
|-----|---|--|--|------|
| 143 | Wear performance of Nb-alloyed, pulsed plasma nitrided Mo <sub>3</sub> Si intermetallic   | HORACIO MARTINEZ VALENCIA<br>Rosales I. Ponce D. et al.  | INTERNATIONAL JOURNAL OF REFRACTORY METALS & HARD MATERIALS  | 2007 |
| 144 | Comparative study on the decomposition process of N-isopropylacrylamide in He, N <sub>2</sub> and air plasmas   | HORACIO MARTINEZ VALENCIA<br>FERMIN CASTILLO MEJIA<br>Rodríguez-Lazcano Y.                           | PLASMA SOURCES SCIENCE & TECHNOLOGY  | 2007 |
| 145 | The formation and motion of CCl <sub>4</sub> - in CCl <sub>4</sub> - Ar mixture   | HORACIO MARTINEZ VALENCIA<br>FAROOK BASHIR YOUSIF  | AIP Conference Proceedings   | 2006 |
| 146 | AC glow discharge plasma in N <sub>2</sub> O  | FAROOK BASHIR YOUSIF HORACIO MARTINEZ VALENCIA FERMIN CASTILLO MEJIA et al.                          | AIP Conference Proceedings   | 2006 |
| 147 | Absolute differential and total cross sections for charge transfer of O <sup>+</sup> ground and mixed states ions in N <sub>2</sub>   | HORACIO MARTINEZ VALENCIA<br>FAROOK BASHIR YOUSIF Hernandez C.L.                                     | JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS  | 2006 |
| 148 | Absolute cross sections for the production of positive atomic ions from dissociative collisions of H <sub>3</sub> <sup>+</sup> , D <sub>3</sub> <sup>+</sup> and HD <sub>2</sub> <sup>+</sup> in He | HORACIO MARTINEZ VALENCIA  | NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS | 2006 |
| 149 | Absolute cross section measurements for dissociative capture of H <sup>2+</sup> in Ar   | FIDEL BENJAMIN ALARCON<br>HERNANDEZ BEATRIZ ELIZABETH<br>FUENTES MADARIAGA HORACIO MARTINEZ VALENCIA | INTERNATIONAL JOURNAL OF MASS SPECTROMETRY   | 2006 |
| 150 | Formation of O <sub>2</sub> <sup>+</sup> in collisions between O <sup>+</sup> ions and N <sub>2</sub> molecules   | HORACIO MARTINEZ VALENCIA<br>FAROOK BASHIR YOUSIF  | INTERNATIONAL JOURNAL OF MASS SPECTROMETRY   | 2006 |



## HORACIO MARTINEZ VALENCIA

|     |   |   |   |      |
|-----|---|---|---|------|
| 151 | Absolute differential and total cross sections for N + formation from the interaction of N 2 + with He and Ar | HORACIO MARTINEZ VALENCIA<br>BEATRIZ ELIZABETH FUENTES<br>MADARIAGA | NUCLEAR<br>INSTRUMENTS &<br>METHODS IN<br>PHYSICS<br>RESEARCH<br>SECTION<br>B-BEAM<br>INTERACTIONS<br>WITH MATERIALS<br>AND ATOMS | 2005 |
| 152 | Pulsed plasma nitrided Nb alloyed Mo3Si intermetallic alloy   | HORACIO MARTINEZ VALENCIA<br>Resales I.                             | SURFACE<br>ENGINEERING  | 2005 |
| 153 | Electrochemical technique applied to evaluate the hydrogen permeability in microalloyed steels                | HORACIO MARTINEZ VALENCIA Serna<br>S. López S.Y. et al.             | INTERNATIONAL<br>JOURNAL OF<br>HYDROGEN<br>ENERGY   | 2005 |
| 154 | Negative ion formation and motion in a mixture of [Formula presented] and Ar                                  | FAROOK BASHIR YOUSIF HORACIO<br>MARTINEZ VALENCIA                   | PHYS REV E  | 2004 |
| 155 | Translational spectroscopy of N + produced by collision induced dissociation of N 2 + on He and Ar            | BEATRIZ ELIZABETH FUENTES<br>MADARIAGA HORACIO MARTINEZ<br>VALENCIA | INTERNATIONAL<br>JOURNAL OF<br>MASS<br>SPECTROMETRY   | 2004 |
| 156 | Collision-induced dissociation and dissociative capture of H 2 + in Ar and Kr                                 | HORACIO MARTINEZ VALENCIA<br>FAROOK BASHIR YOUSIF                   | PHYSICAL<br>REVIEW A  | 2004 |
| 157 | Negative ion formation and motion in a mixture of CCl4 and Ar   | FAROOK BASHIR YOUSIF HORACIO<br>MARTINEZ VALENCIA                   | PHYSICAL<br>REVIEW E  | 2004 |
| 158 | High temperature solid solution strengthening by Nb additions on Mo3Si matrix                                 | HORACIO MARTINEZ VALENCIA<br>Rosales I.                             | MATERIALS<br>SCIENCE AND<br>ENGINEERING<br>A-STRUCTURAL<br>MATERIALS<br>PROPERTIES<br>MICROSTRUCTURE AND<br>PROCESSING            | 2004 |
| 159 | Charge transfer of positive hydrogen ions and Ca vapour at keV energies                                       | HORACIO MARTINEZ VALENCIA<br>ALEJANDRO AMAYA TAPIA                  | JOURNAL OF<br>PHYSICS<br>B-ATOMIC<br>MOLECULAR<br>AND OPTICAL<br>PHYSICS  | 2003 |

## HORACIO MARTINEZ VALENCIA

|     |   |   |  |      |
|-----|---|---|--|------|
| 160 | Experimental studies on the formation of argon atoms in Ar <sup>+</sup> -atoms collisions                         | HORACIO MARTINEZ VALENCIA<br>FERMIN CASTILLO MEJIA Reyes P.G.<br>et al.               | INTERNATIONAL<br>JOURNAL OF<br>MASS<br>SPECTROMETRY                      | 2003 |
| 161 | [Formula Presented] formation in collisions between [Formula Presented] ions and Ne atoms                         | HORACIO MARTINEZ VALENCIA   | PHYSICAL<br>REVIEW A   | 2002 |
| 162 | He <sup>2+</sup> formation in collisions between He <sup>+</sup> ions and Ne atoms                                | HORACIO MARTINEZ VALENCIA   | PHYSICAL<br>REVIEW A   | 2002 |
| 163 | N <sup>2+</sup> formation in collisions between N <sup>+</sup> ions and rare gases                                | HORACIO MARTINEZ VALENCIA   | PHYSICAL<br>REVIEW A   | 2001 |
| 164 | Experimental and theoretical investigations of single-electron capture and loss in He <sup>+</sup> -Ar collisions | ALEJANDRO AMAYA TAPIA HORACIO<br>MARTINEZ VALENCIA Marquina E.R.<br>et al.            | JOURNAL OF<br>PHYSICS<br>B-ATOMIC<br>MOLECULAR<br>AND OPTICAL<br>PHYSICS | 2001 |
| 165 | Experimental investigation of the formation of N atoms in N <sup>+</sup> -Ne, Kr, and Xe collisions               | FERMIN CASTILLO MEJIA HORACIO<br>MARTINEZ VALENCIA Reyes P.G.                         | INTERNATIONAL<br>JOURNAL OF<br>MASS<br>SPECTROMETRY                      | 2001 |
| 166 | Experimental study of single-electron loss by Ar <sup>+</sup> ions in rare-gas atoms                              | FERMIN CASTILLO MEJIA HORACIO<br>MARTINEZ VALENCIA Reyes P.G.                         | JOURNAL OF<br>PHYSICS<br>B-ATOMIC<br>MOLECULAR<br>AND OPTICAL<br>PHYSICS | 2001 |
| 167 | N <sup>2+</sup> formation in collisions between N <sup>+</sup> ions and rare gases                                | HORACIO MARTINEZ VALENCIA   | PHYSICAL<br>REVIEW A   | 2001 |
| 168 | Absolute electron capture cross sections of Kr <sup>+</sup> with Ne atoms   | HORACIO MARTINEZ VALENCIA<br>BEATRIZ ELIZABETH FUENTES<br>MADARIAGA Reyes P.G. et al. | INTERNATIONAL<br>JOURNAL OF<br>MASS<br>SPECTROMETRY                      | 2000 |
| 169 | Single electron loss of Kr <sup>+</sup> ions in gaseous media   | HORACIO MARTINEZ VALENCIA<br>ALEJANDRO AMAYA TAPIA<br>Hernández J.M.                  | JOURNAL OF<br>PHYSICS<br>B-ATOMIC<br>MOLECULAR<br>AND OPTICAL<br>PHYSICS | 2000 |
| 170 | Charge transfer in H <sup>+</sup> +Ar collisions from 10 to 150 keV   | ALEJANDRO AMAYA TAPIA HORACIO<br>MARTINEZ VALENCIA<br>Hernández-Lamoneda R. et al.    | PHYSICAL<br>REVIEW A   | 2000 |

## HORACIO MARTINEZ VALENCIA

|     |   |   |  |      |
|-----|---|---|--|------|
| 171 | Production of Kr <sup>2+</sup> and Kr <sup>0</sup> in collision of Kr <sup>+</sup> ions with Kr                         | HORACIO MARTINEZ VALENCIA   | JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS  | 1999 |
| 172 | Absolute differential and total cross sections for single electron capture in low-energy Kr <sup>+</sup> -Ar collisions | HORACIO MARTINEZ VALENCIA Reyes P.G.  | PHYSICAL REVIEW A  | 1999 |
| 173 | Single-electron loss and capture for 1.0-5.0 keV Ar <sup>+</sup> colliding with He                                      | HORACIO MARTINEZ VALENCIA   | JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS  | 1998 |
| 174 | Collisional dissociation of H <sub>3</sub> <sup>+</sup> ions on Kr  | HORACIO MARTINEZ VALENCIA Reyes P.G.  | INT J MASS SPECTROM  | 1998 |
| 175 | Single electron capture in low-energy Kr <sup>+</sup> -He collisions  | HORACIO MARTINEZ VALENCIA Hernandez J.M.  | CHEMICAL PHYSICS   | 1997 |
| 176 | Measurements of single electron capture cross sections in collisions of Kr <sup>+</sup> with Xe                         | HORACIO MARTINEZ VALENCIA MARIA DEL CARMEN CISNEROS GUDIÑO Hernández J.M. et al.                      | NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS | 1997 |
| 177 | Single electron capture of H <sup>+</sup> in Mg in the energy range 0.5 to 5.0 keV                                      | MARIA DEL CARMEN CISNEROS GUDIÑO HORACIO MARTINEZ VALENCIA BEATRIZ ELIZABETH FUENTES MADARIAGA et al. | NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS | 1996 |
| 178 | Translational spectroscopy of H <sup>-</sup> produced by collision induced dissociation of H <sup>+</sup> 3 on He       | HORACIO MARTINEZ VALENCIA ALEJANDRO AMAYA TAPIA   | CHEMICAL PHYSICS   | 1996 |

## HORACIO MARTINEZ VALENCIA

|     |   |   |  |      |
|-----|---|---|--|------|
| 179 | The influence of ion/molecule reactions on the evaluation of ion mobility and diffusion coefficients  | JAIME DE URQUIJO CARMONA<br>IGNACIO ALVAREZ TORRES MARIA DEL CARMEN CISNEROS GUDIÑO et al.                  | INT J MASS SPECTROM  | 1996 |
| 180 | Single- and double-electron loss of H <sup>-</sup> in collisions with SF <sub>6</sub> , CH <sub>4</sub> , and CO  | JAIME DE URQUIJO CARMONA MARIA DEL CARMEN CISNEROS GUDIÑO<br>HORACIO MARTINEZ VALENCIA et al.               | PHYSICAL REVIEW A  | 1996 |
| 181 | Absolute cross-section measurements for collisional destruction of He Rydberg atoms and single electron capture of He <sup>+</sup> ions in collision with SF <sub>6</sub> | HORACIO MARTINEZ VALENCIA<br>Morgan T.J.  | CHEMICAL PHYSICS   | 1995 |
| 182 | Single and double electron capture in H <sup>+</sup> on Kr collisions at low-keV energies   | HORACIO MARTINEZ VALENCIA<br>BEATRIZ ELIZABETH FUENTES<br>MADARIAGA MARIA DEL CARMEN CISNEROS GUDIÑO et al. | CHEMICAL PHYSICS   | 1995 |
| 183 | Absolute cross-section measurements for ionization of He Rydberg atoms in collisions with K   | HORACIO MARTINEZ VALENCIA Deng<br>F. Renwick S. et al.  | PHYSICAL REVIEW A  | 1995 |
| 184 | Angular distributions for H <sup>-</sup> formation from interaction of H <sub>2</sub> + with Kr   | BEATRIZ ELIZABETH FUENTES<br>MADARIAGA HORACIO MARTINEZ VALENCIA MARIA DEL CARMEN CISNEROS GUDIÑO et al.    | NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS | 1995 |
| 185 | A coincidence system for studying collisional ion dissociation: Application to H <sup>+</sup> 3 in He   | JAIME DE URQUIJO CARMONA<br>IGNACIO ALVAREZ TORRES MARIA DEL CARMEN CISNEROS GUDIÑO et al.                  | REVIEW OF SCIENTIFIC INSTRUMENTS   | 1994 |
| 186 | Center-of-mass energy distributions of coincident H <sup>-</sup> and H <sup>+</sup> from the collision-induced dissociation of H <sub>3</sub> <sup>+</sup> in He          | HORACIO MARTINEZ VALENCIA MARIA DEL CARMEN CISNEROS GUDIÑO<br>JAIME DE URQUIJO CARMONA et al.               | PHYSICAL REVIEW A  | 1994 |

## HORACIO MARTINEZ VALENCIA

|     |   |  |  |      |
|-----|---|--|--|------|
| 187 | Single electron capture in He <sup>+</sup> on SF <sub>6</sub> , collisions at low keV energies  | HORACIO MARTINEZ VALENCIA MARIA DEL CARMEN CISNEROS GUDIÑO JAIME DE URQUIJO CARMONA et al. | NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS | 1993 |
| 188 | Collisional ionization and destruction cross sections for hydrogen and helium Rydberg atoms on Ar, Xe, and N <sub>2</sub> : Failure of the independent-particle model | HORACIO MARTINEZ VALENCIA Renwick S.P. Deng F. et al.                                      | PHYSICAL REVIEW A  | 1993 |
| 189 | Formation of D <sup>+</sup> by collisional dissociation of 4.5 keV D <sup>+</sup> + 3 with He   | HORACIO MARTINEZ VALENCIA JAIME DE URQUIJO CARMONA MARIA DEL CARMEN CISNEROS GUDIÑO et al. | NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS | 1993 |
| 190 | Transpon Coefficients of SF <sup>+</sup> and SF <sup>+</sup> 2 in SF <sub>6</sub>   | JAIME DE URQUIJO CARMONA MARIA DEL CARMEN CISNEROS GUDIÑO HORACIO MARTINEZ VALENCIA et al. | JOURNAL OF PHYSICS D-APPLIED PHYSICS   | 1992 |
| 191 | Angular distributions of H <sup>-</sup> fragments from H <sup>+</sup> 2 on Mg at low keV collisions   | MARIA DEL CARMEN CISNEROS GUDIÑO HORACIO MARTINEZ VALENCIA JAIME DE URQUIJO CARMONA et al. | NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS | 1991 |
| 192 | Mobility and longitudinal diffusion of sf <sub>5</sub> and sf <sub>6</sub> in sf <sub>6</sub>   | HORACIO MARTINEZ VALENCIA MARIA DEL CARMEN CISNEROS GUDIÑO Urquijo-Carmona J.D. et al.     | JOURNAL OF PHYSICS D-APPLIED PHYSICS   | 1991 |

## HORACIO MARTINEZ VALENCIA

|     |   |  |  |      |
|-----|---|--|--|------|
| 193 | The collisional dissociation of HD+ 2 studied by angular distributions and translational spectroscopy | MARIA DEL CARMEN CISNEROS GUDIÑO JAIME DE URQUIJO CARMONA HORACIO MARTINEZ VALENCIA et al. | NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS | 1991 |
| 194 | Collisional dissociation of HD+ 2 molecular ions in H2 in the energy range 1.5-5.0 keV                | MARIA DEL CARMEN CISNEROS GUDIÑO HORACIO MARTINEZ VALENCIA JAIME DE URQUIJO CARMONA et al. | NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS | 1991 |
| 195 | Collisional dissociation and binding energy of D3 +   | HORACIO MARTINEZ VALENCIA MARIA DEL CARMEN CISNEROS GUDIÑO JAIME DE URQUIJO CARMONA et al. | NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS | 1991 |
| 196 | Single electron capture of Ne+ in He in the energy range 0.5 to 5 keV                                 | HORACIO MARTINEZ VALENCIA MARIA DEL CARMEN CISNEROS GUDIÑO JAIME DE URQUIJO CARMONA et al. | Z PHYS D ATOM MOL CL   | 1991 |
| 197 | Mobility and longitudinal diffusion of SF3+and SF5+in SF6   | JAIME DE URQUIJO CARMONA HORACIO MARTINEZ VALENCIA Alvarez I.                              | JOURNAL OF PHYSICS D-APPLIED PHYSICS   | 1990 |
| 198 | Single and double electron capture of H+ in SF6 in the energy range 1 to 5 keV                        | HORACIO MARTINEZ VALENCIA JAIME DE URQUIJO CARMONA MARIA DEL CARMEN CISNEROS GUDIÑO et al. | PHYSICS LETTERS A  | 1990 |

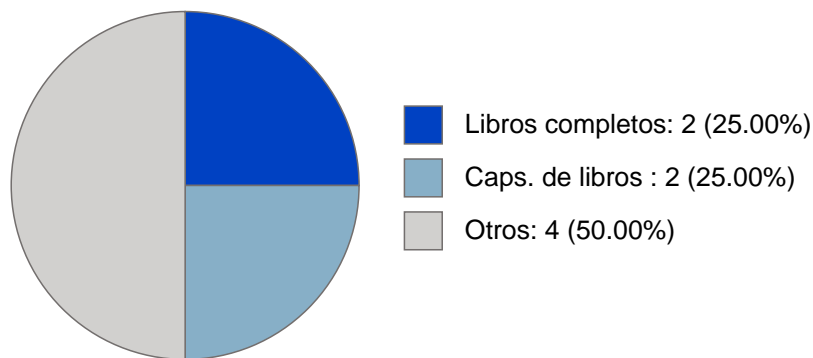
## HORACIO MARTINEZ VALENCIA

|     |  |  |  |      |
|-----|--|--|--|------|
| 199 | Absolute differential cross sections for single-electron capture of H0 in Ar at keV energies                       | HORACIO MARTINEZ VALENCIA<br>JORGE ANTONIO REYES MORALES<br>JAIME DE URQUIJO CARMONA et al.      | NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS | 1989 |
| 200 | H- formation from collision-induced dissociation of H3 + in He at keV energies                                     | HORACIO MARTINEZ VALENCIA MARIA DEL CARMEN CISNEROS GUDIÑO<br>JORGE ANTONIO REYES MORALES et al. | NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS | 1989 |
| 201 | Absolute cross-section measurements of the direct charge transfer of He+ in neon in the energy range 0.55 keV      | HORACIO MARTINEZ VALENCIA MARIA DEL CARMEN CISNEROS GUDIÑO<br>JAIME DE URQUIJO CARMONA et al.    | PHYSICAL REVIEW A  | 1988 |
| 202 | Binding energy of H3 + from the analysis of angular and energy distributions of the reaction H3 ++HeH2 + +H +He    | HORACIO MARTINEZ VALENCIA JAIME DE URQUIJO CARMONA MARIA DEL CARMEN CISNEROS GUDIÑO et al.       | PHYSICAL REVIEW A  | 1987 |
| 203 | Surface modification of the Nylon 6,6 and wasted glass fiber-Nylon 6.6 coatings using atmospheric plasma treatment | EDNA VAZQUEZ VELEZ ARTURO<br>GALVAN HERNANDEZ HORACIO MARTINEZ VALENCIA et al.                   | JOURNAL OF APPLIED POLYMER SCIENCE   |      |

## HORACIO MARTINEZ VALENCIA

### LIBROS Y CAPITULOS CON ISBN

#### Obras con registro ISBN



| # | Título  | Autores   | Alcance              | Año  | ISBN          |
|---|---|---|----------------------|------|---------------|
| 1 | Corrosion inhibition studies of synthesized oleic sources-based green inhibitors from agro-industrial waste | OSCAR SOTELO MAZON<br>EDNA VAZQUEZ VELEZ<br>HORACIO MARTINEZ VALENCIA et al.              | Capítulo de un Libro | 2023 | 9781668476901 |
| 2 | Física experimental   | HORACIO MARTINEZ VALENCIA IGNACIO ALEJANDRO FIGUEROA VARGAS CITLALI SANCHEZ AKE et al.    | Libro Completo       | 2022 | 9786074247770 |
| 3 | Escuela de Física Experimental  | IGNACIO ALEJANDRO FIGUEROA VARGAS MARAOLINA DOMINGUEZ DIAZ MONSERRAT BIZARRO SORDO et al. | Libro Completo       | 2022 | 9786074247787 |
| 4 | Study of an atmospheric-pressure discharge in air   | FERMIN CASTILLO MEJIA OSVALDO FLORES CEDILLO BERNARDO FABIAN CAMPILLO ILLANES et al.      | Conferencia e Paper  | 2019 | 9781538633861 |





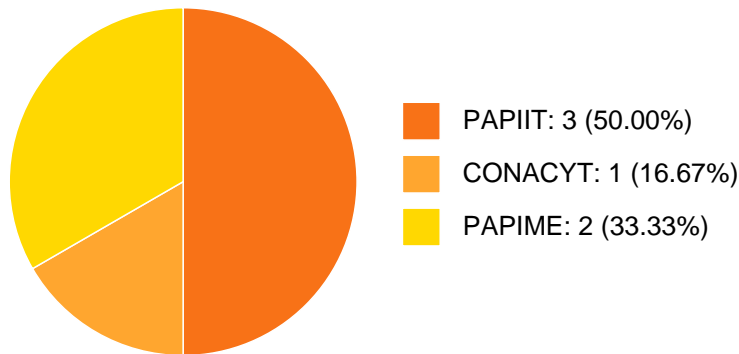
## HORACIO MARTINEZ VALENCIA

|   |  |   |                         |      |                   |
|---|--|---|-------------------------|------|-------------------|
| 5 | Laser induced breakdown spectroscopy on liquids assisted by acoustic levitation sampling: Towards on-line monitoring applications. | HORACIO MARTINEZ VALENCIA Contreras V. Díaz A. et al.   | Conferenc<br>e Paper    | 2018 | 9781557528209     |
| 6 | Study of an atmospheric-pressure discharge in air  | FERMIN CASTILLO MEJIA<br>OSVALDO FLORES<br>CEDILLO BERNARDO<br>FABIAN CAMPILLO<br>ILLANES et al.    | Procedin<br>gs Paper    | 2017 | 9781538633861     |
| 7 | La Física Atómica, Molecular y Óptica en México  | IGNACIO ALVAREZ<br>TORRES REMIGIO<br>CABRERA TRUJILLO<br>MARIA DEL CARMEN<br>CISNEROS GUDIÑO et al. | Capítulo<br>de un Libro | 2016 | 9786079745509     |
| 8 | Corrosion behavior of 18Cr-18Mn experimental steel   | HORACIO MARTINEZ VALENCIA Torres-Islas A. Reyes-Hernandez R. et al.                                 | Conferenc<br>e Paper    | 2013 | 978989988500<br>4 |

## HORACIO MARTINEZ VALENCIA

### PARTICIPACIÓN EN PROYECTOS

#### Histórico de participación en proyectos

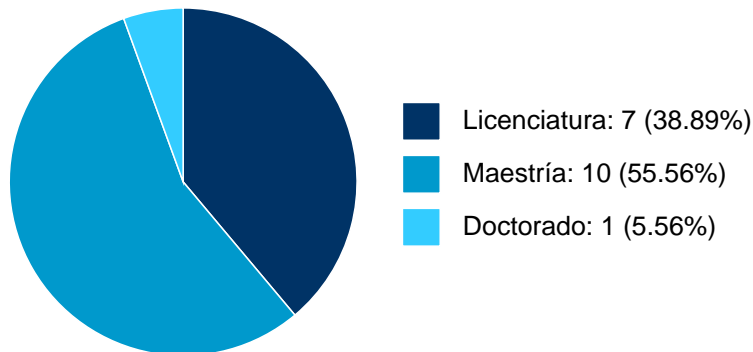


| # | Nombre   | Participantes             | Fuente           | Fecha inicio | Fecha fin  |
|---|--|---------------------------|------------------|--------------|------------|
| 1 | Estudio de plasmas a presión atmosférica   | HORACIO MARTINEZ VALENCIA | Recursos PAPIIT  | 01-01-2016   | 31-12-2018 |
| 2 | VII Escuela de Física Experimental   | HORACIO MARTINEZ VALENCIA | Recursos CONACYT | 25-04-2018   | 30-11-2018 |
| 3 | Tratamiento con plasma a presión atmosférica de superficies de materiales poliméricos para la mejora de la adhesión. | HORACIO MARTINEZ VALENCIA | Recursos PAPIIT  | 01-01-2019   | 31-12-2021 |
| 4 | Escuela de Física Experimental.  | HORACIO MARTINEZ VALENCIA | Recursos PAPIIME | 01-01-2019   | 31-12-2021 |
| 5 | Tratamiento con plasma de nanofibras y películas biopoliméricas para mejorar sus propiedades de superficie           | HORACIO MARTINEZ VALENCIA | Recursos PAPIIT  | 01-01-2022   | 31-12-2024 |
| 6 | ESCUELA DE FISICA EXPERIMENTAL   | HORACIO MARTINEZ VALENCIA | Recursos PAPIIME | 01-01-2022   | 31-12-2023 |

## HORACIO MARTINEZ VALENCIA

### PARTICIPACIÓN EN TESIS

#### Histórico de Colaboraciones en Tesis



| # | Título del documento  | Tipo de Tesis     | Sinodales                         | Autores  | Entidad   | Año  |
|---|---|-------------------|-----------------------------------|--|---|------|
| 1 | Influencia de la pre-oxidación por plasma en el estudio de corrosión del cobre en la solución de NaCl al 3.5% a diferentes temperaturas | Tesis de Maestría | HORACIO MARTINEZ VALENCIA,        | González Noriega, Omar Alejandro,                            | Instituto de Ciencias Físicas,                      | 2021 |
| 2 | Modificación superficial del PP por un tratamiento por plasma a presión atmosférica   | Tesis de Maestría | BERNARDO FABIAN CAMPILLO ILLANES, | HORACIO MARTINEZ VALENCIA, Xosocotla Espejel, Oscar Eduardo, | Facultad de Química, Instituto de Ciencias Físicas, | 2020 |
| 3 | Plasma a baja presión de una mezcla ternaria de Ar, N <sub>2</sub> ,CH <sub>4</sub> : simulacion experimental de la atmosfera de Titán  | Tesis de Maestría | HORACIO MARTINEZ VALENCIA,        | Salazar Flores, Leomar,                                      | Instituto de Ciencias Físicas,                      | 2014 |
| 4 | Enseñanza de plasmas físicos en el nivel medio superior   | Tesis de Maestría | HORACIO MARTINEZ VALENCIA,        | Alarcón Hernández, Fidel Benjamín,                           | Instituto de Ciencias Físicas,                      | 2013 |

## HORACIO MARTINEZ VALENCIA

|    |  |                       |                                      |  |  |      |
|----|--|-----------------------|--------------------------------------|--|--|------|
| 5  | Detección de fragmentos de la colisión de H <sub>2</sub> <sup>+</sup> en aire  | Tesis de Maestría     | BEATRIZ ELIZABETH FUENTES MADARIAGA, | HORACIO MARTINEZ VALENCIA, Corona Arroyo, Pedro,                 | Facultad de Ciencias, Instituto de Ciencias Físicas, | 2011 |
| 6  | Caracterización eléctrica y óptica de la descarga luminiscente de un plasma de N <sub>2</sub> O                          | Tesis de Maestría     | HORACIO MARTINEZ VALENCIA,           | Pérez Martínez, Roberto,   | Instituto de Ciencias Físicas,                       | 2009 |
| 7  | Secciones eficaces absolutas de la captura disociativa del ion molecular H <sub>2</sub> <sup>+</sup> en Ar               | Tesis de Maestría     | HORACIO MARTINEZ VALENCIA,           | Alarcón Hernández, Fidel Benjamín,                               |  | 2006 |
| 8  | Transferencia de carga en la colisión de iones N <sup>+</sup> en N <sub>2</sub>  | Tesis de Licenciatura | HORACIO MARTINEZ VALENCIA,           | Lara de Paz, Javier,   |  | 2005 |
| 9  | Energía potencial del sistema ion-atomo obtenida a partir de datos experimentales  | Tesis de Licenciatura | HORACIO MARTINEZ VALENCIA,           | Perez Martinez, Roberto,   |  | 2003 |
| 10 | Producción de iones de N <sub>2</sub> <sup>+</sup> por impacto de N <sup>+</sup> en Ne, Kr y Xe                          | Tesis de Licenciatura | HORACIO MARTINEZ VALENCIA,           | Flores Fajardo, Nahiely,   |  | 2002 |
| 11 | Sección transversal y umbral de energía de la producción de rayos x en colisiones ion-atomo                              | Tesis de Licenciatura | HORACIO MARTINEZ VALENCIA,           | Alcantara Ortigoza, Marisol,                                     |  | 2001 |
| 12 | Estudio de la formación de átomos de kriptón a partir de la colisión de Kr <sup>+</sup> en la Xe                         | Tesis de Maestría     | HORACIO MARTINEZ VALENCIA,           | Marquina Cruz, Eric Raul,  |  | 1998 |
| 13 | Estudio de la disociación molecular del ion H <sub>3</sub> <sup>+</sup>  | Tesis de Maestría     | HORACIO MARTINEZ VALENCIA,           | Reyes Romero, Pedro Guillermo,                                   |  | 1998 |
| 14 | Estudio de la formación de H [menos], H [cero] y H [mas] a partir de la colisión de H [mas] y H <sub>2</sub> [mas] en Kr | Tesis de Doctorado    | MARIA DEL CARMEN CISNEROS GUDIÑO,    | HORACIO MARTINEZ VALENCIA, Fuentes Madariaga, Beatriz Elizabeth, |  | 1998 |

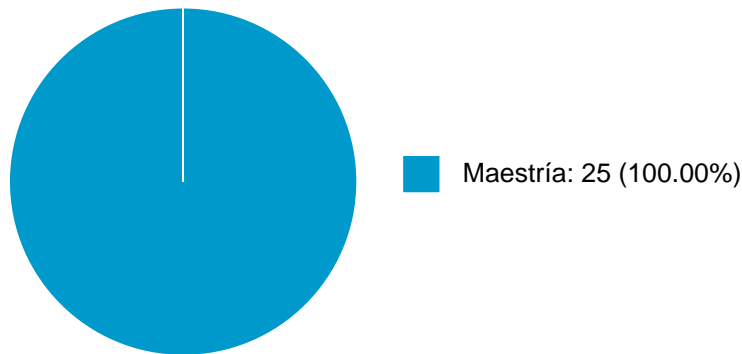
## HORACIO MARTINEZ VALENCIA

|    |  |                       |                            |                                   |      |
|----|--|-----------------------|----------------------------|-----------------------------------|------|
| 15 | Interaccion de iones de Kr+ en helio                                 | Tesis de Maestría     | HORACIO MARTINEZ VALENCIA, | Hernandez Rodriguez, Juan Manuel, | 1997 |
| 16 | Captura de carga entre iones multiples cargados con especies neutras | Tesis de Licenciatura | HORACIO MARTINEZ VALENCIA, | Marquina Cruz, Eric Raul,         | 1994 |
| 17 | Formacion de atomos de helio mediante la colision de He+ en SF6      | Tesis de Licenciatura | HORACIO MARTINEZ VALENCIA, | García Flores, Sinhue,            | 1992 |
| 18 | Estudio de los fragmentos de disociacion del H2+ en SF6              | Tesis de Licenciatura | HORACIO MARTINEZ VALENCIA, | Tejeda Buenosaires, Alfredo,      | 1990 |

## HORACIO MARTINEZ VALENCIA

### DOCENCIA IMPARTIDA

#### Histórico de docencia



| #  | Nivel titulación | Asignatura  | Entidad             | Alumnos | Semestre |
|----|------------------|---|---------------------|---------|----------|
| 1  | Maestría         | ACTIVIDADES ACADÉMICAS ORIENTADAS A LA GRADUACIÓN       | Facultad de Química | 1       | 2021-2   |
| 2  | Maestría         | SESIÓN DE TUTORÍA III                                   | Facultad de Química | 1       | 2021-1   |
| 3  | Maestría         | SESIÓN DE TUTORÍA IV                                    | Facultad de Química | 1       | 2021-1   |
| 4  | Maestría         | TALLER DE INVESTIGACIÓN                                 | Facultad de Química | 1       | 2021-1   |
| 5  | Maestría         | TEMAS SELECTOS DE METALURGÍA TRATAMIENTOS SUPERFICIALES | Facultad de Química | 2       | 2020-2   |
| 6  | Maestría         | ACTIVIDADES ACADÉMICAS ORIENTADAS A LA GRADUACIÓN       | Facultad de Química | 1       | 2020-2   |
| 7  | Maestría         | SESIÓN DE TUTORÍA II                                    | Facultad de Química | 1       | 2020-2   |
| 8  | Maestría         | PROYECTO DE INVESTIGACIÓN I                             | Facultad de Química | 1       | 2020-2   |
| 9  | Maestría         | TALLER DE INVESTIGACIÓN                                 | Facultad de Química | 1       | 2020-1   |
| 10 | Maestría         | SESIÓN DE TUTORÍA III                                   | Facultad de Química | 1       | 2020-1   |
| 11 | Maestría         | SESIÓN DE TUTORÍA IV                                    | Facultad de Química | 1       | 2020-1   |
| 12 | Maestría         | MATEMÁTICAS APLICADAS                                   | Facultad de Química | 2       | 2020-1   |
| 13 | Maestría         | SEMINARIO DE INVESTIGACIÓN I                            | Facultad de Química | 1       | 2020-1   |
| 14 | Maestría         | SESIÓN DE TUTORÍA I                                     | Facultad de Química | 1       | 2020-1   |
| 15 | Maestría         | PROYECTO DE INVESTIGACIÓN I                             | Facultad de Química | 1       | 2019-2   |
| 16 | Maestría         | SESIÓN DE TUTORÍA II                                    | Facultad de Química | 1       | 2019-2   |
| 17 | Maestría         | MATEMÁTICAS APLICADAS                                   | Facultad de Química | 1       | 2019-1   |
| 18 | Maestría         | SEMINARIO DE INVESTIGACIÓN I                            | Facultad de Química | 1       | 2019-1   |
| 19 | Maestría         | SESIÓN DE TUTORÍA I                                     | Facultad de Química | 1       | 2019-1   |
| 20 | Maestría         | MÉTODOS DE ELEMENTO FINITO                              | Facultad de Química | 1       | 2015-1   |
| 21 | Maestría         | MÉTODOS DE ELEMENTO FINITO                              | Facultad de Química | 4       | 2012-1   |



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



**HORACIO MARTINEZ VALENCIA**

|    |          |                                      |                               |   |        |
|----|----------|--------------------------------------|-------------------------------|---|--------|
| 22 | Maestría | SEMINARIO DE INVESTIGACION II        | Instituto de Ciencias Físicas | 1 | 2012-1 |
| 23 | Maestría | SEMINARIO DE INVESTIGACION I         | Instituto de Ciencias Físicas | 1 | 2011-2 |
| 24 | Maestría | METODOS DE ELEMENTO FINITO           | Facultad de Química           | 1 | 2011-2 |
| 25 | Maestría | INTEGRACION PARA EL TRABAJO DE GRADO | Facultad de Ciencias          | 1 | 2011-1 |



## **HORACIO MARTINEZ VALENCIA**

### **PATENTES**

| # | Título   | Inventores  | Sección            | Año  |
|---|--|---|--------------------|------|
| 1 | DISPOSITIVO PARA MONITOREAR EN LINEA LA COMPOSICIÓN QUÍMICA DE LÍQUIDOS, BASADO EN LA TÉCNICA LIBS APLICADA A MUESTRAS LÍQUIDAS LEVITADAS ACÚSTICAMENTE. | HORACIO MARTINEZ VALENCIA, VICTOR ULISES LEV CONTRERAS LOERA, | ELECTRICITYPHYSICS | 2022 |



## HORACIO MARTINEZ VALENCIA

### 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    | 2008-2024 |
| 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 |