

HERIBERTO VILLANUEVA PLIEGO

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Nombre completo

Heriberto Villanueva Pliego

Categoría

Formación

Doctorado

DOCTORADO EN INGENIERÍA Y CIENCIAS APLICADAS CON OPCIÓN
TERMINAL EN TECNOLOGÍA MECÁNICA, universidad Autónoma del
estado de Morelos, Cuernavaca, Morelos, 26/marzo/2019

Posdoctorado/Sabático

Posdoctorado PRODEP, Universidad Michoacana de San Nicolás de
Hidalgo (IIMM).

Finalizó: 31/Octubre/2020

Posdoctorado SECIHTI, Universidad Michoacana de San Nicolás de
Hidalgo.

Finaliza: 30/09/2026

Reconocimiento SNI

NIVEL: 1

Vigencia: 2025/2029

PRODEP

Si ___ No ___X___

Vigencia:

Líneas de Investigación e Incidencia Social (LIES)

LIES-1: Metalurgia Extractiva, Preparación y Desarrollo de Materiales Cerámicos y Compuestos.

LIES-2: Caracterización y Análisis de Materiales.

Publicaciones

- 1) Synthesis and Characterization of Aluminum Matrix Composites Reinforced with (Ni, Cu) γ Al Intermetallic Particles via Mechanical Milling Technique. <https://doi.org/10.1007/s11665-019-03952-0>
- 2) Comparative studies of the mechanical and thermal properties of clay/copolymer nanocomposites synthesized by two in-situ methods and solution blending method. <https://doi.org/10.1007/s10965-019-1966-3>
- 3) Ethanolic Media Effect on the Susceptibility to Stress Corrosion Cracking in an X-70 Microalloyed Steel with Different Aging Treatments. <https://doi.org/10.3390/en13123277>
- 4) Synthesis and Characterization of a Ni γ Al Intermetallic Modified with Copper Atoms via Powder Metallurgy. <https://doi.org/10.1007/s11665-021-05541-6>
- 5) Microstructural and corrosion behavior of A413/Al₂O₃ metal matrix composites in 3.5 wt.% NaCl solution. <https://doi.org/10.20964/2022.11.60>

- 6) Synthesis and microstructure characterization of nanocrystalline NiAl compound with copper addition by mechanical alloying.
<https://doi.org/10.1557/s43580-023-00716-w>
- 7) Processing of copper nanocomposites reinforced with carbon nanotubes via mechanical alloying.
<https://doi.org/10.1557/s43580-024-00845-w>
- 8) Effects of plasma accelerated ageing on a co-polymer reinforced with nanoclay. <https://doi.org/10.1007/s12034-024-03171-x>
- 9) Evaluation of Hydrogen Embrittlement's Effects on the Impact Toughness of Martensitic Ultra-High-Strength Steels as a Function of the Cathodic Charging Time. <https://doi.org/10.3390/ma18040764>
- 10) Optimization of the photon flux in a solar cell using the Monte Carlo Method and Percolation theory.
<https://doi.org/10.1557/s43579-025-00715-y>
- 11) Simulation and comparison of photon flux in organic percolation solar cells using the Monte Carlo Method and Finite Element Analysis. <https://doi.org/10.1016/j.solener.2025.113854>
- 12) Synthesis of Copper Based Composites Reinforced with (Ni,Cu)₃ Al Intermetallic via Low Energy Ball Milling.
<https://doi.org/10.1590/1980-5373-MR-2025-0307>

Alumnos graduados

HERBERTH FERNANDO PINEDA RODRIGUEZ, licenciatura, 14/03/2025

VARELA FITZ JOSE EDUARDO, licenciatura, 02/09/2025