MAYKEL COUREL PIEDRAHITA

Datos Generales

Nombre: MAYKEL COUREL PIEDRAHITA

Máximo nivel de estudios:

Antigüedad académica en la UNAM: años, meses, días

Nombramientos

Último: OTROS POSDOCTOR POSDOCTOR TC No Definitivo
Instituto de Energías Renovables
Desde 01-03-2017 hasta 28-02-2018

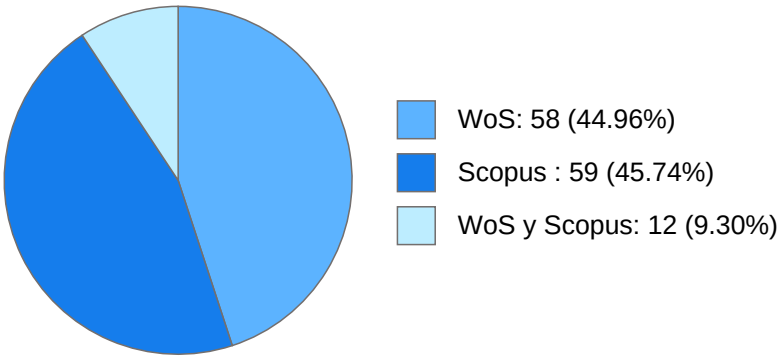
Estímulos, programas, premios y reconocimientos

No cuenta con estímulos, programas, premios y reconocimientos

MAYKEL COUREL PIEDRAHITA

DOCUMENTOS EN REVISTAS

Histórico de Documentos



#	Título	Autores	Revista	Año
1	The study of inorganic absorber layers in perovskite solar cells: the influence of CdTe and CIGS incorporation	MAYKEL COUREL PIEDRAHITA VICTOR IVAN MORENO OLIVA EVELYN BETSABE DIAZ CRUZ et al.	SCIENTIFIC REPORTS	2025
2	Modification of perovskite/HTL interface with cooperative polymers bilayer (PTB7-Th/P3HT) to improve perovskite solar cell efficiency and stability	PAOLA GABRIELA ABREGO MARTINEZ DAVID MATEUS TORRES HERRERA MAYKEL COUREL PIEDRAHITA et al.	MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING	2023
3	Ab initio study on electronic and optical properties of Cu2NiGeS4 for photovoltaic applications	MAYKEL COUREL PIEDRAHITA El Hamdaoui J. El-Yadri M. et al.	SOLAR ENERGY	2022
4	The path to overcome low efficiency values in SnS solar cells: An overview on the different current recombination mechanisms	MAYKEL COUREL PIEDRAHITA Sánchez-Rodríguez F.J. Montoya De Los Santos I. et al.	OPTICAL MATERIALS	2022
5	The state of the art of Sb2(S, Se)3thin film solar cells: Current progress and future prospect	MAYKEL COUREL PIEDRAHITA Nicolás-Marín M.M. González-Castillo J.R. et al.	JOURNAL OF PHYSICS D-APPLIED PHYSICS	2022
6	Parameters Optimization of Intermediate Band Solar Cells: Cases of PbTe/CdTe, PbSe/ZnTe and InN/GaN Quantum Dots	MAYKEL COUREL PIEDRAHITA Pérez L.M. Aouami A.E.L. et al.	Crystals	2022

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7	Impact of loss mechanisms through defects on Sb2(S1-xSex)3/CdS solar cells with p-n structure	MAYKEL COUREL PIEDRAHITA Jimenez T. Montoya De Los Santos I. et al.	EUROPEAN PHYSICAL JOURNAL PLUS	2022
8	Theoretical study of electronic properties and chemical stability of cubic phase zirconia nanowires	MAYKEL COUREL PIEDRAHITA Cuevas F. J.L. Feddi E. et al.	PHYSICA SCRIPTA	2021
9	A proposal to enhance SnS solar cell efficiency: The incorporation of SnSSe nanostructures	MAYKEL COUREL PIEDRAHITA Beltrán-Bobadilla P. Sánchez-Rodríguez F.J. et al.	JOURNAL OF PHYSICS D-APPLIED PHYSICS	2021
10	Strain effects on the electronic and optical properties of kesterite Cu2 ZnGeX4 (X = S, Se): First-principles study	MAYKEL COUREL PIEDRAHITA Hamdaoui J.E. El-Yadri M. et al.	NANOMATERIALS	2021
11	Loss mechanisms in CZTS and CZTSe Kesterite thin-film solar cells: Understanding the complexity of defect density	MAYKEL COUREL PIEDRAHITA Sravani L. Routray S. et al.	SOLAR ENERGY	2021
12	CdTe colloidal-gel: Synthesis and thin films deposition applied to solar cells	MAYKEL COUREL PIEDRAHITA Arce-Plaza A. Sánchez-Rodríguez F.J. et al.	MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING	2021
13	Simulation analysis of Cd1-xZnxS/Sb2(Se1-xSx)3 solar cells with n-i-p structure	MAYKEL COUREL PIEDRAHITA Nicolás-Marín M.M. Ayala-Mato F. et al.	SOLAR ENERGY	2021
14	Influence of geometrical shape on the characteristics of the multiple inn/inxga1-xn quantum dot solar cells	MAYKEL COUREL PIEDRAHITA Aouami A.E. Pérez L.M. et al.	NANOMATERIALS	2021
15	Kesterite Thin-Film Solar Cell: Role of Grain Boundaries and Defects in Copper?Zinc?Tin?Sulfide and Copper?Zinc?Tin?Selenide	MAYKEL COUREL PIEDRAHITA Sravani L. Routray S. et al.	PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE	2021
16	Impact of PC71BM layer on the performance of perovskite solar cells prepared at high moisture conditions using a low temperature annealed ZnO thin film as the electron transport layer	CARLOS ALBERTO RODRIGUEZ CASTAÑEDA DAVID MATEUS TORRES HERRERA MAYKEL COUREL PIEDRAHITA et al.	JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS	2021
17	High performance isopropanol sensor based on spinel ZnMn2O4 nanoparticles	MAYKEL COUREL PIEDRAHITA Guillén-López E.S. López-Urías F. et al.	Materials Today Communications	2021

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18	Numerical modeling of the size effect in CdSe/ZnS and InP/ZnSbased Intermediate Band Solar Cells	MAYKEL COUREL PIEDRAHITA El Aouami A.E. Feddi K. et al.	PHYSICA SCRIPTA	2021
19	Study of loss mechanisms on Sb2(S1-xSex)3solar cell with n-i-p structure: Toward an efficiency promotion	MAYKEL COUREL PIEDRAHITA Ayala-Mató F. Vigil-Galán O. et al.	APPLIED PHYSICS LETTERS	2021
20	LO-Phonons and dielectric polarization effects on the electronic properties of doped GaN/InN spherical core/shell quantum dots in a nonparabolic band model	MAYKEL COUREL PIEDRAHITA Talbi A. El Haouari M. et al.	APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING	2021
21	Obtaining the solid solution Sb2S3-xSex by selenization of Sb2S3 film and identifying the thermal processing parameters to achieve recrystallization while maintaining phase-purity	MAYKEL COUREL PIEDRAHITA NINI ROSE MATHEWS XAVIER MATHEW et al.	MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING	2021
22	Study on the physical properties of Cu2ZnSnS4 thin films deposited by pneumatic spray pyrolysis technique	MAYKEL COUREL PIEDRAHITA Nicolás M.M. Vigil-Galán O.	Applied Chemical Engineering	2021
23	Optimization of CH3NH3PbI3 perovskite solar cells: A theoretical and experimental study	MAYKEL COUREL PIEDRAHITA HAILIN ZHAO HU Montoya De Los Santos I. et al.	SOLAR ENERGY	2020
24	Argon vs. air atmosphere in close spaced vapor transport deposited tin sulfide thin films	MAYKEL COUREL PIEDRAHITA MARTA GARCIA SANCHEZ Andrade-Arvizu J. et al.	SOLAR ENERGY	2020
25	Synthesis of CdSxSe1-x nanoparticles starting from CdS/CdSe bilayers deposited by chemical bath deposition for solar cell applications	MAYKEL COUREL PIEDRAHITA Sanchez-Rodriguez F.J. Arce-Plaza A. et al.	JOURNAL OF NANOPHOTONICS	2020
26	Evaluation of Cd1-xZn xS as electron transport layer in superstrate and inverted configurations of Sb2Se3solar cells with n-i-p structure	MAYKEL COUREL PIEDRAHITA Ayala-Mató F. Vigil-Galán O. et al.	SEMICONDUCTOR SCIENCE AND TECHNOLOGY	2020
27	The effect of Se/(S+Se) compositional ratios on the performance of SnS-based solar cell: A numerical simulation	VICTOR IVAN MORENO OLIVA MAYKEL COUREL PIEDRAHITA Montoya De Los Santos I. et al.	SEMICONDUCTOR SCIENCE AND TECHNOLOGY	2020
28	Internal polarization electric field effects on the efficiency of InN/InxGa1-xN multiple quantum dot solar cells	MAYKEL COUREL PIEDRAHITA El Aouami A. Bikerouin M. et al.	SOLAR ENERGY	2020

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29	Structural, optical, and photoluminescence properties of erbium doped TiO2 films	MAYKEL COUREL PIEDRAHITA NINI ROSE MATHEWS Pérez J.A.B. et al.	Vacuum	2019
30	Recent advances in dye-sensitized solar cells	MAYKEL COUREL PIEDRAHITA Rondán-Gómez V. Montoya De Los Santos I. et al.	APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING	2019
31	Formation of SnSSe thin films by heat treatment of SnS thin films in S/Se atmosphere	MAYKEL COUREL PIEDRAHITA Meza Avendaño C.A. Pantoja Enríquez J. et al.	MATERIALS RESEARCH EXPRESS	2019
32	Status of materials and device modelling for kesterite solar cells	MAYKEL COUREL PIEDRAHITA Hood S.N. Walsh A. et al.	Journal Of Physics-Energy	2019
33	A theoretical study on Sb2S3 solar cells: The path to overcome the efficiency barrier of 8%	MAYKEL COUREL PIEDRAHITA Jiménez T. Arce-Plaza A. et al.	SOLAR ENERGY MATERIALS AND SOLAR CELLS	2019
34	An approach towards the promotion of Kesterite solar cell efficiency: The use of nanostructures	MAYKEL COUREL PIEDRAHITA	APPLIED PHYSICS LETTERS	2019
35	Optimization of Cd x Zn 1-x S compound from CdS/ZnS bi-layers deposited by chemical bath deposition for thin film solar cells application	MAYKEL COUREL PIEDRAHITA Hernández-Calderón V. Vigil-Galán O. et al.	Thin Solid Films	2019
36	Numerical evaluation of the optical-splitter system efficiency using a TCO as optical splitter	MAYKEL COUREL PIEDRAHITA Ayala-Mató F. Seuret-Jiménez D. et al.	MATERIALS RESEARCH EXPRESS	2019
37	Sb2(S1-xSex)3 solar cells: The impact of radiative and non-radiative loss mechanisms	MAYKEL COUREL PIEDRAHITA Jiménez T. Seuret-Jiménez D. et al.	JOURNAL OF PHYSICS D-APPLIED PHYSICS	2018
38	Study on the impact of stoichiometric and optimal compositional ratios on physical properties of Cu 2 ZnSnS 4 thin films deposited by spray pyrolysis	MAYKEL COUREL PIEDRAHITA Picquart M. Arce-Plaza A. et al.	MATERIALS RESEARCH EXPRESS	2018
39	Synthesis and characterization of CZTGSe and CZTGSSe powders by ball milling technique: Influence of Ge content and the role of Cu on the properties of CZTSe	MAYKEL COUREL PIEDRAHITA Nicolás-Marín M.M. Vigil-Galán O. et al.	MATERIALS RESEARCH EXPRESS	2018
40	Study and application of colloidal systems for obtaining CdTe+Te thin films by spray pyrolysis	MAYKEL COUREL PIEDRAHITA Arce-Plazaa A. Andrade-Arvizub J.A. et al.	JOURNAL OF ANALYTICAL AND APPLIED PYROLYSIS	2017

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41	Study of CBD-CdS/CZTGSe solar cells using different Cd sources: behavior of devices as a MIS structure	MAYKEL COUREL PIEDRAHITA Vigil-Galán O. Andrade-Arvizu J.A. et al.	JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS	2017
42	Towards understanding poor performances in spray-deposited Cu2ZnSnS4 thin film solar cells	MAYKEL COUREL PIEDRAHITA Valencia-Resendiz E. Andrade-Arvizu J.A. et al.	SOLAR ENERGY MATERIALS AND SOLAR CELLS	2017
43	Open-circuit voltage enhancement in CdS/Cu2ZnSnSe4-based thin film solar cells: A metal-insulator-semiconductor (MIS) performance	MAYKEL COUREL PIEDRAHITA Pulgarín-Agudelo F.A. Andrade-Arvizu J.A. et al.	SOLAR ENERGY MATERIALS AND SOLAR CELLS	2016
44	CdTe:Bi films deposited by closed space vapor transport under variable pressure and doping levels: Evidences of the possible formation of an intermediate band	MAYKEL COUREL PIEDRAHITA Vigil-Galán O. Cruz-Gandarilla F. et al.	JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS	2016
45	Optimization of CBD-CdS physical properties for solar cell applications considering a MIS structure	MAYKEL COUREL PIEDRAHITA Vigil-Galán O. Pulgarín F.A. et al.	MATERIALS & DESIGN	2016
46	The role of buffer/kesterite interface recombination and minority carrier lifetime on kesterite thin film solar cells	MAYKEL COUREL PIEDRAHITA Andrade-Arvizu J.A. Vigil-Galán O.	MATERIALS RESEARCH EXPRESS	2016
47	Determination of minority carrier diffusion length of sprayed-Cu2ZnSnS4 thin films	MAYKEL COUREL PIEDRAHITA Valencia-Resendiz E. Pulgarín-Agudelo F.A. et al.	SOLID-STATE ELECTRONICS	2016
48	Suited growth parameters inducing type of conductivity conversions on chemical spray pyrolysis synthesized SnS thin films	MAYKEL COUREL PIEDRAHITA Andrade-Arvizu J.A. García-Sánchez M.F. et al.	JOURNAL OF ANALYTICAL AND APPLIED PYROLYSIS	2016
49	Electrical properties of sprayed Cu2ZnSnS4 thin films and its relation with secondary phase formation and solar cell performance	MAYKEL COUREL PIEDRAHITA Vigil-Galán O. Espindola-Rodriguez M. et al.	SOLAR ENERGY MATERIALS AND SOLAR CELLS	2015
50	SnO2 buffer layer deposition for thin film solar cells with superstrate configuration	MAYKEL COUREL PIEDRAHITA Vigil-Galán O. Jiménez-Olarte D. et al.	JOURNAL OF RENEWABLE AND SUSTAINABLE ENERGY	2015
51	Loss mechanisms influence on Cu2ZnSnS4/CdS-based thin film solar cell performance	MAYKEL COUREL PIEDRAHITA Andrade-Arvizu J.A. Vigil-Galán O.	SOLID-STATE ELECTRONICS	2015

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52	SnS-based thin film solar cells: perspectives over the last 25 years	MAYKEL COUREL PIEDRAHITA Andrade-Arvizu J.A. Vigil-Galán O.	JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS	2015
53	Route towards low cost-high efficiency second generation solar cells: current status and perspectives	MAYKEL COUREL PIEDRAHITA Vigil-Galán O. Andrade-Arvizu J.A. et al.	JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS	2015
54	Towards a CdS/Cu2ZnSnS4 solar cell efficiency improvement: A theoretical approach	MAYKEL COUREL PIEDRAHITA Andrade-Arvizu J.A. Vigil-Galán O.	APPLIED PHYSICS LETTERS	2014
55	Trap and recombination centers study in sprayed Cu2ZnSnS4 thin films	MAYKEL COUREL PIEDRAHITA Vigil-Galán O. Jiménez-Olarte D. et al.	JOURNAL OF APPLIED PHYSICS	2014
56	Secondary phases dependence on composition ratio in sprayed Cu 2ZnSnS4 thin films and its impact on the high power conversion efficiency	MAYKEL COUREL PIEDRAHITA Vigil-Galán O. Espíndola-Rodríguez M. et al.	SOLAR ENERGY MATERIALS AND SOLAR CELLS	2013
57	Toward a high Cu2ZnSnS4 solar cell efficiency processed by spray pyrolysis method	MAYKEL COUREL PIEDRAHITA Vigil-Galán O. Espindola-Rodriguez M. et al.	JOURNAL OF RENEWABLE AND SUSTAINABLE ENERGY	2013
58	GaAs/GaInNAs quantum well and superlattice solar cell	MAYKEL COUREL PIEDRAHITA Rimada J.C. Hernández L.	APPLIED PHYSICS LETTERS	2012
59	An approach to high efficiencies using GaAs/GaInNAs multiple quantum well and superlattice solar cell	MAYKEL COUREL PIEDRAHITA Rimada J.C. Hernández L.	JOURNAL OF APPLIED PHYSICS	2012

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LIBROS Y CAPITULOS CON ISBN

Obras con registro ISBN

#	Título	Autores	Alcance	Año	ISBN
1	Different approaches for thin film solar cell simulation	MAYKEL COUREL PIEDRAHITA Vigil-Galán O.	Capítulo de un Libro	2017	9783319599069
2	Contemporary Condensed Matter Physics: Selected Topics	MAYKEL COUREL PIEDRAHITA AUGUSTO DAVID ARIZA FLORES	Libro Completo	2016	9786078434787
3	Some Current Topics in Condensed Matter Physics 2014	MAYKEL COUREL PIEDRAHITA AUGUSTO DAVID ARIZA FLORES	Libro Completo	2016	9786078434794

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PARTICIPACIÓN EN PROYECTOS

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

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PARTICIPACIÓN EN TESIS

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

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DOCENCIA IMPARTIDA

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

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PATENTES

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

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FUENTES DE INFORMACIÓN

Internos

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

Externos

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