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Coordinación de Planeación, Evaluación y
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Reporte individual



JULIAN BRAVO CASTILLERO

Datos Generales

Nombre: JULIAN BRAVO CASTILLERO

Máximo nivel de estudios: DOCTORADO

Antigüedad académica en la UNAM: 7 años

Nombramientos

Vigente: INVESTIGADOR TITULAR B TC Definitivo
Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas
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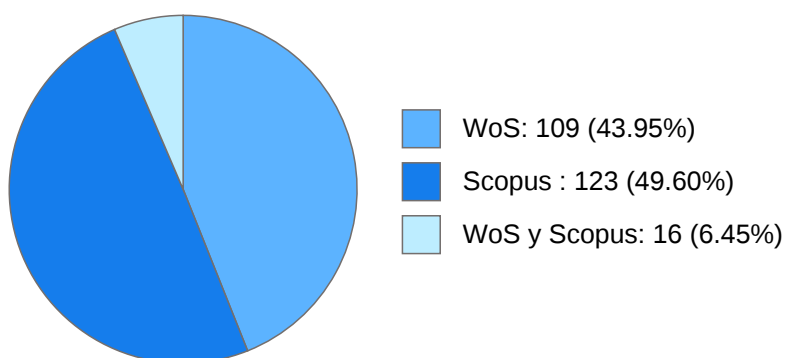
Estímulos, programas, premios y reconocimientos

SNI II 2021 - VIGENTE
SNI I 2019 - 2020
PRIDE C 2023 - 2024
EQUIVALENCIA PRIDE B 2018 - 2023

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DOCUMENTOS EN REVISTAS

Histórico de Documentos



#	Título	Autores	Revista	Año
1	Dispersive effective medium for anti-plane dynamics of piezo-magneto-elastic multiphase composites with generalized periodicity	JULIAN BRAVO CASTILLERO Mriganka Shekhar Chaki David Guinovart	PROCEEDINGS OF THE ROYAL SOCIETY A-MATHEMATICAL PHYSICAL AND ENGINEERING SCIENCES	2025
2	Higher-order coefficients of periodic laminates with strain gradient effective behavior	JULIAN BRAVO CASTILLERO Pérez-Fernández L.D. da Rocha F.C. et al.	COMPOSITE STRUCTURES	2025
3	Turing patterns in domains with periodic inhomogeneities; a homogenization approach	JULIAN BRAVO CASTILLERO JOSE LUIS ARAGON VERA Elkinn A. Calderon-Barreto	CHAOS SOLITONS & FRACTALS	2024
4	A study of non-uniform imperfect contact in shear wave propagation in a magneto-electro-elastic laminated periodic structure	JULIAN BRAVO CASTILLERO Chaki M.S.	ARCHIVE OF APPLIED MECHANICS	2024
5	Asymptotic homogenization of a problem for an elliptic equation with locally microperiodic continuously differentiable coefficient	JULIAN BRAVO CASTILLERO Leonardo F. P. Leite Elyakim A. Santana et al.	Sigmae	2024

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6	Mathematical modelling of composite phantoms for the calibration of ultrasound devices	JULIAN BRAVO CASTILLERO ROGELIO OSCAR CABALLERO PEREZ NIDIYARE HEVIA MONTIEL et al.	Journal Of Applied Research And Technology	2023
7	Dynamic asymptotic homogenization for wave propagation in magneto-electro-elastic laminated composite periodic structure	JULIAN BRAVO CASTILLERO Chaki M.S.	COMPOSITE STRUCTURES	2023
8	A mathematical analysis of anti-plane surface wave in a magneto-electro-elastic layered structure with non-perfect and locally perturbed interface	JULIAN BRAVO CASTILLERO Chaki M.S.	EUROPEAN JOURNAL OF MECHANICS A-SOLIDS	2023
9	Conductivity gain predictions for multiscale fibrous composites with interfacial thermal barrier resistance	JULIAN BRAVO CASTILLERO Ernesto Iglesias-Rodriguez Manuel E. Cruz et al.	MATHEMATICAL METHODS IN THE APPLIED SCIENCES	2023
10	Effective thermo-magneto-electro-elastic properties of laminates with non-uniform imperfect contact: delamination and product properties	JULIAN BRAVO CASTILLERO LUIS FERNANDO LOPEZ RIOS Caballero-Pérez R.O.	ACTA MECHANICA	2022
11	Analysis of a cylindrically orthotropic disk using a regular perturbation method	JULIAN BRAVO CASTILLERO Adair Roberto Aguiar Lucas Almeida Rocha	ARCHIVE OF APPLIED MECHANICS	2022
12	Variational formulation for fractional hyperbolic problems in the theory of viscoelasticity	JULIAN BRAVO CASTILLERO LUIS FERNANDO LOPEZ RIOS	ZEITSCHRIFT FUR ANGEWANDTE MATHEMATIK UND PHYSIK	2022
13	A hierarchical asymptotic homogenization approach for viscoelastic composites	ARIEL RAMIREZ TORRES JULIAN BRAVO CASTILLERO FEDERICO JUAN SABINA CISCAR et al.	MECHANICS OF ADVANCED MATERIALS AND STRUCTURES	2021
14	A simple scheme for calculating the energy harvesting figures of merit of porous ceramics	JULIAN BRAVO CASTILLERO Caballero-Pérez R.O. Pérez-Fernández L.D.	Energy Harvesting and Systems	2020
15	Analytical formulas for complex permittivity of periodic composites. Estimation of gain and loss enhancement in active and passive composites	JULIAN BRAVO CASTILLERO FEDERICO JUAN SABINA CISCAR CATHERINE GARCIA REIMBERT et al.	WAVES IN RANDOM AND COMPLEX MEDIA	2020

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16	Multiscale Homogenization for Linear Mechanics	ARIEL RAMIREZ TORRES JULIAN BRAVO CASTILLERO FEDERICO JUAN SABINA CISCAR et al.	Solid Mechanics and its Applications	2020
17	Relating mechanical properties of vertebral trabecular bones to osteoporosis	JULIAN BRAVO CASTILLERO Cesar R. Ramos R.R. et al.	COMPUT METHOD BIOMECH	2020
18	Behavior of piezoelectric layered composites with mechanical and electrical non-uniform imperfect contacts	JULIAN BRAVO CASTILLERO FEDERICO JUAN SABINA CISCAR López-Realpozo J.C. et al.	Meccanica	2020
19	Computation of the relaxation effective moduli for fibrous viscoelastic composites using the asymptotic homogenization method	JULIAN BRAVO CASTILLERO FEDERICO JUAN SABINA CISCAR PABLO PADILLA LONGORIA et al.	INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES	2020
20	Computation of effective thermo-piezoelectric properties of porous ceramics via asymptotic homogenization and finite element methods for energy-harvesting applications	JULIAN BRAVO CASTILLERO FEDERICO JUAN SABINA CISCAR Caballero-Pérez R.O. et al.	ARCHIVE OF APPLIED MECHANICS	2020
21	Effective predictions of heterogeneous flexoelectric multilayered composite with generalized periodicity	JULIAN BRAVO CASTILLERO FEDERICO JUAN SABINA CISCAR D. Guinovart-Sanjuan et al.	INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES	2020
22	Thermoelastic bounds and self-consistent estimation for the overall properties of composites	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO PABLO PADILLA LONGORIA et al.	MECHANICS RESEARCH COMMUNICATIONS	2020
23	Reiterated homogenization applied to nanofluids with an interfacial thermal resistance	JULIAN BRAVO CASTILLERO MARIA ESTHER CRUZ BELTRAN FEDERICO JUAN SABINA CISCAR et al.	INTERNATIONAL JOURNAL FOR MULTISCALE COMPUTATIONAL ENGINEERING	2020
24	Effective transport properties for periodic multiphase fiber-reinforced composites with complex constituents and parallelogram unit cells	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Guinovart-Díaz R. et al.	INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES	2020
25	Asymptotic Homogenization Applied to Flexoelectric Rods	JULIAN BRAVO CASTILLERO FEDERICO JUAN SABINA CISCAR Guinovart-Sanjuán D. et al.	Materials	2019

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26	Homogenization of thermo-magneto-electro-elastic multilaminated composites with imperfect contact	JULIAN BRAVO CASTILLERO FEDERICO JUAN SABINA CISCAR Caballero-Pérez R.O. et al.	MECHANICS RESEARCH COMMUNICATIONS	2019
27	An approach for modeling non-ageing linear viscoelastic composites with general periodicity	JULIAN BRAVO CASTILLERO FEDERICO JUAN SABINA CISCAR Cruz-González O.L. et al.	COMPOSITE STRUCTURES	2019
28	Simple closed-form property expressions of a metafluid composed of a hexagonal array of transversely isotropic elastic fibres embedded in an ideal fluid	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Guinovart-Díaz R. et al.	MECHANICS RESEARCH COMMUNICATIONS	2019
29	Effective coefficients of isotropic complex dielectric composites in a hexagonal array	JULIAN BRAVO CASTILLERO FEDERICO JUAN SABINA CISCAR Yañez-Olmos D. et al.	Technische Mechanik	2019
30	An ADMM-AHM integrated approach for problems with rapidly oscillating coefficients	JULIAN BRAVO CASTILLERO Da Costa C.P. Ferreira A.M. et al.	Defect and Diffusion Forum	2019
31	Effective elastic properties using maxwell's approach for transversely isotropic composites	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Alfonso L.D.L. et al.	Advanced Structured Materials	2019
32	EXACTNESS OF FORMAL ASYMPTOTIC SOLUTIONS OF A DIRICHLET PROBLEM MODELING THE STEADY STATE OF FUNCTIONALLY-GRADED MICROPERIODIC NONLINEAR RODS	JULIAN BRAVO CASTILLERO Roberto M. S. Decio Jr Leslie D. Perez-Fernandez	Journal Of Applied Mathematics And Computational Mechanics	2019
33	Homogenized out-of-plane shear response of three-scale fiber-reinforced composites	ARIEL RAMIREZ TORRES JULIAN BRAVO CASTILLERO Penta R. et al.	Computing and Visualization in Science	2019
34	Viscoelastic effective properties for composites with rectangular cross-section fibers using the asymptotic homogenization method	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Cruz-González O.L. et al.	Advanced Structured Materials	2018
35	Combinação do ADMM com Homogeneização Matemática na Modelagem da Dispersão de Poluentes na Atmosfera	JULIAN BRAVO CASTILLERO Costa C.P. Pérez-Fernández L.D. et al.	Revista Brasileira de Meteorologia	2018
36	Unit cell models of viscoelastic fibrous composites for numerical computation of effective properties	JULIAN BRAVO CASTILLERO Berger H. Würkner M. et al.	Advanced Structured Materials	2018

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37	Application of Mori-Tanaka method in 3-1 porous piezoelectric medium of crystal class 6	JOAO PAULINO DA SILVA NETO JULIAN BRAVO CASTILLERO Adair Roberto Aguiar	INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE	2018
38	Analysis of mechanical and electrical imperfect contacts in piezoelectric composites	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO López-Realpozo J.C. et al.	MECHANICS RESEARCH COMMUNICATIONS	2018
39	The influence of anisotropic growth and geometry on the stress of solid tumors	FEDERICO JUAN SABINA CISCAR CATHERINE GARCIA REIMBERT JULIAN BRAVO CASTILLERO et al.	INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE	2017
40	Asymptotic homogenization of periodic thermo-magneto-electro-elastic heterogeneous media (vol 66, pg 2056, 2013)	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Sixto-Camacho, L.M. et al.	COMPUTERS & MATHEMATICS WITH APPLICATIONS	2017
41	Calculation of the effective thermal conductivity of multiscale ordered arrays based on reiterated homogenization theory and analytical formulae	JULIAN BRAVO CASTILLERO Nascimento, Eduardo S. Cruz, Manuel E.	INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE	2017
42	Local fields in two-phase fibrous piezo-composites with 622 constituents	JULIAN BRAVO CASTILLERO Alfonso-Rodríguez R. Pérez-Fernández L.D.	MATHEMATICAL METHODS IN THE APPLIED SCIENCES	2017
43	Reiterated homogenization applied to heat conduction in heterogeneous media with multiple spatial scales and perfect thermal contact between the phases	JULIAN BRAVO CASTILLERO Rodríguez E.I. Cruz M.E.	JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING	2016
44	Effective properties of regular elastic laminated shell composite	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Guinovart-Sanjuan, D. et al.	COMPOSITES PART B-ENGINEERING	2016
45	Characterization of piezoelectric composites with mechanical and electrical imperfect contacts	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Rodriguez-Ramos R. et al.	JOURNAL OF COMPOSITE MATERIALS	2016
46	Dynamic homogenization for composites with embedded multioriented ellipsoidal inclusions	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO GandarrillaPerez, C. A. et al.	INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES	2015

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47	Improved variational bounds for conductive periodic composites with 3D microstructures and nonuniform thermal resistance	JULIAN BRAVO CASTILLERO López-Ruiz G. Brenner R. et al.	ZEITSCHRIFT FUR ANGEWANDTE MATHEMATIK UND PHYSIK	2015
48	Mathematical modeling of anisotropic avascular tumor growth	JULIAN BRAVO CASTILLERO Ramírez-Torres A. Rodríguez-Ramos R. et al.	MECHANICS RESEARCH COMMUNICATIONS	2015
49	A Dispersive Nonlocal Model for In-Plane Wave Propagation in Laminated Composites with Periodic Structures	JULIAN BRAVO CASTILLERO Brito-Santana H. Wang Y.-S. et al.	J APPL MECH-T ASME	2015
50	A dispersive nonlocal model for shear wave propagation in laminated composites with periodic structures	JULIAN BRAVO CASTILLERO Brito-Santana H. Wang Y.-S. et al.	EUROPEAN JOURNAL OF MECHANICS A-SOLIDS	2015
51	Numerical and analytical analyses for active fiber composite piezoelectric composite materials	JULIAN BRAVO CASTILLERO De Medeiros R. Rodríguez-Ramos R. et al.	JOURNAL OF INTELLIGENT MATERIAL SYSTEMS AND STRUCTURES	2015
52	Action of body forces in tumor growth	JULIAN BRAVO CASTILLERO Ramírez-Torres A. Rodríguez-Ramos R. et al.	INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE	2015
53	Biomechanical trabecular bone behavior of calcaneus samples using finite element analysis and experimental tests	JULIAN BRAVO CASTILLERO Cesar R. Blanco J.O. et al.	IFMBE Proceedings	2015
54	Variational bounds in composites with nonuniform interfacial thermal resistance	JULIAN BRAVO CASTILLERO López-Ruiz G. Brenner R. et al.	APPLIED MATHEMATICAL MODELLING	2014
55	Effective elastic shear stiffness of a periodic fibrous composite with non-uniform imperfect contact between the matrix and the fibers	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Lopez-Realpozo, Juan C. et al.	INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES	2014
56	Micromechanical analysis of fibrous piezoelectric composites with imperfectly bonded adherence	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Rodríguez-Ramos, R. et al.	ARCHIVE OF APPLIED MECHANICS	2014
57	Effective properties of periodic fibrous electro-elastic composites with mechanic imperfect contact condition	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Rodriguez-Ramos, R. et al.	INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES	2013

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58	Asymptotic homogenization of periodic thermo-magneto-electro-elastic heterogeneous media	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Sixto-Camacho, Lazaro M. et al.	COMPUTERS & MATHEMATICS WITH APPLICATIONS	2013
59	Biomechanic approach of a growing tumor	JULIAN BRAVO CASTILLERO Ramírez-Torres A. Rodríguez-Ramos R. et al.	MECHANICS RESEARCH COMMUNICATIONS	2013
60	Different approaches for calculating the effective elastic properties in composite materials under imperfect contact adherence	JULIAN BRAVO CASTILLERO Rodríguez-Ramos R. de Medeiros R. et al.	COMPOSITE STRUCTURES	2013
61	Two approaches for the evaluation of the effective properties of elastic composite with parallelogram periodic cells	JULIAN BRAVO CASTILLERO Rodríguez-Ramos R. Berger H. et al.	INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE	2012
62	Investigation of the effective response of 2-1-2 piezoelectric composites	JULIAN BRAVO CASTILLERO Brenner R. León D.M.	Procedia IUTAM	2012
63	Universal relations and effective coefficients of magneto-electro-elastic perforated structures	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Rodríguez-Ramos, Reinaldo et al.	QUARTERLY JOURNAL OF MECHANICS AND APPLIED MATHEMATICS	2012
64	Unified analytical formulae for the effective properties of periodic fibrous composites	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Guinovart-Díaz, Raul et al.	MATERIALS LETTERS	2012
65	Dispersion relations for SH waves on a magneto-electro-elastic heterostructure with imperfect interfaces	GUILLERMO MONSIVAIS GALINDO JULIAN BRAVO CASTILLERO Otero, Jose A. et al.	JOURNAL OF MECHANICS OF MATERIALS AND STRUCTURES	2012
66	Effective properties of piezoelectric composites with parallelogram periodic cells	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Guinovart-Díaz, R. et al.	INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE	2012
67	Connections between different models describing imperfect interfaces in periodic fiber-reinforced composites	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Sevostianov, I. et al.	INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES	2012
68	Enhancement of Young's moduli and auxetic windows in laminates with isotropic constituents	MIRELLA RAMIREZ RAMIREZ FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO et al.	INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE	2012

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69	Interfacial waves between two piezoelectric half-spaces with electro-mechanical imperfect interface	GUILLERMO MONSIVAIS GALINDO JULIAN BRAVO CASTILLERO Otero, J. A. et al.	PHILOSOPHICAL MAGAZINE LETTERS	2012
70	Overall properties in fibrous elastic composite with imperfect contact condition	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Guinovart-Díaz, R. et al.	INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE	2012
71	Influence of parallelogram cells in the axial behaviour of fibrous composite	MIRELLA RAMÍREZ RAMÍREZ FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO et al.	INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE	2011
72	Effects of interface contacts on the magneto electro-elastic coupling for fiber reinforced composites	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Espinosa-Almeyda, Y. et al.	INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES	2011
73	Two analytical models for the study of periodic fibrous elastic composite with different unit cells	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Rodríguez-Ramos R. et al.	COMPOSITE STRUCTURES	2011
74	Transport properties in fibrous elastic rhombic composite with imperfect contact condition	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Lopez-Realpozo, Juan C. et al.	INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES	2011
75	Response of multiferroic composites inferred from a fast-Fourier-transformbased numerical scheme	JULIAN BRAVO CASTILLERO Brenner R.	SMART MATERIALS AND STRUCTURES	2010
76	Influence of imperfect elastic contact condition on the antiplane effective properties of piezoelectric fibrous composites	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Rodríguez-Ramos, Reinaldo et al.	ARCHIVE OF APPLIED MECHANICS	2010
77	Analytical formulae for electromechanical effective properties of 3-1 longitudinally porous piezoelectric materials	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Rodríguez-Ramos, Reinaldo et al.	ACTA MATERIALIA	2009
78	Magnetoelectric coupling and cross-property connections in a square array of a binary composite	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Camacho-Montes, Hector et al.	INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE	2009
79	On the constitutive relations and energy potentials of linear thermo-magneto-electro-elasticity	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Perez-Fernandez, L. D. et al.	MECHANICS RESEARCH COMMUNICATIONS	2009

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80	Homogenization and effective properties of periodic thermomagnetoelastic composites	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Rodríguez-Ramos, Reinaldo et al.	JOURNAL OF MECHANICS OF MATERIALS AND STRUCTURES	2009
81	A dispersive nonlocal model for wave propagation in periodic composites	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Miguel Vivar-Perez, Juan et al.	JOURNAL OF MECHANICS OF MATERIALS AND STRUCTURES	2009
82	Plane magneto-electro-elastic moduli of fiber composites with interphase	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Guinovart-Díaz R. et al.	OPTICS, PHOTONICS, AND DIGITAL TECHNOLOGIES FOR IMAGING APPLICATIONS VIII	2009
83	Unified formulae of variational bounds for multiphase anisotropic elastic composites	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Brito-Santana, H. et al.	ARCHIVE OF APPLIED MECHANICS	2009
84	Variational bounds for anisotropic elastic multiphase composites with different shapes of inclusions	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Rodríguez-Ramos, R. et al.	ARCHIVE OF APPLIED MECHANICS	2009
85	Calculation of effective conductivity of 2D and 3D composite materials with anisotropic constituents and different inclusion shapes in Mathematica	JULIAN BRAVO CASTILLERO Gómez-Muñoz J.L.	COMPUTER PHYSICS COMMUNICATIONS	2008
86	The effect of imperfect contact on the homogenization of a micro-periodic helix	JULIAN BRAVO CASTILLERO Vivar-Perez J.M. Rodríguez-Ramos R. et al.	MATHEMATICS AND MECHANICS OF SOLIDS	2008
87	Evaluation of influence of interphase material parameters on effective material properties of three phase composites	JULIAN BRAVO CASTILLERO Kari S. Berger H. et al.	COMPOSITES SCIENCE AND TECHNOLOGY	2008
88	Effective properties of non-linear elastic laminated composites with perfect and imperfect contact conditions	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Lopez-Realpozo, J. C. et al.	MECHANICS OF ADVANCED MATERIALS AND STRUCTURES	2008
89	Electro-mechanical moduli of three-phase fiber composites	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Guinovart-Díaz, Raul et al.	MATERIALS LETTERS	2008

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90	Analysis of effective properties of electroelastic composites using the self-consistent and asymptotic homogenization methods	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Levin, V. M. et al.	INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE	2008
91	Homogenization of magneto-electro-elastic multilaminated materials	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Rodríguez-Ramos, Reinaldo et al.	QUARTERLY JOURNAL OF MECHANICS AND APPLIED MATHEMATICS	2008
92	Tight bounds for three-dimensional nonlinear incompressible elastic composites	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Leon-Mecias, Angela et al.	INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE	2008
93	Estimation of very narrow bounds to the behavior of nonlinear incompressible elastic composites	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Pérez-Fernández L.D. et al.	ARCHIVE OF APPLIED MECHANICS	2007
94	Asymptotic analysis of linear thermoelastic properties of fiber composites	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Guinovart-Daz R. et al.	JOURNAL OF THERMOPLASTIC COMPOSITE MATERIALS	2007
95	Numerical and analytical approaches for calculating the effective thermo-mechanical properties of three-phase composites	JULIAN BRAVO CASTILLERO Berger H. Kurukuri S. et al.	J THERM STRESSES	2007
96	Homogenization of a micro-periodic helix with parabolic or hyperbolic heat conduction	JULIAN BRAVO CASTILLERO Vivar-Perez J.M. Rodríguez-Ramos R. et al.	J THERM STRESSES	2006
97	Effective properties of nonlinear laminated composites with perfect adhesion	JULIAN BRAVO CASTILLERO Lebon F. Rodríguez-Ramos R. et al.	J APPL MECH-T ASME	2006
98	Cross-property connections for fiber-reinforced composites with transversely isotropic constituents	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Sevostianov I. et al.	INT J FRACTURE	2006
99	Effective coefficients for two phase magneto-electroelastic fibrous composite with square symmetry cell in-plane mechanical displacement and out-of-plane electric and magnetic field case	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Carnacho-Montes H. et al.	INTEGR FERROELECTR	2006

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100	Effective elastic properties of periodic fibrous composites. Limit cases. Applications to porous and nonlinear materials	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Guinovart-Díaz R. et al.	Computer Assisted Mechanics and Engineering Sciences	2006
101	Unit cell models of piezoelectric fiber composites for numerical and analytical calculation of effective properties	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Berger H. et al.	SMART MATERIALS AND STRUCTURES	2006
102	Closed-form thermoelastic moduli of a periodic three-phase fiber-reinforced composite	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Guinovart-Díaz R. et al.	J THERM STRESSES	2005
103	Thermoelastic expressions for the effective coefficients of a fibre-reinforced composite	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Guinovart-Díaz R. et al.	PHILOSOPHICAL MAGAZINE	2005
104	A comprehensive numerical homogenisation technique for calculating effective coefficients of uniaxial piezoelectric fibre composites	JULIAN BRAVO CASTILLERO Berger H. Kari S. et al.	MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING	2005
105	Calculation of effective coefficients for piezoelectric fiber composites based on a general numerical homogenization technique	JULIAN BRAVO CASTILLERO Berger H. Kari S. et al.	COMPOSITE STRUCTURES	2005
106	Homogenization of a micro-periodic helix	JULIAN BRAVO CASTILLERO Vivar-Pérez J.M. Rodriguez-Ramos R. et al.	PHILOSOPHICAL MAGAZINE	2005
107	Pan American Congress of Applied Mechanics (PACAM VIII)	JULIAN BRAVO CASTILLERO Khayat R.E. Ostoja-Starzewski M. et al.	INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES	2005
108	An analytical and numerical approach for calculating effective material coefficients of piezoelectric fiber composites	JULIAN BRAVO CASTILLERO Berger H. Kari S. et al.	INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES	2005
109	About the improvement of variational bounds for nonlinear composite dielectrics	JULIAN BRAVO CASTILLERO Pérez-Fernández L.D. León-Mecías A.	MATERIALS LETTERS	2005

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110	Overall electromechanical properties of a binary composite with 622 symmetry constituents. Antiplane shear piezoelectric state	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO López-López E. et al.	INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES	2005
111	A recursive asymptotic homogenization scheme for multi-phase fibrous elastic composites	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Guinovart-Díaz R. et al.	MECHANICS OF MATERIALS	2005
112	Variational principles for nonlinear piezoelectric materials	PABLO PADILLA LONGORIA JULIAN BRAVO CASTILLERO Rodríguez-Ramos R. et al.	ARCHIVE OF APPLIED MECHANICS	2004
113	Analytical expressions of effective constants for a piezoelectric composite reinforced with square cross-section fibers	JULIAN BRAVO CASTILLERO Otero J.A. Guinovart-Díaz R. et al.	ARCH MECH	2003
114	Finite element and asymptotic homogenization methods applied to smart composite materials	JULIAN BRAVO CASTILLERO Berger H. Gabbert U. et al.	COMPUT MECH	2003
115	Modeling of Three-Phase Fibrous Composite Using the Asymptotic Homogenization Method	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Guinovart-Díaz R. et al.	MECHANICS OF ADVANCED MATERIALS AND STRUCTURES	2003
116	Elastic effective coefficients of fibre-reinforced composite with cubic symmetry constituents in a hexagonal arrangement	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Valdiviezo-Mijangos O.C. et al.	MECHANICS RESEARCH COMMUNICATIONS	2002
117	Fiber-reinforced composite with cubic symmetry constituents	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Valdiviezo-Mijangos O.C. et al.	MATERIALS LETTERS	2002
118	Modeling of elastic transversely isotropic composite using the asymptotic homogenization method. Some comparisons with other models	FLORENCIA SERRANIA SOTO JULIAN BRAVO CASTILLERO Guinovart-Díaz R. et al.	MATERIALS LETTERS	2002
119	Closed-form expressions for the effective coefficients of a fiber-reinforced composite with transversely isotropic constituents - I. Elastic and square symmetry	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Rodríguez-Ramos R. et al.	MECHANICS OF MATERIALS	2001
120	Closed-form expressions for the effective coefficients of a fibre-reinforced composite with transversely isotropic constituents. II: Piezoelectric and hexagonal symmetry	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Rodríguez-Ramos R. et al.	J MECH PHYS SOLIDS	2001

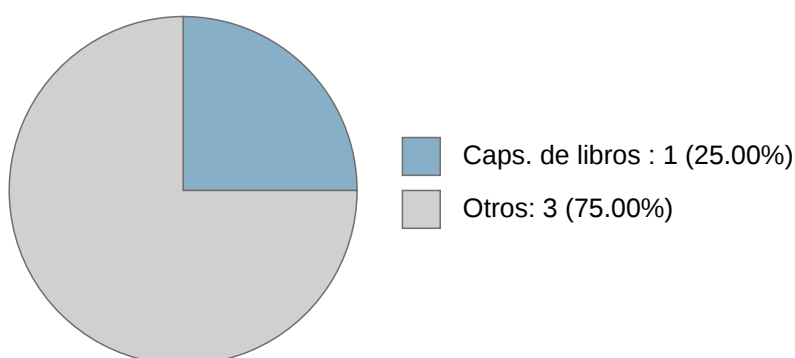
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121	Overall behavior of two-dimensional periodic composites	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Guinovart-Díaz R. et al.	INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES	2001
122	Closed-form expressions for the effective coefficients of a fiber-reinforced composite with transversely isotropic constituents - II. Piezoelectric and square symmetry	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Guinovart-Díaz R. et al.	MECHANICS OF MATERIALS	2001
123	Closed-form expressions for the effective coefficients of fibre-reinforced composite with transversely isotropic constituents. I: Elastic and hexagonal symmetry	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Guinovart-Díaz R. et al.	J MECH PHYS SOLIDS	2001
124	Overall properties of piezocomposite materials 1-3	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Guinovart-Díaz R. et al.	MATERIALS LETTERS	2001

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LIBROS Y CAPITULOS CON ISBN

Obras con registro ISBN

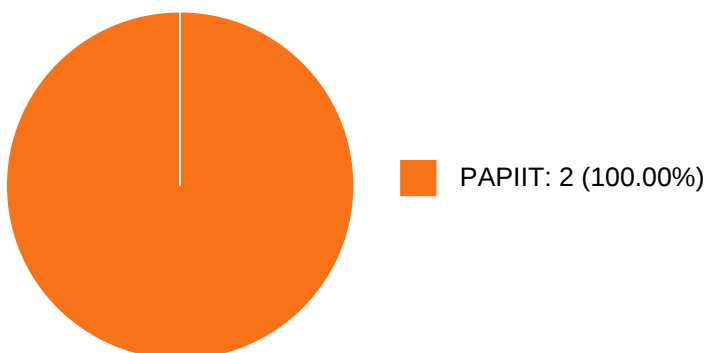


#	Título	Autores	Alcance	Año	ISBN
1	Numerical calculation of the effective thermal conductivity of three-dimensional three-scale microstructures	JULIAN BRAVO CASTILLERO Mattos L.P. Cruz M.E.	Conferenc e Paper	2018	9781624105524
2	Modeling of smart piezoelectric sensors: Determining effective properties with interfacial bonding conditions	JULIAN BRAVO CASTILLERO De Medeiros R. Brito-Santana H. et al.	Capítulo de un Libro	2017	9781536121926
3	Micro-macro characterization of effective properties for fibrous composites with parallelogram cells and imperfect contact condition	FEDERICO JUAN SABINA CISCAR JULIAN BRAVO CASTILLERO Rodríguez-Ramos R. et al.	Conferenc e Paper	2011	9780791854877
4	Low intensity ultrasound therapy transducer design employing piezocomposites	JULIAN BRAVO CASTILLERO Rodríguez O. Otero J.A. et al.	Conferenc e Paper	2004	0780385314

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PARTICIPACIÓN EN PROYECTOS

Histórico de participación en proyectos

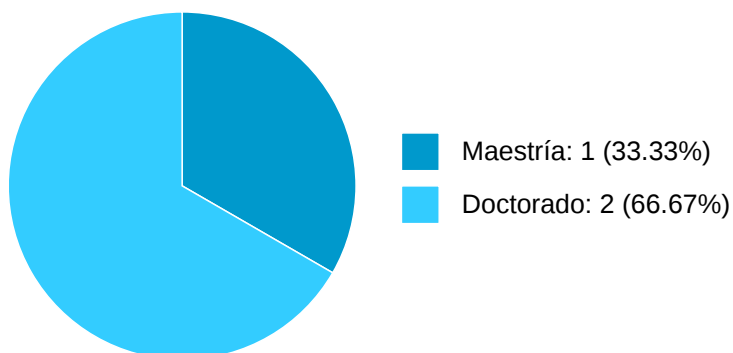


#	Nombre	Participantes	Fuente	Fecha inicio	Fecha fin
1	Homogeneización y cálculo de propiedades efectivas de materiales compuestos.	JULIAN BRAVO CASTILLERO FEDERICO JUAN SABINA CISCAR	Recursos PAPIIT	01-01-2019	31-12-2020
2	Homogeneización matemática y cálculo de leyes efectivas de materiales compuestos. Aplicaciones	JULIAN BRAVO CASTILLERO FEDERICO JUAN SABINA CISCAR	Recursos PAPIIT	01-01-2022	31-12-2024

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PARTICIPACIÓN EN TESIS

Histórico de Colaboraciones en Tesis

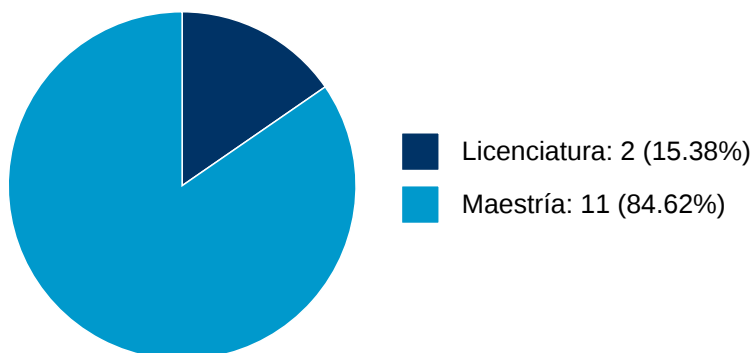


#	Título del documento	Tipo de Tesis	Sinodales	Autores	Entidad	Año
1	Homogeneización y cálculo de coeficientes efectivos de medios conductivos con múltiples escalas y contacto imperfecto entre las fases	Tesis de Doctorado	JULIAN BRAVO CASTILLERO,	Iglesias Rodríguez, Ernesto,	Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas,	2022
2	Homogeneización y coeficientes efectivos de compuestos periódicos bifásicos fibrosos con propiedades dieléctricas complejas	Tesis de Maestría	JULIAN BRAVO CASTILLERO,	Yañez Olmos, David,	Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas,	2022
3	Homogeneización de materiales compuestos periódicos termo-magneto-electro-elásticos	Tesis de Doctorado	JULIAN BRAVO CASTILLERO,	Caballero Pérez, Rogelio Oscar,	Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas,	2021

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DOCENCIA IMPARTIDA

Histórico de docencia



#	Nivel titulación	Asignatura	Entidad	Alumnos	Semestre
1	Maestría	TEMAS SELECTOS DE ECUACIONES DIFERENCIALES (ORDINARIAS Y PARCIALES) II INTRODUCCIÓN A LOS MÉTODOS ASINTÓTICOS Y DE HOMOGENEIZACIÓN. APLICACIONES II	Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas	1	2024-2
2	Maestría	TEMAS SELECTOS DE ECUACIONES DIFERENCIALES (ORDINARIAS Y PARCIALES) II INTRODUCCIÓN A LOS MÉTODOS ASINTÓTICOS Y DE HOMOGENEIZACIÓN. APLICACIONES	Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas	1	2024-1
3	Maestría	TEMAS SELECTOS DE ECUACIONES DIFERENCIALES (ORDINARIAS Y PARCIALES) II INTRODUCCIÓN A LOS MÉTODOS ASINTÓTICOS Y DE HOMOGENEIZACIÓN APLICACIONES II	Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas	1	2023-2
4	Maestría	TEMAS SELECTOS DE ECUACIONES DIFERENCIALES (ORDINARIAS Y PARCIALES) II INTRODUCCIÓN A LOS MÉTODOS ASINTÓTICOS Y DE HOMOGENEIZACIÓN. APLICACIONES	Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas	1	2023-1

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5	Maestría	INTRODUCCIÓN A LOS MEDIOS CONTINUOS	Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas	0	2022-2
6	Maestría	TEMAS SELECTOS DE SEÑALES, IMÁGENES Y AMBIENTES VIRTUALES	Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas	1	2022-2
7	Maestría	TEMAS SELECTOS DE SEÑALES, IMÁGENES Y AMBIENTES VIRTUALES (RECONOCIMIENTO DE PATRONES EN IMÁGENES MULTIMODALES)	Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas	2	2021-2
8	Maestría	TEMAS SELECTOS DE SISTEMAS CONTINUOS II METODOS ASINTOTICOS Y DE HOMOGENEIZACION. APLICACIONES	Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas	1	2021-2
9	Licenciatura	MATEMATICAS	ESCUELA NACIONAL DE ESTUDIOS SUPERIORES, UNIDAD MÉRIDA, YUCATÁN	13	2021-1
10	Maestría	TEMAS SELECTOS DE SEÑALES, IMÁGENES Y AMBIENTES VIRTUALES (APRENDIZAJE AUTOMÁTICO EN ROBÓTICA MÉDICA)	Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas	3	2020-2
11	Licenciatura	MATEMATICAS	ESCUELA NACIONAL DE ESTUDIOS SUPERIORES, UNIDAD MÉRIDA, YUCATÁN	9	2020-1
12	Maestría	TEMAS SELECTOS DE SEÑALES, IMÁGENES Y AMBIENTES VIRTUALES ANALISIS DE SISTEMAS EN TIEMPO-FRECUENCIA)	Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas	3	2020-1
13	Maestría	INTRODUCCIÓN A LA MECÁNICA ANALÍTICA	Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas	5	2017-2



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



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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