Elizaldo Domingues dos Santos

Curriculum Vitae

Main Links:

Curriculum Lattes (Brazil): http://lattes.cnpq.br/6854950768271660

ORCID: https://orcid.org/0000-0003-4566-2350

Scopus: https://www.scopus.com/authid/detail.uri?origin=resultslist&authorId=57388640600&zone=

ResearcherID: https://www.webofscience.com/wos/author/record/D-3652-2012

February - 2023

Elizaldo Domingues dos Santos
Curriculum Vitae

Personal Information

Born on June, 2, 1981
Brazilian
Professor
Married
2 children
Passport GG285018

Current professional adress

Graduate Program in Ocean Engineering
Graduate Program in Computational Modeling
Federal University of Rio Grande (FURG)
Av. Itália, km 8 – Carreiros
Rio Grande – RS, Brazil
Phone: +55 53 999702391
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Education

2011: Ph.D., Mechanical Engineering, Federal University of Rio Grande do Sul (UFRGS), Brazil
Title: Numerical Analysis of Non-Reactive Turbulent Flows with Convection and Thermal Radiation Heat Transfer

2007: M.Sc., Mechanical Engineering, Federal University of Rio Grande do Sul (UFRGS), Brazil
Title: Analysis of Non-isothermal and Incompressible Flows Using Large Eddy Simulation and the Finite Element Method

2004: B.Sc., Mechanical Engineering, Federal University of Rio Grande (FURG), Brazil
Title: Geometrical Optimization of Cooling Cavities Intruded into a Heat Generating Wall by means of Constructal Theory

2000: Industrial Design Technician, Federal Technical School of Pelotas (ETFPEL), Brazil

Research Areas

1. Convection Heat Transfer

2. Computational Fluid Dynamics

3. Geometrical Investigation

4. Numerical Approach of Turbulence

5. Wave and Wind Energy

6. Micro-Channel Heat Exchangers

Professional Experience:

2018 – Present: Associate Professor, School of Engineering, EE, FURG, Rio Grande, RS, Brazil

2012 – Present: Permanent Professor of Graduate Program in Ocean Engineering, FURG, Rio Grande, RS, Brazil

2011 – Present: Permanent Professor of Graduate Program in Computational Modeling, FURG, Rio Grande, RS, Brazil

2010 – Present: Professor of Undergraduate Courses of Mechanical Engineering, FURG, Rio Grande, RS, Brazil

2021 (Jul): Dean of Research and Graduate Programs, Pro-Rectory of Research and Graduate Programs, FURG, Rio Grande, RS, Brazil

2021 (Jan – Oct): Graduate Programs Director, Pro-Rectory of Research and Graduate Programs, FURG, Rio Grande, RS, Brazil

2019 - 2020: Vice Coordinator of Graduate Program of Ocean Engineering, FURG, Rio Grande, RS, Brazil

2017 - 2018: Graduate Programs Coordinator, Pro-Rectory of Research and Graduate Programs, FURG, Rio Grande, RS, Brazil

2015 - 2016: Coordinator of Graduate Program of Ocean Engineering, FURG, Rio Grande, RS, Brazil

2011 – 2017: Adjunct Professor, School of Engineering, EE, FURG, Rio Grande, RS, Brazil

2010 – 2011: Assistant Professor, School of Engineering, EE, FURG, Rio Grande, RS, Brazil

2007 – 2011: Doctoral student, Federal University of Rio Grande do Sul (UFRGS), Porto Alegre, RS, Brazil – Scholarship of Coordination of Superior Level Staff Improvement (CAPES)

2006 – 2007: Master's student, Federal University of Rio Grande do Sul (UFRGS), Porto Alegre, RS, Brazil – Scholarship of Coordination of Superior Level Staff Improvement (CAPES)

2005 (Mar – Nov): Staff Engineer, Sadia Concordia S/A – SADIA, Toledo, PR, Brazil

2004 – 2005: Trainee in Engineering, Brazilian Company of Compressors S/A (EMBRACO), Joinville, SC, Brazil

Awards:

2022: Research Productivity Scholarship – Level 1D of National Council for Scientific and Technological Development (CNPq) – Mechanical, Naval and Oceanic and Aerospace Engineering

2022: Paranymph Professor, Business Mechanical Engineering, Federal University of Rio Grande

2021: Highlighted Egress of Graduate Program of Mechanical Engineering (PROMEC) during the period 2000 – 2020 - Federal University of Rio Grande do Sul (UFRGS)

2021: Highlighted Egress of Graduate Programs of School of Engineering - Federal University of Rio Grande do Sul (UFRGS) - Award granted in the celebrations of 125 years of the School of Engineering of UFRGS

2021: Indicated to the *Gaúcho* Researcher Award by Federal University of Rio Grande in the

Engineering Area, Federal University of Rio Grande (FURG)

2020: Honored Professor, Mechanical Engineering, Federal University of Rio Grande

2019: Patron Professor, Business Mechanical Engineering, Federal University of Rio Grande

2019: Honored Professor, Mechanical Engineering, Federal University of Rio Grande

2019: Honored Professor, Naval Mechanical Engineering, Federal University of Rio Grande

2019: Outstanding Scientific Initiation Award, Engineering Area of XVIII University Production Exhibition, Federal University of Rio Grande. Title: Verification of Numerical Modeling of a Noozle based on Coanda Effect.

2018: Paranymph Professor, Mechanical Engineering, Federal University of Rio Grande

2018: Honored Professor, Naval Mechanical Engineering, Federal University of Rio Grande

2018: Research Productivity Scholarship – Level 1D of National Council for Scientific and Technological Development (CNPq) – Mechanical, Naval and Oceanic and Aerospace Engineering

2017: Honored Professor, Mechanical Engineering, Federal University of Rio Grande

2016: Outstanding Reviewer of Energy (Oxford) – Elsevier

2016: Honored Professor, Business Mechanical Engineering, Federal University of Rio Grande

2015: Honored Professor, Mechanical Engineering, Federal University of Rio Grande

2015: Research Productivity Scholarship – Level 2 of National Council for Scientific and Technological Development (CNPq) – Mechanical, Naval and Oceanic and Aerospace Engineering

2014: Paranymph Professor, Mechanical Engineering, Federal University of Rio Grande

2013: Honored Professor, Mechanical Engineering, Federal University of Rio Grande

2012: Paranymph Professor, Mechanical Engineering, Federal University of Rio Grande

2012: Outstanding Scientific Initiation Award, Engineering Area of XI University Production Exhibition, Federal University of Rio Grande. Work Title: Numerical Analysis of Mechanical Behavior of Composite Materials Plate.

2011: Honored Professor, Computational Engineering, Federal University of Rio Grande

2011: Outstanding Scientific Initiation Award, Engineering Area of X University Production Exhibition, Federal University of Rio Grande. Title: Numerical Study of the Influence of Chimney Placement over the Performance of an Oscillating Water Column Device.

2011: Outstanding Graduate Meeting, Engineering Area of XI University Production Exhibition, Federal University of Rio Grande. Title: Computational Modeling of an Oscillating Water Column Device.

2009: Outstanding Scientific Initiation Award of XXI Scientific Initiation Saloon, Federal University of Rio Grande do Sul.

2007: Doctorate Scholarship for Defense of Master Thesis in Record Time, Scholarship of Coordination of Superior Level Staff Improvement (CAPES).

1997: Development of the divulgation material for Entrance Tests in Federal Technical School of Pelotas (ETFPEL – Actually: Federal Institute of Science and Technology of Pelotas – RS), Pelotas, RS, Brazil

Lectures:

1. Invited speaker, Evaluation of Shape and Structure in Fluid Mechanics and Convection Heat Transfer Problems with Constructal Design (in portuguese), Design with Constructal Theory course, Graduate Program of Mechanical Engineering, Federal University of Rio Grande do Sul, Porto Alegre, RS, Brazil, 2022.

2. Invited speaker, Numerical Investigation of the Influence of an Auxiliary Wall in the Performance of a Solar Chimney Connected to a Room for Natural Ventilation. 19th Brazilian Congress of Thermal Sciences and Engineering, Bento Gonçalves, RS, Brazil, 2022.

3. Invited speaker, Development of an Eddy Current Brake Applied in Small Scale Wind Turbine Tests. 19th Brazilian Congress of Thermal Sciences and Engineering, Bento Gonçalves, RS, Brazil, 2022.

4. Invited speaker, Constructal Design Applied for Geometric Investigation in Engineering Problems, PhD in Mechanics and Advanced Engineering Sciences (DIMSAI), Department of Industrial Engineering, Bologna University, 2020.

5. Invited speaker, Employment of a Computational Modeling for Simulation of Convection Heat Transfer with Nucleate Pool Boiling, 18th Brazilian Congress of Thermal Sciences and Engineering, Online event, 2020.

6. Invited speaker, Constructal Theory Applied to Construction of Fins Arrangement Mounted in a Microchannel Subjected to Laminar Forced Convective Flows, 18th Brazilian Congress of Thermal Sciences and Engineering, Online event, 2020.

7. Invited speaker, Numerical Analysis of Construction of Empty Channels Inserted in Porous Medium Plate Comparing Two Different Boundary Conditions, 18th Brazilian Congress of Thermal Sciences and Engineering, Online event, 2020.

8. Invited speaker, Geometrical Evaluation of a Seabed Structure Coupled with an Onshore Overtopping Wave Energy Converter Applying Constructal Design, 18th Brazilian Congress of Thermal Sciences and Engineering, Online event, 2020.

9. Invited speaker, Geometrical Evaluation of Triangular Arrangement of Bluff Bodies with Different Aspect Ratios Subjected to Forced Convective Flows, Constructal Law & Second Law Conference (CLC 2019), Porto Alegre, Brazil, 2019.

10. Invited speaker, Indicators of Interdisciplinary area of CAPES and the Development of Self-Evaluation System in the Graduate Program of Ocean Engineering, Federal Institute of Paraná, Paranaguá, PR, Brazil, 2018.

11. Invited speaker, Application of Constructal Design for Geometrical Investigation of Transport Phenomena Problems, XV Academic Week of Engineering and Architecture Faculty, Passo Fundo University, Passo Fundo, 2016.

12. Invited speaker, Numerical Study of Resin Infusion Process for Different Configurations of Empty Inserted Channels. Brazilian Conference on Composite Materials (BCCM 3), Gramado, RS, Brazil, 2016.

13. Invited speaker, Geometrical Optimization of Mixed Convective Flows over Triangular Arrangement of Cylinders, 23rd International Congress of Mechanical Engineering, Rio de Janeiro, RJ, Brazil, 2015.

14. Invited speaker, Constructal Design of na Onshore Overtopping Device in Real Scale for Different Ramp Construction Areas, 23rd International Congress of Mechanical Engineering, Rio de Janeiro, RJ, Brazil, 2015.
15. Invited speaker, Numerical Study of Turbulent Forced Convective Jet Flows Employing Different Closure Models, 11th International Conference on Diffusion in Solids and Liquids (DSL), Munich, Germany, 2015.

16. Invited speaker, Improving Earth-Air Heat Exchangers Considering the Air Flow Velocity and Ducts Diameter, XXXV Ibero-Latin American Congresso n Computational Methods in Engineering, Fortaleza, CE, Brazil, 2014.

17. Invited speaker, Geometrical Optimization of Symmetric Fins Intruded into Forced Convective Lid-driven Cavity Flows, XXXV Ibero-Latin American Congresso n Computational Methods in Engineering, Fortaleza, CE, Brazil, 2014.

18. Invited speaker, Numerical Investigation of Turbulent Internal Flow with Combined Convective and Radiative Heat Transfer in a Participant Medium, 22nd International Congress of Mechanical Engineering, Ribeirão Preto, SP, Brazil, 2013.

19. Invited speaker, Constructal Design of a Vortex Tube for Several Inlet Stagnation Pressures, V Southern Conference in Computational Modeling, Rio Grande, RS, Brazil, 2012.

20. Invited speaker, Constructal Design of Two T-Shaped Assemblies of Fins Cooling a Cylindrical Solid Body, V Southern Conference in Computational Modeling, Rio Grande, RS, Brazil, 2012.

21. Invited speaker, Optimization of the Geometry of Electric Motors Fins by Means of Constructal Design, V Constructal Law Conference, Porto Alegre, RS, Brazil, 2011.

22. Invited speaker, Constructal Design of an Overtopping Wave Energy Converter, V Constructal Law Conference, Porto Alegre, RS, Brazil, 2011.

Professional Service:

1. Coordinator of Assessment Comittee of FAPERGS (Foundation for Research Support of the State of Rio Grande do Sul) in Engineering Area (2023 – Present)

2. Member of Carlos Chagas Committee (Evaluation of Research Projects), Pro-Rectory of Research and Graduate Programs - FURG (2022 – Present)

3. Member of the Committee of Naval and Ocean Engineering of the Brazilian Association of Mechanical Sciences (ABCM), Rio de Janeiro, RJ, Brazil (2021 – Present)

4. Member of Sucupira Committee (Evaluation of New Graduate Programs), Pro-Rectory of Research and Graduate Programs – FURG (2017 – Present)

5. Member of Brazilian Association of Mechanical Sciences (ABCM), Rio de Janeiro, RJ, Brazi (2014 – Present)l

6. Guest Editor of Journal of Marine Science and Engineering (2019 – 2020)

7. Member of Editorial Board of Revista Mundi Engenharia, Tecnologia e Gestão (2017 – Present)

8. Reviewer – Journal of Porous Media (2022 – Present)

9. Reviewer – Energies (MDPI) (2022 – Present)

10. Reviewer – Journal of Physics D (2021 – Present)

11. Reviewer – Journal of Applied and Computational Mechanics (2020 – Present)

12. Reviewer – International Communications in Heat and Mass Transfer (2020 – Present)

13. Reviewer – Journal of Building Engineering (2020 – Present)

14. Reviewer – Journal of Heat Transfer – Asian Research (2020 – Present)

15. Reviewer – European Journal of Mechanics B – Fluids (2019 – Present)

16. Reviewer – International Journal of Hydromechatronics (2019 – Present)

17. Reviewer – Renewable Energy (2018 – Present)

18. Reviewer – Regional Studies in Marine Science (2018 – Present)

19. Reviewer – Physical A – Statistical Mechanics and Its Applications (2018 – Present)

20. Reviewer – Applied Ocean Research (2018 – Present)

21. Reviewer – Journal of Cleaner Production (2018 – Present)

22. Reviewer – International Journal of Research on Engineering Structures & Materials (2018 – Present)

23. Reviewer – Applied Energy (2017 – Present)

24. Reviewer – International Journal of Thermal Sciences (2017 – Present)

25. Reviewer – International Journal of Fluid Mechanics Research (2016 – Present)

26. Reviewer – Journal of Aerospace Technology and Management (2016 – Present)

27. Reviewer – Acta Amazonica (2015 – Present)

28. Reviewer – International Journal of Engineering, Science and Technology (2015 – Present)

29. Reviewer – Journal of Heat Transfer – ASME (2014 – Present)

30. Reviewer – Journal of the Brazilian Society of Mechanical Sciences and Engineering (2014 – Present)

31. Reviewer – *Ingeniare. Revista Chilena de Ingenieria* (2014 – Present)

32. Reviewer – Energy (Oxford) (2013 – Present) - *Outstanding reviewer (2016)

33. Reviewer – Energy Conversion and Management (2012 – Present)

34. Reviewer – International Journal of Heat and Mass Transfer (2012 – Present)

35. Reviewer – *Revista Brasileira de Geofísica* (2011 – Present)

36. Reviewer of Scientific and Technological Projects for Superintendência de Ciência, Tecnologia e Ensino Superior do Estado do Paraná – SETI (2021 – Present)

37. Reviewer of Scientific and Technological Projects for Secretaria de Inovação, Ciência e Tecnologia do Rio Grande do Sul – SIST (2021 – Present)

38. Reviewer of Scientific and Technological Projects for National Council for Scientific and Technological Development (CNPq)

39. Reviewer of the 2nd ERANet-LAC Call

Production Indicators:

1. Total Papers: 284
2. Total Number of Complete Conference Works: 316
3. Doctorate Thesis Examination Boards: 23
4. Master's Thesis Advisory Boards: 102
5. Graduation Course Work Examination Boards: 68
6. Theses Supervisions: 2 Doctorate, 23 Master and 46 Graduation Works
7. Theses Co-supervisions: 4 Doctorate and 22 Master
8. Coordination of Financed Projects: 8 projects
9. Citations:

Web of Science
Total of citations: 1,395
Total of works: 102
h-index: 22

Scopus
Total of citations: 1,686
Total of works: 138
h-index: 24

Google Scholar
Total of citations: 3,204
Total of works: 492
h-index: 30
i-index: 85

Main Publications

Journal Publications

1. GONZALES, GILL VELLEDA ; BISERNI, CESARE ; DA SILVA DIAZ ESTRADA, EMANUEL ; PLATT, GUSTAVO MENDES ; ISOLDI, LIÉRCIO ANDRÉ ; ROCHA, LUIZ ALBERTO OLIVEIRA ; DA SILVA NETO, ANTÔNIO JOSÉ ; **DOS SANTOS, ELIZALDO DOMINGUES** . Investigation on the Association of Differential Evolution and Constructal Design for Geometric Optimization of Double Y-Shaped Cooling Cavities Inserted into Walls with Heat Generation. Applied Sciences-Basel, v. 13, p. 1998-30, 2023.

2. DE BARROS, ANDRÉIA S. ; FRAGASSA, CRISTIANO ; PAIVA, MAYCON DA S. ; ROCHA, LUIZ A. O. ; MACHADO, BIANCA N. ; ISOLDI, LIÉRCIO A. ; GOMES, MATEUS DAS N. ; **DOS SANTOS, ELIZALDO D.** . Numerical Study and Geometrical Investigation of an Onshore Overtopping Device Wave Energy Converter with a Seabed Coupled Structure. Journal of Marine Science and Engineering, v. 11, p. 412-20, 2023.

3. PINTO, V. T. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . Numerical analysis of stiffened plates subjected to transverse uniform load through the constructal design method. Engineering Solid Mechanics, v. 10, p. 99-108, 2022.

4. Razera, A. L. ; FONSECA, R. J. C. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. . A constructal approach applied to the cooling of semi-elliptical blocks assembled into a rectangular channel under forced convection. INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, v. 184, p. 122293, 2022.
Citações:4

5. KUCHARSKI, D. M. P. ; PINTO, V. T. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; FRAGASSA, C. ; ISOLDI, L. A. . GEOMETRIC ANALYSIS BY CONSTRUCTAL DESIGN OF STIFFENED STEEL PLATES UNDER BENDING WITH TRANSVERSE I-SHAPED OR T-SHAPED STIFFENERS. Facta Universitatis-Series Mechanical Engineering, v. 20, p. 617-632, 2022.

6. HALAL, Y. B. E. ; MARQUES, C. H. ; LEMOS, R. L. ; GUNES, U. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . Analysis of geometric and non-geometric parameters in a Coanda device for marine applications. OCEAN ENGINEERING, v. 244, p. 110337-12, 2022.

7. SANTOS, A. L. ; FRAGASSA, C. ; SANTOS, A. L. G. ; VIEIRA, R. S. ; ROCHA, L. A. O. ; CONDE, J. M. P. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . Development of a Computational Model for Investigation of Oscillating Water Column Device with Savonius Turbine. Journal of Marine Science and Engineering, v. 10, p. 79, 2022.

8. MARTINS, J. C. ; GOULART, M. M. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; GOMES, M. N. ; ROCHA, L. A. O. . Constructal Design of a Two Ramps Overtopping Wave Energy Converter Integrated into a Breakwater: Effect of the Vertical Distance between the Ramps over its Performance. DEFECT AND DIFFUSION FORUM, v. 420, p. 242-258, 2022.

9. da Silveira, T. ; BAUMGARDT, G.R. ; Rocha, L.A.O. ; **dos Santos, E.D.** ; ISOLDI, L.A. . Numerical Simulation and Constructal Design Applied to Biaxial Elastic Buckling of Plates of Composite Material used in Naval Structures. COMPOSITE STRUCTURES, v. 290, p. 115503, 2022.

10. MARTINS, JAIFER CORRÊA ; FRAGASSA, CRISTIANO ; GOULART, MARCELO MORAES ; **Dos Santos, Elizaldo Domingues dos** ; ISOLDI, LIÉRCIO ANDRÉ ; GOMES, MATEUS DAS NEVES ; ROCHA, LUIZ ALBERTO OLIVEIRA . Constructal Design of an Overtopping Wave Energy Converter Incorporated in a Breakwater. Journal of Marine Science and Engineering, v. 10, p. 471-28, 2022.

11. RODRIGUES, MICHEL KEPES ; VAZ, JOAQUIM ; OLIVEIRA ROCHA, LUIZ ALBERTO ; DOMINGUES **DOS SANTOS, ELIZALDO** ; ISOLDI, LIÉRCIO ANDRÉ . A full approach to Earth-Air Heat Exchanger employing computational modeling, performance analysis and geometric evaluation. RENEWABLE ENERGY, v. 191, p. 535-556, 2022.
Citações:2

12. SOARES, LAÍSA LUIZ ; BISERNI, CESARE ; DA ROSA COSTA, ROGER ; OLIVEIRA JÚNIOR, JOÃO AMÉRICO AGUIRRE ; **DOS SANTOS, ELIZALDO DOMI**NGUES ; GALARÇA, MARCELO MORAES . Numerical Study and Geometric Investigation of the Influence of Rectangular Baffles over the Mixture of Turbulent Flows into Stirred Tanks. Applied Sciences-Basel, v. 12, p. 4827-27, 2022.

13. HUBNER, R. G. ; FRAGASSA, C. ; PAIVA, M. S. ; PHELYPE HARON OLEINIK ; GOMES, M. N. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; MACHADO, B. N. ; ISOLDI, L. A. . Numerical Analysis of an Overtopping Wave Energy Converter Subjected to the Incidence of Irregular and Regular Waves from Realistic Sea States. Journal of Marine Science and Engineering, v. 10, p. 1084, 2022.

14. CRUZ, D. M. ; CRUZ JUNIOR, A. J. ; **Dos Santos, E. D.** . SIMULAÇÃO DE ESCOAMENTO EM CAVIDADE ABERTA COM GERAÇÃO DE CALOR SOB CONDIÇÕES PRESCRITAS. REVISTA DE ENGENHARIA E TECNOLOGIA, v. 14, p. 1-8, 2022.

15. FEIJO, B. C. ; FRAGASSA, C. ; TEIXEIRA, F. B. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . GEOMETRICAL INVESTIGATION OF COOLING CHANNELS WITH TWO ALTERNATED ISOTHERMAL BLOCKS UNDER FORCED CONVECTIVE TURBULENT FLOW. CONTINUUM MECHANICS AND THERMODYNAMICS, v. 34, p. 1687-1709, 2022.

16. BORAHEL, R. S. ; ZINANI, F. S. F. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; Biserni, C. . Geometric optimization of a rectangular isothermal block inside a lid-driven cavity by means of constructal design. INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, v. 139, p. 106499, 2022.

17. FEIJÓ, BRUNO COSTA ; PAVLOVIC, ANA ; ROCHA, LUIZ ALBERTO OLIVEIRA ; ISOLDI, LIÉRCIO ANDRÉ ; LORENTE, SYLVIE ; **DOS SANTOS, ELIZALDO DOMINGUES** . Geometrical investigation of microchannel with two trapezoidal blocks subjected to laminar convective flows with and without boiling.

Reports in Mechanical Engineering, v. 3, p. 20-36, 2022.

18. CISCO, L. A. ; MACIEL, R. P. ; OLEINIK, P. H. ; **Dos Santos, E. D.** ; GOMES, M. N. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; MACHADO, B. N. . Numerical Analysis of the Available Power in an Overtopping Wave Energy Converter Subjected to a Sea State of the Coastal Region of Tramandaí, Brazil. Fluids, v. 7, p. 359, 2022.

19. PINTO, V. T. ; CUNHA, M. L. ; MARTINS, K. L. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . BENDING OF STIFFENED PLATES CONSIDERING DIFFERENT STIFFENERS ORIENTATIONS. Magazine of Civil Engineering, v. 103, p. 10310-1-10310-24, 2021.

20. MOREIRA, R. S. M. ; ESCOBAR, C. C. ; ISOLDI, L. A. ; DAVESAC, R. R. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** . Numerical Study and Geometric Investigation of Corrugated Channels Subjected to Forced Convective Flows. Journal of Applied and Computational Mechanics, v. 7, p. 727-738, 2021.

21. da Silveira, T. ; PINTO, V. T. ; NEUFELD, J. P. S. ; PAVLOVIC, A. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . Applicability Evidence of Constructal Design in Structural Engineering: Case Study of Biaxial Elasto-Plastic Buckling of Square Steel Plates with Elliptical Cutout. Journal of Applied and Computational Mechanics, v. 7, p. 922-934, 2021.

22. GOMES, M. N. ; SALVADOR, H. ; MAGNO, F. ; RODRIGUES, A. A. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . Constructal Design Applied to Geometric Shapes Analysis of Wave Energy Converters. DEFECT AND DIFFUSION FORUM, v. 407, p. 147-160, 2021.

23. NOGUEIRA, CAROLINA MARTINS ; PINTO, VINÍCIUS TORRES ; ROCHA, LUIZ ALBERTO OLIVEIRA ; **SANTOS, ELIZALDO DOMINGUES DOS** ; ISOLDI, LIÉRCIO ANDRÉ . Numerical simulation and constructal design applied to plates with different heights of traverse and longitudinal stiffeners. Engineering Solid Mechanics, v. 9, p. 221-238, 2021.

24. TEIXEIRA, F.B. ; Biserni, C. ; CONDE, P.V. ; Rocha, L.A.O. ; ISOLDI, L.A. ; **dos Santos, E.D.** . Geometrical investigation of bluff bodies array subjected to forced convective flows for different aspect ratios of frontal body. INTERNATIONAL JOURNAL OF THERMAL SCIENCES, v. 161, p. 106724-106724-18, 2021.

25. DA SILVEIRA, T ; NEUFELD, J P S ; ROCHA, L A O ; **DOS SANTOS, E D** ; ISOLDI, L A . Numerical analysis of biaxial elasto-plastic buckling of perforated rectangular steel plates applying the Constructal Design method. IOP CONFERENCE SERIES: MATERIALS SCIENCE AND ENGINEERING (PRINT), v. 1048, p. 012017-012017-6, 2021.

26. LEMOS, R. L. ; MARQUES, C. H. ; HALAL, Y. B. E. ; **Dos Santos, E. D.** . Two novel marine thruster concepts based on the Coanda effect. MARINE SYSTEMS & OCEAN TECHNOLOGY (ONLINE), v. 16, p. 14-22, 2021.

27. GONZALES, G. V. ; Lorenzini, G. ; ISOLDI, L. A. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; SILVA NETO, A. J. . Constructal Design and Simulated Annealing applied to the geometric optimization of an isothermal Double T-shaped cavity. INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, v. 174, p. 121268-19, 2021.

28. RODRIGUES, GERUSA C. ; LORENZINI, GIULIO ; VICTORIA, LUCAS C. ; VAZ, IGOR S. ; ROCHA, LUIZ A.O. ; **DOS SANTOS, ELIZALDO D.** ; RODRIGUES, MICHEL K. ; ESTRADA, EMANUEL DA S.D. ; ISOLDI, LIÉRCIO A. . Constructal Design Applied to the Geometric Evaluation of a T-Shaped Earth-Air Heat Exchanger. INTERNATIONAL JOURNAL OF SUSTAINABLE DEVELOPMENT AND PLANNING: ENCOURAGING THE UNIFIED APPROACH TO ACHIEVE SUSTAINABILITY, v. 16, p. 207-217, 2021.

29. BAUMGARDT, GUILHERME RIBEIRO ; SILVEIRA, THIAGO DA ; LIMA, JOÃO PAULO ; ROCHA, LUIZ ALBERTO OLIVEIRA ; **SANTOS, ELIZALDO DOMINGUES DOS** ; ISOLDI, LIÉRCIO ANDRÉ . Verification of Finite Element Computational Model for Biaxial Buckling of Stiffened Plates. IOP Conference Series: Materials Science and Engineering, v. 1150, p. 012023-8, 2021.

30. NUNES, BRUNA RODRIGUES ; RODRIGUES, MICHEL KEPES ; OLIVEIRA ROCHA, LUIZ ALBERTO ;

LABAT, MATTHIEU ; LORENTE, SYLVIE **; SANTOS, ELIZALDO DOMINGUES** ; ISOLDI, LIÉRCIO ANDRÉ ; BISERNI, CESARE . Numerical-analytical study of earth-air heat exchangers with complex geometries guided by constructal design. International Journal of Energy Research, v. 45, p. er.7157-18, 2021.

31. MACHADO, B. N. ; OLEINIK, P. H. ; KIRINUS, E. P. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. ; GOMES, M. N. ; CONDE, J. M. P. ; ISOLDI, L. A. . WaveMIMO Methodology: Numerical Wave Generation of a Realistic Sea State. Journal of Applied and Computational Mechanics, v. 1, p. 1-20, 2021.

32. MACIEL, R. P. ; FRAGASSA, C. ; MACHADO, B. N. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; GOMES, M. N. ; ISOLDI, L. A. . VERIFICATION AND VALIDATION OF A METHODOLOGY TO NUMERICALLY GENERATE WAVES USING TRANSIENT DISCRETE DATA AS PRESCRIBED VELOCITY BOUNDARY CONDITION. Journal of Marine Science and Engineering, v. 9, p. 896-896-20, 2021.

33. LIMA, Y. T. B. ; GOMES, M. N. ; ISOLDI, L. A. **; Dos Santos, E. D.** ; Lorenzini, G. ; ROCHA, L. A. O. . Geometric Analysis through the Constructal Design of a Sea Wave Energy Converter with Several Coupled Hydropneumatic Chambers Considering the Oscillating Water Column Operating Principle. Applied Sciences-Basel, v. 11, p. 8630-25, 2021.

34. VICTORIA, L. C. ; VAZ, I. S. ; COSTI, J. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; Rodrigues, M. K. ; ISOLDI, L. A. . Estudo numérico de desempenho de trocadores de calor solo-ar em cidades do Rio Grande do Sul. *CIÊNCIA E NATURA*, v. 43, p. 1-12, 2021.

35. OLIVEIRA, MARLA RODRIGUES ; **SANTOS, ELIZALDO DOMINGUES** ; ISOLDI, LIÉRCIO ANDRÉ ; ROCHA, LUIZ ALBERTO OLIVEIRA ; GOMES, MATEUS DAS NEVES . Numerical and Geometrical Analysis of the Onshore Oscillating Water Column Wave Energy with a Ramp. DEFECT AND DIFFUSION FORUM, v. 412, p. 11-26, 2021.

36. CARRIR, F. L. C. ; Biserni, C. ; AGUIAR, D. B. ; **Dos Santos, E. D.** ; Acunha Jr, I.C. . Implementation of a Floating Head Pressure Condensation Control to Reduce Electrical Energy Consumption in an Industrial Refrigeration System. Applied Sciences-Basel, v. 11, p. 11923, 2021.

37. TEIXEIRA, F. B. ; ALTNETTER, M. V. ; Lorenzini, G. ; Rodriguez, B. D. do A. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . Geometrical Evaluation of a Channel with Alternated Mounted Blocksunder Mixed Convection Laminar Flows Using Constructal Design. Journal of Engineering Thermophysics, v. 29, p. 92-113, 2020.

38. FRAGASSA, C. ; BABIC, M. ; **Dos Santos, E. D.** . Machine Learning Approaches to Predict the Hardness of Cast Iron. Tribology in Industry, v. 42, p. 1-9, 2020.

39. LIMA, JOÃO PAULO SILVA ; CUNHA, MARCELO LANGHINRICHS ; **DOS SANTOS, ELIZALDO DOMINGUES** ; ROCHA, LUIZ ALBERTO OLIVEIRA ; REAL, MAURO DE VASCONCELLOS ; ISOLDI, LIÉRCIO ANDRÉ . Constructal Design for the ultimate buckling stress improvement of stiffened plates submitted to uniaxial compressive load. ENGINEERING STRUCTURES, v. 203, p. 109883-109883-16, 2020.

40. HERMES, V.F. ; RAMALHO, J.V.A. ; Rocha, L.A.O. ; **dos Santos, E.D.** ; MARQUES, W.C. ; COSTI, J. ; RODRIGUES, M.K. ; ISOLDI, L.A. . Further realistic annual simulations of earth-air heat exchangers installations in a coastal city. Sustainable Energy Technologies and Assessments, v. 37, p. 100603-100603-11, 2020.

41. PEDROTI, V.A. ; DE ESCOBAR, C.C. ; **dos Santos, E.D.** ; SOUZA, J.A. . Thermal analysis of tubular arrangements submitted to external flow using constructal theory. INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, v. 111, p. 104458-104458-12, 2020.

42. TROINA ; CUNHA ; PINTO ; ROCHA ; **SANTOS, E.D.** ; FRAGASSA ; ISOLDI . Computational Modeling and Constructal Design Theory Applied to the Geometric Optimization of Thin Steel Plates with Stiffeners Subjected to Uniform Transverse Load. Metals, v. 10, p. 220-249, 2020.
Citações:11

43. ESTRADA, E.S.D. ; BARRETO, E.X. ; ISOLDI, L.A. ; **dos Santos, E.D.** ; Lorente, S. ; Rocha, L.A.O. .

Constructal design of tree shaped cavities inserted into a cylindrical body with heat generation. INTERNATIONAL JOURNAL OF THERMAL SCIENCES, v. 152, p. 106342-106342-10, 2020.

44. MAGALHÃES, G. M. C. ; FRAGASSA, C. ; LEMOS, R. L. ; ISOLDI, L. A. ; Amico, A. C. ; ROCHA, L. A. O. ; Souza, J. A. ; **Dos Santos, E. D.** . Numerical Analysis of the Influence of Empty Channels Design on Performance of Resin Flow in a Porous Plate. Applied Sciences-Basel, v. 10, p. 4054-1-4054-20, 2020.

45. MARTINS, KAUÊ LOURO ; SILVA, RAFAEL BRUNO DA ; SILVESTRE, GEORGE MAXIMIANO ; PINTO, VINÍCIUS TORRES ; **SANTOS, ELIZALDO DOMINGUES DOS** ; ISOLDI, LIÉRCIO ANDRÉ ; ROCHA, LUIZ ALBERTO OLIVEIRA . Constructal design applied to geometrical analysis of a triangular arrangement of H-Darrieus wind turbines. International Journal of Hydromechatronics, v. 3, p. 155-166, 2020.

46. PINTO, VINÍCIUS TORRES ; CUNHA, MARCELO LANGHINRICHS ; MARTINS, KAUÊ LOURO ; ROCHA, LUIZ ALBERTO OLIVEIRA ; REAL, MAURO DE VASCONCELLOS ; **SANTOS, ELIZALDO DOMINGUES DOS** ; ISOLDI, LIÉRCIO ANDRÉ . Geometric evaluation of steel plates subjected to uniform transverse load with rectangular or trapezoidal stiffeners by means constructal design method. International Journal of Hydromechatronics, v. 3, p. 190-198, 2020.

47. RODRIGUES, P.M. ; Biserni, C. ; DE ESCOBAR, C.C. ; Rocha, L.A.O. ; ISOLDI, L.A. ; **dos Santos, E.D.** . Geometric optimization of a lid-driven cavity with two rectangular intrusions under mixed convection heat transfer: A numerical investigation motivated by constructal design. INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, v. 117, p. 104759-14, 2020.

48. PORTELA JUNIOR, MILTON CESAR BASTOS ; PINTO, VINÍCIUS TORRES ; ROCHA, LUIZ ALBERTO OLIVEIRA ; **DOS SANTOS, ELIZALDO DOMINGUES** ; ISOLDI, LIÉRCIO ANDRÉ . ANALYSIS THROUGH CONSTRUCTAL DESIGN OF THE INFLUENCE OF SPACING BETWEEN STIFFENERS IN THE DEFLECTION OF PLATES. *REVISTA MUNDI ENGENHARIA, TECNOLOGIA E GESTÃO*, v. 5, p. 1-21, 2020.

49. AMARAL, RODRIGO R. ; TROINA, GRÉGORI S. ; FRAGASSA, CRISTIANO ; PAVLOVIC, ANA ; CUNHA, MARCELO L. ; ROCHA, LUIZ A.O. ; **DOS SANTOS, ELIZALDO D.** ; ISOLDI, LIÉRCIO A. . Constructal design method dealing with stiffened plates and symmetry boundaries. THEORETICAL & APPLIED MECHANICS LETTERS, v. 10, p. 366-376, 2020.

50. MARTINS, KAUÊ LOURO ; ISOLDI, LIÉRCIO ANDRÉ ; CUNHA, MARCELO LANGHINRICHS ; ROCHA, LUIZ ALBERTO OLIVEIRA ; PINTO, VINÍCIUS TORRES ; **DOS SANTOS, ELIZALDO DOMINGUES** . *SIMULAÇÃO NUMÉRICA E MÉTODO DESIGN CONSTRUTAL APLICADOS À ANÁLISE GEOMÉTRICA DE PLACAS DE AÇO COM ENRIJECEDORES RETANGULARES OU TRAPEZOIDAIS*. *REVISTA SUL-AMERICANA DE ENGENHARIA ESTRUTURAL (ONLINE)*, v. 17, p. 61-76, 2020.

51. CUNHA, MARCELO LANGHINRICHS ; ESTRADA, EMANUEL DA SILVA DIAZ ; LIMA, JOÃO PAULO SILVA ; TROINA, GRÉGORI DA SILVA ; **SANTOS, ELIZALDO DOMINGUES** ; ISOLDI, LIÉRCIO ANDRÉ . Constructal design associated with genetic algorithm to minimize the maximum deflection of thin stiffened steel plates. Heat Transfer, v. 49, p. 4040-4055, 2020.

52. VICTORIA, LUCAS COSTA ; HERMES, VINICIUS DE FREITAS ; VAZ, JOAQUIM ; COSTI, JULIANA ; MARQUES, WILLIAM CORREA ; ROCHA, LUIZ ALBERTO OLIVEIRA ; **SANTOS, ELIZALDO DOMINGUES DOS** ; RODRIGUES, MICHEL KEPES ; BISERNI, CESARE ; ISOLDI, LIÉRCIO ANDRÉ . Methodology Allying Standard Penetration Test and Era-Interim Data Set for Numerical Simulations of Earth-Air Heat Exchangers. Journal of Advanced Research in Fluid Mechanics and Thermal Sciences, v. 76, p. 43-64, 2020.

53. MARTINS, K. L. ; PINTO, V. T. ; FRAGASSA, C. ; REAL, M. V. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . A Simplified Numerical Method for the Design and Analysis of FPSO Platform Brackets Subjected to Operational Conditions. Journal of Marine Science and Engineering, v. 8, p. 929-929-17, 2020.

54. PINTO, V. T. ; ROCHA, L. A. O. ; FRAGASSA, C. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . Multiobjective Geometric Analysis of Stiffened Plates under Bending through Constructal Design Method. Journal of Applied and Computational Mechanics, v. 6, p. 1438-1449, 2020.

55. LETZOW, MAX ; LORENZINI, GIULIO ; BARBOSA, DANTE VINÍCIUS ELOY ; HÜBNER, RICARDO GABRIEL ; ROCHA, LUIZ ALBERTO OLIVEIRA ; GOMES, MATEUS DAS NEVES ; ISOLDI, LIÉRCIO ANDRÉ ; **DOS SANTOS, ELIZALDO DOMINGUES** . Numerical Analysis of the Influence of Geometry on a Large Scale Onshore Oscillating Water Column Device with Associated Seabed Ramp. International Journal of Design & Nature and Ecodynamics, v. 15, p. 873-884, 2020.

56. OLIVEIRA, M. R. ; ISOLDI, L. A. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; GOMES, M. N. . *Avaliação numérica e geométrica do efeito da inserção de um anteparo triangular na parede frontal de um conversor de energia das ondas do mar do tipo Coluna de Água Oscilante. REVISTA INTERDISCIPLINAR DE PESQUISA EM ENGENHARIA*, v. 6, p. 44, 2020.

57. Rodrigues, P. M. ; ALDRIGHI, E. S. ; PROLO FILHO, J. F. ; ISOLDI, L. A. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** . GEOMETRICAL EVALUATION OF RECTANGULAR FIN MOUNTED IN LATERAL SURFACE OF LID-DRIVEN CAVITY FORCED CONVECTIVE FLOWS. *ENGENHARIA TÉRMICA*, v. 18, p. 98-106, 2019.

58. BARBOSA, DANTE V. ELOY ; SANTOS, ANDREI LUÍS G. ; **DOS SANTOS, ELIZALDO D.** ; SOUZA, JEFERSON A. . Overtopping device numerical study: Openfoam solution verification and evaluation of curved ramps performances. INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, v. 131, p. 411-423, 2019.

59. DE QUEIROZ, JOÃO ; CUNHA, MARCELO ; PAVLOVIC, ANA ; ROCHA, LUIZ ; **DOS SANTOS, ELIZALDO** ; TROINA, GRÉGORI ; ISOLDI, LIÉRCIO . Geometric Evaluation of Stiffened Steel Plates Subjected to Transverse Loading for Naval and Offshore Applications. Journal of Marine Science and Engineering, v. 7, p. 7-19, 2019.

60. GOMES, MATEUS DAS NEVES ; DE DEUS, MATHEUS JOSÉ ; **DOS SANTOS, ELIZALDO DOMINGUES** ; ISOLDI, LIÉRCIO ANDRÉ . Analysis of the Geometric Constraints Employed in Constructal Design for Oscillating Water Column Devices Submitted to the Wave Spectrum through a Numerical Approach. DEFECT AND DIFFUSION FORUM, v. 390, p. 193-210, 2019.

61. EL HALAL, YOUSSEF ; MARQUES, CRÍSTOFER ; ROCHA, LUIZ ; ISOLDI, LIÉRCIO ; LEMOS, RAFAEL ; FRAGASSA, CRISTIANO ; **DOS SANTOS, ELIZALDO** . Numerical Study of Turbulent Air and Water Flows in a Nozzle Based on the Coanda Effect. Journal of Marine Science and Engineering, v. 7, p. 21-21-13, 2019.

62. BRUM, RUTH S. ; RAMALHO, JAIRO V.A. ; RODRIGUES, MICHEL K. ; ROCHA, LUIZ A.O. ; ISOLDI, LIÉRCIO A. ; **DOS SANTOS, ELIZALDO D.** . Design evaluation of Earth-Air Heat Exchangers with multiple ducts. RENEWABLE ENERGY, v. 135, p. 1371-1385, 2019.

63. AMARAL, R. R. ; TROINA, G. S. ; CUNHA, M. L. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . *Verificação de modelo computacional para placas com enrijecedores considerando condição de contorno de simetria. REVISTA INTERDISCIPLINAR DE PESQUISA EM ENGENHARIA*, v. 5, p. 76-84, 2019.

64. RODRIGUES, L. ; AGHENESE, A. P. ; **Dos Santos, E. D**. ; ISOLDI, L. A. ; ROCHA, L. A. O. ; GOMES, M. N. . *Análise da discretização temporal para a simulação numérica de um espectro de ondas do tipo Pierson-Moskowitz. REVISTA INTERDISCIPLINAR DE PESQUISA EM ENGENHARIA*, v. 5, p. 108-120, 2019.

65. HERMES, V. F. ; COSTI, J. ; MARQUES, W. C. ; ROCHA, L. A. O. ; **Dos Santos, E. D**. ; Rodrigues, M. K. ; ISOLDI, L. A. . *Estudo numérico de trocador de calor solo-ar considerando variação anual realística de temperatura do ar e da superfície do solo em região da Universidade Federal do Rio Grande - FURG. REVISTA INTERDISCIPLINAR DE PESQUISA EM ENGENHARIA*, v. 5, p. 121-128, 2019.

66. HALAL, Y. B. E. ; MARQUES, C. H. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; LEMOS, R. L. **; Dos Santos, E. D.** . *Desenvolvimento de um modelo numérico para a predição de um escoamento em bocal do tipo H.O.M.E.R.. REVISTA INTERDISCIPLINAR DE PESQUISA EM ENGENHARIA*, v. 5, p. 129-137, 2019.

67. PICANCO, C. E. P. ; OLIVEIRA, D. M. ; CUNHA, M. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; ROCHA, L. A.

O. ; GOMES, M. N. . *Aplicação de design construtal para a análise geométrica de um dispositivo coluna de água oscilante no formato de duplo trapézio submetido a ondas regulares. REVISTA INTERDISCIPLINAR DE PESQUISA EM ENGENHARIA*, v. 5, p. 186-194, 2019.

68. CAMARGO RODRIGUES, GERUSA ; KEPES RODRIGUES, MICHEL ; ALBERTO OLIVEIRA ROCHA, LUIZ ; **DOMINGUES DOS SANTOS, ELIZALDO** ; DA SILVA DIAZ ESTRADA, EMANUEL ; ANDRÉ ISOLDI, LIÉRCIO . *Simulação Numérica e Método Constructal Design Aplicados à Avaliação Geométrica de um Trocador de Calor Solo-Ar com Formato T. REVISTA CEREUS*, v. 11, p. 65-80, 2019.

69. FAGUNDES, T. M. ; Lorenzini, G. ; Estrada, E. da S. D. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. ; DA SILVA NETO, A. J. . Constructal Design of Conductive Asymmetric Tri-Forked Pathways. Journal of Engineering Thermophysics, v. 28, p. 26-42, 2019.

70. SEIBT, F. M. ; CAMARGO, F. V. ; **Dos Santos, E. D**. ; GOMES, M. N. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; FRAGASSA, C. . Numerical evaluation on the efficiency of the submerged horizontal plate type wave energy converter. FME Transactions, v. 47, p. 543-551, 2019.

71. LEMOS, R. L. ; MARQUES, C. H. ; ROCHA, L. A. ; ISOLDI, L. A. ; **Santos, E. D. dos** . PHENOMENOLOGICAL ANALYSIS OF A CONCEPTUAL WATERJET PROPULSOR BASED ON THE COANDA EFFECT. *ENGENHARIA TÉRMICA*, v. 18, p. 03-09, 2019.

72. AGHENESE, A. P. D. ; TEIXEIRA, F. B. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; PROLO FILHO, J. F. ; **Santos, E. D. dos** . GEOMETRIC EVALUATION OF FOUR STAGGERED CYLINDERS ARRAY SUBJECTED TO FORCED CONVECTIVE FLOWS BY MEANS OF CONSTRUCTAL DESIGN. *ENGENHARIA TÉRMICA*, v. 18, p. 57-63, 2019.

73. PINTO JR, E. A. ; GOMES, M. DAS N. ; ROCHA, L. A. O. ; **Santos, E. D. dos** ; ISOLDI, L. A. . EVALUATION OF STATIC PRESSURE BEHAVIOR IN AN OSCILLATING WATER COLUMN WAVE ENERGY CONVERTER. *ENGENHARIA TÉRMICA*, v. 18, p. 36-42, 2019.

74. HUBNER, R. G. ; OLEINIK, P. H. ; MARQUES, W. C. ; GOMES, M. N. ; Dos Santos, E. D. ; MACHADO, B. N. ; ISOLDI, L. A. . NUMERICAL STUDY COMPARING THE INCIDENCE INFLUENCE BETWEEN REALISTIC WAVE AND REGULAR WAVE OVER AN OVERTOPPING DEVICE. *ENGENHARIA TÉRMICA*, v. 18, p. 46-49, 2019.

75. MARTINS, J. C. ; GOULART, M. M. ; ISOLDI, L. A. ; **Santos, E. D. dos** ; GOMES, M. N. ; ROCHA, L. A. O. . GEOMETRIC EVALUATION USING CONSTRUCTAL DESIGN OF A COASTAL OVERTOPPING DEVICE WITH DOUBLE RAMP CONSIDERING A REGULAR WAVE AND TIDAL VARIATION. *ENGENHARIA TÉRMICA*, v. 18, p. 64-70, 2019.

76. SANTOS, A. L. DOS ; ISOLDI, L. A. ; ROCHA, L. A. O. ; GOMES, M. N. ; VIERA, R. S. ; **Santos, E. D. dos** . DEVELOPMENT OF A NUMERICAL MODEL FOR THE STUDY OF AN OSCILLATING WATER COLUMN DEVICE CONSIDERING AN IMPULSE TURBINE. *ENGENHARIA TÉRMICA*, v. 18, p. 99-105, 2019.

77. MARTINS, J. C. ; GOULART, M. M. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; GOMES, M. N. ; ROCHA, L. A. O. . *Comparação entre dispositivos de galgamento costeiro com rampa única e com rampa dupla empregando espectro de ondas e design construtal. SCIENTIA PLENA*, v. 15, p. 049902 ? 1-049902 ? 9, 2019.

78. NOGUEIRA, C. M. ; CUNHA, M. L. ; AMARAL, R. R. ; TROINA, G. S. ; LIMA, J. P. S. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . *Simulação numérica e design construtal aplicados a placas com enrijecedores com diferentes relações altura/espessura. SCIENTIA PLENA*, v. 15, p. 049906 ? 1-049906 ? 9, 2019.

79. SOARES, L. L. ; GALARCA, M. M. ; **Dos Santos, E. D.** ; OLIVEIRA JUNIOR, J. A. A. . *Comparação entre o modelo de malha móvel e o modelo de fonte de quantidade de movimento para a simulação numérica do princípio de funcionamento de tanques misturadores. SCIENTIA PLENA*, v. 15, p. 049907 ? 1-049907 ? 9, 2019.

80. GOMES, M. N. ; LIMA, Y. T. B. ; ROCHA, L. A. O. ; **Dos Santos, E. D**. ; ISOLDI, L. A. . *Investigação*

numérica da descontinuidade geométrica entre a entrada e a saída de um conversor de energia das ondas do mar do tipo coluna de água oscilante. SCIENTIA PLENA, v. 15, p. 049908 ? 1-049908 ? 10, 2019.

81. Razera, A. L. ; FRAGA, G. ; HORN, H. H. ; HIRT, T. A. ; ZINANI, F. F. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. . *Design construtal de uma cavidade aletada em forma de `E? para refrigeração de um corpo gerador de calor. SCIENTIA PLENA*, v. 15, p. 049909? 1-049909? 9, 2019.

82. DEUS, M. J. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. ; GOMES, M. N. . *Análise numérica da profundidade de submersão de um dispositivo coluna de água oscilante submetido à incidência de um espectro de ondas do tipo Pierson-Moskowitz. SCIENTIA PLENA*, v. 15, p. 049910 ? 1-049910 ? 9, 2019.

83. BARROS, A. S. ; PINTO JUNIOR, E. A. ; SANTOS, D. B. ; SELL JUNIOR, F. K. ; HUBNER, R. G. ; RODRIGUES, G. C. ; AGHENESE, A. P. ; DUTRA, C. M. B. ; TEIXEIRA, T. A. ; **Dos Santos, E. D.** . *Design Construtal aplicado a um caminho condutivo em forma de seta inserido em um sólido com geração de calor. SCIENTIA PLENA*, v. 15, p. 049911? 1-049911? 10, 2019.

84. KISNER, E. V. ; MACHADO, B. N. ; Dos Santos, E. D. ; ROCHA, L. A. O. ; GOMES, M. N. ; ISOLDI, L. A. . *Proposta de malha Stretched para ser utilizada com o método de imposição de dados discretos como condição de contorno de velocidade prescrita na geração numérica de ondas. SCIENTIA PLENA*, v. 15, p. 049919 ? 1-049919 ? 9, 2019.

85. DA SILVA, CAIO CÉSAR CARDOSO ; HELBIG, DANIEL ; CUNHA, MARCELO LANGHINRICHS ; **DOS SANTOS, ELIZALDO DOMINGUES** ; ROCHA, LUIZ ALBERTO OLIVEIRA ; REAL, MAURO DE VASCONCELLOS ; ISOLDI, LIÉRCIO ANDRÉ . Numerical buckling analysis of thin steel plates with centered hexagonal perforation through constructal design method. Journal of the Brazilian Society of Mechanical Sciences and Engineering, v. 41, p. 1-18, 2019.

86. AGHENESE, A. P. ; HEINEMANN, E. M. ; BARRETO, G. A. ; TEIXEIRA, F. B. ; ISOLDI, L. A. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** . Geometrical Evaluation of a Pair of Elliptical Tubes Subjected to a Flow with Forced Convection Heat Transfer. DEFECT AND DIFFUSION FORUM, v. 396, p. 155-163, 2019.

87. GONZALES, G. V. ; ISOLDI, L. A. ; ROCHA, L. A. O. ; SILVA NETO, A. J. ; **Dos Santos, E. D.** . Evaluation of a Differential Evolution/Constructal Design Algorithm for Geometrical Optimization of Double T-Shaped Cavity Intruded into a Heat Generating Wall. DEFECT AND DIFFUSION FORUM, v. 396, p. 145-154, 2019.

88. Rodrigues, P. M. ; ESCOBAR, C. C. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . Geometry Evaluation of Heat Transfer by Mixed Convention in Driven Cavities with Two Inserted Fins. DEFECT AND DIFFUSION FORUM, v. 396, p. 164-173, 2019.

89. LIMA, Y. T. B. ; GOMES, M. N. ; CARDOZO, C. F. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. . Analysis of Geometric Variation of Three Degrees of Freedom through the Constructal Design Method for a Oscillating Water Column Device with Double Hidropneumatic Chamber. DEFECT AND DIFFUSION FORUM, v. 396, p. 22-31, 2019.

90. OLIVEIRA, D. M. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. ; GOMES, M. N. . Ocean Wave Energy as a Possible Power Source for the Brazilian Energy Matrix. DEFECT AND DIFFUSION FORUM, v. 396, p. 70-78, 2019.

91. CUNHA, M. L. ; Estrada, E. da S. D. ; TROINA, G. S. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. ; ISOLDI, L. A. . Verification of a genetic algorithm for the optimization of stiffened plates through the constructal design method. Research on Engineering Structures and Materials, v. 5, p. 437-446, 2019.

92. MARTINS, K. L. ; PINTO, V. T. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . Numerical evaluation of the mechanical behavior of an FPSO mooring system fairleads foundations due to maximum environmental loads. Research on Engineering Structures and Materials, v. 5, p. 355-366, 2019.

93. PINTO, V. T. ; CUNHA, M. L. ; TROINA, G. S. ; MARTINS, K. L. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . Constructal design applied to geometrical evaluation of rectangular plates with inclined stiffeners subjected to uniform transverse load. Research on Engineering Structures and Materials, v. 5, p.

379-392, 2019.

94. AMARAL, R. R. ; TROINA, G. S. ; NOGUEIRA, C. M. ; CUNHA, M. L. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . Computational Modeling and Constructal Design Method Applied to the Geometric Evaluation of Stiffened Thin Steel Plates Considering Symmetry Boundary Condition. Research on Engineering Structures and Materials, v. 5, p. 393-402, 2019.

95. FRAGASSA ; **DOMINGUES DOS SANTOS** ; VANNUCCHI DE CAMARGO . Use of Engineering Mathematics for Ship Design. Journal of Marine Science and Engineering, v. 7, p. 370-371, 2019.

96. RAZERA, A.L. ; QUEZADA, L.A. ; FAGUNDES, T.M. ; ISOLDI, L.A. ; **dos Santos, E.D**. ; Biserni, C. ; Rocha, L.A.O. . Fluid flow and heat transfer maximization of elliptic cross- section tubes exposed to forced convection: A numerical approach motivated by Bejan's theory. INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, v. 109, p. 104366-104366-9, 2019.

97. LIMA, J. P. S. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; REAL, M. V. ; ISOLDI, L. A. . Constructal design applied to stiffened steel plates submitted to elasto-plastic buckling. Proceedings of the Romanian Academy Series A-Mathematics Physics Technical Sciences Information Science, v. 19, p. 195-200, 2018.

98. Razera, A. L. ; Errera, M. R. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . CONSTRUCTAL NETWORK OF SCIENTIFIC PUBLICATIONS, CO-AUTHORSHIP AND CITATIONS. Proceedings of the Romanian Academy Series A-Mathematics Physics Technical Sciences Information Science, v. 19, p. 105-110, 2018.

99. HERMANY, L. ; Lorenzini, G. ; KLEIN, R.J. ; ZINANI, F.F. ; **dos Santos, E.D.** ; ISOLDI, L.A. ; Rocha, L.A.O. . Constructal design applied to elliptic tubes in convective heat transfer cross-flow of viscoplastic fluids. INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, v. 116, p. 1054-1063, 2018.

100. MARTINS, J.C. ; GOULART, M.M. ; GOMES, M. DAS N. ; SOUZA, J.A. ; Rocha, L.A.O. ; ISOLDI, L.A. ; **dos Santos, E.D.** . Geometric Evaluation of the main Operational Principle of an Overtopping Wave Energy Converter By means of constructal design. RENEWABLE ENERGY, v. 118, p. 727-741, 2018.

101. VIANNA, J. C. B. ; Estrada, E. da S. D. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; Souza, J. A. . A new Constructal Theory based algorithm applied to thermal problems. INTERNATIONAL JOURNAL OF THERMAL SCIENCES, v. 126, p. 118-124, 2018.

102. DA SILVA, C. C. C. ; Helbig, D. ; LIMA, J. P. S. ; REAL, M. V. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. ; ISOLDI, L. A. . *SIMULAÇÃO NUMÉRICA E MÉTODO DESIGN CONSTRUTAL APLICADOS AO ESTUDO DE FLAMBAGEM EM PLACAS DE AÇO COM PERFURAÇÃO HEXAGONAL. PERSPECTIVAS ONLINE*, v. 8, p. 64-77, 2018.

103. LIMA, J. P. S. ; RAMOS, A. P. ; RIBEIRO, B. Z. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. ; REAL, M. V. ; ISOLDI, L. A. . *APLICAÇÃO DO MÉTODO DESIGN CONSTRUTAL NA ANÁLISE DE TUBOS PERFURADOS SOB FLAMBAGEM. PERSPECTIVAS ONLINE*, v. 8, p. 89-102, 2018.

104. LEMOS, R. L. ; ROCHA, L. A. O. ; VIEIRA, R. S. ; PEREIRA, M. S. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . *SIMULAÇÃO DE ESCOAMENTO COM EFEITO COANDA SOBRE PERFIS HIDRODINÂMICOS. PERSPECTIVAS ONLINE*, v. 8, p. 103-115, 2018.

105. MICHAELLO, R. S. ; PAES, J. R. S. ; ISOLDI, L. A. ; BASTOS, R. G. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. . *PERFIS PERFURADOS SUBMETIDOS À FLAMBAGEM TÉRMICA E MECÂNICA. PERSPECTIVAS ONLINE*, v. 8, p. 116-126, 2018.

106. FOLZKE, E. G. G. ; da Silveira, T. ; LIMA, J. P. S. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; REAL, M. V. ; ISOLDI, L. A. . NUMERICAL SIMULATION AND CONSTRUCTAL DESIGN APPLIED TO THE STUDY OF ELASTIC BUCKLING IN THIN STEEL PLATES WITH OBLONG PERFORATIONS. *PERSPECTIVAS ONLINE*, v. 8, p. 127-138, 2018.

107. GOMES, M. N. ; Lorenzini, G. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . Constructal Design Applied to the Geometric Evaluation of an Oscillating Water Column Wave Energy Converter

Considering Different Real Scale Wave Periods. Journal of Engineering Thermophysics, v. 27, p. 173-190, 2018.

108. RAMALHO, JAIRO VALÕES DE ALENCAR ; BRUM, RUTH DA SILVA ; ROCHA, LUIZ ALBERTO OLIVEIRA ; ISOLDI, LIÉRCIO ANDRÉ ; **SANTOS, ELIZALDO DOMINGUES DOS** ; SULZBACHER, MARIANE . Fitting new constructal models for the thermal potential of earth-air heat exchangers. ACTA SCIENTIARUM. TECHNOLOGY (ONLINE), v. 40, p. 30897-30897-8, 2018.

109. FEIJO, B. C. ; Lorenzini, G. ; ISOLDI, L. A. ; ROCHA, L. A. O. ; GOULART, J. N. V. ; **Dos Santos, E. D.** . Constructal design of forced convective flows in channels with two alternated rectangular heated bodies. INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, v. 125, p. 710-721, 2018.

110. TEIXEIRA, F. B. ; Lorenzini, G. ; Errera, M. R. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . Constructal Design of triangular arrangements of square bluff bodies under forced convective turbulent flows. INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, v. 126, p. 521-535, 2018.

111. TEIXEIRA, FILIPE BRANCO ; SANTOS, ANDREI LUÍS GARCIA ; ROCHA, LUIZ ALBERTO OLIVEIRA ; ISOLDI, LIÉRCIO ANDRÉ ; **DOS SANTOS, ELIZALDO DOMINGUES** . MESHING STRATEGY EVALUATION FOR A SQUARE SHAPED BLUFF BODY UNDER HIGH REYNOLDS NUMBER CROSS FLOW. *Revista Mundi Engenharia, Tecnologia e Gestão* (ISSN: 2525-4782), v. 3, p. 70-1-70-16, 2018.

112. VELLEDA GONZALES, GILL ; **DOMINGUES DOS SANTOS, ELIZALDO** ; SILVA NETO, ANTÔNIO JOSÉ . *UMA COMPARAÇÃO ENTRE OS ALGORITMOS DE EVOLUÇÃO DIFERENCIAL E RECOZIMENTO SIMULADO ASSOCIADOS AO DESIGN CONSTRUTAL PARA A OTIMIZAÇÃO GEOMÉTRICA DE UMA CAVIDADE EM FORMA DE DUPLO-T. Revista Mundi Engenharia, Tecnologia e Gestão* (ISSN: 2525-4782), v. 3, p. 85-1-85-19, 2018.

113. DEUS, M. J. ; ISOLDI, L. A. **; Dos Santos, E. D.** ; ROCHA, L. A. O. ; GOMES, M. N. . *ANÁLISE NUMÉRICA DE UM DISPOSITIVO CONVERSOR DE ENERGIA DAS ONDAS DO MAR EM ENERGIA ELÉTRICA DO TIPO COLUNA DE ÁGUA OSCILANTE CONSIDERANDO UMA CÂMARA COM DUAS CHAMINÉS. Revista Científica Interdisciplinar, INTERLOGOS*, v. 3, p. 67-81, 2018.

114. MIRANDA, G. B. ; GOMES, M. N. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. . *ANÁLISE DA INFLUÊNCIA DAS CONDIÇÕES DE CONTORNO NO EFEITO DE REFLEXÃO NA SIMULAÇÃO NUMÉRICA DE ONDAS OCEÂNICAS. Revista Científica Interdisciplinar INTERLOGOS*, v. 3, p. 110-125, 2018.

115. Razera, A. L. ; FONSECA, R. J. C. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. ; Biserni, C. . Constructal design of a semi-elliptical fin inserted in a lid-driven square cavity with mixed convection. INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, v. 126, p. 81-94, 2018.

116. DA SILVA TROINA, GRÉGORI ; PEDRO TEIXEIRA PEIXOTO DE QUEIROZ, JOÃO ; LANGHINRICHS CUNHA, MARCELO ; ALBERTO OLIVEIRA ROCHA, LUIZ ; **DOMINGUES DOS SANTOS, ELIZALDO** ; ANDRÉ ISOLDI, LIÉRCIO . *Verificação de modelos computacionais para placas com enrijecedores submetidas a carregamento transversal uniforme. REVISTA CEREUS*, v. 10, p. 285-298, 2018.

117. KEPES RODRIGUES, MICHEL ; RODRIGUES NUNES, BRUNA ; OLIVEIRA ROCHA, LUIZ ALBERTO ; **DOMINGUES DOS SANTOS, ELIZALDO** ; ANDRÉ ISOLDI, LIÉRCIO . *Simulação Numérica de Trocador de Calor Solo-Ar Constituído por Formas Geométricas Complexas. REVISTA CEREUS*, v. 10, p. 12-25, 2018.

118. GOMES, M. N. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. . *Simulação Numérica de um Dispositivo Coluna de Água Oscilante em Grandes Intervalos de Tempo. REVISTA CEREUS*, v. 10, p. 152-164, 2018.

119. CUNHA, MARCELO ; TROINA, GRÉGORI DA SILVA ; **SANTOS, ELIZALDO DOMINGUES DOS** ; Rocha, Luiz Alberto ; ISOLDI, LIÉRCIO ANDRÉ . Computational modeling and Constructal Design method applied to the geometric optimization of stiffened steel plates subjected to uniform transverse load. Research on Engineering Structures and Materials, v. 4, p. 139-149, 2018.

120. RODRIGUES, M.K. ; COSWIG, F.S. ; CAMARGO, K.R. ; ISOLDI, L.A. ; BRUM, R.S. ; RAMALHO, J.V.A. ; Vaz, J. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** . Thermal performance simulations of Earth-Air Heat Exchangers for different soils of a coastal city using in-situ data. Sustainable Energy Technologies and Assessments, v. 30, p. 224-229, 2018.

121. Helbig, D. ; CUNHA, M. L. ; DA SILVA, C. C. C. ; **Dos Santos, E. D.** ; ITURRIOZ, IGNACIO ; REAL, M. V. ; ISOLDI, L. A. ; ROCHA, L. A. O. . Numerical study of the elasto-plastic buckling in perforated thin steel plates using the constructal design method. Numerical study of the elasto-plastic buckling in perforated thin steel plates using the constructal design method, v. 4, p. 169-187, 2018.

122. SEHN, ALYSSON ; FERNANDES, CÁSSIO SPOHR ; **DOS SANTOS, ELIZALDO DOMINGUES** ; ISOLDI, LIÉRCIO ANDRÉ ; CENTENO, FELIPE ROMAN ; SOLIMAN, PAULO . *Estudo numérico de uma aleta elíptica inserida em uma cavidade quadrada com a superfície superior deslizante submetida à convecção mista. ESTUDOS TECNOLÓGICOS (ONLINE)*, v. 12, p. 14-28, 2018.

123. PINTO, V. T. ; CUNHA, M. L. ; TROINA, G. S. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . *MÉTODO DESIGN CONSTRUTAL APLICADO À AVALIAÇÃO GEOMÉTRICA DE PLACAS RETANGULARES COM ENRIJECEDORES INCLINADOS SUBMETIDAS À CARREGAMENTO TRANSVERSAL UNIFORME. RETEC. REVISTA DE TECNOLOGIAS (OURINHOS)*, v. 11, p. 51-64, 2018.

124. PORTELA JUNIOR, M. C. B. ; TROINA, G. S. ; CUNHA, M. L. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . *SIMULAÇÃO NUMÉRICA E DESIGN CONSTRUTAL PARA A AVALIAÇÃO DA INFLUÊNCIA DO ESPAÇAMENTO DE ENRIJECEDORES NA DEFLEXÃO DE PLACAS FINAS DE AÇO SUBMETIDAS A CARREGAMENTO TRANSVERSAL UNIFORME. RETEC. REVISTA DE TECNOLOGIAS (OURINHOS)*, v. 11, p. 65-79, 2018.

125. SUERO, ROBERTA ; DE SOUZA MONTEIRO, NIELTON ; RICARDO FERREIRA DE MIRANDA, PAULO ; JOSÉ DE DEUS, MATHEUS ; **DOMINGUES DOS SANTOS, ELIZALDO** ; ANDRÉ ISOLDI, LIÉRCIO ; ALBERTO OLIVEIRA ROCHA, LUIZ ; DAS NEVES GOMES, MATEUS . *Uma análise do emprego do Método Multigrid Algébrico na simulação numérica da propagação de ondas oceânicas. REVISTA CEREUS*, v. 10, p. 211-225, 2018.

126. MORAES GOULAR, MARCELO ; PAULA GOMES, ANA ; ALBERTO OLIVEIRA ROCHA, LUIZ ; **DOMINGUES DOS SANTOS, ELIZALDO** ; ANDRÉ ISOLDI, LIÉRCIO ; CORRÊA MARTINS, JAIFER ; DAS NEVES GOMES, MATEUS . *Verificação e Validação de um Modelo Numérico para Abordagem do Escoamento em um Canal de Ondas. REVISTA CEREUS*, v. 10, p. 226-239, 2018.

127. Lorenzini, G. ; BARRETO, E.X. ; BECKEL, C.C. ; SCHNEIDER, P.S. ; ISOLDI, L.A. ; **dos Santos, E.D.** ; Rocha, L.A.O. . Geometrical evaluation of T-shaped high conductive pathway with thermal contact resistance for cooling of heat-generating medium. International Journal of Heat and Mass Transfer, v. 108, p. 1884-1893, 2017.

128. VAZ, C. R. ; Rodrigues, M. K. ; Brum R. S. ; VAZ, J. ; ROCHA, L. A. O. ; RAMALHO, J. V. A. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . *SIMULAÇÃO NUMÉRICA E DESIGN CONSTRUTAL APLICADOS À ANÁLISE DE UM TROCADOR DE CALOR SOLO-AR PARA O APROVEITAMENTO DO POTENCIAL ENERGÉTICO DO SOLO. Revista Mundi Engenharia, Tecnologia e Gestão* (ISSN: 2525-4782), v. 1, p. 23-1-23-19, 2017.

129. PEREIRA, M. S. ; FEIJO, B. C. ; TEIXEIRA, F. B. ; ISOLDI, L. A. ; ROCHA, L. A. O. ; GOULART, J. N. V. ; **Dos Santos, E. D.** . Geometric Evaluation of Forced Convective Flows across an Arrangement of Four Circular Cylinders. DEFECT AND DIFFUSION FORUM, v. 372, p. 110-121, 2017.

130. HERMANY, L. ; KLEIN, R. J. ; ZINANI, F. F. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. . Numerical Study of the Effect of Reynolds Number and Aspect Ratio in Heat Transfer from Elliptical Tubes to Viscoplastic Fluids Employing Constructal Design. DEFECT AND DIFFUSION FORUM, v. 372, p. 142-151, 2017.

131. FEIJO, B. C. ; PEREIRA, M. S. ; TEIXEIRA, F. B. ; ISOLDI, L. A. ; ROCHA, L. A. O. ; GOULART, J. N. V. ; **Dos Santos, E. D.** . Constructal Design Applied to a Channel with Triangular Fins Submitted to Forced Convection. DEFECT AND DIFFUSION FORUM, v. 372, p. 152-162, 2017.

132. VIANNA, J. C. B. ; Estrada, E. da S. D. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; Souza, J. A. . Design of Cooling Cavities by the Application of the Constructal Design. DEFECT AND DIFFUSION FORUM, v. 372, p. 163-169, 2017.

133. Razera, A. L. ; FAGUNDES, T. M. ; SEIBT, F. M. ; FONSECA, R. J. C. ; VARELA, D. J. C. ; ORTIZ, P. R. B. ; COELHO, F. R. ; LESSA, L. Z. ; SCHMIDT, A. ; FURTADO, G. M. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . Constructal Design of a Triangular Fin Inserted in a Cavity with Mixed Convection Lid-Driven Flow. DEFECT AND DIFFUSION FORUM, v. 372, p. 188-201, 2017.

134. Brum R. S. ; Rodrigues, M. K. ; RAMALHO, J. V. A. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . On the Design of Two EAHE Assemblies with Four Ducts. DEFECT AND DIFFUSION FORUM, v. 372, p. 31-39, 2017.

135. VIEIRA, R. S. ; PETRY, A. P. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . Numerical evaluation of a solar chimney geometry for different ground temperatures by means of constructal design. Renewable Energy, v. 109, p. 222-234, 2017.

136. LEMOS, R. L. ; VIEIRA, R. S. ; ISOLDI, L. A. ; ROCHA, L. A. O. ; PEREIRA, M. S. ; **Dos Santos, E. D.** . Numerical analysis of a turbulent flow with Coanda effect in hydrodynamics profiles. FME Transaction, v. 45, p. 412-420, 2017.

137. VIEIRA, R. S. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . NUMERICAL STUDY OF TWO VERTICAL AXIS WIND TURBINES DARRIEU TYPE LINED UP IN FUNCTION OF POWER COEFFICIENT. Revista Brasileira de Energia Renováveis, v. 6, p. 346-359, 2017.

138. TIMM, R. L. ; OLEINIK, P. H. ; KIRINUS, E. P. ; MARQUES, W. C. ; **Dos Santos, E. D.** . *ANÁLISE E APLICAÇÃO DO DESIGN CONSTRUTAL PARA AVALIAÇÃO GEOMÉTRICA DE SÍTIOS DE CONVERSÃO DE ENERGIA NA PLATAFORMA CONTINENTAL SUL DO BRASIL. Revista Brasileira de Energia Renováveis*, v. 6, p. 360-375, 2017.

139. LIMA, Y. T. B. ; ROCHA, L. A. O. ; GOMES, M. N. ; **Dos Santos, E. D**. ; ISOLDI, L. A. . *APLICAÇÃO DO MÉTODO DESIGN CONSTRUTAL NA AVALIAÇÃO NUMÉRICA DA POTÊNCIA HIDROPNEUMÁTICA DE UM DISPOSITIVO CONVERSOR DE ENERGIA DAS ONDAS DO MAR DO TIPO COLUNA DE ÁGUA OSCILANTE COM REGIÃO DE TRANSIÇÃO TRAPEZOIDAL. Revista Brasileira de Energia Renováveis*, v. 6, p. 376-396, 2017.

140. SEIBT, F. M. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . *MODELAGEM COMPUTACIONAL DO CONVERSOR DE ENERGIA DAS ONDAS TIPO PLACA HORIZONTAL SUBMERSA EM ESCALA REAL E ANÁLISE DE SIMILARIDADE COM MODELO EM ESCALA DE LABORATÓRIO. Revista Brasileira de Energia Renováveis*, v. 6, p. 397-418, 2017.

141. MARTINS, J. C. ; BARBOSA, D. V. E. ; GOULART, M. M. ; VIEGAS, A. R. ; FURICH, A. S. ; ROCHA, L. A. O. ; Souza, J. A. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . *ESTUDO DOS PROCEDIMENTOS NUMÉRICOS PARA SIMULAÇÃO DE UM DISPOSITIVO DE GALGAMENTO. Revista Brasileira de Energia Renováveis*, v. 6, p. 419-438, 2017.

142. OLIVEIRA, G. N. ; ROCHA, L. A. O. ; PETRY, A. P. ; ISOLDI, L. A. ; VIEIRA, R. S. ; **Dos Santos, E. D.** . *INFLUÊNCIA DO REFINAMENTO DA MALHA NOS COEFICIENTES DE ARRASTO, SUSTENTAÇÃO E TORQUE ESTÁTICO DE UMA TURBINA SAVONIUS DE ÚNICO ESTÁGIO. Revista Brasileira de Energia Renováveis*, v. 6, p. 438-453, 2017.

143. Letzow, M. ; Levien, F. ; Pons, R. dos P. ; GOMES, M. N. ; Souza, J. A. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . *AVALIAÇÃO GEOMÉTRICA DA CÂMARA DE UM DISPOSITIVO DE CONVERSÃO DE ENERGIA DAS ONDAS DO TIPO OWC PARA DIFERENTES COMPRIMENTOS DA BORDA FRONTAL. Revista Brasileira de Energia Renováveis*, v. 6, p. 454-471, 2017.

144. MARTINS, J. C. ; GOULART, M. M. ; GOMES, M. N. ; Souza, J. A. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . *ANÁLISE NUMÉRICA DE UM DISPOSITIVO DE GALGAMENTO ONSHORE COMPARANDO A INFLUÊNCIA DE UMA ONDA MONOCROMÁTICA E DE UM ESPECTRO DE ONDAS.*

Revista Brasileira de Energia Renováveis, v. 6, p. 472-488, 2017.

145. Rodrigues, M. K. ; COSWIG, F. S. ; CAMARGO, K. R. ; Brum R. S. ; ROCHA, L. A. O. ; VAZ, J. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . *ESTUDO DO POTENCIAL TÉRMICO DE TROCADOR DE CALOR SOLO-AR EM DOIS TIPOS DE SOLOS NO MUNICÍPIO DE RIO GRANDE (RS). Revista Brasileira de Energia Renováveis*, v. 6, p. 489-506, 2017.

146. PLAMER, C. B. ; LIMA, Y. T. B. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. ; GOMES, M. N. . *MODELAGEM COMPUTACIONAL E MÉTODO CONSTRUCTAL DESIGN APLICADOS A UM CONVERSOR DE ENERGIA DAS ONDAS DO MAR DO TIPO COLUNA DE ÁGUA OSCILANTE (CAO) ANALISANDO A INFLUÊNCIA EM SEU DESEMPENHO DA VARIAÇÃO DA RAZÃO ENTRE O VOLUME DE ENTRADA E O VOLUME TOTAL DA CÂMARA HIDROPNEUMÁTICA. Revista Brasileira de Energia Renováveis*, v. 6, p. 507-526, 2017.

147. VIEIRA, R. S. ; RAJAO, M. L. ; ISOLDI, L. A. ; ROCHA, L. A. O. ; **Dos Santos, E. D**. . *ESTUDO NUMÉRICO DO ESCOAMENTO TURBULENTO EM CHAMINÉ SOLAR PARA VENTILAÇÃO DE AMBIENTES CONSTRUIDOS. Revista Brasileira de Energia Renováveis*, v. 6, p. 527-547, 2017.

148. MACHADO, B. N. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; GOMES, M. N. ; ROCHA, L. A. O. . *ANÁLISE NUMÉRICA DA GEOMETRIA DA RAMPA DE UM DISPOSITIVO DE GALGAMENTO ONSHORE EM ESCALA REAL APLICANDO O DESIGN CONSTRUTAL. Revista Brasileira de Energia Renováveis*, v. 6, p. 548-566, 2017.

149. GOMES, M. N. ; Cassel, L. F. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . *ANÁLISE GEOMÉTRICA DE DOIS GRAUS DE LIBERDADE DE UM DISPOSITIVO CONVERSOR DE ENERGIA DAS ONDAS DO TIPO COLUNA DE ÁGUA OSCILANTE NA FORMA TRAPEZOIDAL. Revista Brasileira de Energia Renováveis*, v. 6, p. 567-585, 2017.

150. SEIBT, F. M. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . *ESTUDO NUMÉRICO DO EFEITO DA VARIAÇÃO CONJUNTA DO COMPRIMENTO E DA ALTURA RELATIVA DE UM CONVERSOR DE ENERGIA DAS ONDAS TIPO PLACA HORIZONTAL SUBMERSA. Revista Brasileira de Energia Renováveis*, v. 6, p. 586-605, 2017.

151. HARTER, F. V. ; Souza, J. A. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; Amico, A. C. . Transverse permeability determination and influence in resin flow through an orthotropic medium in the RTM process. Materia-Rio de Janeiro, v. 22, p. 1-12, 2017.

152. BARROS, G. M. ; Lorenzini, G. ; ISOLDI, L. A. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** . Influence of mixed convection laminar flows on the geometrical evaluation of a triangular arrangement of circular cylinders. INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, v. 114, p. 1188-1200, 2017.

153. HOOD, L. M. ; **Dos Santos, E. D**. ; Porte, A. F. ; GALARCA, M. M. . *MODELAGEM NUMÉRICA DO ESCOAMENTO DE AR NO INTERIOR DE UM BALCÃO EXPOSITOR REFRIGERADO. RETEC. REVISTA DE TECNOLOGIAS (OURINHOS)*, v. 10, p. 88-100, 2017.

154. SOARES, L. L. ; Souza, J. A. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; Amico, A. C. ; TRINDADE, R. S. . *MODELAGEM NUMÉRICA DA INFUSÃO DE RESINA EM UM MEIO POROSO. RETEC. REVISTA DE TECNOLOGIAS (OURINHOS)*, v. 10, p. 75-87, 2017.

155. ALTNETTER, MAICON VINICIUS ; PEREIRA, MARTIM DOS SANTOS ; ISOLDI, LIÉRCIO ANDRÉ ; DE OLIVEIRA ROCHA, LUIZ ALBERTO ; DO AMARAL RODRIGUEZ, BÁRBARA DENICOL ; **DOS SANTOS, ELIZALDO DOMINGUES** . *Análise geométrica de um canal aletado com transferência de calor por convecção mista através do Design Construtal. SCIENTIA PLENA*, v. 13, p. 049903 ? 1-049903 ? 10, 2017.

156. LIMA, YURI THEODORO BARBOSA DE ; ROCHA, LUIZ ALBERTO OLIVEIRA ; GOMES, MATEUS DAS NEVES ; **SANTOS, ELIZALDO DOMINGUES DOS** ; ISOLDI, LIÉRCIO ANDRÉ . *Análise numérica e geométrica com design construtal da região de transição para um dispositivo do tipo coluna de água oscilante (CAO). SCIENTIA PLENA*, v. 13, p. 049906 ? 1-049906 ? 12, 2017.

157. RODRIGUES, MICHEL KEPES ; GONÇALVES, HENRIQUE SICA ; BRUM, RUTH DA SILVA ; VAZ, JOAQUIM ; ROCHA, LUIZ ALBERTO OLIVEIRA ; RAMALHO, JAIRO VALÕES DE ALENCAR ; **SANTOS, ELIZALDO DOMINGUES DOS** ; ISOLDI, LIÉRCIO ANDRÉ . *Usando séries temporais obtidas experimentalmente como condições de contorno para a simulação numérica de trocadores de calor solo-ar. SCIENTIA PLENA*, v. 13, p. 049912 ? 1-049912 ? 10, 2017.

158. GOUVEA, ROGÉRIO ALMEIDA ; **DOS SANTOS, ELIZALDO DOMINGUES** ; SOUZA, JEFERSON AVILA . *Otimização construtal de uma cavidade multi-bifurcada para dissipação de calor. SCIENTIA PLENA*, v. 13, p. 049914 ? 1-049914 ? 12, 2017.

159. DE OLIVEIRA, SERSANA SABEDRA ; OLEINIK, PHELYPE HARON ; GOMES, MATEUS DAS NEVES ; **DOS SANTOS, ELIZALDO DOMINGUES** ; SOUZA, JEFERSON AVILA ; ROCHA, LUIZ ALBERTO OLIVEIRA ; MARQUES, WILIAN CORREA ; ISOLDI, LIÉRCIO ANDRÉ . *Modelagem computacional de um conversor de energia das ondas em energia elétrica do tipo Coluna de Água Oscilante (CAO) considerando dados de estado do mar. SCIENTIA PLENA*, v. 13, p. 049915 ? 1-049915 ? 10, 2017.

160. LIMA, JOÃO PAULO SILVA ; RAMOS, ANDRÉ PEREIRA ; CARVALHO, FERNANDA SANTANA ; ROCHA, LUIS ALBERTO OLIVEIRA ; **DOS SANTOS, ELIZALDO DOMINGUES** ; REAL, MAURO DE VASCONCELLOS ; ISOLDI, LIÉRCIO ANDRÉ . *Verificação de um modelo computacional para a flambagem elástica de placas ortotrópicas. SCIENTIA PLENA*, v. 13, p. 049916 ? 1-049916 ? 11, 2017.

161. DA SILVEIRA, THIAGO ; LIMA, JOÃO PAULO SILVA ; REAL, MAURO DE VASCONCELLOS ; ROCHA, LUIZ ALBERTO OLIVEIRA ; **DOS SANTOS, ELIZALDO DOMINGUES** ; ISOLDI, LIÉRCIO ANDRÉ . *Verificação de um modelo computacional baseado no método de elementos finitos aplicado à flambagem biaxial de placas delgadas laminadas. SCIENTIA PLE*NA, v. 13, p. 049918 ? 1-049918 ? 10, 2017.

162. SCHNICH, C. A. ; MAGALHÃES, G. M. C. ; Amico, A. C. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; Souza, J. A. ; **Dos Santos, E. D.** . *ESTUDO NUMÉRICO DE UM PROCESSO DE INFUSÃO DE RESINA PARA DIFERENTES CONFIGURAÇÕES DE UM CANAL VAZIO EM FORMA DE Y. Revista Mundi Engenharia, Tecnologia e Gestão* (ISSN: 2525-4782), v. 2, p. 28-1-28-16, 2017.

163. AVENDANO, P. A. ; JEFERSON AVILA SOUZA ; ADAMATTI, D. F. ; **Dos Santos, E. D**. . GEOMETRIC OPTIMIZATION OF ?+?-SHAPED CAVITY USING CONSTRUCTAL THEORY. *ENGENHARIA TÉRMICA*, v. 16, p. 75-80, 2017.

164. Razera, A. L. ; FAGUNDES, T. M. ; FONSECA, R. J. C. ; LESSA, L. Z. ; SCHMIDT, A. ; FURTADO, G. M. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . NUMERICAL STUDY OF A TRIANGULAR FIN INSERTED IN A SQUARE CAVITY WITH UPPER SLIDING SURFACE SUBJECTED TO A MIXED CONVECTION EFFECT. *ENGENHARIA TÉRMICA*, v. 16, p. 81-88, 2017.

165. TEIXEIRA, F. B. ; PEREIRA, M. S. ; FEIJO, B. C. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . GEOMETRIC EVALUATION OF T AND H-SHAPED CAVITIES INSERTED IN A SOLID WITH HEAT GENERATION APPLYING CONSTRUCTAL DESIGN. *ENGENHARIA TÉRMICA*, v. 16, p. 89-95, 2017.

166. GUIMARAES, M. V. F. ; EMMENDORFER, L. R. ; PROLO FILHO, J. F. ; **Dos Santos, E. D.** . GEOMETRIC EVALUATION OF COMPLEX CAVITY INTRUDED IN HEAT GENERATED WALLS. *ENGENHARIA TÉRMICA*, v. 16, p. 31-36, 2017.

167. BARBOSA, D. V. E. ; JEFERSON AVILA SOUZA ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; MARTINS, J. C. . NUMERICAL ANALYSES OF OPENFOAM'S OVERTOPPING DEVICE SOLUTION. *ENGENHARIA TÉRMICA*, v. 16, p. 93-103, 2017.

168. NASCIMENTO, V. H. F. ; ARAUJO, V. M. C. ; BRUNETTI, C. ; BURIOL, T. M. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; GOMES, M. N. . *Modelagem Computacional e Aplicação de Design Construtal para Análise Estrutural de Embalagens. Interlogos*, v. 2, p. 129-143, 2017.

169. da Silveira, T. ; LIMA, J. P. S. ; REAL, M. V. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . *DESIGN CONSTRUTAL E MÉTODO DE ELEMENTOS FINITOS APLICADOS À FLAMBAGEM BIAXIAL DE PLACAS PERFURADAS LAMINADAS SIMETRICAMENTE. REVISTA DE ENGENHARIA E TECNOLOGIA*, v. 9, p. 186-198, 2017.

170. LIMA, J. P. S. ; RAMOS, A. P. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. ; REAL, M. V. ; ISOLDI, L. A. . *MODELAGEM COMPUTACIONAL E MÉTODO DESIGN CONSTRUTAL APLICADOS AO ESTUDO DA TENSÃO ÚLTIMA DE FLAMBAGEM EM PAINÉIS DE AÇO COM ENRIJECEDORES SUBMETIDOS À COMPRESSÃO AXIAL. REVISTA DE ENGENHARIA E TECNOLOGIA*, v. 9, p. 199-213, 2017.

171. Helbig, D. ; ROCHA, L. A. O. ; DA SILVA, C. C. C. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; REAL, M. V. . *SIMULAÇÃO NUMÉRICA E MÉTODO CONSTRUCTAL DESIGN NO ESTUDO DE PLACAS FINAS PERFURADAS DE AÇO SUBMETIDAS À FLAMBAGEM ELASTO-PLÁSTICA. REVISTA DE ENGENHARIA E TECNOLOGIA*, v. 9, p. 214-228, 2017.

172. FEIJO, B. C. ; TEIXEIRA, F. B. ; PEREIRA, M. S. ; ROCHA, L. A. O. ; GOULART, J. N. V. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . CONSTRUCTAL DESIGN APPLYIED TO A FINNED CHANNEL UNDER FORCED CONVECTION FLOWS WITH DIFFERENT IMPOSED PRESSURE DROP. *ENGENHARIA TÉRMICA*, v. 16, p. 81-87, 2017.

173. SANTOS, J. T. ; FAGUNDES, T. M. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . ANALYSIS OF A COMBINED BRAYTON/RANKINE CYCLE WITH TWO REGENERATORS IN PARALLEL. *ENGENHARIA TÉRMICA*, v. 16, p. 1-8, 2017.

174. Lorenzini, G. ; Helbig, D. ; REAL, M. V. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . Computational modeling and constructal design method applied to the mechanical behavior improvement of thin perforated steel plates subject to buckling. J ENG THERMOPHYS-RUS, v. 25, p. 197-215, 2016.
Citações:10|1

175. Lorenzini, G. ; Helbig, D. ; DA SILVA, C. C. C. ; REAL, M. V. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . NUMERICAL EVALUATION OF THE EFFECT OF TYPE AND SHAPE OF PERFORATIONS ON THE BUCKLING OF THIN STEEL PLATES BY MEANS OF THE CONSTRUCTAL DESIGN METHOD. Heat and Technology, v. 34, p. S9-S20, 2016.

176. MAGALHÃES, G. M. C. ; Lorenzini, G. ; Nardi, M. G. ; Amico, A. C. ; ISOLDI, L. A. ; ROCHA, L. A. O. ; SOUZA, JEFERSON AVILA ; **Dos Santos, E. D.** . GEOMETRICAL EVALUATION OF A RESIN INFUSION PROCESS BY MEANS OF CONSTRUCTAL DESIGN. Heat and Technology, v. 34, p. S101-S108, 2016.

177. **DOS SANTOS, ELIZALDO D**.; RODRIGUES, M. P. ; ANDRADE, T. S. V. C. ; ISOLDI, L. A. ; FRANCA, F. H. R. ; ROCHA, L. A. O. . Numerical Study of Different Closure Approaches for Prediction of Forced Convective Turbulent Cylindrical Cavity Flows. Defect and Diffusion Forum, v. 366, p. 166-181, 2016.

178. Lorenzini, G. ; MACHADO, B. S. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. . CONSTRUCTAL DESIGN OF RECTANGULAR FIN INTRUDED INTO MIXED CONVECTIVE LID-DRIVEN CAVITY FLOWS. Journal of Heat Transfer, p. 102501-102501-12, 2016.

179. DANIEL HELBIG ; CAIO CESAR CARDOSO DA SILVA ; REAL, M. V. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . Study About Buckling Phenomenon in Perforated Thin Steel Plates Employing Computational Modeling and Constructal Design Method. Latin American Journal of Solids and Structures, v. 13, p. 1912-1936, 2016.

180. ALDRIGHI, E. S. ; Rodrigues, P. M. ; Rodriguez, B. D. do A. ; ISOLDI, L. A. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** . Constructal Design of Rectangular Fin Intruded into Different Surfaces of Forced Convective Lid-Driven Cavity Flow. International Journal of Fluid Mechanics Research, v. 43, p. 418-440, 2016.

181. Brum R. S. ; RAMALHO, J. V. A. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . Transient Models to Analyze the Influence of the Air Velocity and Ducts Diameter on the Performance of Earth-Air Heat Exchangers. International Journal of Fluid Mechanics Research, v. 43, p. 503-520, 2016.

182. FEIJO, B. C. ; PEREIRA, M. S. ; TAGLIANI, L. ; FERRI, G. G. B. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . *DESIGN CONSTRUTAL DE CANAIS COM SECÇÃO TRANSVERSAL EM FORMA DE T CONSIDERANDO ESCOAMENTOS LAMINARES COM CONVECÇÃO FORÇADA SOB A INFLUÊNCIA DE DIFERENTES NÚMEROS DE REYNOLDS. Vetor (FURG)*, v. 26, p. 2-19, 2016.

183. FOLZKE, E. G. G. ; CORREIA, A. L. G. ; da Silveira, T. ; ROCHA, L. A. O. **; Dos Santos, E. D.** ; REAL, M. V. ; ISOLDI, L. A. . *Simulação numérica e Constructal design aplicados à flambagem Elástica de placas finas de aço. Vetor (FURG)*, v. 26, p. 20-34, 2016.

184. BECKEL, C. C. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. . *Constructal design de caminhos condutivos não uniformes em forma de ?T? para a refrigeração de corpos geradores de calor. Vetor (FURG)*, v. 26, p. 2-13, 2016.

185. DE MELO, TIAGO ; GOULART, JHON N.V. ; ANFLOR, CARLA T.M. ; **DOS SANTOS, ELIZALDO** . Experimental investigation of the velocity time-traces of the turbulent flow in a rectangular channel with a lateral slot. European Journal of Mechanics. B, Fluids, v. 62, p. 130-138, 2016.

186. BARROS, G. M. ; PEREIRA, M. S. ; DO CARMO, D. M. ; CEMIN, R. ; ISOLDI, L. A. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** . GEOMETRICAL OPTIMIZATION OF MIXED CONVECTIVE FLOWS OVER TRIANGULAR ARRANGEMENT OF CYLINDERS. Engenharia Térmica, v. 15, p. 84-91, 2016.

187. GONZALES, G. V. ; **Dos Santos, E.** D. ; ISOLDI, L. A. ; ROCHA, L. A. O. ; SILVA NETO, A. J. ; TELLES, W. R. . Constructal Design of Double-T Shaped Cavity with Stochastic Methods Luus-Jaakola and Simulated Annealing. Diffusion and Defect Data, Solid State Data. Part A, Defect and Diffusion Forum, v. 370, p. 152-161, 2016.

188. GOMES, M. N. ; AMADO, E. A. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . Numerical Analysis of the Oscillating Water Column (OWC) Wave Energy Converter (WEC) Considering Different Incident Wave Height. Diffusion and Defect Data, Solid State Data. Part A, Defect and Diffusion Forum, v. 370, p. 120-129, 2016.

189. LIMA, Y. T. B. ; ROCHA, L. A. O. ; GOMES, M. N. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . *INVESTIGAÇÃO NUMÉRICA E GEOMÉTRICA DA REGIÃO DE TRANSIÇÃO TRAPEZOIDAL ENTRE A CÂMARA HIDROPNEUMÁTICA E A CHAMINÉ DE UM DISPOSITIVO CONVERSOR DE ENERGIA DAS ONDAS DO MAR EM ENERGIA ELÉTRICA DO TIPO COLUNA DE ÁGUA OSICLANTE. Revista Interdisciplinar de Pesquisa em Engenharia - RIPE*, v. 2, p. 01-19, 2016.

190. GOMES, M. N. ; COSTA, C. A. O. ; DEUS, M. J. ; RICARDO, R. L. P. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. . *ANÁLISE COMPUTACIONAL E GEOMÉTRICA COM DESIGN CONSTRUTAL DE UM DISPOSITIVO CONVERSOR DE ENERGIA DAS ONDAS DO MAR EM ENERGIA ELÉTRICA DO TIPO COLUNA DE ÁGUA OSCILANTE SUBMETIDO A UM ESPECTRO DE ONDAS. Revista Interdisciplinar de Pesquisa em Engenharia - RIPE*, v. 2, p. 20-39, 2016.

191. LIMA, J. P. S. ; RAMOS, A. P. ; ISOLDI, L. A. ; REAL, M. V. ; **Dos Santos, E. D.** ; CARVALHO, F. S. ; ROCHA, L. A. O. . *MODELAGEM COMPUTACIONAL E MÉTODO DESIGN CONSTRUTAL APLICADOS AO ESTUDO DO COMPORTAMENTO MECÂNICO DE PAINÉIS DE AÇO COM ENRIJECEDORES SUBMETIDOS À FLAMBAGEM. Revista Interdisciplinar de Pesquisa em Engenharia - RIPE*, v. 2, p. 40-59, 2016.

192. PEREIRA, M. S. ; TEIXEIRA, F. B. ; FEIJO, B. C. ; LUIZ A. O. ROCHA ; GOULART, J. N. V. ; MELO, T. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . *OTIMIZAÇÃO GEOMÉTRICA DE ESCOAMENTOS COM CONVECÇÃO FORÇADA SOBRE UM ARRANJO DE QUATRO CILINDROS. Revista Interdisciplinar de Pesquisa em Engenharia - RIPE*, v. 2, p. 60-71, 2016.

193. SEIBT, F. M. ; Razera, A. L. ; VARELA, D. J. C. ; FONSECA, R. J. C. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . *CONSTRUCTAL DESIGN DE UMA ALETA TRIANGULAR INSERIDA EM UMA CAVIDADE DE PLACA SUPERIOR MÓVEL COM ESCOAMENTO POR CONVECÇÃO MISTA. Revista Interdisciplinar de Pesquisa em Engenharia - RIPE*, v. 2, p. 72-84, 2016.

194. FEIJO, B. C. ; PEREIRA, M. S. ; TEIXEIRA, F. B. ; GOULART, J. N. V. ; MELO, T. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . *DESIGN CONSTRUTAL APLICADO A UM CANAL COM ALETAS SUBMETIDO A CONVECÇÃO FORÇADA. Revista Interdisciplinar de Pesquisa em Engenharia - RIPE*, v. 2, p. 85-100, 2016.

195. TEIXEIRA, F. B. ; PEREIRA, M. S. ; FEIJO, B. C. ; ROCHA, L. A. O. ; GOULART, J. N. V. ; MELO, T. ;

ISOLDI, L. A. ; **Dos Santos, E. D.** . *OTIMIZAÇÃO GEOMÉTRICA DE ESCOAMENTOS COM CONVECÇÃO FORÇADA SOBRE UM ARRANJO TRIANGULAR DE CORPOS ROMBUDOS QUADRADOS. Revista Interdisciplinar de Pesquisa em Engenharia - RIPE*, v. 2, p. 101-113, 2016.

196. Lorenzini, G. ; BARRETO, E.X. ; BECKEL, C.C. ; SCHNEIDER, P.S. ; ISOLDI, L.A. ; **dos Santos, E.D.** ; Rocha, L.A.O. . Constructal design of I-shaped high conductive pathway for cooling a heat-generating medium considering the thermal contact resistance. International Journal of Heat and Mass Transfer, v. 93, p. 770-777, 2016.

197. GALARCA, M. M. ; Cardoso, F. ; Razera, A. L. ; Acunha Jr, I.C. ; ISOLDI, L. A. ; Porte, A. F. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** . *Otimização geométrica de um arranjo triangular de cilindros submetido a escoamento laminar com convecção forçada. Scientia Plena*, v. 11, p. 021706-1-021706-13, 2015.

198. Lorenzini, G. ; Estrada, E. da S. D. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . Constructal design of convective cavities inserted into a cylindrical solid body for cooling. International Journal of Heat and Mass Transfer, v. 83, p. 75-83, 2015.

199. GOMES, M. N. ; Lara, M. F. E. ; IAHNKE, S. L. P. ; MACHADO, B. N. ; GOULART, M. M. ; SEIBT, F. M. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . Numerical Approach of the Main Physical Operational Principle of Several Wave Energy Converters: Oscillating Water Column, Overtopping and Submerged Plate. Defect and Diffusion Forum, v. 362, p. 115-171, 2015.

200. Estrada, E. da S. D. ; FAGUNDES, T. M. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; XIE, G. ; ROCHA, L. A. O. . CONSTRUCTAL DESIGN ASSOCIATED TO GENECTIC ALGORITHM OF ASYMMETRIC V-SHAPED PATHWAYS. Journal of Heat Transfer, v. 137, p. 061010-1-061010-7, 2015.

201. Rodrigues, M. K. ; Brum R. S. ; Vaz, J. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . Numerical investigation about the improvement of the thermal potential of an Earth-Air Heat Exchanger (EAHE) employing the Constructal Design method. Renewable Energy, v. 80, p. 538-551, 2015.

202. BARROS, G. M. ; DO CARMO, D. M. ; CEMIN, R. ; GALARCA, M. M. ; ISOLDI, L. A. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** . *Influência da Convecção Mista sobre a Otimização Geométrica de um Arranjo Triangular de Cilindros em Escoamentos Laminares. Scientia Plena*, v. 11, p. 10, 2015.

203. BRUM, RUTH DA SILVA ; RAMALHO, JAIRO VALÕES DE ALENCAR ; ROCHA, LUIZ ALBERTO OLIVEIRA ; ISOLDI, LIÉRCIO ANDRÉ ; **DOS SANTOS, ELIZALDO DOMINGUES** . A Matlab code to fit periodic data. *Revista Brasileira de Computação Aplicada*, v. 7, p. 16-25, 2015.

204. ISOLDI, L. A. ; Grimmler, J. do A. M. ; Letzow, M. ; Souza, J. A. ; GOMES, M. N. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** . 3D NUMERICAL ANALYSIS ABOUT THE SHAPE INFLUENCE OF THE HYDRO-PNEUMATIC CHAMBER IN AN OSCILLATING WATER COLUMN (OWC). *Engenharia Térmica*, v. 14, p. 03-08, 2015.

205. GONZALES, G. V. ; **Dos Santos, E. D.** ; EMMENDORFER, L. R. ; ISOLDI, L. A. ; Estrada, E. da S. D. ; ROCHA, L. A. O. . CONSTRUCTAL DESIGN AND SIMULATED ANNEALING EMPLOYED FOR GEOMETRIC OPTIMIZATION OF A YSHAPED CAVITY INTRUDED INTO CONDUCTIVE WALL. *Engenharia Térmica*, v. 14, p. 79-87, 2015.

206. VIEIRA, R. S. ; GARCIA, C. ; Acunha Jr, I.C. ; Souza, J. A. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . NUMERICAL STUDY OF THE INFLUENCE OF GEOMETRIC PARAMETERS ON THE AVALIABLE POWER IN A SOLAR CHIMNEY. *Engenharia Térmica*, v. 14, p. 103-109, 2015.

207. PEDROTTI, V. A. ; Souza, J. A. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . CONSTRUCTAL DESIGN OF A TUBULAR ARRAY SUBJECTED TO FORCED CONVECTION. *Engenharia Térmica*, v. 14, p. 16-21, 2015.

208. MICHAELLO, R. S. ; Helbig, D. ; ROCHA, L. A. O. ; REAL, M. V. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . COMPUTATIONAL MODELING APPLIED TO THE STUDY OF THERMAL BUCKLING OF COLUMNS. *Engenharia Térmica*, v. 14, p. 34-39, 2015.

209. DAS NEVES GOMES, MATEUS ; **DOMINGUES DOS SANTOS, ELIZALDO** ; ISOLDI, LIÉRCIO

ANDRÉ ; ROCHA, LUIZ ALBERTO OLIVEIRA . Numerical Analysis including Pressure Drop in Oscillating Water Column Device. Open Engineering, v. 5, p. 229-237, 2015.

210. Acunha Jr, I.C. ; REBELATO, M. ; Rodrigues, M. K. ; RAHN, M. A. S. ; Porte, A. F. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; SCHNEIDER, P. S. . *INVESTIGAÇÃO COMPUTACIONAL DO APROVEITAMENTO DO POTENCIAL ENERGÉTICO SOLO-AR PARA OPERAR UM CICLO DE RANKINE PARA CONVERSÃO DE POTÊNCIA. Revista de Engenharia e Tecnologia*, v. 7, p. 1-11, 2015.

211. ALONSO, R. C. A. ; LIMA, D. S. ; GOMES, M. ; REAL, M. V. ; *Dos Santos, E. D.* ; ISOLDI, L. A. . *MODELAGEM COMPUTACIONAL APLICADA À FLAMBAGEM ELÁSTICA DE COLUNAS PERFURADAS. Revista de Engenharia e Tecnologia*, v. 7, p. 12-22, 2015.

212. DA SILVA, C. C. C. ; TROIAN, S. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; REAL, M. V. ; ISOLDI, L. A. . *SIMULAÇÃO NUMÉRICA E MÉTODO CONSTRUCTAL DESIGN APLICADOS AO ESTUDO DE PLACAS PERFURADAS DE MATERIAL COMPÓSITO SUBMETIDAS À FLEXÃO. Revista de Engenharia e Tecnologia*, v. 7, p. 47-55, 2015.

213. SEIBT, F. M. ; ISOLDI, L. A. ; TEIXEIRA, P. R. F. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. . *AVALIAÇÃO NUMÉRICA DO EFEITO DA VARIAÇÃO DA ALTURA RELATIVA DE UM CONVERSOR DE ENERGIA DAS ONDAS DO MAR TIPO PLACA SUBMERSA. Revista de Engenharia e Tecnologia*, v. 7, p. 102-115, 2015.

214. GOULART, M. M. ; MARTINS, J. C. ; Acunha Jr, I.C. ; GOMES, M. N. ; Souza, J. A. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . Constructal design of an onshore overtopping device in real scale for two different depths. Marine Systems & Ocean Technology, v. 10, p. 120-129, 2015.

215. DE ANDRADE, THIAGO SMITH VASCONCELLOS COIMBRA ; RODRIGUES, MARCO PAULSEN ; ISOLDI, LIÉRCIO ANDRÉ ; SOUZA, JEFERSON AVILA ; CENTENO, FELIPE ROMAN ; ROCHA, LUIZ ALBERTO OLIVEIRA ; FRANÇA, FRANCIS HENRIQUE RAMOS ; **DOS SANTOS, ELIZALDO DOMINGUES** . *Estudo numérico de escoamentos turbulentos com convecção forçada em cavidades cilíndricas: comparação entre LES e RANS. Scientia Plena*, v. 11, p. 10, 2015.

216. NUNES, BRUNA RODRIGUES ; FERRAZ, JULIANE GABINA ; KIPPER, RICARDO ; RODRIGUES, MICHEL KEPES ; BRUM, RUTH DA SILVA ; SOUZA, JEFERSON AVILA ; ROCHA, LUIZ ALBERTO OLIVEIRA ; **DOS SANTOS, ELIZALDO DOMINGUES** ; ISOLDI, LIÉRCIO ANDRÉ . *Modelagem computacional aplicada ao estudo de um trocador de calor solo-ar com diferentes configurações geométricas. Scientia Plena*, v. 11, p. 10, 2015.

217. BONOW, VINÍCIUS TIMM ; MACEDO, FABIANO JORGE ; **DOS SANTOS, ELIZALDO DOMINGUES** ; FERREIRA DOS SANTOS, FABIANE BINSFELD ; DE MELLO, FELIPE BIER ; ISOLDI, LIÉRCIO ANDRÉ . *Análise da influência de parâmetros construtivos no funcionamento de um equipamento de infusão mecanizada. Scientia Plena*, v. 11, p. 10, 2015.

218. HELBIG, DANIEL ; MICHAELLO, ROBERTA DA SILVA ; **DOS SANTOS, ELIZALDO DOMINGUES** ; REAL, MAURO DE VASCONCELLOS ; ROCHA, LUIZ ALBERTO OLIVEIRA ; ISOLDI, LIÉRCIO ANDRÉ . *Análise numérica da flambagem térmica em placas finas de aço. Scientia Plena*, v. 11, p. 8, 2015.

219. TROIAN, SANDRO ; CARDOSO DA SILVA, CAIO CESAR ; OLIVEIRA ROCHA, LUIZ ALBERTO ; **DOMINGUES DOS SANTOS, ELIZALDO** ; ISOLDI, LIÉRCIO ANDRÉ ; VASCONCELLOS REAL, MAURO . *Análise Numérica do Comportamento Mecânico de Placas Finas Perfuradas de Materiais Compósitos sob Flexão. Scientia Plena*, v. 11, p. 10, 2015.

220. ALONSO, RENATA COSTA DE ALMEIDA ; LIMA, DIEGO SOUZA DE ; GOMES, MATHEUS ; REAL, MAURO DE VASCONCELLOS ; **SANTOS, ELIZALDO DOMINGUES DOS** ; ISOLDI, LIÉRCIO ANDRÉ . *Modelagem computacional aplicada à flambagem elástica de colunas. Scientia Plena*, v. 11, p. 10, 2015.

221. GOULART, MARCELO MORAES ; MARTINS, JAIFER CORRÊA ; GOMES, MATEUS DAS NEVES ; ACUNHA JR, IVONI CARLOS ; SOUZA, JEFERSON AVILA ; ROCHA, LUIZ ALBERTO OLIVEIRA ; ISOLDI, LIÉRCIO ANDRÉ ; **DOS SANTOS, ELIZALDO DOMINGUES** . *Constructal Design de um dispositivo de galgamento onshore em escala real para uma profundidade fixa. Scientia Plena*, v. 11, p. 10, 2015.

222. FERRAZ, JULIANE GABINA ; NUNES, BRUNA RODRIGUES ; RODRIGUES, MICHEL KEPES ; BRUM, RUTH DA S. ; SOUZA, JEFERSON AVILA ; ROCHA, LUIZ ALBERTO OLIVEIRA ; ISOLDI, LIÉRCIO ANDRÉ ; **DOS SANTOS, ELIZALDO DOMINGUES** . *Modelagem computacional de um trocador de calor solo-ar empregando diferentes modelagens para turbulência. Scientia Plena*, v. 11, p. 10, 2015.

223. DA FONSECA, SUELEM GRELLERT ; CARDOSO, FELIPE RODRIGUES ; RAZERA, ANDRE LUIZ ; ISOLDI, LIÉRCIO ANDRÉ ; PORTE, ANDERSON FAVERO ; ROCHA, LUIZ ALBERTO OLIVEIRA ; **DOS SANTOS, ELIZALDO DOMINGUES** ; GALARÇA, MARCELO MORAES . *Estudo numérico de um arranjo triangular de cilindros submetidos a escoamento laminar com convecção forçada. Scientia Plena*, v. 11, p. 10, 2015.

224. ESTRADA, EMANUEL DA SILVA DIAZ ; GONZALES, GILL VELLEDA ; **DOS SANTOS, ELIZALDO DOMINGUES** ; ISOLDI, LIÉRCIO ANDRÉ ; ROCHA, LUIZ ALBERTO OLIVEIRA . *Constructal design aplicado à cavidades convectivas inseridas em um sólido cilíndrico. Scientia Plena*, v. 11, p. 10, 2015.

225. RODRIGUES, MICHEL KEPES ; GOULART, MARCELO MORAES ; HELBIG, DANIEL ; MAGALHÃES, GLAUCILÉIA M. C. ; JUNIOR, IVONI CALOS ACUNHA ; ROCHA, LUIZ ALBERTO OLIVEIRA ; ISOLDI, LIÉRCIO ANDRÉ ; **DOS SANTOS, ELIZALDO DOMINGUES** . *Constructal Design aplicado à otimização geométrica de um material de alta condutividade térmica em forma de 'T'. Scientia Plena*, v. 11, p. 10, 2015.

226. JUNIOR, IVONI CARLOS ACUNHA ; POHLMANN, STEPHANIE DOS SANTOS ; DA SILVEIRA, LISSANDRA SILVEIRA ; RAHN, MARCO AURÉLIO DOS SANTOS ; PORTE, ANDERSON FAVERO ; **SANTOS, ELIZALDO DOMINGUES DOS** ; ISOLDI, LIÉRCIO ANDRÉ ; RODRIGUES, MICHEL KEPES . *Estudo experimental e computacional de um compressor de refrigeração operando sob condições controladas em uma câmara calorimétrica. Scientia Plena*, v. 11, p. 9, 2015.

227. RODRIGUES, MICHEL KEPES ; SOUZA, JEFERSON AVILA ; VAZ, JOAQUIM ; JUNIOR, IVONI CARLOS ACUNHA ; ROCHA, LUIZ ALBERTO OLIVEIRA ; BRUM, RUTH DA SILVA ; **SANTOS, ELIZALDO DOMINGUES DOS** ; ISOLDI, LIÉRCIO ANDRÉ . *Estudo numérico da influência de condições de contorno na modelagem computacional de trocador de calor solo-ar. Scientia Plena*, v. 11, p. 10, 2015.

228. VELLEDA GONZALES, GILL ; **DOMINGUES DOS SANTOS, ELIZALDO** ; RAMOS EMMENDORFER, LEONARDO ; ANDRÉ ISOLDI, LIÉRCIO ; OLIVEIRA ROCHA, LUIZ ALBERTO ; DA SILVA DIAZ ESTRADA, EMANUEL . A Comparative Study of Simulated Annealing with different Cooling Schedules for Geometric Optimization of a Heat Transfer Problem According to Constructal Design. *Scientia Plena*, v. 11, p. 11, 2015.

229. MARZAROTTO, CARINE ; NUNES, BRUNA ; RODRIGUES, MICHEL KEPES ; SOUZA, JEFERSON AVILA ; ROCHA, LUIZ ALBERTO OLIVEIRA ; **DOS SANTOS, ELIZALDO DOMINGUES** ; ISOLDI, LIÉRCIO ANDRÉ . *Análise numérica da influência de parâmetros operacionais e construtivos no funcionamento de trocadores de calor solo-ar. Scientia Plena*, v. 11, p. 11, 2015.

230. GONZALES, G. V. ; Estrada, E. da S. D. ; EMMENDORFER, L. R. ; ISOLDI, L. A. ; XIE, G. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** . A comparison of simulated annealing schedules for constructal design of complex cavities intruded into conductive walls with internal heat generation. Energy (Oxford), v. 93, p. 372-382, 2015.

231. Centeno, F. R. ; **Dos Santos, E. D.** ; da Silva, C. V. ; FRANCA, F. H. R. . *Um estudo numérico da influência da radiação sobre a turbulência em uma chama turbulenta 2D axissimétrica. Estudos Tecnológicos (Online)*, v. 11, p. 55-63, 2015.

232. LORENZINI, GIULIO ; LARA, MARIA ; ROCHA, LUIZ ; GOMES, MATEUS ; **SANTOS, Elizaldo** ; ISOLDI, LIÉRCIO . CONSTRUCTAL DESIGN APPLIED TO THE STUDY OF THE GEOMETRY AND SUBMERGENCE OF AN OSCILLATING WATER COLUMN. HEAT AND TECHNOLOGY, v. 33, p. 31-38, 2015.

233. SEIBT, F. M. ; Couto, E. C. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. ; TEIXEIRA, P. R. F. . Numerical study on the effect of submerged depth on the horizontal plate wave energy converter. China Ocean Engineering, v. 28, p. 687-700, 2014.

234. **Dos Santos, E. D.**; MACHADO, B. N. ; Zanella, M. M. ; GOMES, M. N. ; Souza, J. A. ; ISOLDI, L. A. ; ROCHA, L. A. O. . Numerical Study of the Effect of the Relative Depth on the Overtopping Wave Energy Converters According to Constructal Design. Defect and Diffusion Forum, v. 348, p. 232-244, 2014.

235. Horbach, C. dos S. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . Constructal Design of Y-Shaped Conductive Pathways for Cooling a Heat-Generating Body. Defect and Diffusion Forum, v. 348, p. 245-260, 2014.

236. Link, F. B. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . CONSTRUCTAL DESIGN OF A X-SHAPED CAVITY COOLED BY CONVECTION. *Engenharia Térmica*, v. 13, p. 54-58, 2014.

237. VAZ, JOAQUIM ; SATTLER, MIGUEL A. ; BRUM, RUTH DA S. ; **DOS SANTOS, ELIZALDO D.** ; ISOLDI, LIÉRCIO A. . An experimental study on the use of Earth-Air Heat Exchangers (EAHE). Energy and Buildings, v. 72, p. 122-131, 2014.

238. Lorenzini, G. ; Biserni, C. ; Estrada, E. da S. D. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . Genetic Algorithm Applied to Geometric Optimization of Isothermal Y-Shaped Cavities. Journal of Electronic Packaging, p. 031011-1-031011-8, 2014.

239. Lorenzini, G. ; Biserni, C. ; CORREA, R. L. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . Constructal design of T-shaped assemblies of fins cooling a cylindrical solid body. International Journal of Thermal Sciences, v. 83, p. 96-103, 2014.

240. Lorenzini, G. ; Biserni, C. ; ESTRADA, E. D. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. . Constructal Design of Convective Y-Shaped Cavities by Means of Genetic Algorithm. Journal of Heat Transfer, v. 136, p. 071702-071702-10, 2014.

241. Lorenzini, G. ; Biserni, C. ; LINK, F.B. ; **SANTOS, DOS** ; ISOLDI, L.A. ; Rocha, L.A.O. . Constructal design of isothermal X-shaped cavities. THERM SCI, v. 18, p. 349-356, 2014.

242. SEIBT, F. M. ; Couto, E. C. ; TEIXEIRA, P. R. F. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. ; ISOLDI, L. A. . Numerical Analysis of the Fluid-Dynamic Behavior of a Submerged Plate Wave Energy Converter. Computational Thermal Sciences, v. 6, p. 525-534, 2014.

243. GOMES, M. N. ; SEIBT, F. M. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . Numerical Analysis of an Oscillating Water Column Converter Considering a Physical Constraint in the Chimney Outlet. Marine Systems & Ocean Technology, v. 9, p. 85-93, 2014.

244. SEIBT, F. M. ; Letzow, M. ; GOMES, M. N. ; Souza, J. A. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . Computational Modeling Applied to the Study of Wave Energy Converters (WEC). Marine Systems & Ocean Technology, v. 9, p. 77-84, 2014.

245. **DOS SANTOS, ELIZALDO D.**; ISOLDI, LIÉRCIO A. ; PETRY, ADRIANE P. ; FRANÇA, FRANCIS H. R. . A numerical study of combined convective and radiative heat transfer in non-reactive turbulent channel flows with several optical thicknesses: a comparison between LES and RANS. JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING (ONLINE), v. 36, p. 207-219, 2014.

246. ISOLDI, L. A. ; REAL, M. V. ; Vaz, J. ; CORREIA, A. L. G. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. . Numerical Analysis and Geometric Optimization of Perforated Thin Plates Subjected to Tension or Buckling. Marine Systems & Ocean Technology, v. 8, p. 99-107, 2013.

247. ISOLDI, L. A. ; LOPES, N. R. ; Grimmler, J. do A. M. ; GOMES, M. N. ; Souza, J. A. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. . Numerical Analysis of the Hydropneumatic Chamber Shape Influence in an Oscillating Water Column (OWC) Wave Energy Converter. Marine Systems & Ocean Technology, v. 8, p. 109-117, 2013.

248. **Dos Santos, E. D.**; PETRY, A. P. ; ROCHA, L. A. O. ; FRANCA, F. H. R. . Numerical Study of Forced Convection Lid-driven Cavity Flows using Large Eddy Simulation (LES). Journal of Energy and Power Engineering, v. 7, p. 1669-1680, 2013.

249. CORREIA, A. L. G. ; da Silveira, T. ; Da Silva, C. C. ; ROCHA, L. A. O. ; REAL, M. V. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . *Constructal Design Aplicado a Placas com Furos Elípticos sob Flambagem. Vetor (FURG)*, v. 23, p. 18-31, 2013.

250. DIAS, G. C. ; SANTOS, S. M. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. ; Olinto, C. R. . *Análise Teórica da Influência de Perfis sobre a Potência de uma Turbina Wells Empregada em Dispositivos de Conversão de Energia das Ondas. Vetor (FURG)*, v. 23, p. 44-56, 2013.

251. Brum R. S. ; Vaz, J. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . A New Computational Modeling to Predict the Behavior of Earth-Air Heat Exchangers. Energy and Buildings, v. 64, p. 395-402, 2013.

252. ROCHA, LUIZ A. O. ; ISOLDI, LIÉRCIO A. ; VASCONCELLOS REAL, MAURO ; **SANTOS, ELIZALDO DOMINGUES** ; CORREIA, ANDERSON L. G. ; LORENZINI, GIULIO ; BISERNI, CESARE . Constructal design applied to the elastic buckling of thin plates with holes. Central European Journal of Engineering, v. 3, p. 475-483, 2013.

253. Helbig, D. ; REAL, M. V. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . *Análise Numérica do Comportamento Mecânico sob Flexão de Placas Finas de Material Compósito Laminado Reforçado por Fibras. Vetor (FURG)*, v. 23, p. 5-15, 2013.

254. Lorenzini, G. ; Biserni, C. ; Link, F. B. ; ISOLDI, L. A. ; **Santos, E. D.** ; ROCHA, L. A. O. . Constructal design of T-shaped cavity for several convective fluxes imposed at the cavity surfaces. J ENG THERMOPHYS-RUS, v. 22, p. 309-321, 2013.

255. Brum R. S. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; VAZ, J. ; ROCHA, L. A. O. . TWO-DIMENSIONAL COMPUTATIONAL MODELING OF THE SOIL THERMAL BEHAVIOR DUE TO THE INCIDENCE OF SOLAR RADIATION. *Engenharia Térmica*, v. 12, p. 63-68, 2013.

256. Lorenzini, G. ; ROCHA, L. A. O. ; Biserni, C. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . Constructal Design of Cavities Inserted Into a Cylindrical Solid Body. Journal of Heat Transfer, v. 134, p. 071301-1-071301-8, 2012.

257. Lorenzini, G. ; Garcia, F.L. ; **dos Santos, E.D.** ; Biserni, C. ; Rocha, L.A.O. . Constructal design applied to the optimization of complex geometries: T-Y-shaped cavities with two additional lateral intrusions cooled by convection. INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, v. 55, p. 1505-1512, 2012. Citações:30|22

258. Rocha, Luiz Alberto O. ; Real, M. V. ; CORREIA, A. L. G. ; Vaz, J. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . GEOMETRIC OPTIMIZATION BASED ON THE CONSTRUCTAL DESIGN OF PERFORATED THIN PLATES SUBJECT TO BUCKLING. Computational Thermal Sciences, v. 4, p. 119-129, 2012.

259. Brum R. S. ; ROCHA, L. A. O. ; Vaz, J. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . Development of Simplified Numerical Model for Evaluation of the Influence of Soil-Air Heat Exchanger Installation Depth over Its Thermal Potential. International Journal of Advanced Renewable Energy Research, v. 1, p. 505-514, 2012.

260. Acunha Jr, I.C. ; GALARCA, M. M. ; Porte, A. F. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; Smith Schneider, P. . *Uma Comparação Qualitativa Numérica entre Condensadores Evaporativos de Grande e Pequena Escala. Vetor (FURG)*, v. 22, p. 68-82, 2012.

261. CORREA, R. L. ; ROCHA, L. A. O. ; ISOLDI, L. A. ; **Dos Santos, E. D.** . Constructal Design of two T-Shaped Assemblies of Fins Cooling a Cylindrical Solid Body. *Vetor (FURG)*, v. 22, p. 34-42, 2012.

262. SEIBT, F. M. ; Couto, E. C. ; TEIXEIRA, P. R. F. ; **Dos Santos, E. D**. ; ISOLDI, L. A. . *Análise Numérica de uma Placa Submersa como Quebra Mar e Conversor de Energia das Ondas. Vetor (FURG)*, v. 22, p. 5-17, 2012.

263. **Dos Santos, E. D.**; da Silva, F. M. V. ; Acunha Jr, I.C. ; GALARCA, M. M. ; ISOLDI, L. A. ; ROCHA, L. A. O. . Numerical Investigation of Turbulent Forced Convective Flows over a Pair of Circular Cylinders.

Engenharia Térmica, v. 11, p. 77-84, 2012.

264. GOMES, M. N. ; Nascimento, C. ; Bonafini, B. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . Two-Dimensional Geometric Optimization of an Oscillating Water Column Converter in Laboratory Scale. *Engenharia Térmica*, v. 11, p. 30-36, 2012.

265. MARQUES, C. H. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. . Constructal Design of a Vortex Tube for Several Inlet Stagnation Pressures. *Engenharia Térmica*, v. 11, p. 85-92, 2012.

266. Porto J. S. ; Letzow, M. ; **Dos Santos, E. D.** ; Amico, A. C. ; Souza, J. A. ; ISOLDI, L. A. . Computational Modeling of RTM and LRTM Processes Applied to Complex Geometries. *Engenharia Térmica*, v. 11, p. 93-99, 2012.

267. Grimmler, J. do A. M. ; GOMES, M. N. ; Souza, J. A. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. ; ISOLDI, L. A. . Constructal Design of a Three-Dimensional Oscillating Water Column (OWC) Wave Energy Converter (WEC). International Journal of Advanced Renewable Energy Research (IJARER), v. 1, p. 573-580, 2012.

268. **Dos Santos, E. D**.; XAVIER, C. M. ; PETRY, A. P. . *Estudio Numérico de Flujos Turbulentos Isotérmicos en Canales y Flujos Laminares con Convección Mixta en Cavidades. Informacion Tecnologica*, v. 22, p. 71-82, 2011.

269. Lorenzini, G. ; CORREA, R. L. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. . Constructal design of complex assemblies of fins. JOURNAL OF HEAT TRANSFER-TRANSACTIONS OF THE ASME, v. 133, p. 081902-1-081902-7, 2011.

270. Vaz, J. ; Sattler, M. A. ; **Dos Santos, E. D.** ; ISOLDI, L. A. . Experimental and Numerical Analysis of an Earth-Air Heat Exchanger. Energy and Buildings, v. 43, p. 2476-2482, 2011.

271. **Dos Santos, E. D.**; PICCOLI, G. ; PETRY, A. P. ; FRANCA, F. H. R. . Analysis of mixed convection in transient laminar and turbulen flows in driven cavities. International Journal of Heat and Mass Transfer, v. 54, p. 4585-4595, 2011.

272. Lorenzini, G. ; Biserni, C. ; ISOLDI, L. A. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. . Constructal Design Applied to the Geometric Optimization of Y-shaped Cavities Embedded in a Conducting Medium. Journal of Electronic Packaging, v. 133, p. 041008, 2011.

273. **Dos Santos, E. D.**; GALARCA, M. M. ; MOSSI, A. C. ; PETRY, A. P. ; FRANCA, F. H. R. . A Numerical Study of the Influence of Temperature Fluctuations in the Thermal Radiation Field. *Engenharia Térmica*, v. 8, p. 51-57, 2009.

274. VERGARA, L. C. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. . Thermal Optimization of Circular Bodies Submitted to an Intense Heat Flux using Constructal Design. *Vetor (FURG)*, v. 19, p. 49-61, 2009.

275. BOLZAN, C. R. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . Geometric optimization of bodies submitted to an intense heat flux using bifurcated channel nets. *Vetor (FURG)*, v. 19, p. 51-57, 2009.

276. GOMES, M. N. ; ISOLDI, L. A. ; Olinto, C. R. ; ROCHA, L. A. O. ; **Dos Santos, E. D.** ; Souza, J. A. . *Modelagem computacional de um dispositivo do tipo coluna de água oscilante para a costa de Rio Grande. Vetor (FURG)*, v. 19, p. 58-73, 2009.

277. SANTOS, S. M. ; PINHO, J. M. ; KELLER, P. P. ; DIAS, G. C. ; **Dos Santos, E. D.** . Aerodynamical and Mechanical Design of Turbine Blade. *Vetor (FURG)*, v. 19, p. 5-14, 2009.

278. FARIAS, R. M. ; **Dos Santos, E. D.** ; ISOLDI, L. A. ; ROCHA, L. A. O. . Numerical Study of Reservoir Cooling by Means of Peltier Effect. *Vetor (FURG*), v. 18, p. 56-66, 2008.

279. ROCHA, L. A. O. ; MONTANARI, G. C. ; **Dos Santos, E. D.** ; ROCHA, A. S. . Constructal design applied to the study of cavities into a solid conducting wall. *Engenharia Térmica*, v. 6, p. 41-47, 2007.

280. MARQUES, C. H. ; **Dos Santos, E. D.** ; ROCHA, L. A. O. . Constructal Design Applied to the

Optimization of Heat Transfer in a Solid Conducting Wall. Vetor (FURG), v. 17, p. 5-15, 2007.

Published Books:

1. Rodrigues, M. K.; **Dos Santos, E. D.**; ISOLDI, L. A.. 2022. *Análise de Desempenho de Trocadores de Calor Solo-Ar - Métodos Matemáticos, Métodos Numéricos e Modelo Computacional* ed 1. vols 1, p. 156. *Novas Edições Acadêmicas*

2. SANTOS, A. L. G.; **Dos Santos, E. D.**. 2017. *Análise Numérica do Escoamento Compressível em um Tubo Vórtex* ed 1. vols 1, p. 65. Saarbrücken: *Novas Edições Acadêmicas*

3. Razera, A. L.; **Dos Santos, E. D.**; ROCHA, L. A. O.. 2017. *Escoamento Externo Sobre Cilindros de Seção Transversal Elíptica - Uma avaliação numérica da densidade de transferência de calor através do método Design Construtal* d ed 1. vols 1, p. 69. Saarbrücken: *Novas Edições Acadêmicas*

4. ISOLDI, L. A.; **Dos Santos, E. D.**; SANTOS, M. A. V.. 2016. *Análise Numérica da Dinâmica de Cabos Altamente Extensíveis Através do Método das Diferenças Finitas (MDF)* d ed 1. vols 1, p. 165. Saarbrücken - Deutschland: Verlag - *Novas Edições Acadêmicas*

5. MARTINS, J. C.; **Dos Santos, E. D.**; ISOLDI, L. A.. 2016. *Aplicação do Design Construtal em um Dispositivo de Galgamento Onshore - considerando diferentes áreas de rampa e duas ondas monocromáticas* d ed 1. vols 1, p. 125. Saarbrücken - Deutschland: Verlag - *Novas Edições Acadêmicas*

6. GOULART, M. M.; **Dos Santos, E. D.**; ISOLDI, L. A.. 2016. *CONSTRUCTAL DESIGN DE UM WEC DO TIPO GALGAMENTO ONSHORE EM ESCALA REAL* d ed 1. vols 1, p. 161. Saarbrücken - Deutschland: Verlag - *Novas Edições Acadêmicas*

7. Rodrigues, M. K.; **Dos Santos, E. D.**; ISOLDI, L. A.. 2015.Numerical Analysis and Constructal Design of Earth-Air Heat Exchanger - Mathematical Methods for Engineering d ed 1. vols 1, p. 176. Saarbrücken: Lampert Academic Publishing

8. **Dos Santos, E. D.**; PETRY, A. P.; FRANCA, F. H. R.. 2013. *Interações Turbulência Radiação em Escoamentos Não-Reativos* d ed 1, p. 214. Saarbrücken: Saarbrücken: *Novas Edições Acadêmicas*

Book Chapters:

1. da Silveira, T.; NEUFELD, J. P. S.; ROCHA, L. A. O.; **Dos Santos, E. D.**; ISOLDI, L. A.. 2022. Constructal Design Applied to Biaxial Elasto-Plastic Buckling Analysis of Square Steel Plates with Cutout (Chapter 29) In Structural Integrity and Fatigue Failure Analysis Experimental, Theoretical and Numerical Approaches, edited by Grzegorz Lesiuk, Mieczyslaw Szata, Wojciech Blazejewski, Abílio M.P. de Jesus, José A.F.O. Correia. e ed 1. Vol. 25, 313-320. Cham: Springer Nature

2. BAUMGARDT, GUILHERME RIBEIRO; SOUSA, E. Q.; PINTO, L. W. B.; **Dos Santos, E. D.**; da Silveira, T.; ISOLDI, L. A.. 2022. Numerical Simulation and Constructal Design Applied to Perforated Plate Subjected to Biaxial Buckling In Fatigue and Fracture of Materials and Structures Contributions from ICMFM XX and KKMP2021, edited by Grzegorz Lesiuk, Szymon Duda, José A. F. O. Correia, Abílio M. P. De Jesus. e ed 1. Vol. 24, 23-28. Cham: Springer Nature

3. MARTINS, K. L.; PINTO, V. T.; FRAGASSA, C.; Real, M. V.; ROCHA, L. A. O.; ISOLDI, L. A.; **Dos Santos, E. D.**. 2022. Numerical Study of FPSO Platform Brackets for Different Geometric Configurations Subjected to Environmental Loads (Chapter 30) In Structural Integrity and Fatigue Failure Analysis Experimental, Theoretical and Numerical Approaches, edited by Grzegorz Lesiuk, Mieczyslaw Szata, Wojciech Blazejewski, Abílio M.P. de Jesus, José A.F.O. Correia. e ed 1. Vol. 25, 321-328. Cham: Springer Nature

4. RODRIGUES, MICHEL KEPES; RAMALHO, JAIRO VALÕES DE ALENCAR; BRUM, RUTH DA SILVA; ROCHA, LUIZ ALBERTO OLIVEIRA; **SANTOS, ELIZALDO DOMINGUES DOS**; ISOLDI, LIÉRCIO ANDRÉ. 2020. *ANÁLISES DE GERAÇÃO DE MALHA NA MODELAGEM NUMÉRICA DE TROCADORES DE*

CALOR SOLO-AR In Ciências Exatas e da Terra: Conhecimentos Estratégicos para o Desenvolvimento do País, edited by Júlio César Ribeiro. e ed 1. Vol. 1, 43-54. Ponta Grossa - PR: *Atena Editora*

5. Estrada, Emanuel da Silva Dias; **DOS SANTOS, ELIZALDO DOMINGUES**; ISOLDI, LIÉRCIO ANDRÉ; ROCHA, LUIZ ALBERTO OLIVEIRA. 2019. Constructal Design Associated with Genetic Algorithm to Maximize the Performance of H-Shaped Isothermal Cavities In Computational Intelligence, Optimization and Inverse Problems with Applications in Engineering, edited by Gustavo Mendes Platt, Xin-She Yang, Antônio José Silva Neto. e ed 1, 215-226. Cham: Springer International Publishing

6. BRUM, RUTH DA SILVA; ISOLDI, LIÉRCIO ANDRÉ; RAMALHO, JAIRO VALÕES DE ALENCAR; ROCHA, LUIZ ALBERTO OLIVEIRA; RODRIGUES, MICHEL KEPES; **SANTOS, ELIZALDO DOMINGUES DOS**. 2019. *UM PROJETO CONSTRUCTAL DE TROCADORES DE CALOR SOLO-AR COMPOSTOS POR QUATRO DUTOS In Princípios e Aplicações da Computação no Brasil*, edited by Ernane Rosa Martins. e ed 1. Vol. 1, 16-29. Ponta Grossa - Pr: *Atena Editora*

7. **Dos Santos, E. D.**; ISOLDI, L. A.; GOMES, M. N.; ROCHA, L. A. O.. 2017. The Constructal Design Applied to Renewable Energy Systems In Sustainable Energy Technologies, edited by Eduardo Rincón-Mejía; Alejandro de las Heras. (Org.). e ed 1. Vol. 1, 63-87. Boca Raton: CRC Press - Taylor & Francis Group

8. ROCHA, L. A. O.; **Santos, E. D. dos**; Cunha, D. C.; Garcia, F. L.; Lorenzini, G.; Biserni, C.; Letzow, M.; Costa, J. A. V.; Souza, J. A.; ISOLDI, L. A.. 2013. Constructal Design of Thermal Systems In Understanding Complex Systems, edited by L. A. O. Rocha; S. Lorente; A. Bejan. e ed 1. Vol. 1, 295-321: Springer New York

9. **Santos, E. D. dos**; MARQUES, C. H.; STANESCU, G.; ISOLDI, L. A.; ROCHA, L. A. O.. 2013. Constructal Design of Vortex Tubes In Understanding Complex Systems, edited by L. A. O. Rocha; S. Lorente; A. Bejan. e ed 1. Vol. 1, 259-273: Springer New York

10. **Santos, E. D. dos**; MACHADO, B. N.; Lopes, N.; Souza, J. A.; TEIXEIRA, P. R. F.; GOMES, M. N.; ISOLDI, L. A.; ROCHA, L. A. O.. 2013. Constructal Design of Wave Energy Converters In Understanding Complex Systems, edited by L. A. O. Rocha; S. Lorente; A. Bejan. e ed 1. Vol. 1, 275-294: Springer New York

11. ISOLDI, L. A.; Real, M. V.; CORREIA, A. L. G.; Vaz, J.; **Santos, E. D. dos**; ROCHA, L. A. O.. 2013. Flow of Stresses: Constructal Design of Perforated Plates Subjected to Tension or Buckling In Understanding Complex Systems, edited by L. A. O. Rocha; S. Lorente; A. Bejan. e ed 1. Vol. 1, 195-217: Springer New York

12. GOMES, M. N.; ISOLDI, L. A.; **Dos Santos, E. D.**; ROCHA, L. A. O.. 2012. Numerical Simulation of Regular Wave Propagation in Tanks In Wave Propagation, edited by Luiz A. O. Rocha, Mateus das N. Gomes. e ed 1. Vol. 1, 99-118. Cheyenne: Wyoming: Academy Publish

Human Ressources Formation

Supervision Statistics:
Pos-doctorate supervision: 1
Doctorate – Main Advisor (complete): 2
Doctorate – Co-Advisor: 4
Doctorate (ongoing): 5
Master Thesis – Main Advisor: 23
Master Thesis – Co-Advisor: 22
Master Thesis (ongoing): 1
Undergraduate Conclusion Works: 46
Scientific Initiation: 34

Doctorate Thesis Supervisions:
1. Student: Glauciléia Maria Cardoso Magalhães.

Title: Numerical Analysis of the Geometric Configuration of Injection Channels in Liquid Resin Infusion Problems Constructed with the Application of Constructal Theory.
Year: 2023.
Institution: Federal University of Rio Grande
Graduate Program: Computational Modeling
Advisor: Elizaldo Domingues dos Santos

2. Student: Marcelo Moraes Goulart
Title: Validation of a Numerical Model of an Overtopping Device and Numerical and Experimental Investigation of its Geometry Applying Constructal Design
Year: 2022.
Institution: Federal University of Rio Grande
Graduate Program: Computational Modeling
Co-Advisor: Elizaldo Domingues dos Santos

3. Student: Laísa Luiz Soares
Title: Development of Computational Modeling and Geometrical Evaluation of Baffles in Mixture Tank Applying Constructal Design
Year: 2021.
Institution: Federal University of Rio Grande
Graduate Program: Computational Modeling
Co-Advisor: Elizaldo Domingues dos Santos

4. Student: Thiago da Silveira
Title: Numerical Simulation and Constructal Design for Biaxial Elasto Plastic Buckling of Perforated Plates
Year: 2021.
Institution: Federal University of Rio Grande
Graduate Program: Computational Modeling
Co-Advisor: Elizaldo Domingues dos Santos

5. Student: Gill Velleda Gonzales
Title: Geometric Optimization of the Cooling Cavities Applying Constructal Theory and Computational Inteligence
Year: 2020.
Institution: Federal University of Rio Grande
Graduate Program: Computational Modeling
Advisor: Elizaldo Domingues dos Santos

6. Student: Michel Kepes Rodrigues
Title: Numerical Analysis of Y-Shaped Earth-Air Heat Exchangers by means of Constructal Design and a New Energetic Performance Indicator Employing an Improved Computational Model
Year: 2019.
Institution: Federal University of Rio Grande
Graduate Program: Computational Modeling
Co-Advisor: Elizaldo Domingues dos Santos

Master Thesis Supervisions:
1. Student: Amanda Lopes dos Santos
Title: Numerical Analysis of Geometrical Configuration of Oscillating Water Column Devices Wave Energy Converters Considering an Impulse Turbine.
Year: 2022.
Institution: Federal University of Rio Grande
Graduate Program: Ocean Engineering
Advisor: Elizaldo Domingues dos Santos

2. Student: Gustavo Villela Rodrigues
Title: Study of the influence of geometric parameters of a radial cristalizator using a multiscale CFD model and Constructal Design.

Year: 2022.
Institution: Federal University of Rio Grande
Graduate Program: Chemical Engineering
Co-advisor: Elizaldo Domingues dos Santos

3. Student: Rafael San Martin Moreira
   Title: Numerical Analysis and Application of Constructal Theory for Construction of Blocks Arrangement Inserted in Channels that Simulates Printed Circuit Heat Exchangers.
   Year: 2021.
   Institution: Federal University of Rio Grande
   Graduate Program: Ocean Engineering
   Advisor: Elizaldo Domingues dos Santos

4. Student: Marta Rodrigues Leão
   Title: Constructal Design Applied for Geometric Influence Evaluation on the Mass Flow Rate of an Inclined Passive Wall Solar Chimney Attached to a Room.
   Year: 2021.
   Institution: Federal University of Rio Grande
   Graduate Program: Computational Modeling
   Advisor: Elizaldo Domingues dos Santos

5. Student: Gabryell Malcher Freire
   Title: Employment of Computational Modeling in the Investigation of the Geometrical Influence in Finned Cavity Subjected to Boiling Forced Convection based on Constructal Design.
   Year: 2021.
   Institution: Federal University of Rio Grande
   Graduate Program: Computational Modeling
   Advisor: Elizaldo Domingues dos Santos

6. Student: Marla Rodrigues de Oliveira
   Title: Numerical Evaluation of Triangular Ramp Placed in the Seabed of a Oscillating Water Column Wave Energy Converter.
   Year: 2021.
   Institution: Federal University of Rio Grande
   Graduate Program: Computational Modeling
   Co-Advisor: Elizaldo Domingues dos Santos

7. Student: Alex Maliska de Moura
   Title: Geometric Optimization of Microchannel Heat Exchangers using the Constructal Theory.
   Year: 2021.
   Institution: Federal University of Rio Grande
   Graduate Program: Computational Modeling
   Co-Advisor: Elizaldo Domingues dos Santos

8. Student: Andréia Sá de Barros
   Title: Geometrical Evaluation of a Structure Coupled to an Onshore Overtopping Wave Energy Converter by Means of Constructal Design.
   Year: 2020.
   Institution: Federal University of Rio Grande
   Graduate Program: Ocean Engineering
   Advisor: Elizaldo Domingues dos Santos

9. Student: Kauê Louro Martins
   Title: Analysis of Mechanical Behavior of Brackets in the Fairleads Fundation of a FPSO Plataform by Means of Numerical Simulation.
   Year: 2019.
   Institution: Federal University of Rio Grande
   Graduate Program: Ocean Engineering

Advisor: Elizaldo Domingues dos Santos

10. Student: Vinícius Torres Pinto
    Title: Numerical Simulation and Constructal Design Method Applied to Geometrical Analysis of Stiffened Rectangular Plates Subjected to Uniform Transversal Load
    Year: 2019.
    Institution: Federal University of Rio Grande
    Graduate Program: Ocean Engineering
    Co-Advisor: Elizaldo Domingues dos Santos

11. Student: Ana Paula Del Aghenese
    Title: Geometrical Evaluation of Forced Convective Flows over an Alternated Arrangement of Cylinders Employing Constructal Design
    Year: 2019.
    Institution: Federal University of Rio Grande
    Graduate Program: Computational Modeling
    Advisor: Elizaldo Domingues dos Santos

12. Student: Rafael de Lima Lemos
    Title: Proposal and Numerical Analysis of a Maritime Propeller using Coanda Effect
    Year: 2019.
    Institution: Federal University of Rio Grande
    Graduate Program: Ocean Engineering
    Advisor: Elizaldo Domingues dos Santos

13. Student: Fábio Luiz da Costa Carrir
    Title: Implementation of a Fluctuating Condensing Temperature System for Reduction of Electric Energy in a Refrigerator Unit
    Year: 2019.
    Institution: Federal University of Rio Grande
    Graduate Program: Computational Modeling
    Co-Advisor: Elizaldo Domingues dos Santos

14. Student: Milton Cesar Bastos Portela Junior
    Title: Numerical Simulation and Constructal Design for Evaluation of the Influence of Spacing between Stiffeners in Deflection of Steel Thin Plates when Subjected to Universal Transverse Load
    Year: 2019.
    Institution: Federal University of Rio Grande
    Graduate Program: Ocean Engineering
    Co-Advisor: Elizaldo Domingues dos Santos

15. Student: Priscila Martta Rodrigues
    Title: Numerical Study and Geometrical Evaluation of Mixed Convection Heat Transfer in a Lid-Driven Cavity with Two Intruded Fins
    Year: 2018.
    Institution: Federal University of Rio Grande
    Graduate Program: Computational Modeling
    Advisor: Elizaldo Domingues dos Santos

16. Student: Andrei Luís Garcia Santos
    Title: Numerical Simulation of an Oscillating Water Column Device Comparing the Laminar and Turbulent Modeling
    Year: 2018.
    Institution: Federal University of Rio Grande
    Graduate Program: Ocean Engineering
    Co-Advisor: Elizaldo Domingues dos Santos

17. Student: Bruno Costa Feijó.
    Title: Geometrical Optimization of a Channel with Intruded Rectangular Fins Subjected to

Forced Convection and Applying Constructal Design
Year: 2017.
Institution: Federal University of Rio Grande
Graduate Program: Ocean Engineering
Advisor: Elizaldo Domingues dos Santos

18. Student: Filipe Branco Teixeira.
Title: Numerical Study of Forced Convective Turbulent Flows over a Triangular Arrangement of Bluff Bodies
Year: 2017.
Institution: Federal University of Rio Grande
Graduate Program: Ocean Engineering
Advisor: Elizaldo Domingues dos Santos

19. Student: Grégori da Silva Troina
Title: Computational Modeling and Constructal Design Applied to Geometrical Optimization of Thin Steel Plates with Stiffeners Subjected to Uniform Transversal Load
Year: 2017.
Institution: Federal University of Rio Grande
Graduate Program: Ocean Engineering
Co-Advisor: Elizaldo Domingues dos Santos

20. Student: Régis Lucas Timm
Title: Constructal Design Application for Geometrical Evaluation of Energy Conversion Sites in the Brazilian South Continental Shelf
Year: 2017.
Institution: Federal University of Rio Grande
Graduate Program: Computational Modeling
Co-Advisor: Elizaldo Domingues dos Santos

21. Student: Eliciana Sias Aldrighi
Title: Numerical Analysis of Geometry of Fins Inserted in Lid-driven Cavities Subjected to Forced Convective Flows
Year: 2016.
Institution: Federal University of Rio Grande
Graduate Program: Computational Modeling
Co-Advisor: Elizaldo Domingues dos Santos

22. Student: Glauciléia Maria Cardoso Magalhães
Title: Constructal Design and Computational Modeling Applied for Geometric Evaluation of Open Channels in a Resin Infusion Process
Year: 2016.
Institution: Federal University of Rio Grande
Graduate Program: Computational Modeling
Advisor: Elizaldo Domingues dos Santos

23. Student: Maicon Vinicius Altnetter
Title: Numerical Study of Geometric Form of Channels with Intruded Fins with Mixed Convective Flows
Year: 2016.
Institution: Federal University of Rio Grande
Graduate Program: Computational Modeling
Advisor: Elizaldo Domingues dos Santos

24. Student: Roberta da Silva Michaello
Title: Numerical Simulation and Constructal Design Applied to the Analysis of the Behavior of Perfurated Columns Subjected to Thermal Buckling
Year: 2016.
Institution: Federal University of Rio Grande
Graduate Program: Computational Modeling

Co-Advisor: Elizaldo Domingues dos Santos

25. Student: Martim dos Santos Pereira
    Title: Geometrical Evaluation of Four Cylinders Arrangment Subjected to Forced Convective Flows Employing Constructal Design
    Year: 2016.
    Institution: Federal University of Rio Grande
    Graduate Program: Ocean Engineering
    Advisor: Elizaldo Domingues dos Santos

26. Student: Thiago da Silveira
    Title: Numerical Simulation and Constructal Design Applied for Biaxial Buckling of Composite Plates used in Naval Structures
    Year: 2016.
    Institution: Federal University of Rio Grande
    Graduate Program: Ocean Engineering
    Co-Advisor: Elizaldo Domingues dos Santos

27. Student: Júlio César Burlamaqui Vianna
    Title: Cooling Cavities Design by Means of Development of Evolutionary Algorithm based on the Constructal Theory
    Year: 2016.
    Institution: Federal University of Rio Grande
    Graduate Program: Ocean Engineering
    Co-Advisor: Elizaldo Domingues dos Santos

28. Student: Jaifer Corrêa Martins
    Title: Constructal Design of an Onshore Overtopping Device in Real Scale for Different Construction Areas and Monochromatic Waves
    Year: 2016.
    Institution: Federal University of Rio Grande
    Graduate Program: Ocean Engineering
    Advisor: Elizaldo Domingues dos Santos

29. Student: Gill Velleda Gonzales
    Title: Geometrical Optimization of Shape and Structure of a Heat Transfer Problem Employing Constructal Theory and Simulated Annealing
    Year: 2015.
    Institution: Federal University of Rio Grande
    Graduate Program: Computational Modeling
    Advisor: Elizaldo Domingues dos Santos

30. Student: Juliane Gabina Ferraz
    Title: Computational Modeling of Earth-Air Heat Exchangers Comparing Different Closure Modeling of Turbulence
    Year: 2015.
    Institution: Federal University of Rio Grande
    Graduate Program: Computational Modeling
    Advisor: Elizaldo Domingues dos Santos

31. Student: Vagner Andrade Pedrotti
    Title: Geometrical Optimization of Tubes Arrangement Subjected to External Flows Using Constructal Design
    Year: 2015.
    Institution: Federal University of Rio Grande
    Graduate Program: Computational Modeling
    Co-Advisor: Elizaldo Domingues dos Santos

32. Student: Gabriel Moraes Barros
    Title: Mixed Convective Influence Over the Geometrical Optimization of Laminar Flows

over a Triangular Arrangement of Circular Cilinders
Year: 2015.
Institution: Federal University of Rio Grande
Graduate Program: Ocean Engineering
Advisor: Elizaldo Domingues dos Santos

33. Student: Rodrigo Spotorno Vieira
Title: Evaluation of the Geometrical Influence of a Solar Chimney Power Plant over the Available Power Employing Constructal Design
Year: 2015.
Institution: Federal University of Rio Grande
Graduate Program: Ocean Engineering
Advisor: Elizaldo Domingues dos Santos

34. Student: Bruna Rodrigues Nunes
Title: Computational Modeling Applied to the Study of Earth-Air Heat Exchanger with Complex Geometrical Configuration
Year: 2015.
Institution: Federal University of Rio Grande
Graduate Program: Computational Modeling
Co-Advisor: Elizaldo Domingues dos Santos

35. Student: Max Letzow
Title: Geometrical Evaluation of an Onshore OWC Chamber Inserted into a Wave Tank with Triangular Ramp in Real Scale Employing Constructal Design
Year: 2014.
Institution: Federal University of Rio Grande
Graduate Program: Ocean Engineering
Advisor: Elizaldo Domingues dos Santos

36. Student: Marcelo Moraes Goulart
Title: Numerical Study of the Geometry of na Onshore Overtopping Device in Real Scale Employing Constructal Design
Year: 2014.
Institution: Federal University of Rio Grande
Graduate Program: Computational Modeling
Advisor: Elizaldo Domingues dos Santos

37. Student: Gustavo da Cunha Dias
Title: Design, Construction and Tests in a Wells Turbine
Year: 2014.
Institution: Federal University of Rio Grande
Graduate Program: Ocean Engineering
Co-Advisor: Elizaldo Domingues dos Santos

38. Student: Michel Kepes Rodrigues
Title: Computational Modeling Applied to the Improvement of Thermal Performance of Earth-Air Heat Exchangers by Means of Constructal Design
Year: 2014.
Institution: Federal University of Rio Grande
Graduate Program: Computational Modeling
Co-Advisor: Elizaldo Domingues dos Santos

39. Student: Ruth da SIlva Brum
Title: Computational Modeling of Earth-Air Heat Exchangers
Year: 2013.
Institution: Federal University of Rio Grande
Graduate Program: Computational Modeling
Co-Advisor: Elizaldo Domingues dos Santos

40. Student: Juliana do Amaral Martins Grimmler
    Title: Numerical Simulation and Geometric Investigation of na Oscillating Water Column Device
    Year: 2013.
    Institution: Federal University of Rio Grande
    Graduate Program: Computational Modeling
    Co-Advisor: Elizaldo Domingues dos Santos

41. Student: Anderson Luis Garcia Correia
    Title: Numerical Simulation and Constructal Design Applied to Analysis of the Mechanical Behavior of Steel Plates Subjected to Elastic Buckling in Ocean Structures
    Year: 2013.
    Institution: Federal University of Rio Grande
    Graduate Program: Ocean Engineering
    Co-Advisor: Elizaldo Domingues dos Santos

42. Student: Crístofer Hood Marques
    Title: Geometric Optimization of a Vortex Tube used for Reuse of Fuels in Gas Stations
    Year: 2012.
    Institution: Federal University of Rio Grande
    Graduate Program: Computational Modeling
    Co-Advisor: Elizaldo Domingues dos Santos

43. Student: Bianca Neves Machado
    Title: Computational Modeling and Geometric Optimization of an Overtopping Wave Energy Converter
    Year: 2012.
    Institution: Federal University of Rio Grande
    Graduate Program: Computational Modeling
    Advisor: Elizaldo Domingues dos Santos

44. Student: Fernanda Link Garcia
    Title: Geometrical Optimization of Complex Cavities Employing Constructal Design
    Year: 2011.
    Institution: Federal University of Rio Grande
    Graduate Program: Computational Modeling
    Co-Advisor: Elizaldo Domingues dos Santos

45. Student: Roberta de Lima Corrêa
    Title: Geometrical Optimization of of a Complex Arrangement of Fins Employing Constructal Design
    Year: 2010.
    Institution: Federal University of Rio Grande
    Graduate Program: Computational Modeling
    Co-Advisor: Elizaldo Domingues dos Santos

Kind Regards,

Prof. Elizaldo Domingues dos Santos (DSc.)
Mechanical Engineering - Associate Professor III - School of Engineering
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