Currículo Lattes

Clodoaldo Irineu Levartoski de Araujo

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Researcher of Productivity at CNPq - Level 2

Resumo informado pelo autor

Bachelor's at Licenciatura plena (2005), master's at Physic (2007) and doctorate at Sciense and Materials Engeneering (2011) from Universidade Federal de Santa Catarina.

(Text informed by the author)

Civil name

Full name Clodoaldo Irineu Levartoski de Araujo

Personal Information

Parental information [redacted]

Birth information [redacted]

Identification document [redacted]

CPF Number [redacted]

Formal Education

2007 - 2011 Doctorate in Engenharia de Materiais.
Universidade Federal de Santa Catarina, UFSC, Florianopolis, Brazil
with **Sandwich Doctorate** in Fondazione Bruno Kessler (Advisor: Leandro Lorenzelli)
Title: Fabricação de dispositivos híbridos para aplicação em transistores de spin, Year of degree: 2011
Advisor: André Avelino Pasa
Scholarship from : Conselho Nacional de Desenvolvimento Científico e Tecnológico

2006 - 2007 Master's in Physics.
Universidade Federal de Santa Catarina, UFSC, Florianopolis, Brazil
Title: Magnetorresistência em ligas ferro-níquel eletrodepositadas sobre silício tipo-n, Year of degree: 2007
Advisor: André Avelino Pasa

1998 - 2005 Graduation in Licenciatura plena.
Universidade Federal de Santa Catarina, UFSC, Florianopolis, Brazil

Postdoctorate

2015 - 2016 Postdoctorate .
Spin electronics Research, SPINTEC, France
Scholarship from : Conselho Nacional de Desenvolvimento Científico e Tecnológico

2011 - 2012 Postdoctorate .
Universidade Federal de Santa Catarina, UFSC, Florianopolis, Brazil
Scholarship from : Coordenação de Aperfeiçoamento de Pessoal de Nível Superior

2012 - 2012 Postdoctorate .
INNOVASENS BRASIL LTDA, InnovaSens, Florianopolis, Brazil
Scholarship from : Conselho Nacional de Desenvolvimento Científico e Tecnológico

Professional Experience

1. Universidade Federal de Viçosa - UFV

Contract institutional

2013 - Current Contract: Servidor público , Position: Professor Adjunto 3, Schemes of job: Full-time and exclusiveness

Activities

02/2013 - Current Research and Development, Departamento de Física

2. INNOVASENS BRASIL LTDA - InnovaSens

Contract
institutional

2012 - 2013 Contract: Bolsista recém-doutor , Position: Bolsista RHAE , Working hours (weekly): 40, Schemes of job: Full-time and exclusiveness

3. Plymouth University - PLYMOUTH

Contract
institutional

2010 - 2010 Contract: Doutorado Sanduiche , Position: Estudante, Schemes of job: Full-time and exclusiveness

4. Fondazione Bruno Kessler - FBK

Contract
institutional

2009 - 2010 Contract: Estagio doutorado , Position: Pesquisador , Working hours (weekly): 40, Schemes of job: Full-time and exclusiveness

5. Universidade Federal de Santa Catarina - UFSC

Contract
institutional

2008 - 2011 Contract: Livre , Position: Doutorando , Working hours (weekly): 40, Schemes of job: Full-time and exclusiveness

2006 - 2007 Contract: Colaborador , Position: Mestrando , Working hours (weekly): 20, Schemes of job: Part-time

2006 - 2012 Contract: Colaborador , Position: Pesquisador , Working hours (weekly): 20, Schemes of job: Part-time

6. Universidade do Vale do Itajai - UNIVALI

Contract
institutional

2007 - 2007 Contract: Colaborador , Position: Professor , Working hours (weekly): 17, Schemes of job: Part-time

Activities

03/2007 - 12/2007 Graduate degree, Engenharia Industrial Mecânica

Disciplines Taught:
Dinâmica , Fisica 3 , Introdução a Fisica , Laboratório de Fisica 3

7. International Iberian Nanotechnology Laboratory - INL

Contract
institutional

2019 - Current

8. Massachusetts Institute of Technology - MIT

Contract
institutional

2018 - Current

Scientific Journal Referee

1. Cell Reports

Contract

2020 - Current Schemes of job: Part-time

2. JOURNAL OF APPLIED PHYSICS

Contract

2018 - Current Schemes of job: Part-time

3. JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS

Contract

2018 - Current Schemes of job: Part-time

4. Nanoscale Research Letters (Print)

Contract

2016 - Current Schemes of job: Part-time

5. Journal of Molecular Liquids (Print)

Contract

2016 - Current Schemes of job: Part-time

Membro de comitê de assessoramento

1. Fundação de Amparo à Pesquisa do Estado de Minas Gerais - FAPEMIG

Contract

2019 - Current Schemes of job: Part-time

Revisor de projeto de agência de fomento

1. Fundação de Apoio à Pesquisa do Distrito Federal - FAP/DF

Contract

2016 - Current Schemes of job: Part-time

2. Fundo Mackenzie de Pesquisa - MACKPESQUISA

Contract

2016 - Current Schemes of job: Part-time

S, T & A Production

Bibliographic Production

Articles Published in Scientific Journals

1. doi DO NASCIMENTO, MARCUS V. B.; NOBRE, FRANCISCO X.; DE ARAÚJO, EDUARDO N. D.; **DE ARAÚJO, CLODOALDO I. L.**; COUCEIRO, PAULO R. C.; MANZATO, LIZANDRO
$Ag_{2-x}Cu_xWO_4$ Solid Solution: Structure, Morphology, Optical Properties, and Photocatalytic Performance in the Degradation of RhB under Blue Light-Emitting Device Irradiation. Journal of Physical Chemistry C. JCR, v.125, p.11875 - 11890, 2021.

2. doi CACILHAS, R.; **DE ARAUJO, C. I. L.**; CARVALHO-SANTOS, V. L.; MORENO, R.; CHUBYKALO-FESENKO, O.; ALTBIR, D.
Controlling domain wall oscillations in bent cylindrical magnetic wires. PHYSICAL REVIEW B. JCR, v.101, p.1 - , 2020.

3. doi DE PAIVA, T. S.; RODRIGUES, J. H.; MÓL, L. A. S.; PEREIRA, A. R.; BORME, J.; FREITAS, P. P.; **DE ARAUJO, C. I. L.**
Effects of magnetic monopoles charge on the cracking reversal processes in artificial square ices. Scientific Reports. JCR, v.10, p.9959 - , 2020.

4. doi GONÇALVES, R.S.; GOMES, A.C.C.; LORETO, R.P.; **DE ARAUJO, C.I.L.**; NASCIMENTO, F.S.; MOURA-MELO, W.A.; PEREIRA, A.R.
Naked-eye visualization of geometric frustration effects in macroscopic spin ices. JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS. JCR, v.1, p.166471 - , 2020.

5. doi ANDRADE SANTECE, ISAAC; CARLOS SOUZA GOMES, JOSIEL; TOSCANO, DANILO; GAMA MONTEIRO JR., MAXWEL; ALMEIDA DE MENDONÇA, JOÃO PAULO; **IRINEU LEVARTOSKI DE ARAUJO, CLODOALDO**; SATO, FERNANDO; DE ANDRADE LEONEL, SIDINEY; ZIMMERMANN COURA, PABLO
Quantitative behavior study of velocity, radius and topological charge on skyrmion/edge interaction dynamics on Co/Pt nanotrack. Quarks: Brazilian Electronic Journal of Physics, Chemistry and Materials Science. , v.3, p.50 - 65, 2020.

6. doi TOSCANO, D.; MENDONÇA, J.P.A.; MIRANDA, A.L.S.; **DE ARAUJO, C.I.L.**; SATO, F.; COURA, P.Z.; LEONEL, S.A.
Suppression of the skyrmion Hall effect in planar nanomagnets by the magnetic properties engineering: Skyrmion transport on nanotracks with magnetic strips. JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS. JCR, v.504, p.166655 - , 2020.

7. doi TORO, OSCAR O.; ALVES, SIDINEY G.; CARVALHO-SANTOS, VAGSON L.; **DE ARAÚJO, CLODOALDO I. L.**
Three terminal nano-oscillator based on domain wall pinning by track defect and anisotropy control. JOURNAL OF APPLIED PHYSICS. JCR, v.127, p.183905 - , 2020.

8. doi TOSCANO, D.; SANTECE, I. A.; GUEDES, R. C. O.; ASSIS, H. S.; MIRANDA, A. L. S.; **DE ARAUJO, C. I. L.**; SATO, F.; COURA, P. Z.; LEONEL, S. A.
Traps for pinning and scattering of antiferromagnetic skyrmions via magnetic properties engineering. JOURNAL OF APPLIED PHYSICS, JCR, v.127, p.193902 - , 2020.

9. doi KHAN, RAJWALI; ZULFIQAR; **DE ARAUJO, CLODOALDO IRINEU LEVARTOSKI**; KHAN, TAHIRZEB; KHATTAK, SHAUKAT ALI; AHMED, EJAZ; KHAN, AURANGZEB; ULLAH, BURHAN; KHAN, GULZAR; SAFEEN, KASHIF; SAFEEN, AKIF; RAZA, SYED ADNAN
Effect of thermal calcination on the structural, dielectric and magnetic properties of (ZnO-Ni) semiconductor. JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS. JCR, v.1, p.1 - , 2019.

10. doi **DE ARAUJO, C. I. L.**; GOMES, J. C. S.; TOSCANO, D.; PAIXÃO, E. L. M.; COURA, P. Z.; SATO, F.; MASSOTE, D. V. P.; LEONEL, S. A.

Investigation of domain wall pinning by square anti-notches and its application in three terminals MRAM. APPLIED PHYSICS LETTERS. JCR, v.114, p.212403 - , 2019.

11. doi LORETO, R.P.; ZHANG, X.; ZHOU, Y.; EZAWA, M.; LIU, X.; **DE ARAUJO, C.I.L.**
Manipulation of magnetic skyrmions in a locally modified synthetic antiferromagnetic racetrack. JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS. JCR, v.482, p.155 - 159, 2019.

12. doi RESSE, L.; OLIVEIRA, L.G.S.; **DE ARAUJO, C.I.L.**; PEREIRA, A.R.; SILVA, R.L.
Periodic Néel skyrmion transport. PHYSICS LETTERS A. JCR, v.1, p.1 - , 2019.

13. doi GONÇALVES, R. S.; LORETO, R. P.; DE PAIVA, T. S.; BORME, J.; FREITAS, P. P.; **DE ARAUJO, C. I. L.**
Tuning magnetic monopole population and mobility in unidirectional array of nanomagnets as a function of lattice parameters. APPLIED PHYSICS LETTERS. JCR, v.114, p.142401 - , 2019.

14. doi GOMES, J. C. S.; TOSCANO, D.; PAIXÃO, E. L. M.; **DE ARAUJO, C. I. L.**; SATO, F.; DIAS, R. A.; COURA, P. Z.; LEONEL, S. A.
Effect of the dipolar coupling on the precessional magnetization switching in two-dimensional arrays of single-domain nano-ellipses. AIP Advances. JCR, v.8, p.095017 - , 2018.

15. doi LORETO, RENAN PIRES; NASCIMENTO, FABIO; GONÇALVES, RAFAEL SILVA; BORME, JÉRÔME; CRIGINSKI CEZAR, JULIO; NISOLI, CRISTIANO; PEREIRA, AFRANIO RODRIGUES; **DE ARAUJO, CLODOALDO IRINEU LEVARTOSKI**
Experimental and theoretical evidences for the ice regime in planar artificial spin ices. JOURNAL OF PHYSICS-CONDENSED MATTER. JCR, v.1, p.1 - , 2018.

16. doi KHAN, RAJWALI; ZULFIQAR; **LEVARTOSKI DE ARAUJO, CLODOALDO IRINEU**; KHAN, TAHIRZEB; MUNEEB-UR-RAHMAN; ZIA-UR-REHMAN; KHAN, AURANGZEB; ULLAH, BURHAN; FASHU, SIMBARASHE
Influence of oxygen vacancies on the structural, dielectric, and magnetic properties of (Mn, Co) co-doped ZnO nanostructures. JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS. JCR, v.1, p.1 - , 2018.

17. doi SILVA, G. V. O.; TEIXEIRA, H. A.; MELLO, S. L. A.; **DE ARAUJO, C. I. L.**
Stable room temperature magnetocurrent in electrodeposited permeable n-type metal base transistor. APPLIED PHYSICS LETTERS. JCR, v.112, p.092405 - , 2018.

18. doi LORETO, R.P.; MOURA-MELO, W.A.; PEREIRA, A.R.; ZHANG, X.; ZHOU, Y.; EZAWA, M.; **DE ARAUJO, C.I.L.**
Creation, transport and detection of imprinted magnetic solitons stabilized by spin-polarized current. JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS. JCR, v.455, p.25 - 31, 2017.

19. doi MENDES, J. B. S.; ALVES SANTOS, O.; HOLANDA, J.; LORETO, R. P.; **DE ARAUJO, C. I. L.**; CHANG, CUI-ZU; MOODERA, J. S.; AZEVEDO, A.; REZENDE, S. M.
Dirac-surface-state-dominated spin to charge current conversion in the topological insulator (Bi 0.22 Sb 0.78). PHYSICAL REVIEW B. JCR, v.96, p.180415-1 - 180415-7, 2017.

20. doi RIBEIRO, I. R. B.; NASCIMENTO, F. S.; FERREIRA, S. O.; MOURA-MELO, W. A.; COSTA, C. A. R.; BORME, J.; FREITAS, P. P.; WYSIN, G. M.; **DE ARAUJO, C. I. L.**; PEREIRA, A. R.
Realization of Rectangular Artificial Spin Ice and Direct Observation of High Energy Topology. Scientific Reports. JCR, v.7, p.13982 - , 2017.

21. doi FREITAS, KENEDY; TOLEDO, JOSÉ; FIGUEIREDO, LEANDRO; MORAIS, PAULO; FELIX, JORLANDIO; **DE ARAUJO, CLODOALDO**
Static and Dynamic Magnetization Investigation in Permalloy Electrodeposited onto High Resistive N-Type Silicon Substrates. Coatings. JCR, v.7, p.33 - , 2017.

22. doi ALVES, SIDINEY G; **ARAUJO, CLODOALDO I L DE**; FERREIRA, SILVIO C
Hallmarks of the Kardar-Parisi-Zhang universality class elicited by scanning probe microscopy. NEW JOURNAL OF PHYSICS. JCR, v.18, p.093018 - , 2016.

23. doi RIBEIRO, I R B; FELIX, J F; FIGUEIREDO, L C; MORAIS, P C; FERREIRA, S O; MOURA-MELO, W A; PEREIRA, A R; QUINDEAU, A; **DE ARAUJO, C I L**
Investigation of ferromagnetic resonance and magnetoresistance in anti-spin ice structures. Journal of Physics. Condensed Matter (Print). JCR, v.28, p.456002 - , 2016.

24. **DE ARAUJO, C I L**
MONOPOLOS MAGNÉTICOS A longa busca por um 'Norte' ou 'Sul' isolados.. Ciência Hoje. , v.56, p.30 - , 2016.

25. doi **DE ARAUJO, C.'I.'L.**; ALVES, S.'G.; BUDA-PREJBEANU, L.'D.; DIENY, B.
Multilevel Thermally Assisted Magnetoresistive Random-Access Memory Based on Exchange-Biased Vortex Configurations. Physical Review Applied. JCR, v.6, p.024015 - , 2016.

26. doi LORETO, R P; MORAIS, L A; **ARAUJO, C I L DE**; MOURA-MELO, W A; PEREIRA, A R; SILVA, R C; NASCIMENTO, F S; MÓL, L A S
Emergence and mobility of monopoles in a unidirectional arrangement of magnetic nanoislands. NANOTECHNOLOGY. JCR, v.26, p.295303 - , 2015.

27. doi AL SAQRI, N.; FELIX, J.F.; AZIZ, M.; JAMEEL, D.; **DE ARAUJO, C.I.L.**; ALBALAWI, H.; AL MASHARY, F.; ALGHAMDI, H.; TAYLOR, D.; HENINI, M.
Investigation of the effects of gamma radiation on the electrical properties of dilute GaAs1−xNx layers grown by Molecular Beam Epitaxy. CURRENT APPLIED PHYSICS. JCR, v.1, p.1 - 8, 2015.

28. doi FELIX, J.F.; FIGUEIREDO, L.C.; MENDES, J.B.S.; **DE ARAUJO, C.I.L.**; MORAIS, P.C.
Low-field microwave absorption and magnetoresistance in iron nanostructures grown by electrodeposition on n-type lightly-doped silicon substrates. Journal of Magnetism and Magnetic Materials. JCR, v.395, p.130 - 133, 2015.

29. doi WYSIN, G M; PEREIRA, A R; MOURA-MELO, W A; **DE ARAUJO, C I L**
Order and thermalized dynamics in Heisenberg-like square and Kagomé spin ices. Journal of Physics. Condensed Matter (Print). JCR, v.27, p.076004 - , 2015.

30. doi **DE ARAUJO, CLODOALDO I. L.**; FONSECA, JAKSON M.; SINNECKER, JOÃO P.; DELATORRE, RAFAEL G.; GARCIA, NICOLAS; PASA, ANDRÉ A.
Circular single domains in hemispherical Permalloy nanoclusters. Journal of Applied Physics. JCR, v.116, p.183906 - , 2014.

31. doi **DE ARAUJO, C. I. L.**; SILVA, R. C.; RIBEIRO, I. R. B.; NASCIMENTO, F. S.; FELIX, J. F.; FERREIRA, S. O.; MÓL, L. A. S.; MOURA-MELO, W. A.; PEREIRA, A. R.
Magnetic vortex crystal formation in the antidot complement of square artificial spin ice. Applied Physics Letters. JCR, v.104, p.092402 - , 2014.

32. doi FELIX, J F; AZIZ, M; **DE ARAUJO, C I L**; DE AZEVEDO, W M; ANJOS, V; DA SILVA, E F; HENINI, M
Zinc oxide thin films on silicon carbide substrates (ZnO/SiC): electro-optical properties and electrically active defects. Semiconductor Science and Technology (Print). JCR, v.29, p.045021 - , 2014.

33. doi PELEGRINI, SILVIA; ADAMI, ANDREA; COLLINI, CRISTIAN; CONCI, PAOLO; **ARAÚJO, CLODOALDO I. L.**; GUARNIERI, VITTORIO; GÜTHS, SAULO; PASA, ANDRÉ A.; LORENZELLI, LEANDRO
Development and characterization of a microthermoelectric generator with plated copper/constantan thermocouples. MICROSYSTEM TECHNOLOGIES-MICRO-AND NANOSYSTEMS-INFORMATION STORAGE AND PROCESSING SYSTEMS. JCR, v.20, p.585 - 592, 2013.

34. Khalid, Mohd.; ALOK SRIVASTAVA; **C. I. L. de Araujo**; ZOLDAN, Vinicius Claudio; PASA, A. A.; PASA, A. A.
Electrical conductivity study of polyaniline polymethylmethacrylate composite fibers. World Journal of Applied Sciences and Research. , v.2, p.51 - 54, 2012.

35. doi Pasa, A A; Ballestar, A; Delatorre, R G; ARAÚJO, C I L DE; Garcia, N
Magnetoresistance measurements in permalloy clusters electrodeposited on silicon. Journal of Physics. Conference Series (Online). , v.200, p.052022 - , 2010.

36. doi Ballestar, A.; C. I. L. de Araujo; DELATORRE, R. G.; Pasa, A. A.; Garcia, N.
Measuring Magnetoresistance in a 2D Intergranular Magnetic-Semiconducting Material. Journal of Superconductivity and Novel Magnetism. JCR, v.22, p.737 - 748, 2009.

37. doi BRANDT, I. S.; C. I. L. de Araujo; STENGER, V.; DELATORRE, R. G.; Pasa, A.A
Electrical Characterization of Cu/Cu2O Electrodeposited Contacts. ECS Transactions. , v.14, p.413 - 419, 2008.

38. doi C. I. L. de Araujo; MUNFORD, M. L.; DELATORRE, R. G.; da Silva, R. C.; Zoldan, V. C.; Pasa, A.A; Garcia, N.
Spin-polarized current in permalloy clusters electrodeposited on silicon:Two-dimensional giant magnetoresistance. Applied Physics Letters. JCR, v.92, p.222101-1 - 222101-3, 2008.

39. doi ARAUJO, C. I. L.; TUMELERO, M. A.; AVILA, J. I.; VIEGAS, A. D. C.; Garcia, N.; Pasa, A. A.
Electrical Spin Injection from Ferromagnetic Nanocontacts into Nondegenerated Silicon at Low Temperatures. Journal of Superconductivity and Novel Magnetism. JCR, v.26, p.3449 - , rint.

Presentations in Events

1. MARTINS, F.; GONCALVES, R. S.; PAIVA, T. S.; RODRIGUES, J.; MOL, L. A. S.; PEREIRA, A. R.; C. I. L. de Araujo
Experimental and theoretical investigation of emergent excitations in artificial spin ice system with a magnetization reversal process., 2019. (Congress,Presentations in Events)

2. C. I. L. de Araujo
Spin Field Effect Transistor based on graphene channel, 2019. (Conference or lecture,Presentations in Events)

3. C. I. L. de Araujo
Spintrônica: Memória de hoje e lógica de amanhã, 2019. (Conference or lecture,Presentations in Events)

4. C. I. L. de Araujo
Spintronics: Today's memory and possible future logic, 2019. (Conference or lecture,Presentations in Events)

5. C. I. L. de Araujo
Degeneracy and thermodynamics of planar artificial spin ice, 2018. (Congress,Presentations in Events)

6. C. I. L. de Araujo; LORETO, R. P.; MELO, W. A. M.; PEREIRA, A. R.
Emergence and mobility of monopoles in an unidirectional arrangement of magnetic nanoislands, 2015. (Conference or lecture,Presentations in Events)

7. DE ARAUJO, C. I. L.; MELO, W. A. M.; PEREIRA, A. R.
Realization of magnetic monopoles current in an artificial spin ice device: A step towards magnetronics, 2014. (Congress,Presentations in Events)

8. DE ARAUJO, C I L; RIBEIRO, I. R. B.; MELO, W. A. M.; PEREIRA, A. R.
Vortex-crystal pattern in an artificial anti-spin ice system, 2014. (Congress,Presentations in Events)

9. C. I. L. de Araujo; TUMELEIRO, M. A.; VIEGAS, A. C.; Garcia, N.; Pasa, A.A
Spin Transfer from a Ferromagnet into a Semiconductor through an Oxide barrier, 2012. (Congress,Presentations in Events)

10. C. I. L. de Araujo; Pasa, A.A
Nanolithographed ferromagnetic Tunnel Contacts on Silicon, 2011. (Conference or lecture,Presentations in Events)

11. C. I. L. de Araujo; COLLINI, C.; LORENZELLI, L.; Pasa, A.A
Cu2O/Fe/Si n-type magnetic metal base transistor, 2010. (Conference or lecture,Presentations in Events)

12. PELEGRINI, S.; C. I. L. de Araujo; da Silva, R. C.; VIEGAS, A. C.; Pasa, A.A
Electrical characterization of Cu2O n-type doped with chlorine, 2010. (Conference or lecture,Presentations in Events)

13. C. I. L. de Araujo; GUARNIERI, V.; LORENZELLI, L.; GUTHS, S.; Pasa, A.A
Far infrared microsensor based on transversal gradients, 2010. (Conference or lecture,Presentations in Events)

Orientações e Supervisões

Academic Advisory

Academic Advisory - current

Ph.D. Thesis: Primary Advisor

1. Daniel Gouveia Duarte. **Thermodynamics in frustrated system and quantum materials.** 2020. Thesis (Física) - Universidade Federal de Viçosa

Eventos

Eventos

Participation In Events

1. Presentation of Poster / Painel no(a) **Spintech V**, 2009. (Congress)
Low Temperature Magnetoresistance Measurements in a 2-D Granular Material.

Citations

Web of Science

Number of articles: 35 **Total of citations**: 184 **Factor H**: 9

de Araujo CIL; C. I. L. de Araujo; de Araujo C. I. L.; Clodoaldo I. L. de Araujo

Outras

Number of articles: 40 **Total of citations**: 254

C. I. L. de Araujo

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