

Information Regarding Research & Publications

Number of publications:

Sl. No.	Name of the faculty	International Journal	National Journal	Conference	Books	Books Chapter
1	Dr. Baby Bhattacharya	86	00	International: 20	01	04

Publication Details: Dr. Baby Bhattacharya

2023

86. Md Mirazul Hoque, Baby Bhattacharya, Binod Chandra Tripathy, "New Separation Axiom in Multiset Topology", Boletim da Sociedade Paranaense de Matematica (Scopus), May 30, 2023.
85. Md Mirazul Hoque, Baby Bhattacharya, Binod Chandra Tripathy, "A Novel Approach in the Light of Fuzzy Multiset Topology", Proceedings of the National Academy of Sciences, India Section A: Physical Sciences (**SCIE, IF 1.291**), May 25, 2023.
84. Jagannath Nath, Birojit Das, Baby Bhattacharya, Binod Chandra Tripathy, "On Statistically Pre-Cauchy Sequences of Complains of Complex Uncertain Variables Defined by Orlicz Function", on International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems (2023).
83. J Nath, BC Tripathy, P Debnath, B Bhattacharya "Strongly almost convergence in sequences of complex uncertain variables", in Journal of Communications in Statistics-Theory and Methods (2023).

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82. B Das, B Bhattacharya, BC Tripathy, "Relation between convergence and almost convergence of complex uncertain sequences", Kragujevac Journal of Mathematics, Vol.49(2), accepted: April 5, 2022.
81. Birojit Das, Binod Chandra Tripathy, Piyali Debnath, Baby Bhattacharya, "Statistical convergence of complex uncertain triple sequence", Communications in Statistics Theory and Methods (2022/10/18).
80. Das, Birojit, Jayasree Chakraborty, and Baby Bhattacharya. "A stronger form of generalized closed set via ij--open sets". Afrika Matematika (2022).
79. Das, Birojit, Jayasree Chakraborty, and Baby Bhattacharya. "On fuzzy $\gamma\mu$ -open sets in generalized fuzzy topological spaces." Proyecciones (Antofagasta, On line) 41.3 (2022): 733-749.
78. Nath, Jagannath, et al. "On strongly almost λ -convergence and statistically almost λ -convergence in the environment of uncertainty." International Journal of General Systems 51.3 (2022): 262-276.

77. Datta, Rupak, et al. "Further results on stability analysis of Takagi–Sugeno fuzzy time-delay systems via improved Lyapunov–Krasovskii functional." *AIMS Mathematics* 7.9 (2022): 16464-16481.
76. Nath, Jagannath, Binod Chandra Tripathy, and Baby Bhattacharya. "On strongly almost convergence of double sequences via complex uncertain variable." *Проблемы анализа* 11.1 (2022): 102-121.
75. B Das, B Bhattacharya, "LINEAR TO NON-LINEAR TOPOLOGY VIA γ -OPEN SETS IN THE ENVIRONMENT OF BITOPOLOGICAL SPACES", *Facta Universitatis, Series: Mathematics and Informatics* (2022).
74. J NATH, BC TRIPATHY, B BHATTACHARYA, "ISSUES OF ANALYSIS", in *Journal of ISSUES OF ANALYSIS* Учредители: Петрозаводский государственный университет (2022)

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73. Birojit Das, Apu Kumar Saha, Baby Bhattacharya, "Some Remarks on Fuzzy Infi Topological Spaces", *Proyecciones Journal of Mathematics*, 40(2), 399-415, 2021.
72. Jagannath Nath, Binod Chandra Tripathy, Piyali Debnath, Baby Bhattacharya, "Strongly Almost Convergence in Sequence of Complex Uncertain Variables", *Comm in Stat Theo Meth*, doi: 10.1080/03610926.2021.1921802, 2021.
71. Nath, Jagannath, Binod Chandra Tripathy, and Baby Bhattacharya. "Study on Strongly Almost Convergence of Complex Uncertain Triple Sequences", *Journal of Uncertain Systems* 14.04 (2021): 2150024.
70. Datta, Rupak, et al, "Improved stabilization criteria for Takagi–Sugeno fuzzy systems with variable delay", *Information Sciences* 579 (2021): 591-606.

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69. Birojit Das, Baby Bhattacharya, Jayasree Chakraborty, Binod Chandra Tripathy, "Generalized fuzzy closed sets in a fuzzy bitopological space via γ -open sets", *Afrika Matematika*, 32(3), 333-345, 2020.
68. Rupak Datta, Rajeeb Dey, Baby Bhattacharya, Ramasamy Saravanakumar, Oh-Min Kwon, "Stability and stabilization of T-S fuzzy systems with variable delays via new Bessel-Legendre polynomial based relaxed integral inequality", *Information Sciences*, 522, 99-123, 2020.SCI, IF-5.910.
67. Rupak Datta, Rajeeb Dey, Baby Bhattacharya, "Improved delay-range-dependent stability condition for T-S fuzzy systems with variable delays using new extended affine Wirtinger inequality", 23(3), *Int. J. of Fuzzy Systems*, 23(3), pp-985-998, 2020 SCIE, IF-4.406.

66. Rupak Datta, Rajeeb Dey, R. Saravanakumar, Baby Bhattacharya, Tsung-Chih Lin,, “New delay-range-dependent stability condition for fuzzy Hopfield neural networks via Wirtinger Inequality”, *J. of Intelligent & Fuzzy Systems*, VOI-38(5),2020, pp-6099-6109, SCIE, IF-1.851.
65. Birojit Das, Binod Chandra Tripathy, Piyali Debnath, Baby Bhattacharya, “Almost Convergence of Complex Uncertain Double Sequence”, *Filomat*, in press., 2020.
64. Birojit Das, Jayasree Chakraborty, Gayatri Paul, Baby Bhattacharya, “A new approach for some applications of generalized fuzzy closed sets”, *Computational and Applied Mathematics*, **40**, Article number: 44 (2021) , pp-1-14, 2020.
63. Birojit Das, Binod Chandra Tripathy, Piyali Debnath, Baby Bhattacharya, “Study of Matrix Transformation of Uniformly Almost Surely Convergent Complex Uncertain Sequences”, *Filomat*, 34(14), 4907-4922, 2020.
62. Birojit Das, Jayasree Chakraborty, Gayatri Paul, Baby Bhattacharya, “A new approach for some applications of generalized fuzzy closed sets”, *Computational and Applied Mathematics*, 40, Article number: 44 (2021) , pp-1-14, 2020.
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60. Birojit Das, Binod Chandra Tripathy, Piyali Debnath, Baby Bhattacharya, “Characterization of Statistical Convergence of Complex Uncertain Double Sequences, Analysis and Mathematical Physics”, 71(10), doi 10.1007/s13324-020-00419-7, 2020.
59. Birojit Das, Binod Chandra Tripathy, Piyali Debnath, Baby Bhattacharya, “Statistical Convergence of Complex Uncertain Triple Sequences”, *Comm in Stat Theo Meth*, doi:10.1080/03610926.2020.1871016, 2020.

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58. Birojit Das· Baby Bhattacharya · Jayasree Chakraborty, Sree Anusha Ganapathiraju, Arnab Paul, “A new type of generalized closed set via γ -open set in a fuzzy bitopological space”, *Proyecciones Journal of Mathematics*, 38(3), 511-536, 2019.
57. Jayasree Chakraborty, Baby Bhattacharya, and Arnab Paul, “Generalized fuzzy closed sets in generalized fuzzy topological spaces”, *Songklanakarin J. Sci. Technol.* 41 (1), 216-221, 2019.8.
56. Baby Bhattacharya, Arnab Paul, Jayasree Chakraborty, “On Fuzzy $\Lambda\gamma$ -Sets and their Applications”, *Proyecciones Journal of Mathematics*, 38(2), 237-253, 2019.
55. Rupak Datta, Rajeeb Dey, Baby Bhattacharya, “Further improved stability condition for T-S fuzzy time-varying delay systems via generalised inequality”, *Int. J. of Advanced Intelligence Paradigms*, Vol 14(3), 2019,pp-310-327, Scopus.

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52. Rupak Datta, Rajeeb Dey, Baby Bhattacharya, Abanishwar Chakrabarti, "Delayed state feedback controller design for inverted pendulum using T-S fuzzy modeling: an LMI approach", Advances in Intelligent Systems and Computing, Springer, 757, pp-67-79, 2019, Scopus.
51. Gayatri Paul, Baby Bhattacharya, Birojit Das, "Separation Axioms ($T_i, i = 0,1,2$) in the Light of Fuzzy γ^* -Open Set", International Journal of Computational Intelligence & IoT, 2(3), 2019.
50. D Rudrapal, A Das, B Bhattacharya, "Recognition of Partial Textual Entailment for Indian Social Media Text", Computación y Sistemas 23 (1), 143 (SCOPUS).
49. D Rudrapal, A Das, B Bhattacharya, "A New Approach for Twitter Event Summarization Based on Sentence Identification and Partial Textual Entailment", Computación y Sistemas 23 (3) (SCOPUS).
48. D Rudrapal, A Das, B Bhattacharya, Ranking of Event-focused English Tweets Based on Relevance and Informativeness, Computación y Sistemas 23 (2), 491-500 (SCOPUS).
47. B Das, B Bhattacharya, "On (i, j) Generalized Fuzzy γ -Closed Set in Fuzzy Bitopological Spaces", Soft Computing for Problem Solving, 661-673.
46. B Bhattacharya, J Chakraborty, A Paul, "On Fuzzy Contra γ -Continuous Functions", GS Anusha, International Journal of Pure and Applied Mathematics 118 (23), 1-9 (SCOPUS)

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45. Arnab Paul, Baby Bhattacharya, and Jayasree Chakraborty, On γ -locally closed sets in fuzzy bitopological space", Songklanakarin J. Sci. Technol. 40 (5), 1048-1054, 2018(SCOPUS).
44. Rupak Datta, Baby Bhattacharya, and Abanishwar Chakrabarti, On Improved Delay-range-dependent Stability Condition for Linear Systems with Time-varying Delay using Wirtinger Inequality, Int. J. of Dynamics and Control, 6(4), 1745-1754, (SCOPUS) 2018.
43. Birojit Das, Baby Bhattacharya, A New Approach to FBTS via γ -Open Sets, International Journal of Engineering Research Computer Science Engineering, 5(2), 555-562, 2018.
42. Nirmalya Kar, Kaushik Mandal, Baby Bhattacharya, Improved chaos-based video steganography using DNA alphabets, ICT Express (SCOPUS),2018.

41. Dwijen Rudrapal, Amitava Das, Baby Bhattacharya, A survey on automatics twitter event summarization, Journal of Information Processing Systems (SCOPUS), 2018.
40. R Datta, R Dey, B Bhattacharya, A Chakrabarti, Delayed State Feedback Controller Design for Inverted Pendulum Using TS Fuzzy Modeling: An LMI Approach, Innovations in Infrastructure, 67-79, 2018 (SCOPUS)
39. R Datta, B. Bhattacharya, A. Chakrabarti, International Journal of Dynamics and Control,6(4)- 2018,1745-1754.
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35. Arnab Paul, Baby Bhattacharya, Jayasree Chakraborty, On Λ^r -sets in Fuzzy Bitopological Spaces, Bol. Soc. Paran. Mat., 35(3), 285–299, 2017.
34. Jayasree Chakraborty, Baby Bhattacharya, and Arnab Paul, Some results on fuzzy hyperconnected spaces, Songklanakarin J. Sci. Technol., 39 (5), 619-624, 2017.
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27. B. Bhattacharya, A. Paul and J. Chakraborty, "Extension of (i, j) -fuzzy Λ -sets and Their Applications", The Journal of Fuzzy Mathematics, 24(4), 2016.
26. J. Chakraborty, B. Bhattacharya and A. Paul, "Some Properties of Generalized Fuzzy Hyperconnected Spaces", Annals of Fuzzy Mathematics and Informatics, 12(5), 659-668, 2016.
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21. B. Bhattacharya, J. Chakraborty and A. Paul, "A New Approach to Generalized Fuzzy Topological Spaces, 4th Annual International Conference on Computational Mathematics", Computational Geometry & Statistics, 25-27th Jan 2015, Singapore.
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19. Arnab Paul and Baby Bhattacharya, "New Types of Functions and Separation Axiom by γ -Open Sets in Fuzzy Bi-topological Spaces", Malaysian Journal of Mathematical Sciences 9(3): 397-407 (2015).
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17. P Das, S Deb, N Kar, B Bhattacharya, "An Improved DNA based dual cover steganography", Procedia Computer Science 46, 604-611.
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10. D Rudrapal, B Bhattacharya, "Recognition of partial textual entailment for bengali tweets, the Proceedings of 1st Workshop on Language Technologies for Indian Social Media(SOCIAL-INDIA)", 11th International Conference on Natural Language Processing, Pages 29-35, Goa, India, 21st December 2014.
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1. Anjan Mukherjee & Baby Bhattacharya, "PRE-INDUCED L-SUPRA TOPOLOGICAL SPACES", Indian J. Pure Appl, Math, 34(10):1487-1493, October 2003.

Books:

- a. Baby Bhattacharya, Arnab Paul, Jayasree Chakraborty "A study on Fuzzy Hyperconnectedness" Lambert Academic Publishing, published on 2018-03-06.

Book Chapters:

- i. 4. Gayatri Paul, Birojit, Baby Bhattacharya, On g^* -Closed Sets in Fuzzy Topological Spaces, Springer book chapter, Doi: 10.1007/978-3-030-34152-7_57, 2020.
- ii. Dwijen Rudrapal, Amitava Das, Baby Bhattacharya, "Quotology-Reading Between the Lines of Quotations", Natural Language Processing and Information System, 22nd International conference on Applications of Natural Language to Information Systems, NLDB- 2017, Liege, Belgium, June 21-23, 2017, Proceedings.
- iii. Baby Bhattacharya and Sunny Biswas, " On γ -Induced L-Fuzzy Supra Topological Space", Rough Set, Fuzzy Sets and Computing, 2015, Narosa Publishing House, New Delhi.
- iv. Baby Bhattacharya and Jayasree Chakraborty , "L-Fuzzy Topological Space Induced by Scott $-\sigma$ -Continuous Function", Rough Set, Fuzzy Sets and Computing, 2015, Narosa Publishing House, New Delhi.