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Fields of Research: Theoretical Physics, Allometric Scaling in Biology, Organic LED
(<https://www.researchgate.net/profile/Sudipto-Roy-5/publications>)

Publication of Books:

1. A Complete Course in Engineering Physics, Volume – I
S. Roy, T. Ghosh, D. Biswas, ISBN: 81-219-3068-5, Code: 10A 376
S. Chand & Company Ltd., New Delhi – 110055
First Edition 2009, Second Edition 2010, Third Edition 2011
2. A Complete Course in Engineering Physics, Volume – II
S. Roy, T. Ghosh, D. Biswas, ISBN: 81-219-3006-5, Code: 10A 365
S. Chand & Company Ltd., New Delhi –
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Publication of Articles:

1. S. Roy (2020). A Study on the Construction of Dynamical Models Regarding the Pace of Eating of a Man. *Indian Journal of Natural Sciences*, 10(62), 27899-27905.
2. S. Roy (2020). A simple mathematical method to analyze and predict the spread of COVID-19 in India. *International Journal of Advanced Research*, 8(06), 779-792.
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3. S. Roy (2020). An algebraic interpretation of the spread of COVID-19 in India and an assessment of the impact of social distancing. *World Journal of Advanced Research and Reviews*, 6(3), 245-256.
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4. S. Roy & K. Roy Bhattacharya (2020). Spread of COVID-19 in India: A Mathematical Model. *Journal of Science and Technology*, 5(3), 41-47. DOI: 10.46243/jst.2020.v5.i3.pp41-47
5. S. Roy (2020). A Theoretical Study on the Perception of Weight in a Moving Elevator. *International Journal of Contemporary Research and Review*, 11(04), 20189–20200. DOI: 10.15520/ijcrr.v11i04.804
6. S. Roy, A. Sarkar & P. Ghosh (2019). Time Dependence of Various Cosmological Parameters in the Framework of Kaluza-Klein Space-Time. *International Journal of Scientific Research in Science and Technology (IJSRST)*, 6(6), 211-220. DOI: 10.32628/IJSRST196645
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8. K. Ganguly & S. Roy (2019). An Analysis of the Accelerated Expansion of the Universe in the Framework of Brans-Dicke Theory of Gravitation. *International Journal of Advanced Science and Engineering*, 6(1), 1180-1184. DOI: 10.29294/IJASE.6.1.2019.1180-1184
9. S. Roy, D. Nandi, S. Ghosh & A. Das (2019). Time Evolution of Density Parameters for Matter and Dark Energy and their Interaction Term in Brans-Dicke Gravity. *International Journal of Advanced Scientific Research & Development (IJASRD)*, 06(04/I), 44 – 66.
10. S. Roy (2019). Time evolution of the matter content of the expanding universe in the framework of Brans-Dicke gravity. *Research in Astronomy and Astrophysics*, 19(4:61), 1-14.
DOI: 10.1088/1674-4527/19/4/61
11. K. Roy Bhattacharya & S. Roy (2018). Scaling Relations of Length-Biomass Allometry for Bidimensional Macroalgae: A Simple Theoretical Explanation. *International Journal of Advanced Science and Engineering*, 5(2), 962-965. DOI: 10.29294/IJASE.5.2.2018.962-965
12. S. Roy (2018). Time Dependence of the Proportions of Matter and Dark Energy of the Universe in the Framework of Brans-Dicke Theory. *International Journal of Advanced Science and Engineering*, 5(2), 886-895. DOI: 10.29294/IJASE.5.2.2018.886-895
13. S. Roy (2017). Time Dependence of the EoS Parameter in Brans-Dicke Framework. *Global Journal of Pure and Applied Mathematics*, 13(9), 4723-4734.
14. S. Roy & S. Chowdhury (2017). Theoretical Models of the Brans-Dicke Parameter for Time Independent Deceleration Parameters. *International Journal of Mathematics and Physical Sciences Research*, 5(1), 94-101.
15. S. Roy (2017). A Study of the Variable Equation-of-State Parameter in the Framework of Brans-Dicke Theory. *International Journal of Pure and Applied Physics*, 13(3), 279-288.
16. S. Roy & S. Chowdhury (2017). A Study of the Time Evolution of Brans-Dicke Parameter and its Role in Cosmic Expansion. *International Journal of Contemporary Research and Review*, 8(6), MT 20180-20189.
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21. S. Roy (2016). Time evolution of matter and dark energy of the universe in the framework of Brans-Dicke Theory. *International Journal of Physics and Mathematical Sciences*, 6(2), 18-27.
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23. S. Roy (2016). Time Evolution of Various Cosmological Parameters and Their Inter-Dependence in the Framework of Brans-Dicke Theory. *IOSR Journal of Mathematics (IOSR-JM)*, 12(3), Version-VII, 27-35. DOI: 10.9790/5728-1203072735
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29. S. Roy (2015). A Study of Accelerated Expansion of the Universe and Time Varying Gravitational Constant in the Framework of Brans-Dicke Theory. *International Journal of Advanced Research in Science and Technology*, 4(7), 468-473.
30. S. Roy (2015). A Study of Transition of the Expansion of the Universe from a Phase of Deceleration to Acceleration through a Conversion of Matter into Dark Energy in the Framework of Brans-Dicke Theory. *International Journal of Science and Research*, 4(11), 885-890.
31. S. Roy (2015). Time Variation of Deceleration Parameter and Gravitational Constant in the Light of Brans-Dicke Theory. *International Journal of Scientific Research*, 4(11), 272-280.
32. S. Roy, P. Majumdar, M. Varghese, S. Mondal, D. Mookherjee & A. Tirkey (2013). Computation of Electromagnetic Energy Flux Due to various Distributions of Oscillating Electric Dipoles. *Journal of Communication Engineering & Systems*, 3(3), 17-25.
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