HOMI BHABHA CENTRE FOR SCIENCE EDUCATION
Tata Institute of Fundamental Research

Publications by HBCSE members

Compiled by Dean's Office

September 2014

Publications

In Journals (Years 1974-2014)

2013-2014

1. Aguirre, V. S., Ruchti, G.R., Hekker, S., Cassisi, S., Christensen-Dalsgaard, J., Datta, A., Jendreieck, A., Jessen-Hansen, J., Mazumdar, A., Mosser, B., Stello, D., Beck, P. G., & De Ridder, J. (2014). Old puzzle, new insights: a lithium-rich giant quietly burning helium in its core. *The Astrophysical Journal Letters.* 784, L16.
2. Ara, F., Chunawala, S. & Natarajan, C. (2013). Investigating Indian elementary and middle school student's images of designers. *Design and Technology Education: An International Journal.*18(2), 50-65.
3. Arunan, M.C., & Nagarjuna G. (2013). Simple systems and sophisticated questions: The scientific legacy of Obaid Siddiqi. *Annals of Neurosciences*, 20(4). 131-132.
4. Chakrabarti B. C., Pathare S. R., Huli S. H., Nachane M. N. (2013). Experimental determination of unknown masses and their positions in a mechanical black box. *Physics Education (UK)*. 48, 477.
5. Chandrasekharan, S. (2013). The Cognitive Science of Feynmen. *Metascience.* 22, 647–652.
6. De, P., Titus, S., & Sircar, S. (2014). A Fair Division. *At Right Angles.* 3(1), 31-34.
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10. Haydock, K. (2014). Chicken Eggs: which comes first - the expected results or the science?. *School Science Review.* 95(363), 65-74.
11. Hekker, S., Elsworth, Y., Basu, S., Mazumdar, A., Aguirre, V. S., & Chaplin, W. J. (2013). Tests of the asymptotic large frequency separation of acoustic oscillations in solar-type and red-giant stars. *Monthly Notices of the Royal Astronomical Society.* 434, 1668.
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14. Manna, D., Sirohiwal A., & Ghanty, T. K. (2014). Pu@C24: A new example satisfying 32- electron principle. *Journal of Physical Chemistry C.* 118, 7211-7221.
15. Martin, A., & Roy, S. M. (2014). Froissart bound on total cross section without unknown constants. *Physical Review D-Particles, Fields, Gravitation and Cosmology*, 89(4). Article ID 045015, 7 pages. ISSN 1550-7998.
16. Mashood, K. K., & Singh, V. A. (2013). Large-scale studies on the transferability of general problem-solving skills and the pedagogic potential of physics. *Physical Education*. 48, 629-635.

17. Mazumdar, A., Monteiro, M. J. P. F. G., Ballot, J., Antia, H.M., Basu, S., Houdek, G., & 12 co-authors (2014). Measurement of acoustic glitches in solar-type stars from oscillation frequencies observed by Kepler. *The Astrophysical Journal.* 782, 18.
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(iv) Steiner-Lehmus Theorem, January 2012, Volume 119-1, pp. 69.

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1987- 1988 **NIL**

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5. A. D. Ghaisas (2012). *Khagolshastradnya:* Marathi book on the contribution of 101 Astronomers to the development of Astronomy with their short biographies; 5th book in the "He mahit hawech 101" series of books, Manovikas Prakashan, Pune, December.
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17. The following books in Marathi are co-edited by Prof. H. C. Pradhan (with Dr. Bal Phondke) for Y.C. Maharashtra Open University, Nashik. These are textbooks on science education under their M.Ed. programme (2008).
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    - *Science Education – Part 2: Practical, Communication and Scientific Attitude*
    - *Science Education – Part 3: Curriculum, Syllabus and Content-cum-Methodology*
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