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List of Publications

Papers

1. Remarkable influence of substituent in ionic liquid in control of reaction: simple, efficient and hazardous organic solvent free procedure for the synthesis of 2-aryl benzimidazoles promoted by ionic liquid, [pmim]BF_4: **D. Saha**, A. Saha and B. C. Ranu, *Green Chem*. **2009**, *11*, 733–737.

2. Aerobic ligand-free Suzuki coupling catalyzed by in situ-generated palladium nanoparticles in water: **D. Saha**, K. Chattopadhyay and B. C. Ranu, *Tetrahedron Lett*. **2009**, *50*, 1003–1006.

3. Ionic liquid-promoted dehydration of aldoximes: a convenient access to aromatic, heteroaromatic and aliphatic nitriles: **D. Saha**, A. Saha and B. C. Ranu, *Tetrahedron Lett*. **2009**, *50*, 6088–6091.

4. Copper nano-catalyst: sustainable phenyl-selenylation of aryl iodides and vinyl bromides in water under ligand free conditions: A. Saha, **D. Saha** and B. C. Ranu, *Org. Biomol. Chem.* **2009**, *7*, 1652–1657.

5. A simple and efficient one-pot synthesis of substituted benzo[b]furans by Sonogashira Coupling-5-endo-dig cyclization catalyzed by palladium nanoparticles in water under ligand and copper-free conditions: **D. Saha**, R. Dey and B. C. Ranu, *Eur. J. Org. Chem.* **2010**, 6067–6071.

6. Palladium(0) nanoparticles catalyzed ligand-free direct arylation of benzothiazole via C-H bond functionalisation : **D. Saha**, L. Adak and B. C. Ranu, *Tetrahedron Lett*. **2010**, *51*, 5624–5627.

7. Hydroxyapatite–supported Cu(I) catalysed cyanation of styrenyl bromides with $K_4[Fe(CN)_6]$: an easy access to cinnamonitriles : **D. Saha,** L. Adak, M.Mukherjee and B. C. Ranu, *Org. Biomol. Chem.* **2012**, *10*, 952-957 (featured on the inside cover)

8. Solvent-free transesterification in a ball-mill over alumina surface: T. Chatterjee, **D. Saha** and B. C. Ranu, *Tetrahedron Lett*. **2012**, *31*, 4142–4144.

9. Solvent-free transesterification in a ball-mill over alumina surface: T. Chatterjee, **D. Saha** and B. C. Ranu, *Synfacts*, **2012**, *8*, 1160.

10. Copper (I) Hydroxyapatite Catalyzed Sonogashira Reaction of Alkynes with Styrenyl Bromides. Reaction of *Cis*-Styrenyl Bromides Forming Unsymmetric Diynes : **D. Saha,** T. Chatterjee, M. Mukherjee and B. C. Ranu, *J. Org. Chem.* **2012**, 77, 9379-9383.

Reviews

11. Potential of metal nanoparticles in organic reactions: B. C. Ranu, K. Chattopadhyay, A. Saha, L. Adak, R. Jana, S. Bhadra, R. Dey and **D. Saha**, *Journal of Physics: Conference Series*, **2008**, *106*, 012003.

12. Metal nanoparticles as efficient catalysts for organic reactions: B. C. Ranu, K. Chattopadhyay, L. Adak, A. Saha, S. Bhadra, R. Dey and **D. Saha**, *Pure Appl. Chem.* **2009**, *81*, 2337–2354.

13. Green recyclable supported-metal catalyst for useful organic transformations: B. C. Ranu, S. Bhadra and **D. Saha**, *Curr. Org. Synth.* **2011**, 146-173.

Book chapter

14. "Aryl carbon-heteroatom coupling reactions using nano-catalyst''– a chapter in the book entitled "Nano-Catalysis: Synthesis and Applications" : B. C. Ranu, **D. Saha**, D. Kundu and N. Mukherjee, **2013**, 189-220, Publisher: Wiley-Blackwell John Wiley & Sons, Inc, 2013.

Manuscript in process

1. Solid supported copper catalysed C-N bond formation *via* C-H activation: **D. Saha**, P. Dutta and S. Sen, 2017.