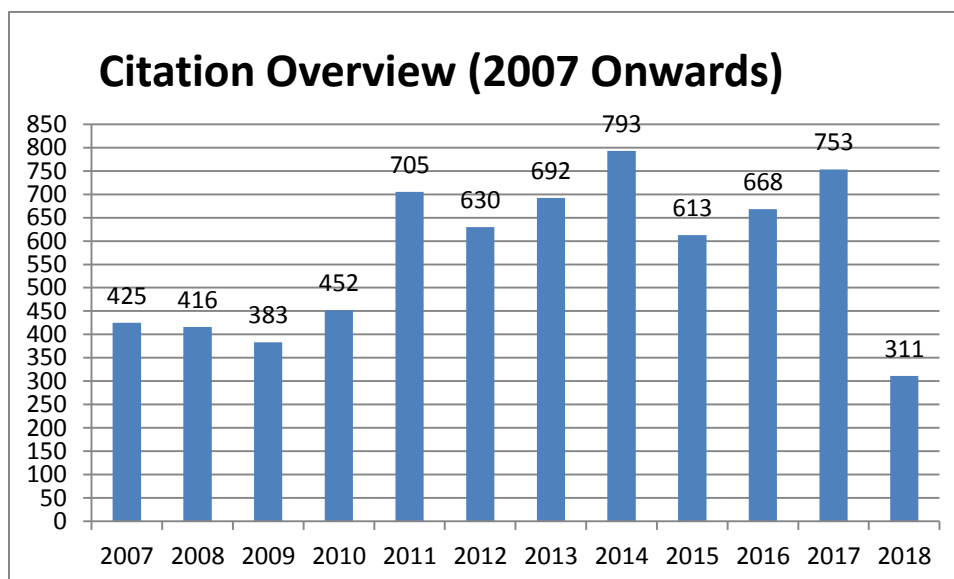


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1. Tejas M. Dhameliya, Rishu Tiwari, Arkaprabha Banerjee, Sahaj Pancholia, Dharmarajan Sriram, Dulal Panda, and Asit K. Chakraborti,* “Benzo[d]thiazole-2-carbanilides as New Anti-TB Chemotypes: Design, Synthesis, Biological Evaluation, and Structure-Activity Relationship,” *Eur. J. Med. Chem.*, **2018**, *155*, 364-380. **IF: 4.519**
2. Sumit S. Chourasiya, Aabid Abdullah Wani, C. M. Nagaraja, Asit K. Chakraborti,* and Prasad V. Bharatam,* “N-(Acridin-9-yl)arenesulfonamides: Synthesis, Quantum Chemical Studies and Crystal Structure Analysis to Establish the Tautomeric Preferences,” *Tetrahedron*, **2018**, *74*, 3634-3641. **IF: 2.651**.
3. Shobhit Kumar Tiwari, Dilip Kumar Singh, Mayurbhai Kathadbhai Ladumor, Asit K. Chakraborti, and Saranjit Singh,* “Study of degradation behaviour of montelukast sodium and its marketed formulation in oxidative and accelerated test conditions and prediction of physicochemical and ADMET properties of its degradation products using ADMET Predictor™,” *J. Pharm. Biomed. Anal.*, **2018**, *158*, 106-118. **IF: 3.255**.
4. Neha Patel, Minhajul Arfeen, Radhika Sood, Sadhika Khullar, Asit K. Chakraborti, Sanjay K. Mandal and Prasad V. Bharatam,* “Can Remote N-Heterocyclic Carbenes Coordinate with Main Group Elements? Synthesis, Structure and Quantum Chemical Analysis of N⁺ Centre Complexes,” *Chem. Eur. J.*, **2018**, *24* (24), 6418-6425. **IF: 5.317**.
5. Deepik Kathuria, Sumit S. Chourasiya, Sanjay K. Mandal, Asit K. Chakraborti, Uwe Beifuss, and Prasad V. Bharatam, “Ring-chain isomerism in conjugated

- guanylhydrazones: Experimental and theoretical study,” *Tetrahedron*, **2018**, 74 (23) 2857-2864. **IF: 2.651**.
6. Bhavin V. Pipaliya and Asit K. Chakraborti,* “Ligand-Assisted Heteroaryl C(sp²)-H Bond Activation by Cationic Ruthenium(II) Complex for Alkenylation of Heteroarenes with Alkynes Directed by Bio-relevant Heterocycles,” *ChemCatChem.*, **2017**, 9 (22), 4191-4198. **IF: 4.803**.
 7. Tejas M. Dhameliya, Sumit S. Chourasiya, Eshan Mishra, Pradeep S. Jadhavar, Prasad V. Bharatam and Asit K. Chakraborti,* “Rationalisation of Benzazole-2-carboxylate vs Benzazine-3-one/Benzazine-2,3-dione Selectivity Switch during Cyclocondensation of 2-Amino thiophenols/phenols/anilines with 1,2-Biselectrophiles in Aqueous Medium,” *J. Org. Chem.*, **2017**, 82 (19), 10077-10091. **IF: 4.849**. **4.805**
 8. Priyank Purohit, Kapileswar Seth, Asim Kumar, and Asit K Chakraborti,* “C-O Bond Activation by Nickel-Palladium Hetero-Bimetallic Nano-Particles for Suzuki-Miyaura Reaction of Bioactive Heterocycle-Tethered Sterically Hindered Aryl Carbonates,” *ACS Catal.*, **2017**, 7 (4), 2452-2457. **Selected by the Editorial Board of SYNFACTS for its important insights and published the highlights in SYNFACTS 2017, 13(05), 0526. Cited 3 times. IF: 10.614. 11.384**
 9. Sumit S. Chourasiya, Dhara Patel, C. M. Nagaraja, Asit K. Chakraborti, and Prasad V. Bharatam, “Sulfonamide vs. Sulfinimide: Tautomerism and Electronic Structure Analysis of *N*-Heterocyclic Arenesulfonamides,” *New J. Chem.*, **2017**, 41 (16), 8118-8129. **Cited 1 time. IF: 3.269**
 10. Bhavin V. Pipaliya and Asit K. Chakraborti,* “Cross Dehydrogenative Coupling of Heterocyclic Scaffolds with Unfunctionalised Aroyl Surrogates by Palladium(II) Catalyzed C(sp²)-H Aroylation through Organocatalytic Dioxxygen Activation,” *J. Org. Chem.*, **2017**, 82 (7), 3767-3780. **Cited 7 times. IF: 4.849 4.805**
 11. Shweta Bhagat, Minhajul Arfeen, Legesse Adane, Savita Singh, Prati Pal Singh, Asit K. Chakraborti, Prasad V. Bharatam, “Guanylthiourea derivatives as potential antimalarial agents: Synthesis, in vivo and molecular modelling studies,” *Eur. J. Med. Chem.* **2017**, 135, 339-348. **Cited 1 time. IF: 4.519**
 12. Tarun Handa, Shalu Jhajra, Shweta Bhagat, P. V. Bhartam, Asit K. Chakraborti, Saranjit Singh* “Molecular insight into atypical instability behavior of fixed-dose combination containing amlodipine mesylate and losartan potassium,” *J. Pharm. Biomed. Anal.*, **2017** 136, 66–80. **Cited 1 time. IF: 3.255**.
 13. Babita Tanwar, Asim Kumar, Perumal Yogeewari, Dharmarajan Sriram, Asit K Chakraborti,* “Design, Development of New Synthetic Methodology, and Biological Evaluation of Substituted Quinolines as New Anti-tubercular Leads,” *Bioorg. Med. Chem. Lett.*, **2016**, 26 (24), 5960-5966. **Cited 7 times. IF: 2.454**.
 14. Minhajul Arfeen, Shweta Bhagat, Rahul Patel, Shivcharan Prasad, Ipsita Roy, Asit K. Chakraborti and Prasad V. Bharatam* “Design, synthesis and biological evaluation of 5-benzylidene-2-iminothiazolidin-4-ones as selective GSK-3 β Inhibitors,” *Eur. J. Med. Chem.*, **2016**, 121, 727-736. **Cited 8 times. IF: 4.519**
 15. Sumit Sunil Chourasiya, Deepika Kathuria, Sampada Sunil Nikam, Ashok Ramakrishnan, Sadhika Khullar, Sanjay K. Mandal, Asit K Chakraborti,* and Prasad V. Bharatam,* “On the Azine-Hydrazone Tautomerism of Guanylhydrazones:

- Evidence for the Preference Towards the Azine Tautomer,” *J. Org. Chem.*, **2016**, *81* (17), 7574-7583. **Cited 5 times. IF: 4.849 4.805**
16. Kapileswar Seth, Sudipta Raha Roy and Asit K. Chakraborti,* “The palladium and copper contrast: a twist to products of different chemotypes and altered mechanistic pathways,” *Catal. Sci. Technol.*, **2016**, *6* (9), 2892–2896. **Cited 6 times. IF: 5.773**
 17. Pradeep S. Jadhavar, Tejas M. Dhameliya, Maulikkumar D. Vaja, Dinesh Kumar, Jonnalagadda Padma Sridevi, Perumal Yogeshwari, Dharmarajan Sriram and Asit K. Chakraborti,* “Synthesis, biological evaluation and structure–activity relationship of 2-styrylquinazolones as anti-tubercular agents,” *Bioorg. Med. Chem. Lett.*, **2016**, *26* (11), 2663–2669. **Cited 3 times. IF: 2.454.**
 18. Sahaj Pancholia, Tejas M. Dhameliya, Parth Shah, Pradeep S. Jadhavar, Jonnalagadda Padma Sridevi, Perumal Yogeshwari, Dharmarajan Sriram and Asit K. Chakraborti,* “Benzo[d]thiazol-2-yl(piperazin-1-yl)methanones as New Anti-mycobacterial Chemotypes: Design, Synthesis, Biological Evaluation and 3D-QSAR Studies,” *Eur. J. Med. Chem.*, **2016**, *116*, 187–199. **Cited 12 times. IF: 4.519**
 19. Kapileswar Seth, Sudipta Raha Roy and Asit K. Chakraborti,* “Synchronous Double C-N Bond Formation via C-H Activation as a Novel Synthetic Route to Phenazine,” *J. Chem. Soc. Chem. Commun.*, **2016**, *52* (5), 922-925. **Cited 19 times. IF: 6.319**
 20. Naisargee Parikh, Sudipta Raha Roy, Kapileswar Seth, Asim Kumar and Asit K. Chakraborti,* ““On-water” multicomponent reaction for the diastereoselective synthesis of functionalized tetrahydropyridines and mechanistic insight,” *Synthesis* **2016**, *48* (4), 547-556. **Cited 12 times. IF: 2.652**
 21. Vaibhav A. Dixit, Prakash Chandra Rathi, Shweta Bhagat, Holger Gohlke, Rasmus K. Petersen, Karsten Kristiansen, Asit K. Chakraborti, Prasad V. Bharatam,* “Design and synthesis of novel Y-shaped barbituric acid derivatives as PPAR γ activators,” *Eur. J. Med. Chem.*, **2016**, *108*, 423-435. **Cited 6 times. IF: 4.519.**
 22. Prasad V. Bharatam,* Minhajul Arfeen, Neha Patel, Priyanka Jain, Sonam Bhatia, Asit K. Chakraborti,* Sadhika Khullar, Vijay Gupta and Sanjay K. Mandal,* “Design, Synthesis, Structural Analysis of Novel Divalent N(I) Compounds and the Identification of a new Electron Donating Ligand,” *Chem. Eur. J.*, **2016**, *22* (3), 1088-1096. **Cited 9 times. IF: 5.317**
 23. Babita Tanwar, Dinesh Kumar, Asim Kumar, Md. Imam Ansari, Mohammad Mohsin Qadri, Maulikkumar D. Vaja, Madhulika Singh, and Asit K. Chakraborti,* “Friedländer annulation: Scope and limitations of metal salt Lewis acid catalysts in selectivity control for the synthesis of functionalised quinolines,” *New J. Chem.*, **2015**, *39* (12), 9824-9833. **Cited 4 times. IF: 3.269**
 24. Sumit S. Chourasiya, Deepika Kathuria, Shaminder Singh, Vijay C. Sonwane, Asit K. Chakraborti and Prasad V. Bharatam,* “Design, Synthesis and Biological Evaluation of Novel Unsymmetrical Azines as Quorum Sensing Inhibitors,” *RSC Advances*, **2015**, *5* (97), 80027-80038. **Cited 4 times. IF: 3.108**
 25. Dinesh Kumar, Pradeep S. Jadhavar, Manesh Nautiyal, Himanshu Sharma, Prahlad K. Meena, Legesse Adane, Sahaj Pancholia, and Asit K. Chakraborti,* “Convenient synthesis of 2,3-disubstituted quinazolin-4(H)-ones and 2-styryl-3-substituted quinazolin-4(3H)-ones: Applications towards the synthesis of drugs,” *RSC Advances*, **2015**, *5* (39), 30819-30825. **Cited 20 times. IF: 3.108**

26. Babita Tanwar, Priyank Purohit, Banothu Naga Raju, Dinesh Kumar, Damodara N. Kommi, and Asit K. Chakraborti,* “An “all-water” strategy for regiocontrolled synthesis of 2-aryl quinoxalines,” *RSC Advances*, **2015**, 5 (16), 11873-11883. **Cited 20 times. IF: 3.108**
27. Kapileswar Seth, Manesh Nautiyal, Priyank Purohit, Naisargee Parikh, and Asit K. Chakraborti,* “Palladium Catalyzed C_{sp2}-H Activation for Direct Aryl Hydroxylation: Unprecedented Role of 1,4-Dioxane as Source of Hydroxyl Radical,” *J. Chem. Soc. Chem. Commun.*, **2015**, 51 (1), 191-194. **Cited 42 times. IF: 6.319**
28. Dinesh Kumar, Asim Kumar, Mohammad Mohsin Qadri, Md. Imam Ansari, Abhishek Gautam and Asit K. Chakraborti,* “In(OTf)₃-catalyzed synthesis of 2-styryl quinolines: scope and limitations of metal Lewis acids for tandem Friedländer annulation–Knoevenagel condensation,” *RSC Advances*, **2015**, 5 (4), 2920-2927. **Cited 9 times. IF: 3.108**
29. Shaminder Singh, Pravin J. Wanjari, Sonam Bhatia, Vijay C. Sonwane, Asit K. Chakraborti and Prasad V. Bharatam,* “Design, synthesis, biological evaluation and toxicity studies of *N,N*-disubstituted biguanides as quorum sensing inhibitors,” *Med. Chem. Res.*, **2015**, 24 (5), 1974-1987. **Cited 7 times. IF: 1.277**
30. Parth Shah, Tejas M. Dhameliya, Rohit Bansal, Manesh Nautiyal, Damodara N. Kommi, Pradeep S. Jadhavar, Jonnalagadda Padma Sridevi, Perumal Yogeeswari, Dharmarajan Sriram, and Asit K. Chakraborti,* “*N*-Arylalkylbenzo[*d*]thiazole-2-carboxamides as anti-mycobacterial agents: Design, new methods of synthesis and biological evaluation,” *Med. Chem. Commun.* **2014**, 5 (10), 1489-1495. **Cited 15 times. IF: 2.608**
31. Kapileswar Seth, Sanjeev K. Garg, Raj Kumar, Priyank Purohit, Vachan S. Meena, Rohit Goyal, Uttam C. Banerjee and Asit K. Chakraborti,* “2-(2-Arylphenyl)benzoxazole As a Novel Anti-Inflammatory Scaffold: Synthesis and Biological Evaluation,” *ACS Med. Chem. Lett.* **2014**, 5 (5), 512-516. **Cited 36 times. IF: 3.746 3.794**
32. Kapileswar Seth, Priyank Purohit, and Asit K. Chakraborti,* “Cooperative Catalysis by Palladium-Nickel Binary Nanocluster for Suzuki-Miyaura Reaction of *Ortho*-Heterocycle-Tethered Sterically Hindered Aryl Bromides,” *Org. Lett.* **2014**, 16 (9), 2334-2337. **Cited 25 times. IF: 6.579 6.492**
33. Linga Banoth, Bhukya Chandarrao, Brahmam Pujala, Asit K. Chakraborti,* U. C. Banerjee, “New and Efficient Chemo-enzymatic Synthesis of (*R*)- and (*S*)-Bunitrolol,” *Synthesis* **2014**, 46 (4), 479-488. **Cited 2 times. IF: 2.65**
34. L Adane, S. Bhagat, M. Arfeen, S. Bhatia, R. Sirawaraporn, W. Sirawaraporn, Asit K. Chakraborti, P. V. Bharatam, “Design and synthesis of guanylthiourea derivatives as potential inhibitors of *Plasmodium falciparum* dihydrofolate reductase enzyme,” *Bioorg. Med. Chem. Lett.* **2014**, 24 (2), 613-617. **Cited 12 times. IF: 2.486**
35. Kapileswar Seth, Sudipta Raha Roy, Damodara N. Kommi, Bhavin V. Pipaliya and Asit K. Chakraborti,* “Silver nanoparticle-catalysed phenolysis of epoxides under neutral conditions: scope and limitations of metal nanoparticles and applications towards drug synthesis,” *J. Mol. Catal. A: Chem.* **2014**, 392C, 164-172. **Cited 9 times. IF: 3.958**

36. Srikant Bhagat, Parth Shah, Sanjeev K. Garg, Shweta Mishra, Preet Kamal, Sushma Singh and Asit K. Chakraborti,* “ α -Aminophosphonates as novel antileishmanial chemotypes: synthesis, biological evaluation, and CoMFA studies,” *Med. Chem. Commun.* **2014**, 5 (5), 665-670. **Cited 15 times. IF: 2.608**
37. Linga Banoth, Brahmam Pujala, Asit K. Chakraborti and Uttam C. Banerjee,* “Development and validation of HPLC method for the resolution of derivatives of 1-bromo-3-chloro-2-propanol: a novel chiral building block for the synthesis of pharmaceutically important compounds,” *J. Anal. Chem.* **2014**, 69 (12), 1206-1213. **IF: 0.723**
38. Dinesh Kumar, Mukesh Sonawane, Brahmam Pujala, Varun K. Jain, Srikant Bhagat and Asit K. Chakraborti,* “Supported protic acid-catalyzed synthesis of 2,3-disubstituted thiazolidin-4-ones: enhancement of the catalytic potential of protic acid by adsorption on solid support,” *Green Chem.* **2013**, 15 (10), 2872-2884. **Cited 36 times. IF: 9.125**
39. Dinesh Kumar, Kapileswar Seth, Damodara N. Kommi, Srikant Bhagat and Asit K. Chakraborti,* “Surfactant micelles as microreactors for the synthesis of quinoxalines in water: scope and limitations of surfactant catalysis,” *RSC Advances*, **2013**, 3 (35), 15157-15168. **Cited 32 times. IF: 3.108**
40. Kapileswar Seth, Sudipta Raha Roy, Bhavin V. Pipaliya and Asit K. Chakraborti,* “Synergistic Dual Activation Catalysis by Palladium Nanoparticles for Epoxide Ring Opening with Phenols,” *J. Chem. Soc. Chem. Commun.*, **2013**, 49 (52), 5886 - 5888. **Cited 31 times. IF: 6.319**
41. Damodara N. Kommi, Dinesh Kumar, Kapileswar Seth, and Asit K. Chakraborti,* “Protecting group-free concise synthesis of (*RS*)/(*S*)-lubeluzole,” *Org. Lett.* **2013**, 15 (6), 1158-1161. **Cited 24 times. IF: 6.579 6.492**
42. Damodara N. Kommi, Dinesh Kumar, and Asit K. Chakraborti,* ““All-water chemistry” for a concise total synthesis of the novel class antianginal drug (*RS*), (*R*), (*S*)-ranozaline,” *Green Chem.* **2013**, 15 (3), 756-767. **Cited 28 times. IF: 9.125**
43. Damodara N. Kommi, Pradeep S. Jadhavar, Dinesh Kumar, and Asit K. Chakraborti,* “All water” one-pot diverse synthesis of 1,2-disubstituted benzimidazoles: hydrogen bond driven ‘synergistic electrophile-nucleophile dual activation’ by water,” *Green Chem.* **2013**, 15 (3), 798-810. **Cited 58 times. IF: 9.125**
44. Dinesh Kumar, Damodara N. Kommi, Rajesh Chebolu, Sanjeev K. Garg, Raj Kumar and Asit K. Chakraborti,* “Selectivity control during the solid supported protic acid catalysed synthesis of 1,2-disubstituted benzimidazoles and mechanistic insight to rationalize selectivity,” *RSC Advances* **2013**, 3 (1), 91-98. **Cited 18 times. IF: 3.108**
45. Linga Banoth, Thete K Narayana, Brahmam Pujala, Asit K. Chakraborti and Uttam Chand Banerjee “New chemo-enzymatic synthesis of (*R*)-1-chloro-3-(piperidin-1-yl) propan-2-ol,” *Tetrahedron Asymmetry* **2012**, 23 (22-23), 1564-1570. **Cited 6 times. IF: 2.126**
46. Damodara N. Kommi, Dinesh Kumar, Rohit Bansal, Rajesh Chebolu and Asit K. Chakraborti,* ““All-water” chemistry of tandem *N*-alkylation-reduction-condensation for synthesis of *N*-arylmethyl-2-substituted benzimidazoles,” *Green Chem.* **2012**, 14 (12), 3329-3335. **Highlighted in RSC Blog by Mary Badcock, Development Editor, Green Chemistry, and may also be included in future promotional material or press releases for Green Chemistry. Cited 41 times. IF: 9.125**

47. Rajesh Chebolu, Damodara N. Kommi, Dinesh Kumar, Narendra Bollineni and Asit K. Chakraborti,* "Hydrogen-bond driven electrophilic activation for selectivity control: the scope and limitations of fluorous alcohol promoted selective formation of 1,2-disubstituted benzimidazoles and mechanistic insight for rational of selectivity," *J. Org. Chem.* **2012**, 77 (22), 10158-10167. **Cited 56 times. IF: 4.849 4.805**
48. Dinesh Kumar, Damodara N. Kommi, Alpesh R. Patel and Asit K. Chakraborti,* "L-Proline catalysed activation of methyl ketones/active methylene compounds and DMF-DMA for synthesis of (2E)-3-dimethylamino-2-propen-1-ones," *Eur J. Org. Chem.* **2012**, 6407-6413. **Cited 11 times. IF: 2.834**
49. Dinesh Kumar, Damodara N. Kommi, Alpesh R. Patel and Asit K. Chakraborti,* "Catalytic procedures for multicomponent synthesis of imidazoles: selectivity control during the competitive formation of tri- and tetra-substituted imidazoles," *Green Chem.* **2012**, 14, 2038-2049. **Cited 48 times. IF: 9.125**
50. Anirban Sarkar, Sudipta Raha Roy, Dinesh Kumar, Chetna Madaan, Santosh Rudrawar, Asit K. Chakraborti,* "Lack of correlation between catalytic efficiency and basicity of amines during the reaction of aryl methyl ketones with DMF-DMA: an unprecedented supramolecular domino catalysis," *Org. Biomol. Chem.* **2012**, 10, 281-286. **Cited 12 times. IF: 3.564**
51. Brahmam Pujala, Shivani Rana, Asit K. Chakraborti,* "Zinc Tetrafluoroborate Hydrate as a Mild Catalyst for Epoxide Ring-opening with Amines: Scope and Limitations of Metal Tetrafluoroborates and Applications in the Synthesis of Anti-hypertensive Drugs (RS)/(R)/(S)-Metoprolols," *J. Org. Chem.* **2011**, 76, 8768-8780. **Cited 48 times. IF: 4.849 4.805**
52. Abhishek Kaler, Vachan Singh Meena, Manpreet Singh, Brahmam Pujala, Asit K. Chakraborti, Uttam Chand Banerjee, "Lipase-mediated kinetic resolution of (RS)-1-bromo-3-[4-(2-methoxy-ethyl)-phenoxy]-propan-2-ol to (R)-1-bromo-3-(4-(2-methoxyethyl) phenoxy) propan-2-yl acetate," *Tetrahedron Lett.* **2011**, 52, 5355-5358. **Cited 4 times. IF: 2.193**
53. Anirban Sarkar, Sudipta Raha Roy, Naisargee Parikh, Asit K. Chakraborti,* "Non-solvent application of ionic liquids: organo-catalysis by 1-alkyl-3-methylimidazolium cation based room temperature ionic liquids for chemoselective *N*-tert-butylloxycarbonylation of amines and the influence of the C-2 hydrogen on catalytic efficiency," *J. Org. Chem.* **2011**, 76, 7132-7140. **Cited 77 times. IF: 4.849 4.805**
54. Sudipta Raha Roy, Pradeep S. Jadhavar, Kapileswar Seth, Kulin K. Sharma, Asit K. Chakraborti,* "Organo-catalytic Application of Room Temperature Ionic Liquids: [bmim][MeSO₄] as a Recyclable Organo-catalyst for One-pot Multicomponent Reaction for Preparation of Dihydropyrimidinones and -thiones," *Synthesis* **2011**, 2261-2267. **Cited 47 times. IF: 2.652**
55. Sachin Bindal, Dinesh Kumar, Damodara N. Kommi, Sonam Bhatiya, Asit K. Chakraborti,* "An Efficient Organocatalytic Dual Activation Strategy for Preparation of the Versatile Synthons 2(E)-1-Aryl/heteroaryl/styryl-3-dimethylamino-2-propen-1-ones and α -(E)-Dimethylaminoformylidene cycloalkanones," *Synthesis* **2011**, 1930-1935. **Cited 9 times. IF: 2.65**
56. Anirban Sarkar, Sudipta Raha Roy and Asit K. Chakraborti,* "Ionic Liquid Catalysed Reaction of Thiols with α,β -Unsaturated Carbonyl Compounds- Remarkable Influence of the C-2 Hydrogen and the Anion," *J. Chem. Soc. Chem. Commun.* **2011**, 47, 4538-4540. **Cited 75 times. IF: 6.319**

57. Naisargee Parikh, Dinesh Kumar, Sudipta Raha Roy and Asit K. Chakraborti,* "Surfactant mediated oxygen reuptake in water for green aerobic oxidation: mass-spectrometric determination of discrete intermediates to correlate oxygen uptake with oxidation efficiency," *J. Chem. Soc. Chem. Commun.* **2011**, 47, 1797-1799. **Cited 65 times. IF: 6.319**
58. Sudipta Raha Roy and Asit K. Chakraborti,* "Supramolecular Assemblies in Ionic Liquid catalysis for Aza-Michael Reaction," *Org. Lett.* **2010**, 12, 3866-3869. **Cited 91 times. IF: 6.579 6.492**
59. Anuradha Ghosh, Meenu Khurana, Archana Chauhan, Masahiro Takeo, Asit K. Chakraborti, and Rakesh K. Jain, "Degradation of 4-nitrophenol, 2-chloro-4-nitrophenol, and 2,4-dinitrophenol by *Rhodococcus imtechensis* strain RKJ300," *Environ. Sci. Technol.* **2010**, 44, 1069-1077. **Cited 58 times. IF: 6.198**
60. Asit K. Chakraborti* and Sudipta Raha Roy, "On Catalysis by Ionic Liquids," *J. Am. Chem. Soc.* **2009**, 131, 6902-6903. **Selected for display in Nature Publishing Groups Asia Materials website. Cited 173 times. IF: 13.858 14.357**
61. Asit K. Chakraborti* and Sunay V. Chankeshwara, "Counterattack Mode Differential Acetylative Deprotection of Phenylmethyl Ethers: Applications to Solid Phase Organic Reactions," *J. Org. Chem.* **2009**, 74, 1367-1370. **Cited 17 times. IF: 4.849 4.805**
62. Asit K. Chakraborti,* Bavneet Singh, Sunay V. Chankeshwara and Alpesh R. Patel, "Protic acid immobilised on solid support as an extremely efficient recyclable catalyst system for a direct and atom economical esterification of carboxylic acids with alcohols," *J. Org. Chem.* **2009**, 74, 5967-5974. **Selected by the Editorial Board of SYNFACTS for its important insights and published the highlights in SYNFACTS Issue 11/09. Cited 66 times. IF: 4.849 4.805**
63. Aditya M. Kaushal, Asit K. Chakraborti and Arvind K. Bansal,* "FTIR Studies on Different Intermolecular Association in the Crystalline and Amorphous States of Structurally Related Non Steroidal Anti-inflammatory Drugs," *Molecular Pharmaceutics* **2008**, 5, 937-945. **Cited 44 times. IF: 4.440 4.556**
64. Dinesh Kumar, Santosh Rudrawar and Asit K. Chakraborti,* "One-pot synthesis of 2-substituted benzoxazoles directly from carboxylic acids," *Aust. J. Chem.* **2008**, 61, 881-887. **Cited 28 times. IF: 1.328**
65. Sunay V. Chankeshwara, Rajesh Chebolu and Asit K. Chakraborti,* "Organocatalytic methods for chemo-selective *O-tert*-butoxycarbonylation of phenols and their regeneration from the *O-t*-Boc derivatives," *J. Org. Chem.* **2008**, 73, 8615-8618. **Cited 22 times. IF: 4.849 4.805**
66. Asit K. Chakraborti,* Sudipta Raha Roy, Dinesh Kumar, Pradeep Chopra, "Catalytic application of room temperature ionic liquids: [bmim][MeSO₄] as a recyclable catalyst for synthesis of bis(indolyl)methanes. Ion-fishing by MALDI-TOF-TOF MS and MS/MS studies to probe the proposed mechanistic model of catalysis," *Green Chem.* **2008**, 10, 1111-1118. **Cited 120 times. IF: 9.125**
67. S. Sundriyal, B. Viswanad, P. Ramarao, Asit K. Chakraborti, P. V. Bharatam, "New PPAR γ Ligands Based on Barbituric acid: Virtual Screening, Synthesis and Receptor Binding Studies," *Bioorg. Med. Chem. Lett.* **2008**, 18, 4959-4962. **Cited 21 times. IF: 2.454**

68. Srikant Bhagat and Asit K. Chakraborti*, "Zirconium(IV) compounds as efficient catalysts for synthesis of α -aminophosphonates," *J. Org. Chem.* **2008**, 73, 6029-6032. **Cited 109 times. IF: 4.849 4.805**
69. Gaurav Sharma, Raj Kumar and Asit K. Chakraborti*, "Fluoroboric Acid Adsorbed on Silica-gel as a New, Highly Efficient and Reusable Heterogeneous Catalyst for Thia-Michael Addition to α,β -Unsaturated Carbonyl Compounds," *Tetrahedron Lett.* **2008**, 49, 4272-7275. **Cited 73 times. IF: 2.193**
70. Gaurav Sharma, Raj Kumar and Asit K. Chakraborti*, "On Water" Synthesis of 2,4-Diaryl-2,3-dihydro-1,5-benzothiazepines Catalysed by Sodium Dodecyl Sulphate (SDS)," *Tetrahedron Lett.* **2008**, 49, 4269-4271. **Cited 70 times. IF: 2.193**
71. Sandeep Sundriyal, Bhoomi Viswanad, Elumalai Bharathy, Poduri Ramarao, Asit K. Chakraborti and Prasad V. Bharatam,* "New PPAR γ Ligands Based on 2-Hydroxy-1,4-naphthoquinone: Computer-Aided Design, Synthesis and Receptor Binding Studies," *Bioorg. Med. Chem. Lett.* **2008**, 18, 3192-3195. **Cited 12 times. IF: 2.454**
72. Rajesh Chebolu, Sunay V. Chankeshwara and Asit K. Chakraborti*, "Triphenylphosphine as a novel organo-catalyst for chemo-selective *O*-tert-butoxycarbonylation of phenols," *Synthesis* **2008**, 1448-1455. **Cited 9 times. IF: 2.65**
73. Dinesh Kumar, Raj Kumar and Asit K. Chakraborti*, "Tetrafluoroboric Acid Adsorbed on Silica-Gel as a Reusable Heterogeneous Dual-Purpose Catalyst for Conversion of Aldehydes/Ketones into Acetals/Ketals and Back Again," *Synthesis* **2008**, 1249-1256. **Cited 22 times. IF: 2.65**
74. Asit K. Chakraborti*, Santosh Rudrawar, Kirtikumar B. Jadhav, Gurmeet Kaur and Sunay V. Chankeshwara, "On Water" Organic Synthesis: A Highly Efficient and Clean Synthesis of 2-Aryl/Heteroaryl/Styryl Benzothiazoles and 2-Alkyl/Aryl Alkyl Benzothiazolines," *Green Chem.* **2007**, 9, 1335-1340. **Cited 148 times. IF: 9.125**
75. Sonia Bhardwaj, Anshuman Shukla, Sourav Mukherjee, Swati Sharma, Purnananda Guptasarma, Asit K. Chakraborti, Arunaloke Chakrabarti, "Putative structure and characteristics of a red water-soluble pigment secreted by *Penicillium Marneffeii*," *Medical Mycology* **2007**, 45, 419-427. **Cited 11 times. IF: 2.644**
76. Hashim F. Motiwala, Raj Kumar and Asit K. Chakraborti,* "Microwave-Accelerated Solvent- and Catalyst-free Synthesis of 4-Aminoaryl/alkyl-7-chloroquinolines and 2-Aminoaryl/alkylbenzothiazoles," *Aust. J. Chem.* **2007**, 60, 369-374. **Cited 35 times. IF: 1.328**
77. Shivani, Brahmam Pujala and Asit K. Chakraborti* "Zinc(II) perchlorate hexahydrate catalysed opening of epoxide ring by amines: applications to synthesis of (*RS*)/(*R*)-propranolols and (*RS*)/(*R*)/(*S*)-naftopidils," *J. Org. Chem.* **2007**, 72, 3713-3722. **Cited 118 times. IF: 4.849 4.805**
78. Hemant Bhutani, Saranjit Singh, Sanjay Vir, K. K. Bhutani, Raj Kumar, Asit K. Chakraborti, K. C. Jindal, "LC and LC-MS study of stress decomposition behaviour of isoniazid and establishment of validated stability-indicating assay method," *J. Pharm. Biomed. Anal.* **2007**, 43, 1213-1220. **Cited 47 times. IF: 3.255**
79. Shivani, Rajesh Gulhane and Asit K. Chakraborti,* "Zinc perchlorate hexahydrate [Zn(ClO₄)₂·6H₂O] as acylation catalyst for poor nucleophilic phenols, alcohols and

- amines: Scope and limitations.” *J. Mol. Catal. A: Chem.* **2007**, *264*, 208-213. **Cited 43 times. IF: 3.958**
80. Srikant Bhagat and Asit K. Chakraborti,* “An extremely efficient three-component reaction of aldehydes/ketone, amines, and phosphates (Kabachnik-Fields reaction) for the synthesis of α -aminophosphonates catalysed by magnesium perchlorate,” *J. Org. Chem.* **2007**, *72*, 1263-1270. **Cited 251 times. Listed under Top 20 Most-Cited Articles Published in the Last Three Years in the Journal of Organic Chemistry (ACS Citation Alert of Oct 6, 2009). IF: 4.849 4.805**
81. Gopal L. Khatik, Raj Kumar and Asit K. Chakraborti,* “Magnesium perchlorate as a novel and highly efficient catalyst for synthesis of 2,3-dihydro-1,5-benzothiazepine,” *Synthesis* **2007**, 541-546. **Cited 29 times. IF: 2.65**
82. Shivani and Asit K. Chakraborti,* “Zinc Perchlorate Hexahydrate as a New and Highly Efficient Catalyst for Synthesis of 2-Hydroxysulfides by Opening of Epoxide Rings with Thiols under Solvent-free Conditions: Application for Synthesis of the Key Intermediate of Diltiazem,” *J. Mol. Catal. A: Chem.* **2007**, *263*, 137-142. **Cited 29 times. IF: 3.958**
83. Gaurav Sharma, Raj Kumar and Asit K. Chakraborti,* “A Novel Environmentally Friendly Process for Carbon-Sulfur Bond Formation Catalyzed by Montmorillonite Clays,” *J. Mol. Catal. A: Chem.* **2007**, *263*, 143-148. **Cited 44 times. IF: 3.958**
84. Hemlata Tamta, Sukriti Kalra, Ramasamy Thilagavathi, Asit K. Chakraborti and Anup K. Mukhopadhyay, “Nature and Position of the Functional Group on the Thiopurine Substrates Influence the Activity of Xanthine Oxidase- Enzymatic Reaction Pathway of 6-Mercaptopurine and 2-Mercaptopurine are Different,” *Biochemistry (Moscow)* **2007**, *72*, 170-177. **Cited 5 times. IF: 1.537**
85. Gopal L. Khatik, Gaurav Sharma, Raj Kumar and Asit K. Chakraborti,* “Scope and Limitations of $\text{HClO}_4\text{-SiO}_2$ as an Extremely Efficient, Inexpensive, and Reusable Catalyst for Chemoselective Carbon-Sulfur Bond Formation,” *Tetrahedron* **2007**, *63*, 1200-1210. **Cited 73 times. IF: 2.651**
86. Raj Kumar, Dinesh Kumar and Asit K. Chakraborti,* “Perchloric Acid Adsorbed on Silica-Gel ($\text{HClO}_4\text{-SiO}_2$) as an Inexpensive, Extremely Efficient, and Reusable Dual Catalyst System for Acetal/Ketal Formation and their Deprotection to Aldehydes/Ketones,” *Synthesis* **2007**, 299-303. **Cited 41 times. IF: 2.65**
87. Srikant Bhagat, Ratnesh Sharma, Asit K. Chakraborti,* “Dual-activation protocol for tandem cross aldol condensation: an easy and highly efficient synthesis of α,α' -bis(arylmethylidene) ketones,” *J. Mol. Catal. A: Chem.* **2006**, *260*, 235-240. **Cited 46 times. IF: 3.958**
88. Santosh Rudrawar, Ram C. Besra and Asit K. Chakraborti,* “Perchloric Acid Adsorbed on Silica Gel ($\text{HClO}_4\text{-SiO}_2$) as an Extremely Efficient and Reusable Catalyst for 1,3-Dithiolane/Dithiane Formation,” *Synthesis* **2006**, 2767-2771. **Cited 44 times. IF: 2.65**
89. Sunay V. Chankeshwara and Asit K. Chakraborti,* “Indium(III) Halides as New and Highly Efficient Catalysts for *N-tert*-Butoxycarbonylation of Amines,” *Synthesis* **2006**, 2784-2788. **Cited 31 times. IF: 2.65**

90. Asit K. Chakraborti* and Shivani, "Magnesium bistrifluoromethanesulfonimide as a new and efficient acylation catalyst," *J. Org. Chem.* **2006**, *71*, 5785-5788. **Cited 75 times. IF: 4.849 4.805**
91. Sunay V. Chankeshwara and Asit K. Chakraborti*, "Catalyst-free chemoselective *N*-*tert*-butyloxycarbonylation of amines in water," *Org. Lett.* **2006**, *8*, 3259-3262. **Cited 140 times. IF: 6.579 6.492**
92. Asit K. Chakraborti* and Sunay V. Chankeshwara, "HClO₄-SiO₂ as a new, highly efficient, inexpensive and reusable catalyst for *N*-*tert*-butoxycarbonylation of amines," *Org. Biomol. Chem.* **2006**, *4*, 2769-2771. **Cited 69 times. IF: 3.564**
93. Sunay V. Chankeshwara and Asit K. Chakraborti*, "Montmorillonite K 10 and Montmorillonite KSF as New and Reusable Catalysts for Conversion of Amines to *N*-*tert*-Butylcarbamates," *J. Mol. Catal. A: Chem.* **2006**, *253*, 198-202. **Cited 60 times. IF: 3.958**
94. Gopal L. Khatik, Raj Kumar and Asit K. Chakraborti*, "Catalyst-free conjugated addition of thiols to α,β -unsaturated carbonyl compounds in water," *Org. Lett.* **2006**, *8*, 2433-2436. **Cited 222 times. IF: 6.579 6.492**
95. Raj Kumar, Ramasamy Thilagavathi, Rajesh Gulhane and Asit K. Chakraborti*, "Zinc(II) perchlorate as a new and highly efficient catalyst for formation of aldehyde 1,1-diacetate at room temperature and under solvent-free conditions," *J. Mol. Catal. A: Chem.* **2006**, *250*, 227-232. **Cited 33 times. IF: 3.958**
96. Navnath S. Gavande, Sonia Kundu, Naresh S. Badgujar, Gurmeet Kaur and Asit K. Chakraborti*, "Ph₂S₂-CaH₂ in *N*-methyl-2-pyrrolidone as an efficient protocol for chemoselective cleavage of aryl alkyl ethers," *Tetrahedron* **2006**, *62*, 4201-4204. **Cited 10 times. IF: 2.651**
97. Sawraj Singh, Gurmeet Kaur, Asit K. Chakraborti, Rakesh K. Jain and Uttam C. Banerjee "Study of the experimental conditions for the lipase production by a newly isolated strain of *Pseudomonas aeruginosa* for the enantioselective hydrolysis of (\pm)-methyl *trans*-3(4-methoxyphenyl) glycidate," *Bioprocess Biosyst Eng.* **2006**, *28*, 341-348. **Cited 9 times. IF: 1.870**
98. Sunay V. Chankeshwara and Asit K. Chakraborti*, "Copper(II) tetrafluoroborate as a novel and highly efficient catalyst for *N*-*tert*-butoxycarbonylation of amines under solvent-free conditions and at room temperatures," *Tetrahedron Lett.* **2006**, *47*, 1087-1091. **Cited 58 times. IF: 2.193**
99. Srikant Bhagat, Ratnesh Sharma, Devesh M. Sawant, Lalima Sharma and Asit K. Chakraborti*, "LiOH·H₂O as a Novel Dual Activation Catalyst for Highly Efficient and Easy Synthesis of 1,3-Diaryl-2-propenones by Claisen-Schmidt Condensation under Mild Conditions," *J. Mol. Catal. A: Chem.* **2006**, *244*, 20 – 24. **Cited 54 times. IF: 3.958**
100. Raj Kumar and Asit K. Chakraborti*, "Copper(II) tetrafluoroborate as a novel and highly efficient catalyst for acetal formation," *Tetrahedron Lett.* **2005**, *46*, 8319-8323. **Cited 45 times. IF: 2.193**

101. Hemant Bhutani, Saranjit Singh, K. C. Jindal and Asit K Chakraborti, "Mechanistic Explanation to the Catalysis by Pyrazinamide and Ethambutol of Reaction Between Rifampicin and Isoniazid in anti-TB FDCs," *J. Pharm. Biomed. Anal.* **2005**, 39, 892-899. **Cited 35 times. IF: 3.255**
102. Santosh Rudrawar, Atul Kondaskar and Asit K Chakraborti,* "An Efficient Acid- and Metal-Free One-Pot Synthesis of Benzothiazoles from Carboxylic Acids," *Synthesis* **2005**, 2521-2526. **Cited 74 times. IF: 2.65**
103. Piyush Gupta, R Thilagavathi, Asit K Chakraborti and Arvind K Bansal, "Differential Molecular Interactions between Crystalline and Amorphous Phase of Celecoxib," *J. Pharm. Pharmacol.* **2005**, 57, 1271-1278. **Cited 9 times. IF: 2.405**
104. Ram C. Besra, Santosh Rudrawar and Asit K Chakraborti,* "Copper(II) tetrafluoroborate as extremely efficient catalyst for 1,3-dithiolane formation from carbonyl compounds under solvent-free conditions at room temperature," *Tetrahedron Lett.* **2005**, 46, 6213-6217. **Cited 32 times. IF: 2.193**
105. Piyush Gupta, R Thilagavathi, Asit K Chakraborti and Arvind K Bansal, "Role of Molecular Interaction in Stability of Celecoxib-PVP Amorphous Systems," *Molecular Pharmaceutics* **2005**, 2, 384-391. **Cited 87 times. IF: 4.440**
106. Ramasamy Thilagavathi and Asit K Chakraborti,* "Importance of Alignment in Developing 3-D QSAR Models of 1,5-Diaryl Pyrazoles for Prediction of COX-2 Inhibitory Activity," *Int. Elec. J. Mol. Des.* **2005**, 4, 603-612.
107. Hemlata Tamta, Ramasamy Thilagavathi, Asit K Chakraborti* and Anup K. Mukhopadhyay,* "6-(*N*-Benzoylamino)purine as a novel and potent inhibitor of xanthine oxidase: Inhibition mechanism and molecular modeling studies," *J. Enzyme Inhibit. Med. Chem.* **2005**, 20, 317-324. **Cited 15 times. IF: 2.50**
108. Pankaj Soni, Gurmeet Kaur, Asit K. Chakraborti and Uttam C. Banerjee, "*Candida viswanathii* as a novel biocatalyst for stereoselective reduction of heteroaryl methyl ketones: a highly efficient enantioselective synthesis of (*S*)- α -(3-pyridyl)ethanol," *Tetrahedron Asymmetry* **2005**, 16, 2425-2428. **Cited 25 times. IF: 2.126**
109. Sanjeev K. Garg, Raj Kumar and Asit K Chakraborti,* "Zinc Perchlorate Hexahydrate catalysed Conjugate Addition of Thiols to α,β -Unsaturated Ketones," *Synlett* **2005**, 1370-1374. **Cited 63 times. IF: 2.151**
110. Raj Kumar, C. Selvam, Gurmeet Kaur and Asit K. Chakraborti,* "Microwave-Assisted Direct Synthesis of 2-Substituted Benzoxazoles from Carboxylic Acids under Catalyst and Solvent Free Conditions." *Synlett* **2005**, 1401-1404. **Cited 44 times. IF: 2.151**
111. C. Selvam, Sanjay M. Jachak, Ramasamy Thilagavathi and Asit K. Chakraborti, "Design, synthesis, biological evaluation and molecular docking of curcumin analogues as antioxidant, cyclooxygenase inhibitory and anti-inflammatory agents," *Bioorg. Med. Chem. Lett.* **2005**, 15, 1793-1797. **Cited 204 times. IF: 2.486**
112. Sanjeev K. Garg, Raj Kumar and Asit K Chakraborti,* "Copper(II) Tetrafluoroborate as a Novel and Highly Efficient Catalyst for Michael Addition of Mercaptans to α,β -Unsaturated Carbonyl Compounds," *Tetrahedron Lett.* **2005**, 46, 1721-1724. **Cited 101 times. IF: 2.193**

113. Ramasamy Thilagavathi, Raj Kumar, Vema Aparna, M. Elizabeth Sobhia, Bulusu Gopalakrishnan and Asit K Chakraborti,* “Three-Dimensional Quantitative Structure Activity Relationship Studies on Imidazolyl and *N*-Pyrrolyl Heptenoates as 3-Hydroxy-3-methylglutaryl-CoA Reductase (HMGR) Inhibitors by Comparative Molecular Similarity Indices Analysis,” *Bioorg. Med. Chem. Lett.* **2005**, *15*, 1027-1032. **Cited 10 times. IF: 2.454**
114. Chittur V. Srikanth, Asit K Chakraborti and Anand K. Bachhawat, “Acetaminophen toxicity and resistance in the yeast *Saccharomyces cerevisiae*,” *Microbiol.* **2005**, *151*, 99-111. **Cited 9 times. IF: 2.957**
115. Asit K. Chakraborti,* Srikant Bhagat and Santosh Rudrawar, “Magnesium perchlorate as an efficient catalyst for synthesis of imines and phenylhydrazones,” *Tetrahedron Lett.* **2004**, *45*, 7641-7644. **Cited 100 times. IF: 2.347**
116. Asit K. Chakraborti,* Atul Kondaskar and Santosh Rudrawar, “Scope and Limitations of Montmorillonite K-10 Catalysed Opening of Epoxide Rings by Amines,” *Tetrahedron* **2004**, *60*, 9085-9091. **Cited 103 times. IF: 2.651**
117. Asit K. Chakraborti,* Santosh Rudrawar and Atul Kondaskar, “Lithium Bromide as an Inexpensive and Efficient Catalyst for Opening of Epoxide Rings by Amines at Room Temperature under Solvent-free Condition,” *Eur. J. Org. Chem.* **2004**, 3597-3600. **Cited 84 times. IF: 2.834**
118. Asit K. Chakraborti,* Santosh Rudrawar, Lalima Sharma and Gurmeet Kaur, “An Efficient Conversion of Phenolic Esters to Benzothiazoles under Mild and Virtually Neutral Conditions,” *Synlett* **2004**, 1533-1536. **Cited 58 times. IF: 2.151**
119. A. Dunge, Asit K. Chakraborti and Saranjit Singh, “Mechanistic explanation to the variable degradation behaviour of stavudine and zidovudine under hydrolytic, oxidative and photolytic conditions,” *J. Pharm. Biomed. Anal.* **2004**, *35*, 965-970. **Cited 21 times. IF: 3.255**
120. C. Selvam, Sanjay M. Jachak, R. Gnana Oli, Ramasamy Thilagavathi, Asit K. Chakraborti and K. K. Bhutani, “A New Cyclooxygenase (COX) Inhibitory Pterocarpin from *Indigofera aspalathoides*: Structure Elucidation and Determination of Binding Orientation in the Active Sites of the Enzyme by Molecular Docking,” *Tetrahedron Lett.* **2004**, *45*, 4311- 4314. **Cited 29 times. IF: 2.193**
121. Asit K. Chakraborti,* Santosh Rudrawar and Atul Kondaskar, “An Efficient Synthesis of 2-Amino Alcohols by Silica Gel Catalysed Opening of Epoxide Rings by Amines,” *Org. Biomol. Chem.* **2004**, *2*, 1277-1280. **Cited 98 times. IF: 3.564**
122. Asit K. Chakraborti* Ramasamy Thilagavathi and Raj Kumar, “Copper Tetrafluoroborate-Catalysed Formation of Aldehyde-1,1-diacetates,” *Synthesis* **2004**, 831-833. **Cited 48 times. IF: 2.65**
123. Asit K. Chakraborti,* C. Selvam, Gurmeet Kaur and Srikant Bhagat, “An Efficient Synthesis of Benzothiazoles by Direct Condensation of Carboxylic Acids with 2-Aminothiophenol under Microwave Irradiation,” *Synlett* **2004**, 851-855. **Cited 85 times. IF: 2.151**
124. Asit K. Chakraborti* and Rajesh Gulhane, “Zirconium (IV) Chloride as a New, Highly Efficient, and Reusable Catalyst for Acylation of Phenols, Thiols, Amines,

- and Alcohols under solvent Free Conditions,” *Synlett* **2004**, 627-630. **Cited 72 times. IF: 2.151**
125. Rohit Sharma, Jitesh P. Iyer, Asit K. Chakraborti and U. C. Banerjee, “Determination of Gibberellins in Fermentation Broth Produced by *Fusarium verticillioides* MTCC 156 by High-performance Liquid Chromatography Tandem Massspectrometry,” *Biotech. Appl. Biochem.* **2004**, 39, 83-88. **Cited 6 times. IF: 1.413**
126. Asit K. Chakraborti,* Rajesh Gulhane and Shivani, “Copper(II) Tetrafluoroborate Catalysed Acylation of Phenols, Thiols, Alcohols, and Amines,” *Synthesis* **2004**, 111-115. **Cited 49 times. IF: 2.65**
127. Asit K Chakraborti* and Ramasamy Thilagavathi, “Computer-Aided Design of Selective COX-2 Inhibitors: Molecular Docking of Structurally Diverse Cyclooxygenase-2 Inhibitors using FlexX Method,” *Int. Elec. J. Mol. Des.* **2004**, 3, 704-719.
128. Asit K. Chakraborti* and Atul Kondaskar, “ZrCl₄ as a New and Efficient Catalyst for Opening of Epoxide Ring by Amines,” *Tetrahedron Lett.* **2003**, 44, 8315-8319. **Cited 165 times. IF: 2.193**
129. Asit K. Chakraborti,* B. Gopalakrishnan, M. Elizabeth Sobhia and Alpeshkumar Malde, “3D-QSAR Studies of Indole derivatives as Phosphodiesterase IV Inhibitors,” *Eur. J. Med. Chem.* **2003**, 38, 975-982. **Cited 27 times. IF: 4.519**
130. Garima Chawla, Piysuh Gupta, R Thilagavathi, Asit K. Chakraborti and Arvind K Bansal, “Characterization of Solid-state Forms of Celecoxib,” *Eur. J. Pharm. Sci.* **2003**, 20, 305-317. **Cited 106 times. IF: 3.756**
131. Asit K. Chakraborti,* Rajesh Gulhane and Shivani, “Bismuth Oxide Perchlorate as a Highly Efficient Catalyst for Heteroatom Acylation under Solvent-Free Conditions,” *Synlett* **2003**, 1805-1808. **Cited 66 times. IF: 2.323**
132. Asit K. Chakraborti,* Lalima Sharma, Rajesh Gulhane and Shivani, “Electrostatic Catalysis by Ionic Aggregates: Scope and Limitations of Mg(ClO₄)₂ as Acylation Catalyst,” *Tetrahedron* **2003**, 59, 7661-7668. **Cited 109 times. IF: 2.651**
133. Asit K. Chakraborti* and R. Thilagavathi, “Computer-aided Design of Non Sulphonyl COX-2 Inhibitors: An Improved Comparative Molecular Field Analysis Incorporating Additional Descriptors and Comparative Molecular Similarity Indices Analysis of 1,3-Diarylisindole Derivatives,” *Bioorg. Med. Chem.* **2003**, 11, 3989-3996. **Cited 18 times. IF: 2.923**
134. Asit K. Chakraborti* and Rajesh Gulhane, “Indium(III) Chloride as a New, Highly Efficient, and Versatile Catalyst for Acylation of Phenols, Thiols, Alcohols, and Amines,” *Tetrahedron Lett.* **2003**, 44, 6749-6753. **Cited 123 times. IF: 2.193**
135. Asit K. Chakraborti* and Rajesh Gulhane, “Perchloric Acid Adsorbed on Silica Gel as New, Highly Efficient, and Versatile Catalyst for Acetylation of Phenols, Thiols, Alcohols, and Amines,” *J. Chem. Soc. Chem. Commun.* **2003**, 1896-1897. **Cited 236 times. IF: 6.319**
136. Asit K. Chakraborti,* B. Gopalakrishnan, M. Elizabeth Sobhia and Alpeshkumar Malde, “Comparative Molecular Field Analysis (CoMFA) of Phthalazine Derivatives

- as Phosphodiesterase IV Inhibitors,” *Bioorg. Med. Chem. Lett.* **2003**, *13*, 2473-2479. **Cited 35 times. IF: 2.454**
137. Asit K. Chakraborti* and Rajesh Gulhane, “Fluoroboric Acid Adsorbed on Silica Gel as a New and Efficient Catalyst for Acylation of Phenols, Thiols, Alcohols and Amines,” *Tetrahedron Lett.* **2003**, *44*, 3521-3525. **Cited 127 times. IF: 2.193**
138. Asit K. Chakraborti*, B. Gopalakrishnan, M. Elizabeth Sobhia and Alpeshkumar Malde, “3D-QSAR Studies on Thieno[3,2-*d*]pyrimidines as Phosphodiesterase IV Inhibitors,” *Bioorg. Med. Chem. Lett.* **2003**, *13*, 1403-1408. **Cited 39 times. IF: 2.454**
139. Tina Ojha, Monika Bakshi, Asit K. Chakraborti and Saranjit Singh, “The ICH guidance in practice: stress decomposition studies on three piperazinyl quinazoline adrenergic receptor-blocking agents and comparison of their degradation behaviour,” *J. Pharm. Biomed. Anal.* **2003**, *31*, 775-783. **Cited 16 times. IF: 3.255**
140. Asit K. Chakraborti*, Lalima Sharma and Mrinal K. Nayak, “Demand-Based Thiolate Anion Generation under Virtually Neutral Conditions: The Influence of Steric and Electronic Factors on Chemo- and Regio-selective Cleavage of Aryl Alkyl Ethers,” *J. Org. Chem.* **2002**, *67*, 6406-6414. **Cited 57 times. IF: 4.849 4.805**
141. Asit K. Chakraborti*, Lalima Sharma and Mrinal K. Nayak, “The influence of Hydrogen Bonding in Activation of Nucleophile: PhSH – (Catalytic) KF in NMP as an Efficient Protocol for Selective Cleavage of Alkyl/Aryl Esters and Aryl Alkyl Ethers under Nonhydrolytic and Neutral Conditions,” *J. Org. Chem.* **2002**, *67*, 2541-2547. **Cited 59 times. IF: 4.849 4.805**
142. Asit K. Chakraborti*, Mrinal K. Nayak and Lalima Sharma, “Diphenyl Disulfide and Sodium in NMP as an Efficient Protocol for in Situ Generation of Thiophenolate Anion: Selective Deprotection of Aryl Alkyl Ethers and Alkyl/Aryl Esters under Nonhydrolytic Conditions,” *J. Org. Chem.* **2002**, *67*, 1776-1780. **Cited 48 times. IF: 4.849 4.805**
143. Saranjit Singh, Sanjeev Kumar, Nishi Sharda and Asit K. Chakraborti, “New Findings on Degradation of Famotidine under Basic Conditions: Identification of a Hitherto Unknown Degradation Product and the Condition for Obtaining the Propionamide Intermediate in Pure Form,” *J. Pharma. Sci.* **2002**, *91*, 253-257. **Cited 13 times. IF: 2.590**
144. Asit K. Chakraborti*, Lalima Sharma and Upasana Sharma, “A Mild and Chemoselective Method for Deprotection of Aryl Acetates and Benzoates Under Non-hydrolytic Condition,” *Tetrahedron* **2001**, *57*, 9343-9346. **Cited 30 times. IF: 2.651**
145. Asit K. Chakraborti*, Gurmeet Kaur and Susmita Roy (née Bhattacharya), “A Simple and Highly Efficient One-Pot Chemoselective Synthesis of Nitriles from Aldehydes: Mechanistic Insight and Selectivity Control through Modulation of Electronic and Steric Factors,” *Indian. J. Chem.* **2001**, *40B*, 1000-1006. **Cited 8 times. IF: 0.471**
146. Bharat Bhusan, Sudip K. Samanta, Ashvini Chauhan, Asit K. Chakraborti and Rakesh K. Jain, “Chemotaxis and Biodegradation of 3-Methyl-4-nitrophenol by *Ralstonia* sp. SJ98,” *Biochem. Biophys. Res. Commun.* **2000**, *275*, 129-133. **Cited 61 times. IF: 2.466**

147. Ashvini Chauhan, Asit K. Chakraborti and Rakesh K. Jain, "Plasmid-encoded Degradation of *p*-Nitrophenol and 4-Nitrocatechol by *Arthrobacter Protosphormiae*," *Biochem. Biophys. Res. Commun.* **2000**, 270, 733-740. **Cited 66 times. IF: 2.466**
148. Saranjit Singh, T. T. Mariappan, Nishi Sharda, Sanjeev Kumar and Asit K. Chakraborti, "The Reason for an Increase in Decomposition of Rifampicin in the Presence of Isoniazid under Acid Conditions," *Pharm. Pharmacol. Commun.* **2000**, 6, 405-410. **Cited 67 times. IF: 2.363** (*J. Pharm. Pharmacol.*)
149. Sudip K. Samanta, Asit K. Chakraborti and Rakesh K. Jain, "Degradation of Phenanthrene by Different Bacteria: Evidence for Novel Transformation Sequences Involving the Formation of 1-Naphthol," *Appl. Microbiol. Biotech.* **1999**, 53, 98-107. **Cited 145 times. IF: 3.420**
150. Asit K. Chakraborti* and Gurmeet Kaur, "One-Pot Synthesis of Nitriles from Aldehydes Under Microwave Irradiation: Influence of the Medium and Mode of Microwave Irradiation on Product Formation," *Tetrahedron*, **1999**, 55, 13265-13268. **Cited 35 times. IF: 2.651**
151. Asit K. Chakraborti*, Anindita Basak (née Nandi) and Vikas Grover, "Chemoselective Protection of Carboxylic Acid as Methyl Ester: A Practical Alternative to Diazomethane Protocol," *J. Org. Chem.* **1999**, 64, 8014-8017. **Cited 92 times. IF: 4.849 4.805**
152. Asit K. Chakraborti*, Mrinal K. Nayak and Lalima Sharma, "Selective Deprotection of Aryl Acetates, Benzoates, Pivalates and Tosylates Under Non-Hydrolytic and Virtually Neutral Condition," *J. Org. Chem.* **1999**, 64, 8027-8030. **Cited 44 times. IF: 4.849 4.805**
153. Lalima Sharma, Mrinal K. Nayak and Asit K. Chakraborti* "A Mild and Chemoselective Method for Ester *O*-Alkyl Cleavage Using *in situ* Generated Potassium Thiophenoxide from Catalytic Quantities of Base," *Tetrahedron* **1999**, 55, 9595-9600. **Cited 18 times. IF: 2.651**
154. Mrinal K. Nayak and Asit K. Chakraborti*, "PhSH-(Catalytic) KF as an Efficient Protocol for Chemoselective Ester *O*-Alkyl Cleavage Under Non-hydrolytic Condition," *Chemistry Lett.* **1998**, 297-298. **Cited 27 times. IF: 1.550**
155. Susmita Roy (née Bhattacharya) and Asit K. Chakraborti*, "An Efficient Synthesis of *anti*-(1*R*)-(+)-Camphorquinone-3-oxime," *Tetrahedron Letters*, **1998**, 39, 6355-6356. **Cited 10 times. IF: 2.193**
156. Anindita Basak (née Nandi), Mrinal K. Nayak and Asit K. Chakraborti*, "Chemoselective *O*-Methylation of Phenols under Non-aqueous Condition," *Tetrahedron Lett.* **1998**, 39, 4883-4886. **Cited 56 times. IF: 2.193**
157. Mrinal K. Nayak and Asit K. Chakraborti*, "Chemoselective Aryl Alkyl Ether Cleavage by Thiophenolate Anion Through its *In Situ* Generation in Catalytic Amount," *Tetrahedron Lett.* **1997**, 38, 8749-8752. **Cited 52 times. IF: 2.193**
158. Mark Cushman, Dhanapalan Nagarathnam, D. Gopal, Asit K. Chakraborti, Chii M. Lin and Ernest Hamel, "Synthesis and Evaluation of Stilbene and Dihydrostilbene Derivatives as Potential Anti-Cancer Agents that Inhibit Tubulin Polymerisation," *J. Med. Chem.* **1991**, 34, 2579-2588. **Cited 290 times. IF: 6.259 6.253**

159. Mark Cushman, Pennamuthiriar Chinnasamy, Asit K. Chakraborti, J. Jurayj, Robert L. Geahlen and Rudiger D. Haugwitz, "Synthesis of [β -(4-Pyridyl-1-oxide)-L-alanine]-angiotensin I as a Potential Suicide Substrate for Proteintyrosine Kinases," *Int. J. Pept. Protein Res.* **1990**, *36*, 538-543. **Cited 13 times. IF: 2.396** (*Chem. Biol. Drug Des.*)
160. Asit K. Chakraborti, Bijali Saha, Chhanda Ray and Usha Ranjan Ghatak, "Alkali Metal-Liquid Ammonia Reduction of γ -Lactones to Diols and Cyclic Hemiacetals: Stereochemical Influence by the Neighbouring Group on the Nature of the Products," *Tetrahedron* **1987**, *43*, 4433-4437. **IF: 2.651**
161. Asit K. Chakraborti and Usha Ranjan Ghatak, "Stereocontrolled Total Synthesis of (+) 9,10-Secoabieta-8,11,13-trien-18,10-olide: A Minor Component of Distilled Tall Oil," *Indian. J. Chem.* **1987**, *26B*, 295-296. **IF: 0.471**
162. Bimal K. Banik, Asit K. Chakraborti and Usha Ranjan Ghatak, "An Efficient Synthesis of 2-Substituted-3,3-Dimethylcyclohexan-1-ones. A Simple Synthetic Route to Podocarpa-8,11,13-triene Intermediates," *J. Chem. Res. (S)*. **1986**, 406-407. **IF: 1.085**
163. Asit K. Chakraborti, Shaikh Khairul Alam, Prabir C. Chakraborti, Rupak Dasgupta, Jyotirmoy Chakravarty, Usha Ranjan Ghatak, Apurba Kabiraj and Sundar Gopal Biswas, "Condensed Cyclic and Bridged-Ring Systems. Part 13. Synthesis of the Insect Attractant Hydrocarbon 9a-Carba-morphinan and X-Ray Structural Analyses of 9a-Carbamorphinan-10-one and 9a-Carba-14 α -morphinan-10-one," *J. Chem. Soc., Perkin Trans. 1* **1986**, 1243-1248. **Cited 5 times IF: 3.564** (*Org. Biomol. Chem.*)
164. Asit K. Chakraborti and Usha Ranjan Ghatak, "A Highly Effective Ligand-Bound Ruthenium Catalyst for the Chemoselective Degradation of Aromatic Rings to Carboxylic Acids," *J. Chem. Soc., Perkin Trans 1* **1985**, 2605-2609. **Cited 22 times. IF: 3.564** (*Org. Biomol. Chem.*)
165. Asit K. Chakraborti, Jayanta K. Ray, Kalyan K. Kundu, Sephali Chakraborti, Debabrata Mukherjee and Usha Ranjan Ghatak, "Regioselectivity in the Intramolecular Carbon-Hydrogen Insertion in the Decomposition of some *cis*-1-Methyl-3-arylcyclohexyl Diazomethyl Ketones: A Highly Efficient Homogeneous Nickel Catalyst for Carbenoid Insertion," *J. Chem. Soc., Perkin Trans. 1* **1984**, 261-273. **Cited 23 times. IF: 3.564** (*Org. Biomol. Chem.*)
166. Asit K. Chakraborti, Bimal K. Banik and Usha Ranjan Ghatak, "A Novel Oxidation Catalyst Derived from a Ruthenium (II)-2,2-Bipyridine Complex for Chemoselective Degradation of Aromatic Rings to Carboxylic Acid," *Indian J. Chem.* **1984**, *23B*, 291-292. **IF: 0.471**
167. Asit K. Chakraborti and Usha Ranjan Ghatak, "Extension of an Improved Procedure for the Ruthenium Tetroxide-Catalysed Degradation of Aromatic Rings: A Highly Efficient and Stereo-controlled Synthesis of Functionalised Bridged-Ring and Carbocyclic Esters," *Synthesis* **1983**, 746-748. **IF: 2.65**
168. Asit K. Chakraborti, Bijali Saha and Usha Ranjan Ghatak, "A Highly Efficient Homogenous Nickel Catalyst for Intramolecular α -Ketocarbenoid Addition to Double Bond," *Indian J. Chem.* **1981**, *20B*, 911-912. **IF: 0.471**

Review Articles: 4

1. Kapileswar Seth, Priyank Purohit and Asit K. Chakraborti,* “Microwave-Assisted Synthesis of Biorelevant Benzazoles,” *Curr. Med. Chem.* **2017**, *24*, 4638-4676. **IF: 3.455**
2. Naisargee Parikh and Asit K. Chakraborti,* “Phosphodiesterase 4 (PDE4) inhibitors in the treatment of COPD: Promising drug candidates and future directions,” *Curr. Med. Chem.* **2016**, *23*, 129-141. **Cited 10 times. IF: 3.455**
3. Pradeep S. Jadhavar, Moulikkumar D. Vaja, Tejas M. Dhameliya, Asit K. Chakraborti,* “Oxazolidinones as Anti-tubercular Agents: Discovery, Development and Future Perspectives,” *Curr. Med. Chem.* **2015**, *22*, 4379-4397. **Cited 8 times. IF: 3.455**
4. Asit K. Chakraborti,* Sanjeev K. Garg, Raj Kumar, Hashim F. Motiwala, Pradeep S. Jadhavar, “Progress in COX-2 Inhibitors: A Journey So Far,” *Curr. Med. Chem.* **2010**, *17*, 1563-1593. **Cited 77 times. IF: 3.455**

Book Chapters: 2

1. Pradeep S. Jadhavar, Dinesh Kumar, Priyank Purohit, Bhavin V. Pipaliya, Asim Kumar, Srikant Bhagat, and Asit K. Chakraborti,* “Sustainable Approaches towards the Synthesis of Quinoxalines,” in *Green Chemistry: Synthesis of Bioactive Heterocycles*, K. L. Ameta, A. Dandia (eds.), Ch 2. **2014**, ISBN 978-81-322-1849-4, Springer. **Cited 1 time.**
2. Asit K. Chakraborti* and Sunay V. Chankeshwara, *Magnesium Perchlorate*. In *Encyclopaedia of Reagents for Organic Synthesis [Online (eEROS)]*. L. A. Paquette Ed. John Wiley & Sons Ltd., (2008), (**Invited contribution**; Unique ID RN1002).

Articles (not abstracts) Published in Seminars, Symposia, Conference Volumes: 10

1. Asit K. Chakraborti,* “Mass spectrometry in supramolecular assemblies of small molecules in understanding organo-catalysis by ionic liquids,” *18th ISMAS Symposium cum Workshop on Mass Spectrometry*, Timber Trail Heights, Parwanoo, HP, India, Mar. 9 – 13, **2014**. Invited Talk No. IT-24. Page 97-102.
2. Asit K. Chakraborti,* “Non-heme model of dioxygen activation in aqueous medium: Mass spectrometric methods to identify the catalytic species and understanding the rational of catalysis,” *14th ISMAS Symposium cum Workshop on Mass Spectrometry*, Tea County, Munnar, Kerala, India, Nov. 7 – 11, **2011**. Invited Talk No. IT-16. Page 81-88.
3. Asit K. Chakraborti,* “Role of mass spectrometry in conceptual advancement towards sustainable development in pharmaceutical research,” *11th ISMAS Triennial International Conference on Mass Spectrometry*, Ramoji Film City, Hyderabad, AP, India, Nov. 24 – 28, **2009**. Award Winning Lecture No. AL-1. Page 3-11.
4. Asit K. Chakraborti* and S. V. Chankeshwara, “Mass spectrometry in pharmaceutical research,” *13th ISMAS Symposium cum Workshop on Mass Spectrometry*, BARC, Mumbai, India, Jan. 27 – 31, **2008**. Invited Talk No. IT-4. Page 11-16.
5. Asit K. Chakraborti* and Anirban Sarkar, “Mass spectrometry identification of ionic liquids,” *12th ISMAS Symposium cum Workshop on Mass Spectrometry*, Cedade-de-Goa, Dona Paola, Goa, India, Mar. 25 – 30, **2007**. Invited Talk No. IT 3 (Proceedings on CD).

6. Sunay V. Chankeshwara, Santosh Rudrawar and Asit K. Chakraborti,* “Investigation of the Ambiphilic Dual Activation Role of Water in Catalysing Organic Reactions: Electro Spray Ion Mass Spectrometry,” *12th ISMAS Symposium cum Workshop on Mass Spectrometry*, Cedade-de-Goa, Dona Paola, Goa, India, Mar. 25 – 30, **2007**. Innovative Research Scholar Presentation No IRP-2 (Proceedings on CD).
7. Asit K. Chakraborti,* “Application of mass spectrometric in combinatorial synthesis of chalcone and stilbene libraries,” *11th ISMAS Workshop on Mass Spectrometry*, Shimla, India, Oct. 7 – 12, **2004**. Invited Talk No. IT-4. Page 41-50.
8. Santosh. Rudrawar, Kirtikumar B. Jadhav, Gurmeet Kaur, Asit K. Chakraborti,* “Application of Mass Spectrometric Techniques for Characterization and Quantification of Solution and Solid Phase Combinatorial 2-Aryl Benzothiazole Libraries,” *11th ISMAS Workshop on Mass Spectrometry*, Shimla, India, Oct. 7 – 12, **2004**. Paper No. RS-16. Page 316-318.
9. Asha Rani, Gurmeet Kaur, Asit K. Chakraborti,* S. Majumdar, N. K. Ganguly, Anuradha Chakraborti, “Use of Mass Spectrometric Analysis in Establishing Siderophore Mediated Iron Acquisition in Group A Streptococcus (GAS),” *11th ISMAS Workshop on Mass Spectrometry*, Shimla, India, Oct. 7 – 12. Paper No. RS-20, **2004**. Page 338-341.
10. Asit K. Chakraborti,* Gurmeet Kaur, Smriti Khanna, Harshvardhan Jain, “Solution and Solid Phase Combinatorial Synthesis of Chalcone Libraries: Application of APCIMS and LCMS in Identification of the Constituents,” *ISMAS Silver Jubilee Symposium on Mass Spectrometry*, National Institute of Oceanography, Goa, India. Jan 27-31, **2003**. Invited Talk: Contributed Papers, *Vol II*, 912-916.

II) Patents Granted/Filed: 42

Granted: 12

1. Asit K. Chakraborti, Alpesh R. Patel, Dinesh Kumar, Sachin Bindal, “**An Improved Catalytic Process for Esterification of Carboxylic Acids**,” Indian Patent Grant No. 292009; Grant Date: 23-01-2018. Indian patent. Appl. No. 1046/DEL/2009 (May 21, 2009).
2. Asit K. Chakraborti, Naisargee Parikh, and Sudipta Raha Roy, “**A Novel and Improved Process for the Synthesis of 2-Substituted Benzthiazoles/Benzoxazoles using Ionic Liquid as a Catalyst**.” Indian Patent Grant No. 290553; Grant Date: 13-12-2017. Indian patent. Appl. No. 1404/DEL/2010 (16/06/2010 IP14531/AMT/md).
3. Asit K. Chakraborti, Alpesh R. Patel, Dinesh Kumar, “**An Improved Process for Esterification using Organic Carbonates**,” Indian Patent Grant No. 288722; Grant Date: 25-10-2017. Indian Patent. Appl. No. 554/DEL/2009. Filing Date: 23-03-2009. IP11168/PC/PGV.
4. Asit K. Chakraborti, Uttam C. Banerjee, Raj Kumar, Sanjeev K. Garg, Vachan S. Meena, “**Novel cyclooxygenase-2 inhibitors**.” Indian Patent Grant No. 283941; Grant Date: 06-06-2017. Indian Patent. Appl. No. 638/DEL/2008. Filing Date: 14-03-2008. IP08491G/SBitpj.
5. Asit K. Chakraborti, Sunay V. Chankeshwara, “**An Improved Organocatalytic Process for Esterification and Amidation Reaction**,” Indian Patent Grant No. 277349; Grant Date: 18-11-2016. Indian patent. Appl. No. 1030/DEL/2008. Filing Date: 22-04-2008. IP08734/mt/md.

6. Asit K. Chakraborti, Sunay V. Chankeshwara, “**A Novel Dealkylation Process,**” Indian patent. Indian Patent Grant No. 276107; Grant Date: 30-09-2016. Appl. No. 01645/DEL/2008. Filing date: 09-07-2008. IP09277G/mt/md
7. Asit K. Chakraborti and Atul Kondaskar, “**An Improved Process for the Preparation of Aminoalcohols.**” Indian Patent Grant No. 252277; Grant Date: 04-05-2012. Indian Application No: 337/DEL/2003. Filing Date: 21-03-2003.
8. Asit K. Chakraborti and Atul Kondaskar, “**An Improved Process for Preparation of Hydroxyalkyl and Hydroxyaryl sulfides.**” Indian Patent Grant No. 248681; Grant Date: 04-08-2011. Indian Application No: 1209/DEL/2002. Filing Date: 03-12-2002, IPO 0978.
9. Asit K. Chakraborti and Rajesh Gulhane, “**A Process for the Acylation of Various Substrates using a Solid Support Catalyst.**” Indian Patent Grant No. 248506; Grant Date: 20-07-2011. Indian Patent Appl. No. 266/DEL/2003. Filing Date: 10-3-2003.
10. Asit K. Chakraborti and Rajesh Gulhane, “**Method for Acylation using Zirconium (IV) Compound as Catalysts.**” Indian Patent Grant No. 248501; Grant Date: 20-07-2011. Indian Patent Application No: 336/DEL/2003. Filing Date: 21-03-2003; IPO 1043.
11. Asit K. Chakraborti, Simi Sarin, Santosh V. Rudrawar, Raj Kumar, Sunay V. Chankeshwara, Abhijit Ray, Sunanda Ghosh Dastidar, “**Inhibitors of Phosphodiesterase Type 4,**” United States Patent. Pub. No. US 2008/0207659 A1. Pub. Date Aug. 28, 2008.
12. Asit K. Chakraborti, Simi Sarin, Santosh V. Rudrawar, Raj Kumar, Sunay V. Chankeshwara, Abhijit Ray, Sunanda Ghosh Dastidar “**Inhibitors of Phosphodiesterase Type 4,**” European Patent. Pub. No. EP 1 958 947 A1. Pub. Date Aug. 20, 2008. Bulletin 2008/34.

Filed: 30

1. Asit K. Chakraborti, Sahaj Pancholia, and Tejas M. Dhameliya, “**N-Arylbenzo[d]-2-carboxamides as Anti-tubercular Agents.**” Indian Patent Application No. TEMP/E-1/10432/2017-DEL filed on 2017/03/23 (IP36982/CBR).
2. Asit K. Chakraborti, and Babita Tanwar, “**Novel 2-Biarylbenzoxazole Compounds and the Process of Preparation Thereof.**” Indian Patent Application No. 3433/DEL/2015 filed on 10.23.2015 (IP32736/CBR).
3. Asit K. Chakraborti, and Babita Tanwar, “**Alkyl 1,2-Diamines and its bioisoters β -Aryloxyamines As Potential Anti-tubercular Agents and Preparation.**” Indian Patent Application No. 3430/DEL/2015 filed on 10.23.2015 (IP32735/SB).
4. Asit K. Chakraborti, and Babita Tanwar, “**Novel 2-(2'-Aminophenyl)benzazoles as Potential Anti-tubercular Agents and improved process of preparation thereof.**” Indian Patent Application No. 2838/DEL/2015 filed on 09.10.2015 (IP32256/SB/md).
5. Asit K. Chakraborti, Priyank Purohit, Shyam S. Sharma, Kapileswar Seth, Shivshaeen B. Kharatmal, Madhulika Singh, and Gulshan Kumar, “**2-(2-Aryl/Alkylphenyl)benzazoles as Selective COX-2 Inhibitory Scaffolds.**” Indian Patent Application No. 2540/DEL/2015 filed on 08.18.2015 (IP32255/NC/sa).

6. Asit K. Chakraborti, and Naisargee Parikh, “**An improved oxidant and solvent free one step synthesis of 5-oxochromenopyridine derivatives.**” Indian Patent Application No. 1518/DEL/2014 filed on 06.06.2014 (IP24815/AK).
7. Asit K. Chakraborti, Kapileswar Seth, Sudipta Raha Roy and Damodara N. Kommi, “**Improved catalytic process for the synthesis of functionalised dibenzo[1,3]diazepines using metal.**” Indian Patent Application No. 338/DEL/2014 filed on 05.02.2014 (IP24720/SP/skm).
8. Asit K. Chakraborti, Babita Tanwar and Pradeep S. Jadhavar, “**An improved green protocol for the synthesis of 1,2-diamines via ring opening of aziridines with amines.**” Indian Patent Application No. 3741/DEL/2013 filed on 23.12.2013. Publication date (U/S 11A) 26.06.2015.
9. Asit K. Chakraborti and Naisargee Parikh, “**Ionic Liquid as a catalyst for an Improved Process of Dihydrobenzothiazepine Synthesis.**” Indian Patent Application No. 1177/DEL/2013 filed on 22.4.2013 (IP21899/JCR/akm).
10. Asit K. Chakraborti, Naisargee Parikh and Sudipta Raha Roy, “**Process for Synthesis of Functionalized Tetrahydropyridines.**” Indian Patent Application No. 226/DEL/2013 filed on 28.1.2013 (IP21900/JCR/akm).
11. Asit K. Chakraborti, Dinesh Kumar, Santosh Rudraawar, Sachin Bindal, Himanshu and Pradeep Chopra, “**Improved Processes for Synthesis of Functionalized Pyridines.**” Indian Patent Application No. 3245/DEL/2012 filed on 18.10.2012 (IP16173/SP/sm).
12. Asit K. Chakraborti, Rajesh Chebolu and Damodara N. Kommi, “**An Improved Catalyst-free Process for the Direct Reductive Amination of Aromatic/Alicyclic Aldehydes and Cyclic ketones.**” Indian Patent Application No. 1918/DEL/2012 filed on 21.06.2012 (IP20473/RK/am).
13. Asit K. Chakraborti, Kapileswar Seth, Sudipta Raha Roy and Damodara N. Kommi, “**A Green Processes for Synthesis of β -Hydroxy Aryl Ethers in the Presence of Transition Metal Nanoparticles.**” Indian Patent Application No. 2071/DEL/2012 provisionally filed on 03.07.2012 (IP18791/SP/sm), complete filing date July 02, 2013.
14. Asit K. Chakraborti, Damodara N. Kommi and Dinesh Kumar, “**Improved Processes for the Synthesis of Lubeluzole.**” Indian Patent Application No. 1962/DEL/2012 filed on 26.06.2012 (IP20458/RK/rp).
15. Asit K. Chakraborti, Kapileswar Seth and Sudipta Raha Roy, “**An Improved Processes for Synthesis of Phenazines and Azo-compounds based on Reusable Metal Nanoparticles as Catalyst.**” Indian Patent Application No. 1818/DEL/2012 filed on 13.06.2012 (IP20392/AK).
16. Asit K. Chakraborti and Damodara N. Kommi, “**Improved Processes for the Total Synthesis of Ranolazine.**” Indian Patent Application No. 1722/DEL/2012 filed on 05.06.2012 (IP20457/RK/rp).
17. Asit K. Chakraborti, Dinesh Kumar, Mukesh Sonawane, and Brahmam Pujala “**Processes for Synthesis of 2,3-Disubstituted-4-Thiazolidinone.**” Indian Patent Application No. 3148/DEL/2011 filed on 08.11.2011 (IP15779/SGBA).

18. Asit K. Chakraborti, Dinesh Kumar, Tushar Satav, “**An Improved Acid Catalyzed One Pot Synthesis of 2-Styryl Quinoline.**” Indian Patent Application No. 2673/DEL/2011 filed on 15.09.2011 (IP17892/VR).
19. Asit K. Chakraborti, Dinesh Kumar and Himanshu Sharma, “**An Improved Process for One-Pot Synthesis of 2-Styryl-4-(3H)-Quinazolinones.**” Indian Patent Application No. 2443/DEL/2011 filed on 26.08.2011 (IP17889/JCR).
20. Asit K. Chakraborti and Sudipta Raha Roy “**An improved process for synthesis of β - δ - hydroxysulfides using ionic liquid as an organo catalyst.**” Indian Patent Application No. 2366/DEL/2011 filed on 19.08.2011 (IP17890/JCR).
21. Asit K. Chakraborti, Dinesh Kumar, Sachin Bindal and Damodar N. Kommi, “**An Improved Process for the Synthesis of Alkyl Ester of Carboxylic Acid.**” Indian Patent Application No. 2176/DEL/2011 filed on 02.08.2011
22. Asit K. Chakraborti, Dinesh Kumar, Kapileshwar Seth and Damodar N. Kommi, “**A Green Procedure for Synthesis of Functionalized Quinoxalines.**” Indian patent Application No. 2023/DEL/2011 filed on 18/07/2011
23. Amit Agarwal, Brahmam Pujala, Asit K. Chakraborti and U.C. Banerjee, “**Novel Substituted 6-Amino/carbamato//Uridopurine Compounds as Xanthine Oxidase Inhibitors.**” Indian Patent Application No. 1119/DEL/2011 (Provisional 15/04/2011 IP15549/AMT/am; Complete 16/04/2012).
24. Asit K. Chakraborti, Anirban Sarkar, and Sudipta Raha Roy, “**Novel Ionic Liquid Catalysts and a Process for *N-t*-Boc formation using said Catalysts.**” Indian patent. Appl. No.1681/DEL/2010 (19/07/2010 16:21:12)
25. Asit K. Chakraborti, Sunay V. Chankeshwara, “**A Novel Process for Direct Alkylation,**” Indian patent. Appl. No. 11107/DEL/2008 (May 01, 2008).
26. Asit K. Chakraborti, Sunay V. Chankeshwara, Bavneet Singh, “**An Improved Solid Support Catalyst Systems for Direct Esterification,**” Indian patent. Appl. No. 2764/DEL/2007 (Dec 28, 2007).
27. Manpreet Singh, Parikshit Khokale, Santosh Rudrawar, Asit K. Chakraborti, Uttam C. Banerjee, “**Process for the preparation of (*R*)-1-chloro-3-(3,4-difluorophenoxy)-2-propanol.**” Indian Pat. Appl. (2008), 21pp. CODEN: INXXBQ IN 2006DE02570 A 20080606. Application: IN 2006-DE2570 20061201. Priority: CAN 150:329407 AN 2008:716774 CAPLUS (Copyright (C) 2009 ACS on SciFinder (R)).
28. Asit K. Chakraborti, Simi Sarin, Santosh V. Rudrawar, Raj Kumar, Sunay V. Chankeshwara, Sunanda Dastidar, Abhijit Ray, “**Inhibitors of Phosphodiesterase Type-IV,**” PCT patent filed/1882/DEL/2006 (22-08-2006).
29. Asit K. Chakraborti, Simi Sarin, Santosh V. Rudrawar, Raj Kumar, Sunay V. Chankeshwara, Sunanda Dastidar, Abhijit Ray, “**Phosphodiesterase Inhibitors,**” PCT patent filed/566/DEL/2006 (06-03-2006).
30. Asit K. Chakraborti, Santosh V. Rudrawar, Raj Kumar, Sunay V. Chankeshwara, Simi Sarin, Dr. Sunanda Dastidar, Dr. Abhijit Ray, “**Inhibitors of Phosphodiesterase Type-IV,**” PCT patent filed/565/DEL/2006 (03-03-2006).