

The research work under reference has not been given any award. The applicant is the main corresponding author of these publications.

Review articles:

- 1) "Nucleic Acids as Templates and Catalysts in Chemical Reactions: Target-guided Dynamic Combinatorial Chemistry and In situ Click Chemistry and DNA/RNA Induced Enantioselective Reactions," P. Saha, D. Panda, **J. Dash***, *Chem. Soc. Rev.*, **2023**, 52, 4248-4291.
- 2) Ring closing metathesis for the construction of carbazole and indole-fused natural products T. Mandal, **J. Dash***, *Organic & Biomolecular Chemistry*, **2021**, 19, 9797-9808.
- 3) "Binding Insights into Quadruplex Selective Carbazole Ligands" D Müller, P Saha, D. Panda, **J. Dash,*** H Schwalbe*, *Chemistry–A European Journal*, **2021**, 27, 12726-12736.
- 4) S. Bhattacharya, **J. Dash,*** Nucleic acid secondary structures for therapeutic and biomolecular device applications." *Chemical Society Reporter*, **2021**.
- 5) R Chaudhuri, K Fatma, J Dash, "Regulation of gene expression by targeting DNA secondary structures." *J. Chem. Sci.* **2021**, 133, 1-17.
- 6) "Recent Update on Targeting c-MYC G-Quadruplexes by Small Molecules for Anticancer Therapeutics" R. Chaudhuri, S. Bhattacharya, **J. Dash,*** S. Bhattacharya*, *J. Med. Chem.* **2021**, 64, 42–70. (perspective).

Book Chapters

- 7) **J. Dash**, P. Saha, K. Fatma. "Click and combinatorial approaches to quadruplex ligand discovery." *Quadruplex Nucleic Acids as Targets for Medicinal Chemistry* Book Chapter, (2020): 287.

Publications

- 8) "Nucleoside Derived Metallo-hydrogel Induces Cell Death in Leishmania Parasites", S. Bhattacharya, T. Bhattacharyya, S. Khanra, R. Banerjee, Rahul; J. Dash*, *ACS Infectious Diseases*, 2023 (accepted).
- 9) "Rapid Access to Substituted Indenones via Grignard Reaction and its Application in the Synthesis of Fluorenones using Ring Closing Metathesis" N. Parui, T. Mandal, J. Dash*, *European Journal of Organic Chemistry*, **2023** (accepted).
- 10) "Expanding the Toolbox of Target Directed Bio-Orthogonal Synthesis: In Situ Direct Macrocyclization by DNA Templates" R. Chaudhuri, P. Thumapati, **J. Dash***, *Angew. Chem. Int. Ed.* **2022**.

- 11) "Diastereoselective Reversible C-C Bond Exchange of Oxindole-Thiazolidinediones for Dynamic Combinatorial Chemistry" A. Gorai, G. Chakraborti, S. Basak, **J. Dash***, *Organic & Biomolecular Chemistry*, **2022**, 20, 9307-9312.
- 12) "Thiazole Containing PNA Mimic Regulates c-MYC Gene Expression through DNA G-quadruplex" A. Gorai, R. Chaudhuri, T. K. Mukhopadhyay, A. Datta, **J. Dash***, *Bioconjugate Chemistry* **2022**,
- 13) Cycloaddition of N-sulfonyl and N-sulfamoyl azides with alkynes in aqueous media for the selective synthesis of 1,2,3-triazoles, P. Thumpati, G. Chakraborti, T. Mandal, V. Ravichandiran, **J. Dash***, *Green Chemistry*, **2022**, 24, 911-915.
- 14) "Triazolyl Dibenzo[a,c]phenazines Stabilize Telomeric G-quadruplex and Inhibit Telomerase", S. Pal, K. Fatma, V. Ravichandiran, **J. Dash***, *Asian J. Org. Chem.* **2021**, 10, 2921-2926.
- 15) T. Bhattacharyya, D. Panda, J. Dash. "Supramolecular Template-Directed In Situ Click Chemistry: A Bioinspired Approach to Synthesize G-Quadruplex DNA Ligands." *Org. Lett.* **2021**, 23, 3004–3009.
- 16) "Studies Directed towards the Synthesis of Acridone Family of Natural Products: Total Synthesis of Acronycines and Atalaphyllidines" T. Mandal, S. Karmakar, A. Kapat, **J. Dash***, *ACS Omega*, **2021**, 6, 27062-27069.
- 17) "Potassium tert-Butoxide Promoted Synthesis of Dihydroquinazolinones", T. Ghosh, I. Mandal, S. Basak, **J. Dash***, *J. Org. Chem.* **2021**, 86, 14695-14704.
- 18) A [3+2] Cycloaddition-1,2-Acyl Migration-Hydrolysis Cascade for Regioselective Synthesis of 1,2,3-Triazoles in Water, G. Chakraborti, T. Mandal, C. P. Roy, **J. Dash***, *Chemical Communications*, **2021**, 57, 7970-7973.
- 19) "Prolinamide plays a key role in promoting copper-catalyzed cycloaddition of azides and alkynes in aqueous media via unprecedented metallacycle intermediates." Gargi, R. Jana, T. Mandal, A. Datta, **J. Dash***, *Org. Chem. Frontiers* **2021**, 8, 2434-2441.
- 20) "A DNA nanosensor for monitoring ligand-induced i-motif formation." P. Saha, D. Panda, R. Paul, and **J. Dash***, *Org. & Biomol. Chem.* **2021**, 9, 1965-1969.
- 21) "Site-Selective Aerobic C–H Monoacylation of Carbazoles Using Palladium Catalysis." S. Maiti, T. Mandal, B. P. Dash, and **J. Dash***, *J. Org. Chem.* **2021**, 86, 1396–1407.
- 22) "Domino Relay Olefin Metathesis of Triallyl Oxindole and Indole Precursors to Access Cyclic Indoxyls and Carbazoles" T. Mandal, K. Dhar, N. Parui, **J. Dash***, *ChemCatChem*, **2020**, 12, 4754-4759.

- 23) "Carbon dot cross-linked gelatin nanocomposite hydrogel for pH-sensing and pH-responsive drug delivery" S. K Bhattacharyya, M Dule, R Paul, **J Dash**, M Anas, TK Mandal, P Das, *ACS Biomaterials Science & Engineering*, **2020**, 6 5662-5674.
- 24) In vivo experiments demonstrate the potent antileishmanial efficacy of repurposed suramin in visceral leishmaniasis, S. Khanra, S. Kumar Jain, J. J. Jawed, S. Ghosh, S. Dutta, S. A. Nabi, **J. Dash**, D. Dasgupta, S. Majumdar, R. Banerjee, *PLOS Neglected Tropical Diseases*, **2020**, 14, e0008575.
- 25) "Target Directed Azide-Alkyne Cycloaddition for Assembling HIV-1 TAR RNA Binding Ligands" R. Paul, D. Dutta, R. Paul, **J. Dash***, *Angew. Chem. Int. Ed.* **2020**,
- 26) "Reductive aromatization of oxindoles to 3-substituted indoles" T. Mandal, G. Chakraborti, **J. Dash***, *Tetrahedron Letters*, **2020**, 61, 152109.
- 27) "In situ Formation of Transcriptional Modulators using Non-canonical DNA i-Motifs" P. Saha, D. Panda, D. Müller, A. Maity, H. Schwalbe, **J. Dash***, *Chemical Science* **2020**, 11, 2058-2067.
- 28) "Ionophore constructed from non-covalent assembly of a G-quadruplex and liponucleoside transports K⁺-ion across biological membranes" M. Debnath, S. Chakraborty, Y. P. Kumar, R. Chaudhuri, B. Jana, **J. Dash***, *Nature Communications*, **2020**, 11, Article number: 469.



Signature of Jyotirmayee Dash