

Name: Dr. A. K. Mohanakrishnan M. Sc, Ph. D
Designation: Professor & Head (From 2016 onwards)
Department: Organic Chemistry



Field of Specialization: Synthetic Organic Chemistry

- Synthesis of biologically important indole alkaloids
- Synthesis of benzo[c]thiophene based thienyl oligomers and their synthetic transformations

Contact Address

Office

Department of Organic Chemistry, Guindy Campus, Chennai 600 025

Phone: 22202813/10 Office: 22202815

Mobile: 9941159831

Email: mohanakrishnan@unom.ac.in (or) mohan_67@hotmail.com

Website: <https://www.unom.ac.in/index.php?route=department/department/deptpage&deptid=53>

Residence

F2, Ohm Param Jothi Apt, No 94, Perumal Koil St, Kottur
Chennai 600 085

Phone: 24451108, Email: mohan_67@hotmail.com

Achievements

- ✓ Mobilizing external grant (Rs. 15 lakhs) for HRMS & NMR Maintenance (2021)
- ✓ Modernization of Research Labs (Wet Lab) with external grant from Pharma Industries (2018-20)
- ✓ Maintenance of high cost equipment with external grant (Rs. 20 lakhs) from Pharma Industries (2016-till date)
- ✓ Installation of HRMS facility worth of Rs. 1.5 crores (2017)
- ✓ Successfully obtained major research projects worth of Rs. 2.5 crores
- ✓ Published more than 100 articles in reputed international journals
- ✓ Successfully obtained DST-FIST grant of Rs. 80 Lakhs on behalf of the Department of Organic Chemistry for the purchase of 300 MHz NMR Instrument (2003)

Honors and Awards

- UGC-Mid Career Award (UGC-FRPS 2018)
- Best Researcher Award (University of Madras, 2018)
- Awarded Outstanding Young Scientist grant by DST, New Delhi (2002)
- Awarded Post-doctoral fellowship at the Institute of Chemistry, Academia Sinica, Taipei & National Tsing Hua University, Hsinchu, Taiwan (1999-2001)
- Awarded Post-doctoral fellowship in the Department of Medicinal Chemistry, Purdue University, West Lafayette, USA (1998-1999)
- Awarded Post-doctoral fellowship in the Department of Chemistry, University of Alabama, Tuscaloosa, USA (1997-1998)
- Awarded CSIR Research Associateship and worked in the National Chemical Laboratory, Pune, India (1995-1997)
- Received Ph. D degree from Department of Organic Chemistry, University of Madras (1995)
- Qualified CSIR-NET examination 1989 & 1993

Other Details

No of Ph.d Students: 21 [Completed 17 + Ongoing 4]

No of International Research publications: 102

No of International Book Chapters: 2

No. of Research projects- Completed: 12 Ongoing: 4

Ongoing Research Projects: 2

- “Synthesis and Biological evaluation Calothrixin a & B analogs” Rs. 47, 21, 945/- Sponsored by SERB, DST, New Delhi. Period: January 1, 2021 to December 31, 2023.
- “Synthetic studies on Quinocarbazole Analogs and their invitro cytotoxicity in human cancer cell cultures”-Total cost: Rs. 30, 00, 000/- Sponsored by CSIR, New Delhi. Period: August 1, 2019 to July 31, 2022

List of Research Publications

As Madras University Faculty (2002-Till date): 85

102. “Synthesis of annulated Carbazoles via FeCl₃/SnCl₄- mediated domino reaction of vinyl ketone tethered bromomethylindoles with arenes and heteroarenes” Saravanan, V.; **Mohanakrishnan, A. K.** *Synthesis* **2021**, 53, 2304-2318 (Impact Factor: 2.67; No of Citations: NA)
101. “Pd(0)-Catalyzed Intramolecular Heck reaction of 2/3-Aryl(amino)methyl-3/2-bromindoles: Syntheses of 3,4-Benzo[*c*]-β-carbolines, Benzo[4,5]isothiazolo[2,3-*a*]indole 5,5-Dioxides, and 1,2-Benzo[*a*]-γ-carbolines” Raju, P.; Saravanan, V.; Pavunkumar, V.; **Mohanakrishnan, A. K.** *J. Org. Chem.* **2021**, 86, 1925-1937. (Impact Factor: 4.45; No of Citations: NA)
100. “Diels-Alder reaction of tetraarylcyclopentadienones with benzo[*b*]thiophene *S*, *S*-dioxides: an unprecedented de-oxygenation VS. sulfur dioxide extrusion” Manikandan, P.; Karunakaran, J.; Varathan, E.; Schreckenbach, G.; **Mohanakrishnan, A. K.** *Chem. Comm.* **2020**, 56, 15317-15320. (Impact Factor: 6.0; No of Citations: 1)
99. “Divergent synthesis and evaluation of *in vitro* cytotoxic profile of 3,4-ethylenedioxythiophenyl-2-propen-1-one (EDOTP) analogues” Karunakaran, J.; Dhatchana Moorthy, N.; Chowdhury, S. R.; Iqbal, S.; Majumder, H. K.; Gunasekaran, K.; Vellaichamy, E.; Mohanakrishnan, A. K. *ChemMedChem.* **2019**, 14, 1418-1430. (Impact Factor: 3.2; No of Citations: 5)
98. “Synthesis of Thiophene *S,S*-dioxide based acenes via Diels-Alder Reaction of Isobenzofurans with Benzothiophene *S,S*-dioxides” Karunakaran, J.; Manikandan, P.; Sathish, M.; **Mohanakrishnan, A. K.** *ChemistrySelect* **2018**, 3, 9409–9413. (Impact Factor: 1.8; No of Citations: 2)
97. “Novel Isothiacalothrixin B Analogues Exhibits Cytotoxic Activity on Human Colon Cancer Cells *In Vitro* by Inducing Irreversible DNA Damage” Dhatchana Moorthy, N.; Ramalingam, B. M.; Iqbal, S.; **Mohanakrishnan, A. K.**; Gunasekaran, K.; Vellaichamy, E. *PLONE ONE* **September 6, 2018**, <https://doi.org/10.1371/journal.pone.0202903>. (Impact Factor: 2.8; No of Citations: 4)
96. “Synthesis of 2,3-Disubstituted Carbazoles, Benzo[*c*]carbazoles and Phenanthrenes Involving FeCl₃-Mediated Cyclization of Triene Frameworks” Raju, P.; Mageshwaran, T.; Ramalingam, B. M. **Mohanakrishnan, A. K.** *SynOpen* **2018**, 2, 246-250. (Impact Factor: Nil; No of Citations: NA)
95. “Diels-Alder reaction of Isobenzofurans/Cyclopentadienones with Tetrathiafulvalene: Preparation of naphthalene, fluoranthene, and fluorenone

- derivatives” Karunakaran, J.; **Mohanakrishnan, A. K.** *Org. Lett.* **2018**, *20*, 966-970. (Impact Factor: 6.2; No of Citations: 10)
94. “Synthesis and Biological Evaluation of Calothrixins B and their Deoxygenated Analogues” Ramalingam, B. M.; Dhatchana Moorthy, N.; Chowdhury, S. R.; Mageshwaran, T.; Vellaichamy, E.; Saha, S.; Ganesan, K.; Navin Rajesh, B.; Iqbal, S.; Majumder, H. K.; Gunasekaran, K.; Siva, R.; **Mohanakrishnan, A. K.** *J. Med. Chem.* **2018**, *61*, 1285-1315. (Impact Factor: 6.2; No of Citations: 14)
93. “Synthetic Utility of Arylmethylsulfones: Annulative π -Extension of Aromatics and Hetero-aromatics Involving Pd(0)-Catalyzed Heck Coupling Reactions” Sankar, E.; Raju, P.; Karunakaran, J.; **Mohanakrishnan, A. K.** *J. Org. Chem.* **2017**, *82*, 13583-13593. (Impact Factor: 4.45; No of Citations: 12)
92. “Synthesis of Benzo[k]fluoranthene Derivatives through Diels-Alder Reaction of 1,3-Diarylbenzo[c]furans” Karunakaran, J.; **Mohanakrishnan, A. K.** *Eur. J. Org. Chem.* **2017**, 6747-6762. (Impact Factor: 3.01; No of Citations: 5)
91. “Synthesis of Indeno[b]indole and Naphtho[a]carbazole Derivatives Involving Diels-Alder Reaction of Isobenzofurans” Sankar, E.; Karunakaran, J.; Dhivyapirabha, L.; **Mohanakrishnan, A. K.** *ChemistrySelect* **2017**, *2*, 7899–7903. (Impact Factor: 1.8; No of Citations: 6)
90. “Synthesis of Oxacalothrixin B and its analogues involving iodine/TBHP-mediated electrocyclization” Ramalingam, B. M.; **Mohanakrishnan, A. K.** *Tetrahedron Lett.* **2017**, *58*, 2919-2922. (Impact Factor: 2.3; No of Citations: 3)
89. “Synthesis of Annulated Thiophenes Involving Benzo-DMTHFs/Triflic acid-Mediated Domino Reactions” Rafiq, M.; **Mohanakrishnan, A. K.** *ChemistrySelect* **2017**, *2*, 2578-2582. (Impact Factor: 1.8; No of Citations: Nil)
88. “Synthesis of Annulated Arenes and Heteroarenes by Hydriodic Acid and Red Phosphorus Mediated Reductive Cyclization of 2-(Hetero)aryl benzoic Acids or 3-(Hetero)arylphthalides” Rafiq, M.; **Mohanakrishnan, A. K.** *Synlett* **2017**, *28*, 362-370. (Impact Factor: 2.4; No of Citations: 6)
87. “Synthesis of Thia-Analogues of Calothrixin B Involving FeCl₃-Mediated Domino Reaction” Ramalingam, B. M.; Dhatchana Moorthy, N.; Vellaichamy, E.; **Mohanakrishnan, A. K.** *Synlett* **2017**, *28*, 133-137. (Impact Factor: 2.4; No of Citations: 2)
86. “Synthesis and photophysical properties of benzo[c]thiophene, p-phenylene-, triphenylamine-, and pyrene-based vinylenes” Nandakumar, M.; Sankar, E.; **Mohanakrishnan, A. K.** *Synth. Commun.* **2016**, *46*, 1810-1819. (Impact Factor: 1.8; No of Citations: 4)

85. "Synthesis and Characterization of Thienothiophene Conjugated Benzo[c]thiophene Analogs" Sivasakthikumar, R.; Arul Clement, J.; Nandakumar, M.; **Mohanakrishnan, A. K.** *J. Heterocyclic Chem.* **2016**, *53*, 1461-1468. (Impact Factor: 1.2; No of Citations: 3)
84. "Synthesis of Cyclo[b]fused Carbazoles via SnCl₄-Mediated Domino Reaction of 2-Indolylmethylpivalates with Arenes and Heteroarenes" Saravanan, V.; Mageshwaran, T.; **Mohanakrishnan, A. K.** *J. Org. Chem.* **2016**, *81*, 8633-8646. (Impact Factor: 4.45; No of Citations: 9)
83. "Synthetic Approach to Dictyodendrins: A Facile Synthesis of Pyrrolo[2,3-c]carbazole, Pyrrolodibenzothiophene, and Benzo[e]indole" Raju, P.; **Mohanakrishnan, A. K.** *Eur. J. Org. Chem.* **2016**, 4361-4371. (Impact Factor: 4.45; No of Citations: 8)
82. "Oxidative cleavage of 1,3-diaryl/ (heteroaryl)benzo[c]furans into 1,2-diaroyl/ (heteroaroyl)benzenes using selenium dioxide" Karunakaran, J.; Sankar, E.; **Mohanakrishnan, A. K.** *Synth. Commun.* **2016**, *46*, 1349-1356. (Impact Factor: 1.8; No of Citations: 4)
81. "Synthetic transformation of 1,3-diarylisobenzofuranDMAD adducts: a facile preparation of tri-substituted α -naphthols" Karunakaran, J.; Nandakumar, N.; Senthil Kumar, N.; **Mohanakrishnan, A. K.** *Org. Biomol. Chem.* **2016**, *14*, 4247-4259. (Impact Factor: 3.5; No of Citations: 8)
80. "Regioselective Annulation of Unsymmetrical 1,2-Phenylenebis(diaryl/ diheteroarylmethanol): A Facile Synthesis of Anthracene, Tetracene, and Naphtho[b]thiophene Analogues" Sivasakthikumar, R.; Rafiq, S. M.; Sankar, E.; Arul Clement, J.; **Mohanakrishnan, A. K.** *Eur. J. Org. Chem.* **2015**, 7816-7835. (Impact Factor: 3.01; No of Citations: 10)
79. "Synthetic Studies on Indolocarbazoles: A Facile Synthesis of Staurosporinone Analogues" Raju, P.; Rajeshwaran, G. G.; **Mohanakrishnan, A. K.** *Eur. J. Org. Chem.* **2015**, 7131-7145. (Impact Factor: 3.01; No of Citations: 8)
78. "Synthesis of Annulated Anthracenes, Carbazoles, and Thiophenes Involving Bradsher-Type Cyclodehydration or Cyclization-Reductive-Dehydration Reactions" Rafiq, S. M.; Sivasakthikumar, R.; Karunakaran, J.; **Mohanakrishnan, A. K.** *Eur. J. Org. Chem.* **2015**, 5099-5114. (Impact Factor: 3.01; No of Citations: 25)
77. "Unusual Reactivity of Aryl Aldehydes with Triethyl Phosphite and Zinc Bromide: A Facile Preparation of Epoxides, Benzisoxazoles, and α -Hydroxy Phosphonate Esters" Raju, P.; Rajeshwaran, G. G.; Nandakumar, M.; **Mohanakrishnan, A. K.** *Eur. J. Org. Chem.* **2015**, 3513-3523. (Impact Factor: 3.01; No of Citations: 9)

76. "Synthesis of push-pull system containing dibenzoheterocycles tethered benzo[c]thiophenes via Vilsmeier-Haack formylation" Senthil Kumar, N.; Nandakumar, M.; **Mohanakrishnan, A. K.** *Indian J. Chem B* **2014**, *53B*, 871-876. (Impact Factor: 0.65; No of Citations: Nil)
75. "Oxidative Cleavage of 1,3-Disubstituted benzo[c]furans using active Manganese dioxide: A facile preparation of 1,2-Diaroyl/(heteroaroyl) benzenes" Sivasakthikumar, R.; Nandakumar, M.; **Mohanakrishnan, A. K.** *Synlett* **2014**, *25*, 1896-1900. (Impact Factor: 2.4; No of Citations: 7)
74. "Diels-Alder reaction of Symmetrical benzo[c]furans with thiophene *S*, *S*-dioxide/indenone derivatives: A facile Preparation of substituted dibenzothienyl *S*, *S*-dioxides and fluorenones" Nandakumar, M.; Karunakaran, J.; **Mohanakrishnan, A. K.** *Org. Lett.* **2014**, *16*, 3068-3071. (Impact Factor: 6.1; No of Citations: 32)
73. "Lewis Acid/Brønsted Acid-Mediated Benz-Annulation of Thiophenes and Electron Rich Arenes" Rafiq, M.; Sivasakthikumar, R.; **Mohanakrishnan, A. K.** *Org. Lett.* **2014**, *16*, 2720-2723. (Impact Factor: 6.1; No of Citations: 33)
72. "Studies on phthalidation of heteroarenes: A Preparation of 3-(heteroaryl)phthalides via Triflic acid Mediated Phthalidation" Nandakumar, M.; Sankar, E.; **Mohanakrishnan, A. K.** *Synlett* **2014**, *25*, 509-514. (Impact Factor: 2.4; No of Citations: 7)
71. "Total synthesis of Calothrixin B and its Analogs" Saravanan, V.; Muthu Ramalingam, B.; **Mohanakrishnan, A. K.** *Eur. J. Org. Chem.* **2014**, 1266-1279. (Impact Factor: 3.01; No of Citations: 20)
70. "Synthesis of Calothrixin and its Analogs Using FeCl₃-Mediated Domino Reaction Protocol" Muthu Ramalingam, B.; Saravanan, V.; **Mohanakrishnan, A. K.** *Org. Lett.* **2013**, *15*, 3726-3729. (Impact Factor: 6.1; No of Citations: 33)
69. "Synthesis and *in vitro* cytotoxicity of 2-substituted 17-methylene/17- β -methyl estratrienes" Panchapakesan, G.; Sureshbabu, R.; Dhatchana Moorthy, N.; **Mohanakrishnan, A. K.** *Indian J. Chem B* **2013**, *52B*, 109-121. (Impact Factor: 0.65; No of Citations: Nil)
68. "Synthesis of Annulated Arenes and Heteroarenes Involving Lewis acid-Mediated Regioselective Cyclization of Unsymmetrical 1,2(diaryl/diheteroarylmethine)dipivalates" Sivasakthikumar, R.; Nandakumar, M.; **Mohanakrishnan, A. K.** *J. Org. Chem.* **2012**, *77*, 9053-9071. (Impact Factor: 4.45; No of Citations: 26)

67. "An improved synthesis of carbazoles via domino reaction of *N*-protected 2-methylindoles with DMF.DMA/DMA.DMA" Sureshbabu, R.; **Mohanakrishnan, A. K.** *J. Het. Chem.* **2012**, *49*, 913-918. **(Impact Factor: 1.22; No of Citations: 8)**
66. "Oxidative Ring Opening of 1, 3-Diaryl benzo[*c*]heterocycles using *m*-CPBA: A Facile Preparation of 1, 2-Diaroylbenzenes" Nandakumar, M.; Sivasakthikumar, R.; **Mohanakrishnan, A. K.** *Eur. J. Org. Chem.* **2012** 3647-3657. **(Impact Factor: 3.33; No of Citations: 28)**
65. "Lewis-acid mediated domino reaction of 3-bromomethylthiophenes with arenes/heteroarenes" Dhayalan, V.; **Mohanakrishnan, A. K.** *Synth. Commun.* **2012**, *42*, 2149-2160. **(Impact Factor: 1.8; No of Citations 5)**
64. "Synthesis of 3-bromo-3-phenylallylindoles via ZnBr₂-mediated addition of bromomethylindoles/indolylmethylacetate with phenyl acetylene" **Sureshbabu, R.**; Mohanakrishnan, A. K. *Synth. Commun.* **2012**, *42*, 526-533. **(Impact Factor: 1.8 ; No of Citations: Nil)**
63. "One pot synthesis of 2-aryolindoles" Dhayalan, V.; Panchapakesan, G.; **Mohanakrishnan, A. K.** *Synth. Commun.* **2012**, *42*, 402-411. **(Impact Factor: 1.8; No of Citations: 7)**
62. "Synthesis of 2-substituted 17-β-hydroxy/17-methylene estratrienes and their *in vitro* cytotoxicity in human cancer cell cultures" Panchapakesan, G.; Dhayalan, V.; Dhatchana Moorthy, N, Saranya, N, **Mohanakrishnan, A. K.** *Steroids* **2011**, *76*, 1491-1504. **(Impact Factor: 2.83; No of Citations: 14)**
61. "Studies on Lewis-acid mediated domino reaction of *N*-protected bromomethylindoles with arenes/heteroarenes" Dhayalan, V.; Sureshbabu, R.; **Mohanakrishnan, A. K.** *Indian J of Chem B*, **2011**, *50B*, 843-857. **(Impact Factor: 0.65; No of Citations: 8)**
60. "Synthetic Studies on Indolocarbazoles: Total Synthesis of Staurosporine Aglycon" Gobi Rajeshwaran, G.; **Mohanakrishnan, A. K.** *Org. Lett.* **2011**, *13* (6), 1418-1421. **(Impact Factor: 5.86; No of Citations: 51)**
59. "Lewis Acid-Mediated Michaelis-Arbuzov Reaction at Room Temperature: A Facile Preparation of Arylmethyl/ Heteroarylmethyl Phosphonates" Gobi Rajeshwaran, G.; Nandakumar, M.; Sureshbabu, R.; **Mohanakrishnan, A. K.** *Org. Lett.* **2011**, *13* (6), 1270-1273. **(Impact Factor: 5.86; No of Citations: 94)**
58. "Lewis acid-mediated one-pot synthesis of aryl/heteroaryl cyclo[*b*]fused carbazoles involving cascade Fridel-Crafts alkylation-electrocyclization-aromatization reaction sequence" Sureshbabu, R.; Saravanan, V.; Dhayalan, V.; Mohanakrishnan, A. K. *Eur. J. Org. Chem.* **2011**, 922-935.

(Impact Factor: 3.33; No of Citations: 32)

57. "Lewis-acid mediated domino reaction of Aryl and Heteroaryl tetra-acetates with Arenes/Heteroarenes" Arul Clement, J.; Sivasakthikumar, R.; **Mohanakrishnan, A. K.**; Sundaramoorthy, S.; Velmurugan, D. *Eur. J. Org. Chem.* **2011**, 569-577. **(Impact Factor: 3.33; No of Citations: 11)**
56. "Studies on fluorescence of Tris-(8-hydroxyquinoline)aluminum" Thangaraju, K.; Amaladass, P.; **Mohanakrishnan, A. K.**; Narayanan. V. Kumar, J. *Polymer-Plastics Technology and Engineering* **2010**, *49*, 1289-1291. **(Impact Factor: 1.28; No of Citations: Nil)**
55. "Synthesis and characterization of fluorene tethered benzo[*c*]thiophene/benzo[*c*]selenophene analogs" Senthil Kumar. N.; **Mohanakrishnan, A. K.** *Tetrahedron* **2010**, *66*, 5660-5670. **(Impact Factor: 3.03; No of Citations: 20)**
54. "Tributyltin hydride Mediated Synthesis of Bi-cyclic Carbocycles Initiated by Et₃B/O₂" Prakash, C.; Gobi Rajeshwaran, G.; **Mohanakrishnan, A. K.** *Synth. Commun.* **2010**, *40*, 2097-2107. **(Impact Factor: 1.8; No of Citations: 2)**
53. "Lewis-acid mediated acetamidation of *N*-protected bromomethylindoles" Dhayalan, V.; Mohanakrishnan, A. K. *Indian J of Chem B*, **2010**, *49B*, 327-334. **(Impact Factor: 0.65; No of Citations: 1)**
52. "Synthesis and characterization of naphth-annelated thiophene analogs" Arul Clement, J.; **Mohanakrishnan, A. K.** *Tetrahedron* **2010**, *66*, 2340-2350. **(Impact Factor: 3.03; No of Citations: 11)**
51. "Synthesis of benzo[*c*]thiophene analogs containing benzimidazole, benzothiazole and oxazole" Arul Clement, J.; Gunasekaran, P.; **Mohanakrishnan, A. K.** *Synth. Commun.* **2009**, *39*, 3324-3337. **(Impact Factor: 1.8; No of Citations: 1)**
50. "An efficient Synthesis of phthalic acid derivatives via three-component coupling reaction of β-arylethylcrotonate, DMF.DMA and DMAD" Prakash, C.; Sureshbabu, R.; **Mohanakrishnan, A. K.**; Arulmani, M.; Kalaichelvan, P. T. *Indian J of Chem B*, **2009**, *48B*, 1137-1143. **(Impact Factor: 0.65; No of Citations: Nil)**
49. "A Facile Preparation of methyl indolylacetates via Stille carbonylation of *N*-protected bromomethylindoles" Ramesh, N.; Dhayalan, V.; Sureshbabu, R.; Mohanakrishnan, A. K. *Indian J of Chem B*, **2009**, *48B*, 858-864. **(Impact Factor: 0.65; No of Citations: Nil)**
48. "Synthesis and characterization of benzo[*c*]thiophene analogs incorporating benzo[*b*]thiophene/benzo[*b*]pyrrole/benzo[*b*]furan" Arul Clement, J.;

- Gunasekaran, P.; **Mohanakrishnan, A. K.** *Tetrahedron* **2009**, 65, 4113-4123. **(Impact Factor: 3.03; No of Citations: 12)**
47. “Synthesis of di-, tri- and tetra-substituted carbazole analogs involving annulation methodology” Ramesh, N.; Gobi Rajeshwaran, G.; **Mohanakrishnan, A. K.** *Tetrahedron* **2009**, 65, 3592-3602. **(Impact Factor: 3.03; No of Citations: 18)**
46. “Synthesis of substituted carbazoles via in situ generated enamines from 1-phenylsulfonyl-2/(3)-methyl-3/(2)-vinylindoles and DMF.DMA/DMA.DMA” Sureshbabu, R.; Balamurugan, R.; **Mohanakrishnan, A. K.** *Tetrahedron* **2009**, 65, 3582-3591. **(Impact Factor: 3.03; No of Citations: 31)**
45. “Studies on influence of light on fluorescence of tris-(8-hydroxyquinoline) aluminum thin films” Thangaraju, K.; Amaladass, P.; Shanmugabarathi, K.; **Mohanakrishnan, A. K.**; Narayanan, V. Kumar, J.; *Appl. Surface Sci.* **2009**, 255, 5760-5763. **(Impact Factor: 2.10; No of Citations: 7)**
44. “Lewis acid mediated arylation of N-protected bromomethylindoles” Dhayalan, V.; Ramesh, N.; **Mohanakrishnan, A. K.** *Synth. Commun.* **2009**, 39, 1241-1256. **(Impact Factor: 1.8; No of Citations: 3)**
43. “A Facile Preparation of indolyl-2/3-methylsulfoxides using HF/H₂O₂” Gobi Rajeshwaran, G.; Ramesh, N.; **Mohanakrishnan, A. K.** *Synth. Commun.* **2009**, 39, 1215-1227. **(Impact Factor: 1.8, No of Citations: Nil)**
42. “A versatile synthesis of annulated carbazole analogs involving a domino reaction of bromomethylindoles with arenes/heteroarenes” Dhayalan, V.; Arul Clement, J.; Jagan, R.; **Mohanakrishnan, A. K.** *Eur. J. of Org. Chem.* **2009**, 4, 531-546. **(Impact Factor: 3.33; No of Citations: 50)**
41. “Synthesis of 3-Indolylpyrroles via Base Mediated Cycloaddition of TOSMIC with Activated Indole-2/3-vinylenes” Balamurugan, R.; Sureshbabu, R.; Gobi Rajeshwaran, G.; **Mohanakrishnan, A. K.** *Synth. Commun.* **2009**, 39, 531-543. **(Impact Factor: 1.8; No of Citations: 8)**
40. “Synthesis and characterization of benzo[*c*]thiophene analogs tethered with dibenzo-heterocycles as potential OLEDs” Senthil Kumar, N.; Arul Clement, J.; **Mohanakrishnan, A. K.** *Tetrahedron* **2009**, 65, 822-830. **(Impact Factor: 3.03; No of Citations: 30)**
39. “A One Pot Synthesis of Annulated Carbazoles” **Mohanakrishnan, A. K.**; Dhayalan, V.; Arul Clement, J.; Balamurugan, R.; Sureshbabu, R.; Senthil Kumar, N. *Tetrahedron Lett.* **2008**, 49, 5850-5854. **(Impact Factor: 2.68; No of Citations: 20)**

38. "Synthesis and characterization of benz-annelated thienyl oligomers" Amaladass, P.; Arul Clement, J.; **Mohanakrishnan, A. K.** *Eur. J. Org. Chem.* **2008**, 3798-3810. (**Impact Factor: 3.33; No of Citations: 30**)
37. "Synthesis and characterization of 1,3-diarylbenzo[*c*]selenophenes" Amaladass, P.; Senthil Kumar, N.; **Mohanakrishnan, A. K.** *Tetrahedron.* **2008**, 64, 7992-7998. (**Impact Factor: 3.01; No of Citations: 21**)
36. "Synthesis and characterization of 9,9-dialkylfluorene capped benzo[*c*]thiophene/benzo[*c*]selenophene analogs as potential OLEDs" **Mohanakrishnan, A. K.**; Senthil Kumar, N.; Amaladass, P. *Tetrahedron Lett.* **2008**, 49, 4792-4795. (**Impact Factor: 2.68; No of Citations: 28**)
35. "Synthesis of angularly fused carbocycles via tandem radical cyclization of α -carbonyl radical" Prakash, C.; **Mohanakrishnan, A. K.** *Eur. J. of Org. Chem* **2008**, 1535-1543. (**Impact Factor: 3.33; No of Citations: 10**)
34. "Unusual Dimerization of N-phenylsulfonyl bromomethylindole/benzyl bromide with arylmetal halides: Generation of indolylmethyl/benzyl radical" Ramesh, N.; Prakash, C.; Dhayalan, V.; Sureshbabu, R.; **Mohanakrishnan, A. K.** *Tetrahedron* **2008**, 64, 2071-2079. (**Impact Factor: 3.03; No of Citations: 8**)
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