

[Synthetic Communications](#) >

An International Journal for Rapid Communication of Synthetic Organic Chemistry

Volume 50, 2020 - Issue 24

241 | 4

Views | CrossRef citations to date | Altmetric | 0

Articles

A facile atom – economical synthesis of highly substituted pyrazolo-*N*-methyl-piperidine grafted spiro-indenoquinoxaline pyrrolidine heterocycles via a sequential multicomponent reaction

Gavaskar Deivasigamani & Suresh Babu Adukamparai Rajukrishnan

Pages 3820-3829 | Received 20 May 2020, Published online: 08 Sep 2020

Cite this article

<https://doi.org/10.1080/00397911.2020.1812081>

Sample our
Physical Sciences
Journals
>> [Sign in here](#) to start your access
to the latest two volumes for 14 days

Full Article

Figures & data

References

Supplemental

Citations

Metrics

Reprints & Permissions

Read this article

Abstract

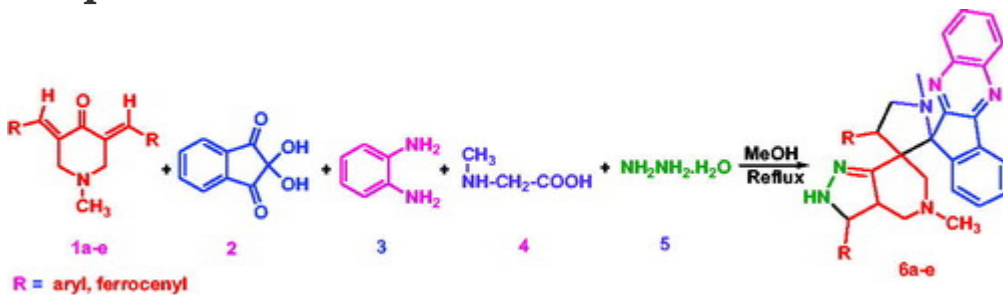
An expedient one-pot sequential five component synthesis of highly substituted pyrazolo-*N*-methyl-piperidine grafted spiro-indenoquinoxaline pyrrolidine heterocycles involving [3 + 2]-cycloaddition of azomethine ylides as the key step is described. The

[Home](#) ▶ [All Journals](#) ▶ [Synthetic Communications](#) ▶ [List of Issues](#) ▶ [Volume 50, Issue 24](#)

▶ [A facile atom – economical synthesis of](#)

regioselectivity and operational simplicity to assemble complex structural entity in a single operation. The structure of the product was confirmed by spectroscopic techniques and elemental analysis.

Graphical Abstract



Q Keywords: Multicomponent reaction (MCR) polyheterocycles azomethine ylide quinoxaline pyrazole N-methylpiperidine spiro-pyrrolidines

Acknowledgements

DG thanks Vels University for the support and encouragement. ARS thanks University Grants Commission (UGC) for the start-up grant under UGC-Faculty Recharge Programme.

Additional information

Funding

One of the author ARS thanks University Grants Commission (UGC) for the start-up grant under UGC-Faculty Recharge Programme.

[◀ Previous article](#)

[View issue table of contents](#)

[Next article ▶](#)

[Home](#) ▶ [All Journals](#) ▶ [Synthetic Communications](#) ▶ [List of Issues](#) ▶ [Volume 50, Issue 24](#)

▶ [A facile atom – economical synthesis of](#)

LOG IN VIA YOUR INSTITUTION

➤ [Access through your institution](#)

Log in to Taylor & Francis Online

➤ [Log in](#)

Restore content access

➤ [Restore content access for purchases made as guest](#)

Purchase options *

[Save for later](#)

PDF download + Online access

- 48 hours access to article PDF & online version
- Article PDF can be downloaded
- Article PDF can be printed

USD 61.00

 Add to cart

Issue Purchase

- 30 days online access to complete issue
- Article PDFs can be downloaded
- Article PDFs can be printed

USD 422.00

 Add to cart

* Local tax will be added as applicable

Related Research

[Home](#) ▶ [All Journals](#) ▶ [Synthetic Communications](#) ▶ [List of Issues](#) ▶ [Volume 50, Issue 24](#)
▶ [A facile atom – economical synthesis of](#)

[A sequential multicomponent reaction \(SMCR\) strategy: Synthesis of novel pyrazolo-1,4-dioxaspiro\[4,5\]decane grafted spiro-indenoquinoxaline pyrrolidine heterocy... >](#)

Gavaskar Deivasigamani et al.

Synthetic Communications

Published online: 12 May 2021

[An easy access to highly substituted trispiroheterocycles – Synthesis of novel pyrazolo-1,4-dioxaspiro\[4,5\]decane grafted spiro-oxindolopyrrolidines via a sequ... >](#)

Gavaskar Deivasigamani et al.

Synthetic Communications

Published online: 4 Jan 2021

[Home](#) ▶ [All Journals](#) ▶ [Synthetic Communications](#) ▶ [List of Issues](#) ▶ [Volume 50, Issue 24](#)
▶ [A facile atom – economical synthesis of](#)

[Home](#) ▶ [All Journals](#) ▶ [Synthetic Communications](#) ▶ [List of Issues](#) ▶ [Volume 50, Issue 24](#)

▶ [A facile atom – economical synthesis of](#)

[Authors](#)

[R&D professionals](#)

[Editors](#)

[Librarians](#)

[Societies](#)

[Opportunities](#)

[Reprints and e-prints](#)

[Advertising solutions](#)

[Accelerated publication](#)

[Corporate access solutions](#)

[Open access](#)

[Overview](#)

[Open journals](#)

[Open Select](#)

[Dove Medical Press](#)

[F1000Research](#)

[Help and information](#)

[Help and contact](#)

[Newsroom](#)

[All journals](#)

[Books](#)

Keep up to date

Register to receive personalised research and resources by email

 [Sign me up](#)

Copyright © 2024 **Informa UK Limited** [Privacy policy](#) [Cookies](#) [Terms & conditions](#) [Accessibility](#)


Taylor & Francis Group
An informa business

Registered in England & Wales No. 3099067
5 Howick Place | London | SW1P 1WG