

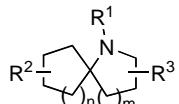
## Contents

## REPORT

- Recent approaches to the construction of 1-azaspiro[4.5]decanes and related 1-azaspirocycles**  
 Gregory Dake

pp 3467–3492

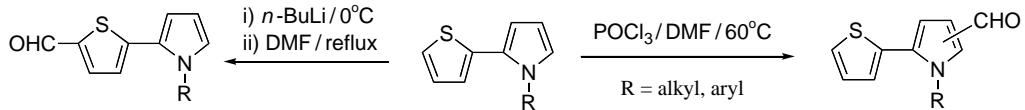
A variety of recently disclosed synthetic methods used to construct 1-azaspirocycles are presented.



## ARTICLES

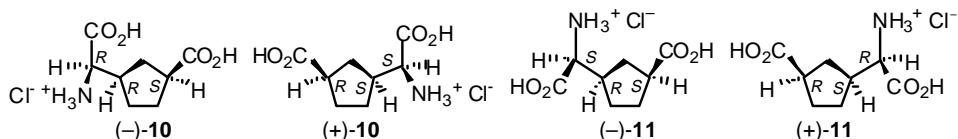
- Synthesis of formyl-thienylpyrroles: versatile building blocks for NLO materials**  
 M. Manuela M. Raposo,\* Ana M. R. C. Sousa, A. Maurício C. Fonseca and G. Kirsch

pp 3493–3501



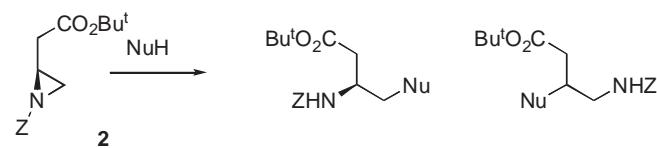
- Chemoenzymatic resolution of epimeric *cis* 3-carboxycyclopentylglycine derivatives**  
 Chiara Cabrele, Francesca Clerici, Raffaella Gandolfi, Maria Luisa Gelmi,\*  
 Francesco Molinari and Sara Pellegrino

pp 3502–3508



**Aziridines derived from amino acids as synthons in pseudopeptide synthesis**  
Laidong Song, Vincent Servajean and Josiane Thierry\*

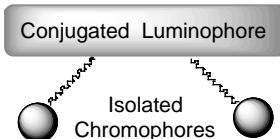
pp 3509–3516



Nu: PhCH<sub>2</sub>NH, CH<sub>2</sub>=CHCH<sub>2</sub>NH, PhCH<sub>2</sub>ONH, PhCH<sub>2</sub>OCONHNH, *p*-MeO-PhCH<sub>2</sub>NH,  
Gly-OBu<sup>t</sup>, Lys(Boc)-OMe, PhCH<sub>2</sub>O, AcO,CH<sub>3</sub>CH(CO<sub>2</sub>CH<sub>3</sub>)O, PhCH<sub>2</sub>S

**Star-like fluorene based polyamines: non-conjugated building blocks for light-harvesting materials**  
K. R. Justin Thomas, Jiann T. Lin,\* Chien-Min Tsai and Hong-Cheu Lin\*

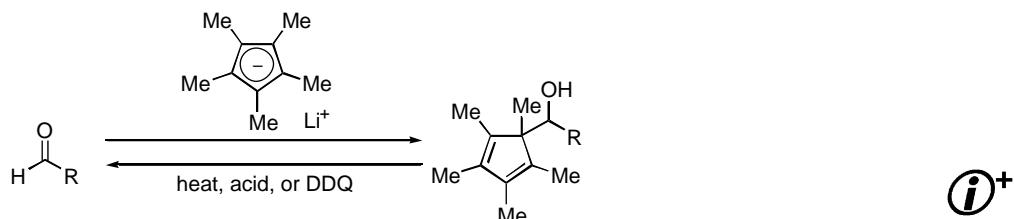
pp 3517–3522



**Pentamethylcyclopentadienide in organic synthesis: nucleophilic addition of lithium pentamethylcyclopentadienide to carbonyl compounds and carbon–carbon bond cleavage of the adducts yielding the parent carbonyl compounds**

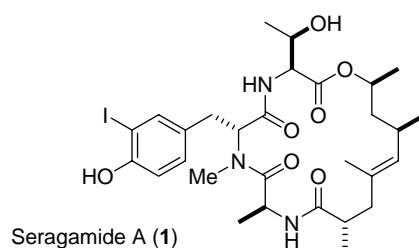
pp 3523–3535

Minoru Uemura, Kazunari Yagi, Masayuki Iwasaki, Kenichi Nomura, Hideki Yorimitsu\*  
and Koichiro Oshima\*



**Seragamides A–F, new actin-targeting depsipeptides from the sponge *Suberites japonicus***  
Thiele  
Chiaki Tanaka, Junichi Tanaka,\* Robert F. Bolland, Gerard Marriott and Tatsuo Higa

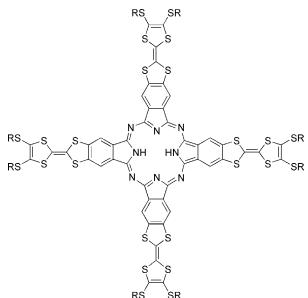
pp 3536–3542



**Synthesis of tetrathiafulvalene-annulated phthalocyanines**

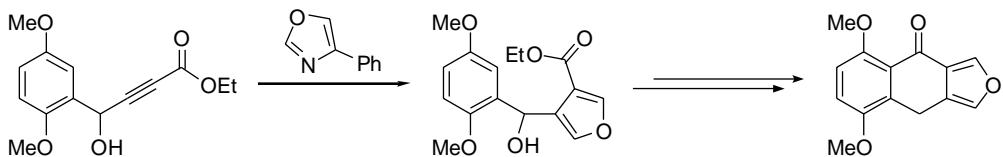
pp 3543–3549

Chantal A. Donders, Shi-Xia Liu,\* Claudia Loosli, Lionel Sanguinet, Antonia Neels and Silvio Decurtins

**Synthesis of 5,8-dimethoxynaphtho[2,3-*c*]furan-4(9*H*)-one**

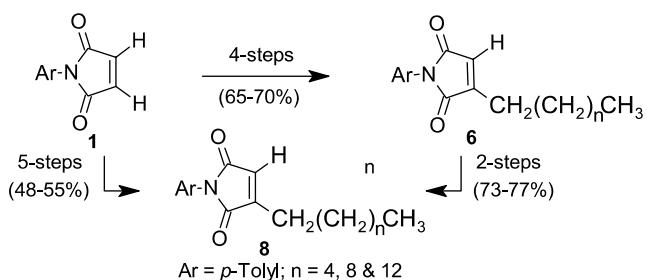
pp 3550–3556

Matthew J. Piggott\* and Dieter Wege

**Haval–Argade contrathermodynamic rearrangement of alkylidenesuccinimides to alkylmaleimides via the corresponding isoimides: a general approach to alkyl and dialkyl substituted maleimides**

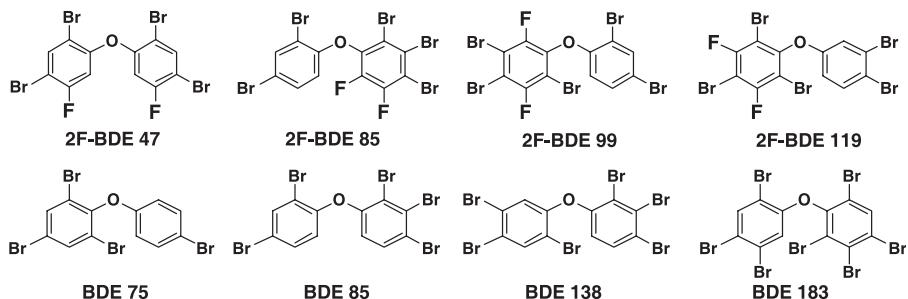
pp 3557–3563

Kishan P. Haval and Narshinha P. Argade\*

**Polybrominated diphenyl ethers (BDEs); preparation of reference standards and fluorinated internal analytical standards**

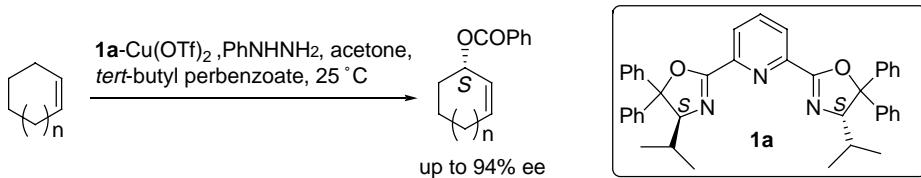
pp 3564–3572

Huiling Liu, Monica Bernhardsen and Anne Fiksdahl\*



**Enantioselective oxidation of olefins catalyzed by chiral copper bis(oxazolinyl)pyridine complexes: a reassessment** pp 3573–3581

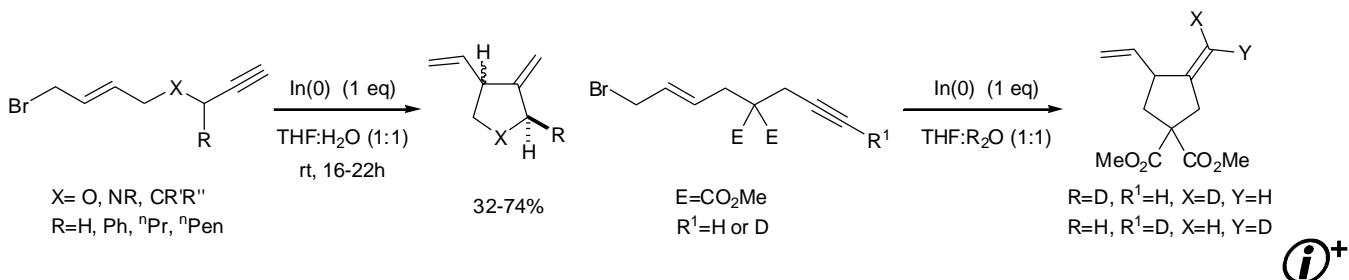
Sandeep K. Ginotra and Vinod K. Singh\*



**New indium-mediated cyclisation reactions of tethered haloenynes in aqueous solvent systems**

pp 3582–3599

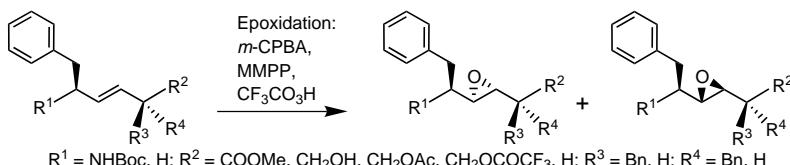
Andres Goeta, Matthew M. Salter\* and Hummad Shah



**Peracid dependent stereoselectivity and functional group contribution to the stereocontrol of epoxidation of (*E*)-alkene dipeptide isosteres**

pp 3600–3609

Daniel Wiktelius, Wei Berts, Annika Jenmalm Jensen, Joachim Gullbo, Stina Saitton, Ingeborg Csöregi and Kristina Luthman\*

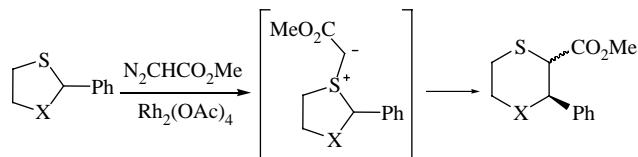


*i*<sup>+</sup>

**The methoxycarbonylcarbene insertion into 1,3-dithiolane and 1,3-oxathiolane rings**

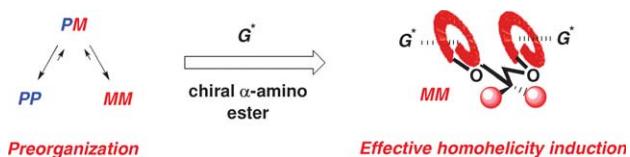
pp 3610–3618

Alexander V. Stepakov, Alexander P. Molchanov, Jörg Magull, Denis Vidović, Galina L. Starova, Jürgen Kopf and Rafael R. Kostikov\*



**Homohelicity induction of propylene-linked zinc bilinone dimers by complexation with chiral amine and  $\alpha$ -amino esters. Preorganization of structurally coupled homohelical subunits**

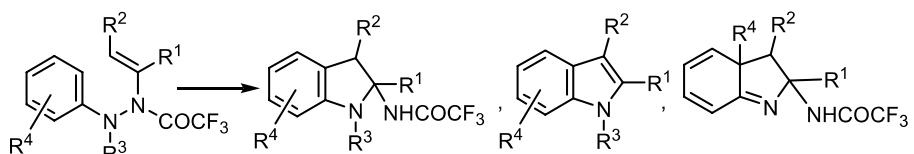
Katsushi Hamakubo, Shigeyuki Yagi,\* Hiroyuki Nakazumi, Tadashi Mizutani and Susumu Kitagawa



**Efficient synthesis of indoles using [3,3]-sigmatropic rearrangement of *N*-trifluoroacetyl enehydrazines**

pp 3629–3647

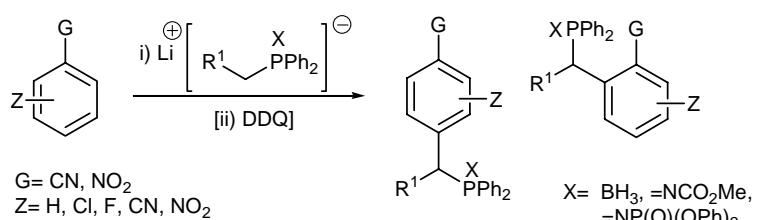
Okiko Miyata, Norihiko Takeda, Yasuo Kimura, Yoshiji Takemoto, Norimitsu Tohnai, Mikiji Miyata and Takeaki Naito\*



**Regioselective functionalisation of nitrobenzene and benzonitrile derivatives via nucleophilic aromatic substitution of hydrogen by phosphorus-stabilized carbanions**

pp 3648–3662

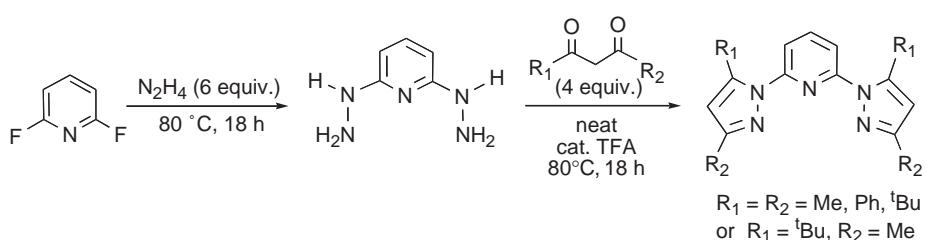
Carmen M. Andújar Sánchez, M<sup>a</sup> José Iglesias, Jesús García Lopez, Isidro J. Pérez Álvarez and Fernando López Ortiz\*



**Synthesis and characterization of 2,6-bis-hydrazinopyridine, and its conversion to 2,6-bis-pyrazolylpyridines**

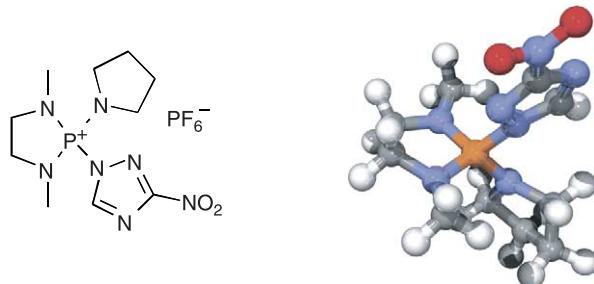
pp 3663–3666

Kimberly A. Brien, Charles M. Garner\* and Kevin G. Pinney



**1,3-Dimethyl-2-(3-nitro-1,2,4-triazol-1-yl)-2-pyrrolidin-1-yl-1,3,2-diazaphospholidinium hexa-fluorophosphate (MNTP): a powerful condensing reagent for phosphate and phosphonate esters**  
Natsuhisa Oka, Mamoru Shimizu, Kazuhiko Saigo and Takeshi Wada\*

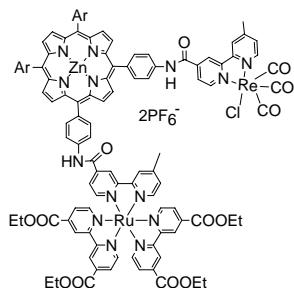
pp 3667–3673

*i*<sup>+</sup>

**A novel ruthenium(II) tris(bipyridine)–zinc porphyrin–rhenium carbonyl triad: synthesis and optical properties**

pp 3674–3680

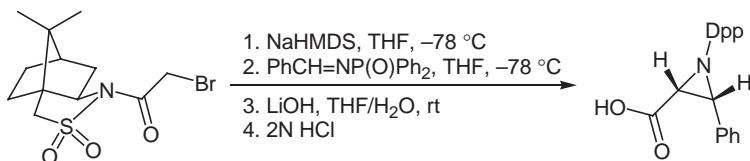
Xien Liu, Jianhui Liu,\* Jingxi Pan, Ruikui Chen, Yong Na, Weiming Gao and Licheng Sun\*



**Asymmetric aziridine synthesis by aza-Darzens reaction of *N*-diphenylphosphinylimines with chiral enolates. Part 1: Formation of *cis*-aziridines**

pp 3681–3693

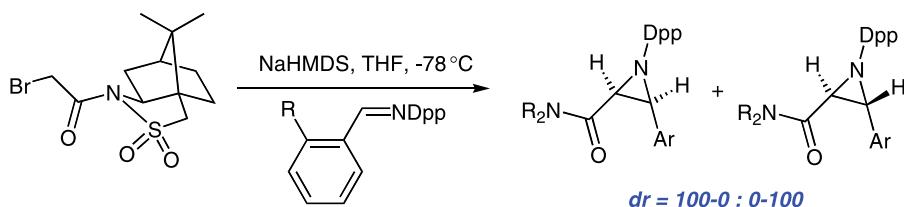
J. B. Sweeney,\* Alex A. Cantrill, Andrew B. McLaren and Smita Thobhani



**Asymmetric aziridine synthesis by aza-Darzens reaction of *N*-diphenylphosphinylimines with chiral enolates. Part 2: Inversion of diastereoselectivity**

pp 3694–3703

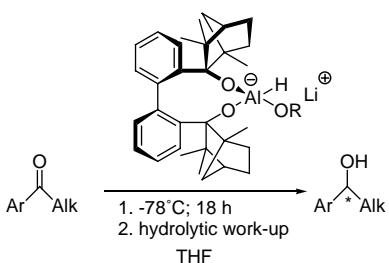
J. B. Sweeney,\* Alex A. Cantrill, Michael G. B. Drew, Andrew B. McLaren and Smita Thobhani



**New chiral lithium aluminum hydrides based on biphenyl-2,2'-bisfenchol (BIFOL): structural analyses and enantioselective reductions of aryl alkyl ketones**

D. A. Lange, J.-M. Neudörfl and B. Goldfuss\*

pp 3704–3709

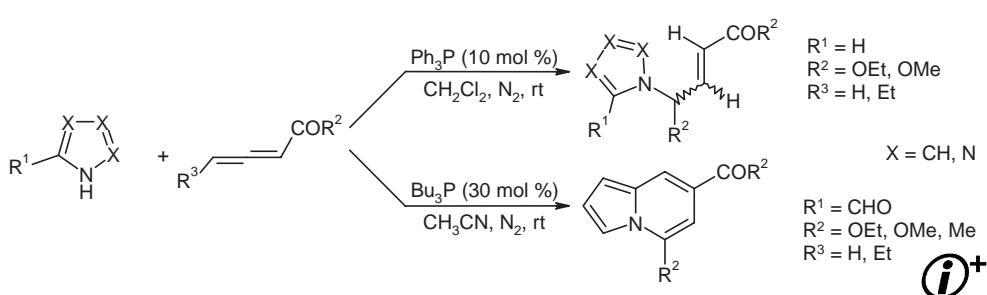


**Phosphines catalyzed nucleophilic addition of azoles to allenes: synthesis of allylazoles and indolizines**

David Virieux,\* Anne-Françoise Guillouzic and Henri-Jean Cristau

pp 3710–3720

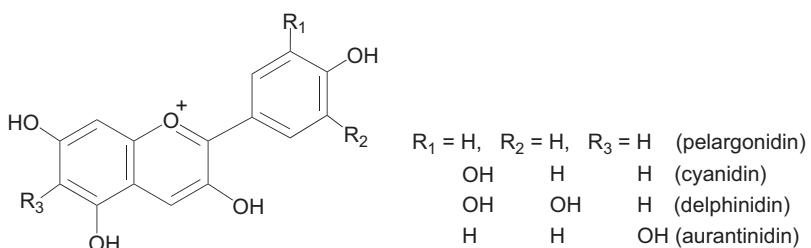
Efficient method for functional allylation of azoles has been developed using phosphine-catalyzed reactions with electron-deficient allenes. This metal free catalytic methodology has been extended to addition-cyclization reactions for the preparation of substituted indolizines.



**Ab initio study of molecular structures and excited states in anthocyanidins**

Ken Sakata,\* Norio Saito and Toshio Honda

pp 3721–3731

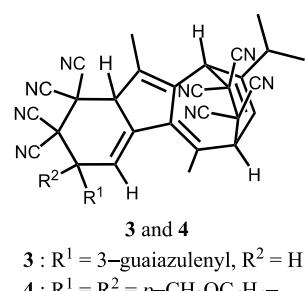


**Reactions of (*E*)-1,2-di(3-guaiazulenyl)ethylene and 2-(3-guaiazulenyl)-1,1-bis(4-methoxyphenyl)ethylene (TCNE) in benzene: comparative studies on the products and their spectroscopic properties**

Shin-ichi Takekuma,\* Masanori Hirosawa, Seiko Morishita, Masato Sasaki, Toshie Minematsu and Hideko Takekuma

pp 3732–3738

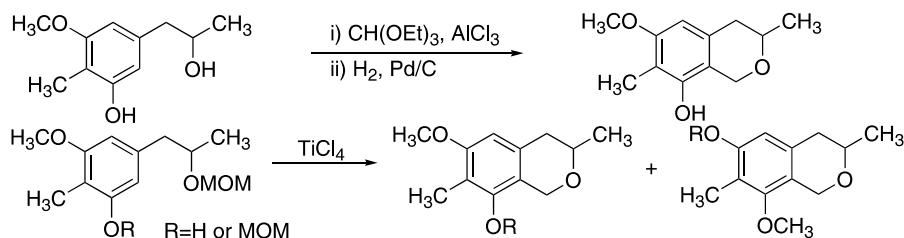
Reactions of the title ethylene derivatives **1** and **2** with TCNE in benzene at 25 °C for 24 h under argon give new cycloaddition compounds **3** (from **1**) and **4** (from **2**), respectively, in 66 and 87% isolated yields. Comparative studies on the above reactions as well as the spectroscopic properties of the unique products **3** and **4**, possessing interesting molecular structures, are reported.



**3** : R<sup>1</sup> = 3-guaiazulenyl, R<sup>2</sup> = H  
**4** : R<sup>1</sup> = R<sup>2</sup> = p-CH<sub>3</sub>OC<sub>6</sub>H<sub>4</sub>-

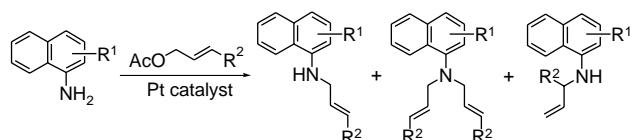
**Synthesis and structure of 8-hydroxy-6-methoxy-3,7-dimethylisochromane and its analogues**  
Tsuneo Suzuki,\* Kiyoshi Tanemura, Takaaki Horaguchi and Kimiyoshi Kaneko

pp 3739–3751



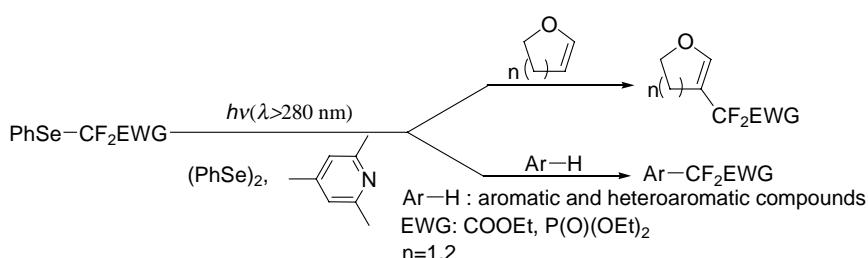
**Platinum-catalyzed allylation of aminonaphthalenes with allylic acetates**  
Shyh-Chyun Yang,\* Wei-Hao Feng and Kim-Hong Gan

pp 3752–3760



**Photochemical substitution of olefins and aromatic compounds with difluoromethyl radicals bearing ester and phosphonate groups**  
Satoru Murakami, Hideki Ishii, Toshiki Tajima and Toshio Fuchigami\*

pp 3761–3769



\*Corresponding author

 <sup>i</sup>† Supplementary data available via ScienceDirect



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