

## 2014

Cooperative N-Heterocyclic Carbene/Brønsted Acid Catalysis for the Tail-to-Tail (Co)dimerization of Methacrylonitrile

Terumasa Kato, Shin-ichi Matsuoka,\* Masato Suzuki

J. Org. Chem. 2014, 79(10), 4484–4491

DOI: 10.1021/jo500514e

Aggregation of Polythiophene Homopolymer and Block Copolymer in Solution Utilizing the Characteristics of Pyridine at the Side Chain

Koji Takagi,\* Eiki Kawagita, Ryo Kouchi, and Junpei Kawai

J. Polym. Sci. Part A: Polym. Chem., 2014, 52(23), 3383–3389

DOI: 10.1002/pola.27403

Synthesis and Characterization of Polythiophene Derivatives with Nitrogen Heterocycles at the Side Chain

Koji Takagi,\* Eiki Kawagita, and Ryo Kouchi

J. Polym. Sci. Part A: Polym. Chem., 2014, 52(15), 2166–2174

DOI: 10.1002/pola.27228

Synthesis, Reaction, and Optical Properties of Cyclic Trimer bearing 9,10-Diphenylanthracene Based on an Aromatic Tertiary Amide Skeleton

Ryohei Yamakado, Shin-ichi Matsuoka, Masato Suzuki, Daisuke Takeuchi, Hyuma Masu, Isao Azumaya, and Koji Takagi\*

RSC Adv., 2014, 4(13), 6752–6760

DOI: 10.1039/C3RA46652C

Synthesis and Optoelectronic Properties of Conjugated Polymers Based on a Dithienobenzimidazole Unit in the Main Chain

Koji Takagi,\* Masanori Sakaida, Kazuma Kusafuka, and Takuya Miwa

J. Polym. Sci. Part A: Polym. Chem., 2014, 52(3), 401–409

DOI: 10.1002/pola.27013

## 2013

Synthesis and Optical Properties of Poly(p-benzamide)s bearing Oligothiophene on Amide Nitrogen Atom through Alkylene Spacer

Koji Takagi,\* Katsuya Nobuke, Yuma Nishikawa, and Ryohei Yamakado

Polym. J., 2013, 45(12), 1171–1176

DOI: 10.1038/pj.2013.52

N-Heterocyclic Carbene-Catalyzed Cyclotetramerization of Acrylates

Shin-ichi Matsuoka,\* Shoko Namera, Atsushi Washio, Koji Takagi, and Masato Suzuki

Org. Lett., 2013, 15(23), 5916–5919

DOI: 10.1021/ol04021942

Experimental Mechanistic Studies of the Tail-to-Tail Dimerization of Methyl Methacrylate Catalyzed by N-Heterocyclic Carbene

Terumasa Kato, Yoshiya Ota, Shin-ichi Matsuoka,\* Koji Takagi, Masato Suzuki

Org. Chem., 2013, 78(17), 8739–8747

DOI: 10.1021/jo401477b

Helicity Induction in Three p-Conjugated Chromophores by Planar Chirality of Calixamide

Ryohei Yamakado, Koichiro Mikami,\* Koji Takagi,\* Isao Azumaya,\* Shinri Sugimoto, Shin-ichi

Matsuoka, Masato Suzuki, Kosuke Katagiri, Masanobu Uchiyama, and Atsuya Muranaka

Chem. –Eur. J., 2013, 19(36), 11853–11857

DOI: 10.1002/chem.201301198

Synthesis and Optical Properties of Conjugated Polymers bearing 1,8-Difunctionalized Carbazole Unit

Koji Takagi,\* Hidenobu Takao, and Tsuyoshi Nakagawa

Polym. J., 2013, 45(4), 396–400

DOI: 10.1038/pj.2012.153

Synthesis of Green and Blue Fluorescent Ladder-Type Conjugated Imidazolium Compounds

Koji Takagi,\* Yohei Ito, Kazuma Kusafuka, and Masanori Sakaida

Org. Biomol. Chem., 2013, 11(14), 2245–2248

DOI: 10.1039/C3OB40164B

A Screw-Shaped Alignment of Pyrene using m-Calix[3]amide

Ryohei Yamakado, Shin-ichi Matsuoka, Masato Suzuki, Koji Takagi,\* Kosuke Katagiri, and Isao Azumaya  
Tetrahedron, 2013, 69(5), 1516–1520  
DOI: 10.1016/j.tet.2012.12.015

## 2012

Sequential One-Pot and Three-Component Reactions of An N-Heterocyclic Carbene to form 4-(1,2,4-Triazol-5-ylidene)pyrrolidine-2,5-diones: A Tandem Umpolung/Annulation Sequence via Deoxy-Breslow Intermediates  
Shin-ichi Matsuoka,\* Yusuke Tochigi, Koji Takagi, and Masato Suzuki  
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DOI: 10.1016/j.tet.2012.08.076

Preparation of Molecular Cage by Coordination of m-Calix[3]amide bearing Pyridine with Palladium Complex  
Ryohei Yamakado, Shinri Sugimoto, Shin-ichi Matsuoka, Masato Suzuki, Yasuhiro Funahashi, and Koji Takagi\*  
Chem. Lett., 2012, 41(3), 249–251  
DOI: 10.1246/cl.2012.249

## 2011

Organocatalytic Head-to-Tail Dimerization of Methacrolein via Conjugate Addition of Methanol: An Alcohol Activation Mechanism proved by Electrospray Ionization Mass Spectrometry  
Shin-ichi Matsuoka,\* Shintaro Shimakawa, Koji Takagi, and Masato Suzuki  
Tetrahedron Lett., 2011, 52, 6835–6838  
DOI: 10.1016/j.tetlet.2011.10.070

Synthesis and Isomerization of Conjugated Oligomers Containing Azoimidazole Unit  
Koji Takagi,\* Takato Isomura, Yohei Ito, Masanori Sakaida, Shusaku Nagano, and Takahiro Seki  
J. Polym. Sci. Part A: Polym. Chem., 2011, 49(23), 4993–5000  
DOI: 10.1002/pola.24958

Organocatalytic Tail-to-Tail Dimerization of Olefin: Umpolung of Methyl Methacrylate Mediated by N-Heterocyclic Carbene

Shin-ichi Matsuoka,\* Yoshiya Ota, Atsushi Washio, Akiho Katada, Kenji Ichioka, Koji Takagi, and Masato Suzuki

Org. Lett., 2011, 13(14), 3722–3725

DOI: 10.1021/ol201380m

Regioselective Grignard Metathesis Reaction of 2,5-Dibromo-3-(6'-hexylpyridine-2'-yl)thiophene and Kumada Coupling Polymerization

Koji Takagi,\* Hyunho Joo, Yusuke Yamashita, Eiki Kawagita, and Chikako Torii

J. Polym. Sci. Part A: Polym. Chem., 2011, 49(18), 4013–4020

DOI: 10.1002/pola.24843

Syntheses of Aliphatic Polycarbonates from 2'-Deoxyribonucleosides

Masato Suzuki,\* Toyokazu Sekido, Shin-ichi Matsuoka, and Koji Takagi

Biomacromolecules, 2011, 12(5), 1449–1459

DOI: 10.1021/bm101328j

Self-Assembly of Oligothiophene Chromophores by m-Calix[3]amide Scaffold

Koji Takagi,\* Shinri Sugimoto, Ryohei Yamakado, and Katsuya Nobuke

J. Org. Chem., 2011, 76(8), 2471–2478

DOI: 10.1021/jo102160x

Polycondensation of 4-Octylaminobenzoic Acid Esters Having Bithiophene at 3-Position and Optical Properties of Polymer

Katsuya Nobuke, Ryohei Yamakado, and Koji Takagi\*

Kobunshi Ronbunshu 2011, 68(1), 33–38

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Poly(3-hexylthiophene)-block-poly(3-semifluoroalkylthiophene) for Polymer Solar Cells

Ichiko Yamada, Takeshi Toru, Koji Takagi, Yasuhiko Hayashi,\* Tetsuo Soga, and Norio Shibata

Int. J. Mol. Sci., 2010, 11(12), 5027–5039

DOI: 10.3390/ijms11125027

Synthesis and Characterization of Nitrogen-Linked Carbazole-Containing Fluorescent Polymers

Koji Takagi,\* Hidenobu Takao, and Tsuyoshi Nakagawa

J. Polym. Sci. Part A: Polym. Chem., 2010, 48(17), 3729–3735

DOI: 10.1002/pola.24155

Poly(ethylene glycol)-Induced Acceleration of Free Radical Polymerization of Methyl Methacrylate:  
Effects of Highly Viscous Solvent and Kinetic Study

Shin-ichi Matsuoka,\* Takashi Kikuno, Koji Takagi, and Masato Suzuki

Polym. J., 2010, 42(5), 368–374

DOI: 10.1038/pj.2010.17

Synthesis and Light-Emitting Properties of Carbazole-Based Copolymers Bearing Cyano-Substituted  
Arylenevinylene Chromophore

Koji Takagi,\* Tsuyoshi Nakagawa, and Hidenobu Takao

J. Polym. Sci. Part A: Polym. Chem., 2010, 48(1), 91–98

DOI: 10.1002/pola.23764