



Documents

Kurokhtina, A.A., Larina, E.V., Schmidt, A.F.

Measuring the kinetic isotope effect at natural isotopic abundances for discriminating between the homogeneous and heterogeneous catalytic mechanisms in the Heck and Suzuki reactions

(2016) *Kinetics and Catalysis*, 57 (1), pp. 32-38.

DOI: 10.1134/S0023158415060063

Document Type: Article

Source: Scopus

Cano, R., Schmidt, A.F., McGlacken, G.P.

Direct arylation and heterogeneous catalysis; Ever the twain shall meet

(2015) *Chemical Science*, 6 (10), pp. 5338-5346. Cited 3 times.

DOI: 10.1039/c5sc01534k

Document Type: Review

Source: Scopus

Kurokhtina, A.A., Larina, E.V., Shmidt, A.F.

Study of the differential selectivity of cross-coupling reactions for elucidating the nature of the true catalyst

(2015) *Kinetics and Catalysis*, 56 (2), pp. 190-196.

DOI: 10.1134/S0023158415020068

Document Type: Article

Source: Scopus

Schmidt, A.F., Kurokhtina, A.A., Larina, E.V.

Differential selectivity measurements and competitive reaction methods as effective means for mechanistic studies of complex catalytic reactions

(2014) *Catalysis Science and Technology*, 4 (10), pp. 3439-3457. Cited 1 time.

DOI: 10.1039/c4cy00479e

Document Type: Review

Source: Scopus

Larina, E.V., Kurokhtina, A.A., Schmidt, A.F.

Approach to the Determination of Kinetic Order of Catalyst Deactivation: Observation of Unusual Kinetics in the Suzuki - Miyaura Reaction

(2014) *Mendeleev Communications*, 24 (2), pp. 96-97. Cited 1 time.

DOI: 10.1016/j.mencom.2014.03.010

Document Type: Article

Source: Scopus

Vyazova, N.G., Kryukova, V.N., Shaulina, L.P., Pisar'Kova, E.A., Shmidt, A.F.

Adsorption properties of coal from the Ishideiskoe deposit, semicokes, and ash and slag wastes from the combustion of coals from Siberia and Sakhalin

(2014) *Solid Fuel Chemistry*, 48 (3), pp. 170-179.

DOI: 10.3103/S0361521914030100

Document Type: Article

Source: Scopus

Kurokhtina, A.A., Larina, E.V., Schmidt, A.F., Malaika, A., Krzyzynska, B., Rechnia, P., Kozlowski, M.
Mechanistic studies of the Suzuki-Miyaura reaction with aryl bromides using Pd supported on micro- and mesoporous activated carbons
(2013) *Journal of Molecular Catalysis A: Chemical*, 379, pp. 327-332. Cited 7 times.

DOI: 10.1016/j.molcata.2013.08.032

Document Type: Article
Source: Scopus

Schmidt, A.F., Kurokhtina, A.A.
Distinguishing between the homogeneous and heterogeneous mechanisms of catalysis in the mizoroki-heck and suzuki-miyaura reactions: Problems and prospects
(2012) *Kinetics and Catalysis*, 53 (6), pp. 714-730. Cited 19 times.

DOI: 10.1134/S0023158412060109

Document Type: Review
Source: Scopus

Schmidt, A.F., Kurokhtina, A.A., Smirnov, V.V., Larina, E.V., Chechil, E.V.
Competing reaction method for identification of fast and slow steps of catalytic cycles: Application to Heck and Suzuki reactions
(2012) *Kinetics and Catalysis*, 53 (2), pp. 214-221. Cited 2 times.

DOI: 10.1134/S0023158412020103

Document Type: Article
Source: Scopus

Schmidt, A.F., Kurokhtina, A.A., Larina, E.V.
Simple kinetic method for distinguishing between homogeneous and heterogeneous mechanisms of catalysis, illustrated by the example of "ligand-free" suzuki and heck reactions of aryl iodides and aryl bromides
(2012) *Kinetics and Catalysis*, 53 (1), pp. 84-90. Cited 10 times.

DOI: 10.1134/S0023158412010107

Document Type: Article
Source: Scopus

Vyazova, N.G., Shaulina, L.P., Ukhova, N.N., Shmidt, A.F.
Coals from the Khingui coal manifestation
(2011) *Solid Fuel Chemistry*, 45 (5), pp. 309-312. Cited 1 time.

DOI: 10.3103/S0361521911050132

Document Type: Article
Source: Scopus

Schmidt, A.F., Kurokhtina, A.A., Larina, E.V.
Role of a base in suzuki-miyaura reaction
(2011) *Russian Journal of General Chemistry*, 81 (7), pp. 1573-1574. Cited 15 times.

DOI: 10.1134/S1070363211070334

Document Type: Article
Source: Scopus

Smirnov, V.V., Pröckl, S.S., Schmidt, A.F., Köhlerb, K.
In situ NMR studies of the mechanism of homogeneously and heterogeneously catalysed Heck reactions of aryl chlorides and bromides
(2011) *Arkivoc*, 2011 (8), pp. 225-241. Cited 2 times.

Document Type: Article
Source: Scopus

Shmidt, A.F., Kurokhtina, A.A.
Suzuki reaction with aryl bromides at room temperature in the presence of a simple "ligand-free" catalytic system

(2010) *Russian Journal of Applied Chemistry*, 83 (7), pp. 1248-1253. Cited 2 times.

DOI: 10.1134/S1070427210070153

Document Type: Article

Source: Scopus

Trofimov, B.A., Mal'Kina, A.G., Sapozhnikov, A.N., Vasil'Eva, I.E., Shmidt, A.F., Kurokhtina, A.A., Vakul'Skaya, T.I., Khutsishvili, S.S. **Polymerization of acetylene in aqueous PdCl₂-CuCl solutions: Novel catalytically active palladium-copper-containing carbon materials**

(2010) *Doklady Chemistry*, 431 (1), pp. 94-98.

DOI: 10.1134/S0012500810030080

Document Type: Article

Source: Scopus

Smirnov, V.V., Al Halaiqa, A., Shmidt, A.F.

Study of "ligand-free" catalytic systems with low palladium content for the Heck reaction

(2010) *Russian Journal of Applied Chemistry*, 83 (3), pp. 453-457.

DOI: 10.1134/S1070427210030158

Document Type: Article

Source: Scopus

Schmidt, A.F., Kurokhtina, A.A., Svechkarev, A.N., Smirnov, V.V., Al-Halaiqa, A.

Problems of distinguishing the homogeneous and heterogeneous mechanisms of the Suzuki reaction

(2010) *Kinetics and Catalysis*, 51 (1), pp. 113-118. Cited 1 time.

DOI: 10.1134/S0023158410010180

Document Type: Conference Paper

Source: Scopus

Kurokhtina, A.A., Schmidt, A.F.

Suzuki reaction: Mechanistic multiplicity versus exclusive homogeneous or exclusive heterogeneous catalysis

(2009) *Arkivoc*, 2009 (11), pp. 185-203. Cited 11 times.

Document Type: Article

Source: Scopus

Schmidt, A.F., Al-Halaiqa, A., Smirnov, V.V., Kurokhtina, A.A.

State of palladium in ligandless catalytic systems for the Heck reaction of nonactivated bromobenzene

(2008) *Kinetics and Catalysis*, 49 (5), pp. 638-643. Cited 5 times.

DOI: 10.1134/S0023158408050078

Document Type: Article

Source: Scopus

Schmidt, A.F., Al-Halaiqa, A., Smirnov, V.V.

New approaches to heck reaction testing for homogeneity-heterogeneity

(2008) *Kinetics and Catalysis*, 49 (3), pp. 395-400. Cited 6 times.

DOI: 10.1134/S0023158408030129

Document Type: Article

Source: Scopus

Shmidt, A.F., Al Halaiqa, A., Smirnov, V.V.

Enhancement of catalyst performance in Heck reaction of nonactivated aryl bromides in the absence of phosphine ligands

(2007) *Russian Journal of Applied Chemistry*, 80 (10), pp. 1695-1698.

DOI: 10.1134/S1070427207100187

Document Type: Article

Source: Scopus

Schmidt, A.F., Al-Halaiqa, A., Smirnov, V.V.

Heck reactions of alkenes with aryl iodides and aryl bromides: Rate-determining steps deduced from a comparative kinetic study of competing and noncompeting reactions

(2007) *Kinetics and Catalysis*, 48 (5), pp. 716-727. Cited 7 times.

DOI: 10.1134/S0023158407050175

Document Type: Article

Source: Scopus

Schmidt, A.F., Smirnov, V.V., Al-Halaiga, A.

Kinetics of the Heck reactions of styrene with bromobenzene and iodobenzene in the presence of ligandless catalytic systems: A comparative study

(2007) *Kinetics and Catalysis*, 48 (3), pp. 390-397. Cited 9 times.

DOI: 10.1134/S002315840703007X

Document Type: Article

Source: Scopus

Schmidt, A.F., Al Halaiqa, A., Smirnov, V.V.

Interplays between reactions within and without the catalytic cycle of the Heck reaction as a clue to the optimization of the synthetic protocol

(2006) *Synlett*, (18), pp. 2861-2878. Cited 43 times.

DOI: 10.1055/s-2006-951527

Document Type: Review

Source: Scopus

Trofimov, B.A., Schmidt, E.Yu., Mikhaleva, A.I., Vasil'itsov, A.M., Zaitsev, A.B., Smolyanina, N.S., Senotrusova, E.Yu., Afonin, A.V., Ushakov, I.A., Petrushenko, K.B., Kazheva, O.N., Dyachenko, O.A., Smirnov, V.V., Schmidt, A.F., Markova, M.V., Morozova, L.V.

2-arylazo-1-vinylpyrroles: A novel promising family of reactive dyes

(2006) *European Journal of Organic Chemistry*, (17), pp. 4021-4033. Cited 27 times.

DOI: 10.1002/ejoc.200600357

Document Type: Article

Source: Scopus

Schmidt, A.F., Al-Halaiqa, A., Smirnov, V.V.

Effect of macrokinetic factors on the ligand-free Heck reaction with non-activated bromoarenes

(2006) *Journal of Molecular Catalysis A: Chemical*, 250 (1-2), pp. 131-137. Cited 17 times.

DOI: 10.1016/j.molcata.2006.01.051

Document Type: Article

Source: Scopus

Shmidt, A.F., Smirnov, V.V.

Oxidative addition step in reactions involving palladium activation of carbon-halogen and carbon-oxygen bonds

(2005) *Kinetics and Catalysis*, 46 (4), pp. 495-501. Cited 5 times.

DOI: 10.1007/s10975-005-0101-0

Document Type: Article

Source: Scopus

Shmidt, A.F., Smirnov, V.V.

Role of catalyst deactivation and regeneration in the Heck reaction involving unactivated aryl bromides

(2005) *Kinetics and Catalysis*, 46 (1), pp. 54-58. Cited 3 times.

Document Type: Article

Source: Scopus

Shmidt, A.F., Smirnov, V.V.

Role of catalyst deactivation and regeneration in the Heck reaction involving unactivated aryl bromides
(2005) *Kinetics and Catalysis*, 46 (1), pp. 47-51. Cited 5 times.

DOI: 10.1007/s10975-005-0007-x

Document Type: Article

Source: Scopus

Schmidt, A.F., Smirnov, V.V.

Simple method for enhancement of the ligand-free palladium catalyst activity in the Heck reaction with non-activated bromoarenes

(2003) *Journal of Molecular Catalysis A: Chemical*, 203 (1-2), pp. 75-78. Cited 58 times.

DOI: 10.1016/S1381-1169(03)00382-0

Document Type: Article

Source: Scopus

Schmidt, A.F., Smirnov, V.V.

The mechanism of the palladium hydride β -elimination step in the heck reaction

(2003) *Kinetics and Catalysis*, 44 (4), pp. 518-523. Cited 7 times.

DOI: 10.1023/A:1025190016959

Document Type: Article

Source: Scopus

Shmidt, A.F., Smirnov, V.V.

The NMR study of the mechanism of alkene arylation with anhydrides of aromatic acids

(2002) *Kinetics and Catalysis*, 43 (2), pp. 195-198. Cited 9 times.

DOI: 10.1023/A:1015364310409

Document Type: Article

Source: Scopus

Shmidt, A.F., Smirnov, V.V.

Kinetic study of the heck reaction by the method of competing reactions

(2001) *Kinetics and Catalysis*, 42 (6), pp. 800-804. Cited 11 times.

DOI: 10.1023/A:1013231232636

Document Type: Article

Source: Scopus

Shmidt, A.F., Smirnov, V.V., Starikova, O.V., Elaev, A.V.

The effect of the coupling of the formation and regeneration of catalytically active complexes with the main catalytic cycle in the heck reaction

(2001) *Kinetics and Catalysis*, 42 (2), pp. 199-204. Cited 8 times.

DOI: 10.1023/A:1010409200196

Document Type: Article

Source: Scopus

Shmidt, A.F., Smirnov, V.V.

Use of aromatic acid anhydrides as arylation agents in the heck reaction

(2000) *Kinetics and Catalysis*, 41 (6), pp. 743-744. Cited 15 times.

Document Type: Article

Source: Scopus

Schmidt, A.F., Halaiqa, A., Nindakova, L.O., Skripina, O.S.

Reducing agents as components in catalytic systems of the Heck reaction

(1999) *Reaction Kinetics and Catalysis Letters*, 67 (2), pp. 301-304. Cited 12 times.

Document Type: Article

Source: Scopus

Shmidt, A.F., Khalaika, A.

The Heck Catalytic Reaction as an Example of the Self-controlled System
(1998) *Kinetics and Catalysis*, 39 (6), pp. 803-809. Cited 13 times.**Document Type:** Article**Source:** Scopus

Shmidt, A.F., Khalaika, A., Nindakova, L.O., Shmidt, E.Yu.

Mechanism of Alkene Insertion into the Pd-Ar Bond in the Heck Reaction
(1998) *Kinetics and Catalysis*, 39 (2), pp. 200-206. Cited 14 times.**Document Type:** Article**Source:** Scopus

Shmidt, A.F., Khalaika, A., Bylkova, V.G.

Role of a Base in the Catalytic Arylation of Olefins
(1998) *Kinetics and Catalysis*, 39 (2), pp. 194-199. Cited 11 times.**Document Type:** Article**Source:** Scopus

Shmidt, A.F., Vladimirova, T.A., Shmidt, E.Yu.

Regioselectivity of the Step of Olefin Insertion into a Pd-C Bond in the Heck Reaction
(1997) *Kinetics and Catalysis*, 38 (2), pp. 245-250. Cited 9 times.**Document Type:** Article**Source:** Scopus

Shmidt, A.F., Vladimirova, T.A., Dmitrieva, T.V., Zinchenko, S.V.

Regioselective α -Arylation of N-Vinylpyrroles by the Heck Reaction
(1996) *Russian Journal of General Chemistry*, 66 (9), pp. 1497-1500. Cited 1 time.**Document Type:** Article**Source:** Scopus

Shmidt, A.F., Mametova, L.V.

Main Features of Catalysis in the Styrene Phenylation Reaction
(1996) *Kinetics and Catalysis*, 37 (3), pp. 406-408. Cited 57 times.**Document Type:** Article**Source:** Scopus

Shmidt, A.F., Vladimirova, T.A., Shmidt, E.Yu., Dmitrieva, T.V.

Regioselective α -arylation of N-vinylpyrroles by the Heck reaction
(1995) *Russian Chemical Bulletin*, 44 (4), pp. 767-768. Cited 1 time.**DOI:** 10.1007/BF00698522**Document Type:** Letter**Source:** Scopus

Shmidt, A.F., Mametova, L.V., Tkach, V.S.

Limiting stage of the Heck reaction
(1991) *Kinetics and Catalysis*, 32 (3 pt 2), pp. 684-685. Cited 1 time.**Document Type:** Article**Source:** Scopus

Shmidt, A.F., Mametova, L.V., Dmitrieva, T.V., Shmidt, E.Yu., Tkach, V.S.

Effect of base on the state of palladium in the synthesis of styrene in the heck reaction

(1991) *Bulletin of the Academy of Sciences of the USSR Division of Chemical Science*, 40 (1), p. 190.

DOI: 10.1007/BF00959660

Document Type: Article

Source: Scopus

ELSEVIER

Copyright © 2016 Elsevier B.V. All rights reserved. Scopus® is a registered trademark of Elsevier B.V.

 RELX Group™