

	Title	Authors	Date	Publication	Keywords
1	Microwave-promoted Suzuki coupling reactions with organotrifluoroborates in water using ultra-low catalyst loadings	Riina K. Arvela, Nicholas E. Leadbeater , Tamera L. Mack and Chad M. Kormos	2006	Tetrahedron Letters 47 (2006) 217–220	Suzuki, organotrifluoroborates,
2	Expedited Palladium-Catalyzed Amination of Aryl Nonaflates through the Use of Microwave-Irradiation and Soluble Organic Amine Bases	Rachel E. Tundel, Kevin W. Anderson, and Stephen L. Buchwald	2006	J. Org. Chem., 2006, 71(1), 430-433(Note)	Amination; (Hetero)aryl Nonaflate; palladium; amine base
3	Microwave enhanced cross-coupling reactions involving potassium organotrifluoroborates	George W. Kabalka and Mohammad Al-Masum	2005	Tetrahedron Letters 46 (2005) 6329–6331	Suzuki, cross-coupling, aryltrifluoroborate, aryl iodide,
4	Microwave-Assisted Intramolecular Suzuki-Miyaura Reaction to Macrocyclic, a Concise Asymmetric Total Synthesis of Biphenomycin B	Renaud Le'pine and Jieping Zhu	2005	Org. Lett., Vol. 7, No. 14, 2005	Suzuki-Miyaura, intramolecular cyclization, cyclophane
5	Utilization of microwave heating in the McMurry reaction for facile coupling of aldehydes and ketones to give alkenes	Nicolai Stuhr-Hansen	2005	Tetrahedron Letters 46 (2005) 5491–5494	McMurray Coupling, alkene, protected thiols, nanoscale electronics
6	Microwave-Assisted Synthesis of 1,5- and 2,6-Linked Naphthylene-Based Ladder Polymers	Benjamin S. Nehls, Stefan Fuldner, Eduard Preis, Tony Farrell , and Ullrich Scherf	2005	Macromolecules, Vol. 38, No. 3, 2005	Suzuki, 2,6-naphthylene polyketone, ladder polymer, optoelectronic

7	Fluorous synthesis of biaryl-substituted proline analogs by 1,3-dipolar cycloaddition and Suzuki coupling reactions	Wei Zhang and Christine Hiu-Tung Chen	2005	Tetrahedron Letters 46 (2005) 1807–1810	Suzuki, cycloaddition, bicyclic proline, multicomponent, fluorous synthesis
8	Automated batch scale-up of microwave-promoted Suzuki and Heck coupling reactions in water using ultra-low metal catalyst concentrations	Riina K. Arvela, Nicholas E. Leadbeater , and Michael J. Collins, Jr.	2005	Tetrahedron 61 (2005) 9349-9355	Stop-flow processor, scale-up, Suzuki, Heck, water
9	A novel highly active biomaterial supported palladium catalyst	Mark J. Gronnow, Rafael Luque, Duncan J. Macquarrie and James H. Clark	2005	Green Chem., 2005, 7, 552–557	cross-coupling, biomaterial support; StarCat; palladium
10	Optical properties of donor–acceptor phenylene-ethynylene systems containing the 6-methylpyran-2-one group as an acceptor	Jonathan C. Collings, Alexander C. Parsons, Laurent Porre`s, Andrew Beeby, Andrei S. Batsanov, Judith A. K. Howard.	2005	Chem. Commun., 2005, 2666–2668	Sonogshira, 2-pyrone, chromophore, linear and non-linear optical properties,
11	Efficient Methods for the Synthesis of 2-Hydroxyphenazine Based on the Pd-Catalyzed N-Arylation of Aryl Bromides	Mario Tietze, Alberto Iglesias, Elena Merisor, Ju Irgen Conrad, Iris Klaiber, and Uwe Beifuss	2005	Org Lett, 2005, Vol 7, No 8, 1549-1552	Phenazine, Diphenylamine, Buchwald-Hartwig, intramolecular cyclization
12	A Reassessment of the Transition-Metal Free Suzuki-Type Coupling Methodology	Riina K. Arvela, Nicholas E. Leadbeater , Michael S. Sangi, Victoria A. Williams, Patricia Granados. and Robert D.	2005	J. Org. Chem., 2005, 70(1), 161-168.	Suzuki, biaryls, water, phase-transfer agent, low palladium concentration, sodium carbonate
13	Microwave-Promoted Heck Coupling Using Ultralow Metal Catalyst Concentrations	Arvela, RK; Leadbeater , NE	2005	J. Org. Chem., 2005, 70, 1786-1790.	

14	Microwave-Enhanced Cadogan Cyclization: An Easy Access to the 2-Substituted Carbazoles and other Fused Heterocyclic Systems	Microwave-Enhanced Cadogan Cyclization Prasad Appukkuttan, Erik Van der Eycken, Wim Dehaen	2005	Synlett 2005, No. 1, pp 0127–0133	Carbazole, fused heterocycle, Cadogan cyclization, Suzuki–Miyaura cross-coupling
15	Palladium-Catalyzed Cross-Coupling of Aryl Triethylammonium Bis(catechol) Silicates with Aryl Bromides Using Microwave Irradiation	Seganish, WM; DeShong, P	2004	Org Lett, Vol 6, No 23, 2004, 4379-4381	Hiyama coupling, aryl bromides, aryl bis(catechol) silicates, unsymmetrical biaryls
16	Microwave heating of heterogeneously catalysed Suzuki reactions in a micro reactor	Ping He, Stephen J. Haswell and Paul D. I. Fletcher	2004	Lab Chip, 2004, 4, 38-41	Suzuki reaction, biaryls, micro-reactor, solid phase catalyst, continuous flow
17	Rapid Palladium-Catalyzed Aminations of Aryl Chlorides with Aliphatic Amines Under Temperature-Controlled Microwave Heating	Maes, BUW ; Loones, KTJ; Lemiere, GLF; Dommissie, RA	2004	Tetrahedron 60 (2004) 11559–11564	Buchwald–Hartwig amination, Aryl chlorides, Aryl bromides, primary amines, palladium
18	Efficient Palladium-Catalyzed Cross-Coupling of beta-Chloroalkylidene/arylidene Malonates Using Microwave Chemistry	Poondra, RR; Fischer PM; Turner, NJ	2004	J Org Chem 2004, 69, 6920-6922	beta-Aryl/alkylarylidene malonate, Suzuki, cross coupling, palladium catalyst,
19	Microwave-assisted N-arylation of a sulfoximine with aryl chlorides	Harmata, M ; Hong, X, Ghosh, SK	2004	Tetrahedron Lett, 2004, 45, 5233-5236	N-Arylsulfoximines, sulfoximine, aryl chloride, coupling, benzothiazine
20	A Highly Efficient Microwave-Assisted Suzuki Coupling Reaction of Aryl Perfluorooctylsulfonates with Boronic Acids	Zhang, W ; Chen, C.H.-T; Lu, Y; Nagashima, T	2004	Org Lett, 2004, 6(9); 1473-1476	Suzuki, biaryls, phenol, aryl triflate, aryl boronic acid, fluoros synthesis, palladium

21	Controlled mono and double Heck reactions in water catalyzed by an oxime-derived palladacycle	Luis Botella and Carmen Najera	2004	Tetrahedron Letters 45 (2004) 1833–1836	Heck, arylation, alkene, palladacycle, palladium, water
22	Six vs. Five-Membered Ring Formation in Radical Cyclizations of 7-Bromo-Substituted Hexahydroindolinones	Ozdemir, AD; Padwa, A ; Rashatasakhon, P; Willis, J.	2004	Org Lett, 2004, 6(6); 917-920	Stille, cross-coupling, intramolecular, cyclized diene, hexahydroindolinone
23	Semiconducting Polymers via Microwave-Assisted Suzuki and Stille-Cross Coupling Reactions	Benjamin S. Nehls, Udom Asawapirom Stefan Fuldner, Eduard Preis, Tony Farrell, and Ullrich Scherf	2004	Adv Funct Mater 2004 , 14, No 4, April	Suzuki, Stille, ladder polymer,
24	A Fluorous-Tagged, Acid-Labile Protecting Group for the Synthesis of Carboxamides and Sulfonamides	Anne-Laure Villard, Brian H. Warrington, and Mark Ladlow	2004	J Combi Chem; 2004 6(4); 611-622	Carboxamides, Sulfonamides, fluorous-tag, combinatorial chemistry, Suzuki-Miyaura coupling
25	Microwave assisted Petasis boronic-Mannich reactions	McLean, NJ; Tye, H ; Whittaker, M	2004	Tetrahedron Lett., 2004, 45, 993-95	Petasis, Boronic acid, Mannich, amino acid derivative, tertiary amine, glyoxylic acid, salicylaldehyde
26	Rapid cyanation of aryl iodides in water using microwave promotion	Arvela, RK; Leadbeater, NE ; Torenius, HM; Tye, H	2003	Org. Biomol. Chem., 2003, 1, 1119-21	
27	Transition-Metal-Free Sonogashira-Type Coupling Reactions in Water	Prasad Appukkuttan, Wim Dehaen, and Erik Van der Eycken	2003	Eur. J. Org. Chem. 2003, 4713 4716	cross-coupling, Sonogashira, metal-free, water, (hetero)aryl halide, acetylene, green chemistry, phase transfer catalyst

28	Rapid, easy cyanation of aryl bromides and chlorides using nickel salts in conjunction with microwave promotion	Arvela, RK; Leadbeater, NE	2003	J. Org. Chem, 2003, 68, 9122-25	cyanation, aryl nitriles, aryl halides, nickel cyanide
29	First Examples of Transition-Metal Free Sonogashira-Type Couplings	Nicholas E. Leadbeater, Maria Marco, and Bonnie J. Tominack	2003	Org. Lett., Vol. 5, No. 21, 2003	Sonogashira, aryl alkynes, water, transition metal-free, phase-transfer agent
30	Fluorous technologies for solution-phase high-throughput organic synthesis	Zhang, W	2003	Tetrahedron, 2003, 59, 4475-4489	Suzuki, fluorous synthesis, review
31	Microwave-assisted functionalization of bromo-fluorescein and bromorhodamine derivatives	Han, JW; Castro, JC; Burgess, K	2003	Tetrahedron Lett., 2003, 44, 9359-62	fluorescent dyes, borylation; Suzuki coupling; Sonogashira coupling, fluorescein and rhodamine
32	A new β-carbolinone synthesis using a Rh(II)-promoted [3+2]-cycloaddition and Pd(0) cross-coupling/Heck cyclization chemistry	Harris, JM; Padwa, A	2003	Org. Lett., 2003, 5, 4195	amination, cross-coupling, aryl halides, aryl triflates, amines
33	Microwave-assisted multi-component synthesis of fused 3-aminoimidazoles	Ireland, SM; Tye, H; Whittaker, M	2003	Tetrahedron Lett., 2003, 44, 4369-71	heterocycle, aminoimidazole, Ugi, multi-component, scandium triflate
34	Microwave-assisted Mannich-type three-component reactions	Leadbeater, NE; Torenus, HM; Tye, H	2003	Molec. Diversity, 2003, 7, 135-44	Mannich, multi-component reaction, ionic liquids, substituted propargylamines

35	Microwave-enhanced transition metal-catalyzed decoration of 2(1H)-pyrazinone	Bisztray, K; Dehaen, W; Kappe, O; Kaval, N; Van der Eycken, E;	2003	Molec. Diversity, 2003, 7, 125-133	cyanation, dechlorination, Heck, 2(1H)-pyrazinone, Sonogashira, Stille, Suzuki, palladium, cross-coupling, heterocycle
36	Rapid and amenable Suzuki coupling reaction in water using microwave and conventional heating	Leadbeater, NE; Marco, M	2003	J. Org. Chem., 2003, 68, 888-92	Suzuki, biaryls, aryl bromides, phenylboronic acid, phase transfer agent, water, low palladium concentrations
37	Transition-metal-free Suzuki-type coupling reactions	Leadbeater, NE; Marco, M	2003	Angew. Chem. Intl. Ed., Eng., 2003, 42, 1407-09	Suzuki, biaryls, transition metal-free, aryl bromides, phenylboronic acid, phase transfer agent, water
38	Transition-metal-free Suzuki-type coupling reactions: scope and limitations of the methodology	Leadbeater, NE; Marco, M	2003	J. Org. Chem., 2003, 68, 5660-67	Suzuki, biaryls, transition metal-free, aryl bromides, phenylboronic acid, phase transfer agent, water
39	The first rapid palladium-catalyzed aminations of (azahetero)aryl chlorides under temperature-controlled microwave heating	Maes, BUW; Loones, KTJ; Lemiere, GLF; Dommissie, RA	2003	Synlett, 2003, 12, 1822-25	Buchwald-Hartwig aminations, (azahetero)aryl chlorides, aryl amines, palladium
40	Studies on high-temperature amination reactions of aromatic chlorides using discrete palladium-N-heterocyclic carbene (NHC) complexes and in situ palladium/imidazolium salt protocols	McCarroll, AJ; Sandham, DA; Titcomb, LR; de K. Lewis, AK; Cloke, FGN; Davies, BP; de Santana, AP; Hiller, W: Caddick, S	2003	Molec. Diversity, 2003, 7, 115-23	amination, aromatic chlorides, imidazolium salts, palladium-N-heterocyclic carbene
41	Combination of Microwave reactions with fluoros separations in the palladium catalyzed synthesis of aryl sulfides	Zhang, W; Chen, C.H.-T; Lu, Y	2003	Molec. Diversity, 2003, 7, 199-202	aryl sulfide, cross-coupling, palladium, fluoros synthesis, aryl triflate, thiol

- 42 **Synthesis of pyridinyl-pyrimidines via Pd-catalyzed cross-coupling reactions: a comparison of classical thermal and microwave assisted reaction conditions** Stanetty, P; Schnurch, M; Mihovilovic, MD 2003 Synlett, 2003, 12, 1862-64
- 43 **Ligand-free palladium catalysis of the Suzuki reaction in water using microwave heating** Leadbeater, NE; Marco, M 2002 Org. Lett., 2002, 4, 2973-76 Suzuki, ligand-free palladium, biaryls, water, phase-transfer agent