

## List of Publications

329. D. Kyriazi, L. Voth, A. Bader, W. Ewert, J. Gerlach, K. Elfrink, P. Franz, M. I. Tsap, B. Schirmer, J. Damiano-Guercio, F. K. Hartmann, M. Plenge, A. Salari, D. Schoetteldreier, K. Strienke, N. Bresch, C. Salinas, H. O. Gutzeit, N. Schaumann, K. Hussein, H. Bähre, I. Brüscher, P. Claus, D. Neumann, M. H. Taft, H. R. Shcherbata, A. Ngezahayo, M. Bähler, M. Amiri, H.-J. Knölker, M. Preller, G. Tsiavaliaris, *Nat. Commun.* **2024**, *15*, 9947: An Allosteric Inhibitor of RhoGAP Class-IX Myosins Suppresses the Metastatic Features of Cancer Cells.
328. D. Auguin, J. Robert-Paganin, S. Réty, C. Kikuti, A. David, G. Theumer, A. W. Schmidt, H.-J. Knölker, A. Houdusse, *Nat. Commun.* **2024**, *15*, 4885: Omecamtiv Mecarbil and Mavacamten Target the Same Myosin Pocket Despite Opposite Effects in Heart Contraction.
327. R. Thoran, F. Puls, H.-J. Knölker, *Chem. Eur. J.* **2024**, *30*, e202303794: Synthesis of 1,1'-Bicarbazoles by Sequential Iron(III)- and Palladium(II)-Catalyzed Oxidative Coupling Reactions.
326. G. P. Lobo, R. Radhakrishnan, M. Leung, A. Gruesen, H.-J. Knölker, F. J. van Kuijk, S. R. Montezuma, *Adv. Exp. Med. Biol.* **2023**, *1415*, 499–505: In Silico Prediction of MYO1C-Rhodopsin Interactions and Its Significance in Protein Localization and Visual Function.
325. R. Thoran, T. Schuh, P. Holling, F. Puls, O. Kataeva, H.-J. Knölker, *Eur. J. Org. Chem.* **2023**, *26*, e202300591: Transition Metals in Organic Synthesis, Part 154. 2,2'-Bis(arylamino)-1,1'-biaryls as Building Blocks for the Synthesis of Dibenzo[*d,f*][1,3]diazepines, Dibenzo[*d,f*][1,3]diazepinones, and Dibenzo[*c,e*][1,2,7]thiadiazepine 6-oxides.
324. A. P. Gómez-Escribano, C. Mora-Martínez, M. Roca, D. S. Walker, J. Panadero, M. D. Sequedo, R. Saini, H.-J. Knölker, J. Blanca, J. Burguera, A. Lahoz, J. Cañizares, J. M. Millán, N. O. Burton, W. R. Schafer, R. P. Vázquez-Manrique, *EMBO Reports* **2023**, *24*, e55556: Changes in Lipid Metabolism Driven by Steroid Signalling Modulate Proteostasis in *C. elegans*.
323. T. Schuh, O. Kataeva, H.-J. Knölker, *Chem. Sci.* **2023**, *14*, 257–265: Transition Metals in Organic Synthesis, Part 153.  $\mu$ -Oxo-bis[(octacosafuoro-*meso*-tetraphenylporphyrinato)iron(III)] – Synthesis, Crystal Structure, and Catalytic Activity in Oxidation Reactions.
322. R. F. Fritsche, T. Schuh, O. Kataeva, H.-J. Knölker, *Chem. Eur. J.* **2023**, *29*, e202203269: Transition Metals in Organic Synthesis, Part 152. Atroposelective Synthesis of 2,2'-Bis(arylamino)-1,1'-biaryls by Oxidative Iron(III)- and Phosphoric Acid-Catalyzed C–C Coupling of Diarylamines.
321. M. P. Rahelivao, I. Bauer, T. Lübken, O. Kataeva, A. Vehlow, N. Cordes, H.-J. Knölker, *Eur. J. Org. Chem.* **2022**, e202200809: First Synthesis, Confirmation of Stereochemistry, and Cytotoxic Activity of Oxyfungiformin.
320. G. Theumer, I. Bauer, A. Jäger, L. Schwark, H.-J. Knölker, *Eur. J. Org. Chem.* **2022**, e202200456: Transition Metals in Organic Synthesis, Part 151. Palladium-Catalyzed Synthesis of Alkylcarbazoles and Their Identification in Petroleum and Source Rocks.
319. R. Radhakrishnan, V. R. Dronamraju, M. Leung, A. Gruesen, A. K. Solanki, S. Walterhouse, H. Roehrich, G. Song, R. da Costa Monsanto, S. Cureoglu, R. Martin, A. A. Kondkar, F. J. van Kuijk, S. R. Montezuma, H.-J. Knölker, R. B. Hufnagel, G. P. Lobo, *Ophthalmic Genet.* **2022**, *43*, 285–300: The Role of Motor Proteins in Photoreceptor Protein Transport and Visual Function.

318. A. Purtsas, M. Rosenkranz, E. Dmitrieva, O. Kataeva, H.-J. Knölker, *Chem. Eur. J.* **2022**, *28*, e202104292: Transition Metals in Organic Synthesis, Part 150. Iron-Catalyzed Oxidative C–O and C–N Coupling Reactions Using Air as Sole Oxidant.
317. F. Puls, F. Seewald, V. Grinenko, H.-H. Klauß, H.-J. Knölker, *Chem. Eur. J.* **2021**, *27*, 16776–16787: Transition Metals in Organic Synthesis, Part 149. Mechanistic Studies on the Hexadecafluorophthalocyanine–Iron-Catalyzed Wacker-Type Oxidation of Olefins to Ketones.
316. D. Mishig, M. Gruner, T. Lübken, C. Ganbaatar, D. Regdel, H.-J. Knölker, *Sci. Rep.* **2021**, *11*, 13740: Isolation and Structure Elucidation of Pyridine Alkaloids from the Aerial Parts of the Mongolian Medicinal Plant *Caryopteris mongolica* Bunge.
315. A. K. Solanki, M. R. Biswal, S. Walterhouse, R. Martin, A. A. Kondkar, H.-J. Knölker, B. Rahman, E. Arif, S. Husain, S. R. Montezuma, D. Nihalani, G. P. Lobo, *Cells* **2021**, *10*, 1322: Loss of Motor Protein MYO1C Causes Rhodopsin Mislocation and Results in Impaired Visual Function.
314. A. Åslund, M. H. Bokhari, E. Wetterdal, R. Martin, H.-J. Knölker, T. Bengtsson, *Mol. Metab.* **2021**, *53*, 101247: Myosin 1c: A Novel Regulator of Glucose Uptake in Brown Adipocytes.
313. F. Puls, P. Linke, O. Kataeva, H.-J. Knölker, *Angew. Chem.* **2021**, *133*, 14202–14209; *Angew. Chem. Int. Ed.* **2021**, *60*, 14083–14090: Transition Metals in Organic Synthesis, Part 148. Iron-Catalyzed Wacker-type Oxidation of Olefins at Room Temperature with 1,3-Diketones or Neocuproine as Ligands.
312. M. Witting, U. Schmidt, H.-J. Knölker, *Anal. Bioanal. Chem.* **2021**, *413*, 2091–2102: UHPLC-IM-Q-ToFMS Analysis of Maradolipids, Found Exclusively in *Caenorhabditis elegans* Dauer Larvae.
311. H.-J. Knölker, *Sitzungsberichte der Sächsischen Akademie der Wissenschaften zu Leipzig – Mathematisch-naturwissenschaftliche Klasse*, S. Hirzel, Stuttgart/Leipzig, **2021**, Band 133, Heft 4, S. 1–30: Katalyse – Eine Renaissance der „Eisenzeit“?
310. S. Vellino, C. Oddou, P. Rivier, C. Boyault, E. Hiriart-Bryant, A. Kraut, R. Martin, Y. Coute, H.-J. Knölker, M. A. Valverde, C. Albigès-Rizo, O. Destaing, *J. Cell Biol.* **2021**, *220*, e201910079: Cross-Talk Between the Calcium Channel TRPV4 and Reactive Oxygen Species Interlocks Adhesive and Degradative Functions of Invadosomes.
309. S. Richter, R. Martin, H. O. Gutzeit, H.-J. Knölker, *Bioorg. Med. Chem.* **2021**, *30*, 115928: *In Vitro* and *In Vivo* Effects of Inhibitors on Actin and Myosin.
308. V. Lösle, O. Kataeva, H.-J. Knölker, *Synthesis* **2021**, *53*, 359–364: Transition Metals in Organic Synthesis, Part 147. First Total Synthesis and Investigation of the X-ray Crystal Structure of the Pyrano[3,2-*a*]carbazole Alkaloid Clausenalansine A.
307. V. Lösle, H.-J. Knölker, *Arkivoc* **2020**, *vii*, 192–200: Transition Metals in Organic Synthesis, Part 146. Synthesis of Indolo[2,3-*a*]carbazole via an Intramolecular McMurry Coupling.
306. H. Klafki, P. Rieper, A. Matzen, S. Zampar, O. Wirths, J. Vogelsang, D. Osterloh, L. Rohdenburg, T. J. Oberstein, O. Jahn, I. Beyer, I. Lachmann, H.-J. Knölker, J. Wiltfang, *Int. J. Mol. Sci.* **2020**, *21*, 6564: Development and Technical Validation of an Immunoassay for the Detection of APP<sub>669–711</sub> (A $\beta$ <sub>3–40</sub>) in Biological Samples.

305. A. Kishonti, A. Jäger, H.-J. Knölker, *Eur. J. Org. Chem.* **2020**, 5572–5579: Transition Metals in Organic Synthesis, Part 145. Synthesis of Clausenal, 1,5-Dimethoxycarbazole-3-carbaldehyde and 2,5-Dimethoxycarbazole-3-carbaldehyde.
304. P. Spitzer, M. Walter, C. Göth, T. J. Oberstein, P. Linning, H.-J. Knölker, J. Kornhuber, J. M. Maler, *Front. Immunol.* **2020**, *11* 1967: Pharmacological Inhibition of Amyloidogenic APP Processing and Knock-Down of APP in Primary Human Macrophages Impairs the Secretion of Cytokines.
303. A. Purtsas, S. Stipurin, O. Kataeva, H.-J. Knölker, *Molecules* **2020**, *25*, 1608: Transition Metals in Organic Synthesis, Part 144. Iron-Catalyzed Synthesis, Structure, and Photophysical Properties of Tetraarylnaphthidines.
302. A. Purtsas, O. Kataeva, H.-J. Knölker, *Chem. Eur. J.* **2020**, *26*, 2499–2508: Transition Metals in Organic Synthesis, Part 143. Iron-Catalyzed C–C Cross-Coupling Reaction of Tertiary Anilines with Hydroxyarenes by Using Air as Sole Oxidant.
301. J. R. Suresh, G. Whitener, G. Theumer, D. J. Bröcher, I. Bauer, W. Massa, H.-J. Knölker, *Chem. Eur. J.* **2019**, *25*, 13759–13765: Transition Metals in Organic Synthesis, Part 142. Synthesis and Crystal Structure of Dimorphic Dibenzo[*cde,opq*]rubicene.
300. S. C. Teixeira, D. S. Lopes, M. S. da Silva, F. A. C. da Luz, S. N. C. Gimenes, B. C. Borges, A. A. da Silva, F. A. Martins, M. A. dos Santos, T. L. Teixeira, R. A. Oliveira, V. d. M. R. Ávila, M. J. B. Silva, M. C. Elias, R. Martin, C. V. da Silva, H.-J. Knölker, *ChemBioChem* **2019**, *20*, 2390–2401: Pentachloropseudilin Impairs Angiogenesis by Disrupting the Actin Cytoskeleton, Integrin Trafficking and the Cell Cycle.
299. E. Arif, A. K. Solanki, P. Srivastava, B. Rahman, B. R. Tash, L. B. Holzman, M. G. Janech, R. Martin, H.-J. Knölker, W. R. Fitzgibbon, P. Deng, M. N. Budisavljevic, W.-K. Syn, C. Wang, J. H. Lipschutz, S.-H. Kwon, D. Nihalani, *Kidney International* **2019**, *96*, 139–158: The Motor Protein Myo 1c Regulates Transforming Growth Factor- $\beta$ -Signaling and Fibrosis in Podocytes.
298. B. Spindler, O. Kataeva, H.-J. Knölker, *J. Org. Chem.* **2018**, *83*, 15136–15143: Transition Metals in Organic Synthesis, Part 141. Enantioselective Total Synthesis and Assignment of the Absolute Configuration of the Furo[3,2-*a*]carbazole Alkaloid Furoclausine-B.
297. J. A. Nieto-Garai, B. Glass, C. Bunn, M. Giese, G. Jennings, B. Brankatschk, S. Agarwal, K. Börner, F. X. Contreras, H.-J. Knölker, C. Zankl, K. Simons, C. Schroeder, M. Lorizate, H.-G. Kräusslich, *Front. Immunol.* **2018**, *9*, 1983: Lipidomimetic Compounds Act as HIV-1 Entry Inhibitors by Altering Viral Membrane Structure.
296. F. Puls, O. Kataeva, H.-J. Knölker, *Eur. J. Org. Chem.* **2018**, 4272–4276: Transition Metals in Organic Synthesis, Part 140. Synthesis of Euchrestifoline Using Iron- and Palladium-Catalyzed C–H Bond Activations.
295. U. Schmidt, G. Theumer, A. Jäger, O. Kataeva, B. Wan, S. G. Franzblau, H.-J. Knölker, *Molecules* **2018**, *23*, 1402: Transition Metals in Organic Synthesis, Part 139. Synthesis and Activity against *Mycobacterium tuberculosis* of Olivacine and Oxygenated Derivatives.

294. C. Brütting, A. W. Schmidt, O. Kataeva, H.-J. Knölker, *Synthesis* **2018**, *50*, 2516–2522: Transition Metals in Organic Synthesis, Part 138. First Total Synthesis of 7-Isovaleryloxy-8-methoxy-girinimbine.
293. O. Juliano, A. Yoshimura, M.-T. Prospéri, R. Martin, H.-J. Knölker, E. Coudrier, *J. Cell Biol.* **2018**, *217*, 2033–2046: Myosin 1b Promotes Axon Formation by Regulating Actin Wave Propagation and Growth Cone Dynamics.
292. S.-W. Wang, C.-L. Chung, Y.-C. Kao, R. Martin, H.-J. Knölker, M.-S. Shiao, C.-L. Chen, *J. Enzyme Inhib. Med. Chem.* **2018**, *33*, 920–935: Pentabromopseudilin: a Myosin V Inhibitor Suppresses TGF- $\beta$  Activity by Recruiting the Type II TGF- $\beta$  Receptor to Lysosomal Degradation.
291. C. Galles, G. M. Prez, S. Penkov, S. Boland, E. O. J. Porta, S. G. Altabe, G. R. Labadie, U. Schmidt, H.-J. Knölker, T. V. Kurzchalia, D. de Mendoza, *Sci. Rep.* **2018**, *8*, 6398: Endocannabinoids in *Caenorhabditis elegans* are Essential for the Mobilization of Cholesterol from Internal Reserves.
290. C.-L. Chung, S.-W. Wang, R. Martin, H.-J. Knölker, Y.-C. Kao, M.-H. Lin, J.-J. Chen, Y.-B. Huang, D.-C. Wu, C.-L. Chen, *ChemBioChem* **2018**, *19*, 851–864: Pentachloropseudilin Inhibits Transforming Growth Factor- $\beta$  (TGF- $\beta$ ) Activity by Accelerating Cell-Surface Type II TGF- $\beta$  Receptor Turnover in Target Cells.
289. J. T. Cramer, J. I. Fühling, P. Baruch, C. Brütting, H.-J. Knölker, R. Gerardy-Schahn, R. Fedorov, *ACS Catal.* **2018**, *8*, 2683–2692: Decoding Allosteric Networks in Biocatalysts: Rational Approach to Therapies and Biotechnologies.
288. F. Puls, H.-J. Knölker, *Angew. Chem.* **2018**, *130*, 1236–1240; *Angew. Chem. Int. Ed.* **2018**, *57*, 1222–1226: Transition Metals in Organic Synthesis, Part 137. Conversion of Olefins into Ketones by an Iron-Catalyzed Wacker-type Oxidation Using Oxygen as the Sole Oxidant.
287. C. Brütting, R. F. Fritsche, S. K. Kutz, C. Börger, A. W. Schmidt, O. Kataeva, H.-J. Knölker, *Chem. Eur. J.* **2018**, *24*, 458–470: Transition Metals in Organic Synthesis, Part 136. Synthesis of 1,1'- and 2,2'-Bicarbazole Alkaloids by Iron(III)-Catalyzed Oxidative Coupling of 2- and 1-Hydroxycarbazoles.
286. F. Puls, N. Richter, O. Kataeva, H.-J. Knölker, *Chem. Eur. J.* **2017**, *23*, 17576–17583: Transition Metals in Organic Synthesis, Part 135. Synthesis of Tetranuclear Palladium(II) Complexes and Their Catalytic Activity for Cross-Coupling Reactions.
285. C. Börger, C. Brütting, K. K. Julich-Gruner, R. Hesse, V. P. Kumar, S. K. Kutz, M. Rönnefahrt, C. Thomas, B. Wan, S. G. Franzblau, H.-J. Knölker, *Bioorg. Med. Chem.* **2017**, *25*, 6167–6174: Transition Metals in Organic Synthesis, Part 132. Anti-Tuberculosis Activity and Structure–Activity Relationships of Oxygenated Tricyclic Carbazole Alkaloids and Synthetic Derivatives.
284. T. Gensch, R. Thoran, N. Richter, H.-J. Knölker, *Chem. Eur. J.* **2017**, *23*, 15116–15123: Transition Metals in Organic Synthesis, Part 134. Reductive Eliminations from Diarylpalladium(II) Complexes: A Combined Experimental and Computational Investigation.
283. G. Rouillé, C. Jäger, F. Huisken, T. Henning, R. Czerwonka, G. Theumer, C. Börger, I. Bauer, H.-J. Knölker, *ChemistryOpen* **2017**, *6*, 519–525: Quantitative Structure–Retention Relationships for Polycyclic Aromatic Hydrocarbons and their Oligoalkynyl-Substituted Derivatives.

282. P. Gupta, R. Martin, H.-J. Knölker, D. Nihalani, D. K. Sinha, *PLoS One* **2017**, *12*, e0180301: Myosin-1 Inhibition by PCIP Affects Membrane Shape, Cortical Actin Distribution and Lipid Droplet Dynamics in Early Zebrafish Embryos.
281. C. Brütting, O. Kataeva, A. W. Schmidt, H.-J. Knölker, *Eur. J. Org. Chem.* **2017**, 3288–3300: Transition Metals in Organic Synthesis, Part 133. First Total Synthesis of the Cytotoxic Carbazole Alkaloid Excavatine-A and Regioselective Annulation to Pyrano[2,3-*a*]carbazoles and [1,4]Oxazepino[2,3,4-*jk*]carbazoles.
280. J. Tunsag, D. Batsuren, B. Ganpurev, B. Sodbayar, L. Bayanjargal, T. Lübken, I. Bauer, H.-J. Knölker, *Nat. Prod. Ind. J.* **2017**, *13*, 106: Isolation and Identification of Iridoid Glucosides of *Pedicularis flava* Pall. Growing in Mongolia.
279. S. Boland, U. Schmidt, V. Zagoriy, J. L. Sampaio, R. F. Fritsche, R. Czerwonka, T. Lübken, J. Reimann, S. Penkov, H.-J. Knölker, T. V. Kurzchalia, *Nature Chem. Biol.* **2017**, *13*, 647–654: Phosphorylated Glycosphingolipids Essential for Cholesterol Mobilization in *Caenorhabditis elegans*.
278. M. P. Rahelivao, T. Lübken, M. Gruner, O. Kataeva, R. Ralambondrahety, H. Andriamanantoanina, M. P. Checinski, I. Bauer, H.-J. Knölker, *Org. Biomol. Chem.* **2017**, *15*, 2593–2608: Isolation and Structure Elucidation of Natural Products of Three Soft Corals and a Sponge from the Coast of Madagascar.
277. R. F. Fritsche, G. Theumer, O. Kataeva, H.-J. Knölker, *Angew. Chem.* **2017**, *129*, 564–568; *Angew. Chem. Int. Ed.* **2017**, *56*, 549–553: Transition Metals in Organic Synthesis, Part 131. Iron-Catalyzed Oxidative C–C and C–N Coupling of Diarylamines and Synthesis of Spiroacridines.
276. S. K. Kutz, A. W. Schmidt, H.-J. Knölker, *Synthesis* **2017**, *49*, 275–292: Transition Metals in Organic Synthesis, Part 129. Palladium-Catalyzed Synthesis of Pyrayaquinones, Murrayaquinones, and Murrayafoline-B.
275. C. Brütting, R. Hesse, A. Jäger, O. Kataeva, A. W. Schmidt, H.-J. Knölker, *Chem. Eur. J.* **2016**, *22*, 16897–16911: Transition Metals in Organic Synthesis, Part 130. Synthesis of Glycoborine, Glybomine A and B, the Phytoalexin Carbaalexin A and the  $\beta$ -Adrenoreceptor Antagonists Carazolol and Carvedilol.
274. T. Gensch, N. Richter, G. Theumer, O. Kataeva, H.-J. Knölker, *Chem. Eur. J.* **2016**, *22*, 11186–11190: Transition Metals in Organic Synthesis, Part 128. Synthesis of Stable Diarylpalladium(II) Complexes: Detailed Study of the Aryl–Aryl Bond-Forming Reductive Elimination.
273. C. Ganbaatar, M. Gruner, T. Jigjidsuren, D. Batsuren, B. Ganpurev, L. Chuluunnyam, B. Sodbayar, A. W. Schmidt, H.-J. Knölker, *Nat. Prod. Res.* **2016**, *30*, 1661–1664: Chemical Constituents Isolated from *Zygophyllum melongena* Bunge Growing in Mongolia.
272. I. Beyer, N. Rezaei-Ghaleh, H.-W. Klafki, O. Jahn, U. Haußmann, J. Wiltfang, M. Zweckstetter, H.-J. Knölker, *Chem. Eur. J.* **2016**, *22*, 8685–8693: Solid-Phase Synthesis and Characterization of N-Terminally Elongated  $A\beta_{3-x}$ -Peptides.
271. N. Kittelberger, M. Breunig, R. Martin, H.-J. Knölker, P. Miklavc, *J. Cell Sci.* **2016**, *129*, 1685–1696: The Role of Myosin 1c and Myosin 1b in Surfactant Exocytosis.

270. L. J. C. van Waalwijk van Doorn, M. J. Koel-Simmelink, U. Haußmann, H. Klafki, H. Struyfs, P. Linning, H.-J. Knölker, H. Twaalhoven, H. B. Kuiperij, S. Engelborghs, P. Scheltens, M. M. Verbeek, E. Vanmechelen, J. Wiltfang, C. E. Teunissen, *J. Neurochem.* **2016**, *137*, 112–121: Validation of Soluble Amyloid- $\beta$  Precursor Protein Assays as Diagnostic CSF Biomarkers for Neurodegenerative Diseases.
269. S. K. Kutz, C. Börger, A. W. Schmidt, H.-J. Knölker, *Chem. Eur. J.* **2016**, *22*, 2487–2500: Transition Metals in Organic Synthesis, Part 127. Synthesis of Methylene-Bridged Biscarbazole Alkaloids by using an Ullmann-type Coupling: First Total Synthesis of Murrastifoline-C and Murrafoline-E.
268. M. P. Rahelivao, M. Gruner, T. Lübken, D. Islamov, O. Kataeva, H. Andriamanantoanina, I. Bauer, H.-J. Knölker, *Org. Biomol. Chem.* **2016**, *14*, 989–1001: Chemical Constituents of the Soft Corals *Sinularia vanderlandi* and *Sinularia gravis* from the Coast of Madagascar.
267. C. Schuster, M. Rönnefahrt, K. K. Julich-Gruner, A. Jäger, A. W. Schmidt, H.-J. Knölker, *Synthesis* **2016**, *48*, 150–160: Transition Metals in Organic Synthesis, Part 126. Synthesis of the Pyrano[3,2-*a*]carbazole Alkaloids Koenine, Koenimbine, Koenigine, Koenigicine, and Structural Reassignment of Mukonicine.
266. M. P. Rahelivao, M. Gruner, H. Andriamanantoanina, I. Bauer, H.-J. Knölker, *Nat. Prod. Bioprospect.* **2015**, *5*, 223–235: Brown Algae (Phaeophyceae) from the Coast of Madagascar: Preliminary Bioactivity Studies and Isolation of Natural Products.
265. R. Hesse, K. K. Julich-Gruner, O. Kataeva, V. P. Kumar, H.-J. Knölker in *The Chemistry of Heterocyclic Compounds. Modern Aspects*; V. G. Kartsev, Ed.; ICSPP Press, Moscow, **2015**; pp. 105–108: Total Synthesis of Biologically Active Carbazole Alkaloids.
264. C. Ganbaatar, M. Gruner, D. Mishig, R. Duger, A. W. Schmidt, H.-J. Knölker, *Open Nat. Prod. J.* **2015**, *8*, 1–7: Flavonoid Glycosides from the Aerial Parts of *Polygonatum odoratum* (Mill.) Druce Growing in Mongolia.
263. M.-T. Prospéri, P. Lépine, F. Dingli, P. Paul-Gilloteaux, R. Martin, D. Loew, H.-J. Knölker, E. Coudrier, *J. Cell Biol.* **2015**, *210*, 347–361: Myosin 1b Functions as an Effector of EphB Signaling to Control Cell Repulsion.
262. M. P. Rahelivao, M. Gruner, H. Andriamanantoanina, B. Andriamihaja, I. Bauer, H.-J. Knölker, *Mar. Drugs* **2015**, *13*, 4197–4216: Red Algae (Rhodophyta) from the Coast of Madagascar: Preliminary Bioactivity Studies and Isolation of Natural Products.
261. U. Kober, H.-J. Knölker, *Synlett* **2015**, *26*, 1549–1552: Transition Metals in Organic Synthesis, Part 124. Palladium-Catalyzed Approach to Malasseziazole A and First Total Synthesis of Malasseziazole C.
260. C. Schuster, K. K. Julich-Gruner, H. Schnitzler, R. Hesse, A. Jäger, A. W. Schmidt, H.-J. Knölker, *J. Org. Chem.* **2015**, *80*, 5666–5673: Transition Metals in Organic Synthesis, Part 125. Total Syntheses of Murrayamine E, I, and K.
259. I. Bauer, H.-J. Knölker, *Chem. Rev.* **2015**, *115*, 3170–3387: Iron Catalysis in Organic Synthesis.

258. R. Hesse, A. W. Schmidt, H.-J. Knölker, *Tetrahedron* **2015**, *71*, 3485–3490: Transition Metals in Organic Synthesis, Part 123. Total Synthesis of Glycomaurrol and Eustifoline-C by DIBAL-H Promoted Reductive Ring Opening of Pyrano[2,3-*c*]carbazoles.
257. R. Beckert, E. Fanghänel, W. D. Habicher, H.-J. Knölker, P. Metz, K. Schwetlick, *Organikum – Organisch-chemisches Grundpraktikum*, 24. Auflage; Wiley-VCH, Weinheim, **2015**; pp. 1–893.
256. E. Rozbicki, M. Chuai, A. I. Karjalainen, F. Song, H. M. Sang, R. Martin, H.-J. Knölker, M. P. MacDonald, C. J. Weijer, *Nature Cell Biol.* **2015**, *17*, 397–408: Myosin-II-Mediated Cell Shape Changes and Cell Intercalation Contribute to Primitive Streak Formation.
255. P. Rudrapaul, M. Gruner, H.-J. Knölker, B. Dinda, *Indian J. Chem.* **2015**, *54B*, 279–282: Flavones and Triterpenes from the Leaves of *Vitex peduncularis*.
254. T. J. Oberstein, P. Spitzer, H.-W. Klafki, P. Linning, F. Neff, H.-J. Knölker, P. Lewczuk, J. Wiltfang, J. Kornhuber, J. M. Maler, *Neurobiol. Dis.* **2015**, *73*, 24–35: Astrocytes and Microglia But Not Neurons Preferentially Generate N-Terminally Truncated A $\beta$  Peptides.
253. K. K. Julich-Gruner, A. W. Schmidt, H.-J. Knölker, *Synthesis* **2014**, *46*, 2651–2655: Transition Metals in Organic Synthesis, Part 122. Synthesis of Carbalexin-B, Clausine-A, Clauszoline-M, and 2,8-Dihydroxy-3-methylcarbazole.
252. C. Gassner, R. Hesse, M. P. Krahl, O. Kataeva, A. W. Schmidt, H.-J. Knölker, *Org. Biomol. Chem.* **2014**, *12*, 6490–6499: Transition Metals in Organic Synthesis, Part 121. Total Synthesis of the Cyclic Monoterpenoid Pyrano[3,2-*a*]carbazole Alkaloids Derived from 2-Hydroxy-6-methylcarbazole.
251. R. Hesse, O. Kataeva, A. W. Schmidt, H.-J. Knölker, *Chem. Eur. J.* **2014**, *20*, 9504–9509: Transition Metals in Organic Synthesis, Part 120. Synthesis of Prenyl- and Geranyl-Substituted Carbazole Alkaloids by DIBAL-H Promoted Reductive Pyran Ring Opening of Dialkylpyrano[3,2-*a*]carbazoles.
250. C. Schuster, C. Börger, K. K. Julich-Gruner, R. Hesse, A. Jäger, G. Kaufmann, A. W. Schmidt, H.-J. Knölker, *Eur. J. Org. Chem.* **2014**, 4741–4752: Transition Metals in Organic Synthesis, Part 119. Synthesis of 2-Hydroxy-7-methylcarbazole, Glycozolicine, Mukoline, Mukolidine, Sansoakamine, Clausine H, and Clausine K and Structural Revision of Clausine TY.
249. R. Martin, C. Risacher, A. Barthel, A. Jäger, A. W. Schmidt, S. Richter, M. Böhl, M. Preller, K. Chinthalapudi, D. J. Manstein, H. O. Gutzeit, H.-J. Knölker, *Eur. J. Org. Chem.* **2014**, 4487–4505: Transition Metals in Organic Synthesis, Part 114. Silver(I)-Catalysed Route to Pyrroles: Synthesis of Halogenated Pseudilins as Allosteric Inhibitors for Myosin ATPase and X-Ray Crystal Structures of the Protein–Inhibitor Complexes.
248. K. K. Julich-Gruner, O. Kataeva, A. W. Schmidt, H.-J. Knölker, *Chem. Eur. J.* **2014**, *20*, 8536–8540: Transition Metals in Organic Synthesis, Part 118. Total Synthesis of 7- and 8-Oxygenated Pyrano[3,2-*a*]carbazole and Pyrano[2,3-*a*]carbazole Alkaloids via Boronic Acid-Catalyzed Annulation of the Pyran Ring.
247. R. Hesse, M. P. Krahl, A. Jäger, O. Kataeva, A. W. Schmidt, H.-J. Knölker, *Eur. J. Org. Chem.* **2014**, 4014–4028: Transition Metals in Organic Synthesis, Part 115. Palladium(II)-Catalysed

Synthesis of the Formylcarbazole Alkaloids Murrayaline A–C, 7-Methoxymukonal, and 7-Methoxy-*O*-methyilmukonal.

246. C. Hauler, G. Rimkus, C. Risacher, H.-J. Knölker, W. Vetter, *Sci. Total Environ.* **2014**, *490*, 994–1001: Concentrations of Halogenated Natural Products versus PCB 153 in Bivalves from the North and Baltic Seas.
245. C. Börger, A. W. Schmidt, H.-J. Knölker, *Synlett* **2014**, *25*, 1381–1384: Transition Metals in Organic Synthesis, Part 116. First Total Synthesis of Murrastifoline-B and an Improved Route to Murrastifoline-F.
244. R. Hesse, A. Jäger, A. W. Schmidt, H.-J. Knölker, *Org. Biomol. Chem.* **2014**, *12*, 3866–3876: Transition Metals in Organic Synthesis, Part 113. Palladium(II)-Catalysed Total Synthesis of Naturally Occurring Pyrano[3,2-*a*]carbazole and Pyrano[2,3-*b*]carbazole Alkaloids.
243. C. Börger, A. W. Schmidt, H.-J. Knölker, *Org. Biomol. Chem.* **2014**, *12*, 3831–3835: Transition Metals in Organic Synthesis, Part 117. First Total Syntheses of Chrestifoline-B and (±)-Chrestifoline-C, and Improved Routes to Bismurrayafoline-A, Bismurrayafolinol and Chrestifoline-D.
242. S. Penkov, A. Ogawa, U. Schmidt, D. Tate, V. Zagoriy, S. Boland, M. Gruner, D. Vorkel, J.-M. Verbavatz, R. J. Sommer, H.-J. Knölker, T. V. Kurzchalia, *Nature Chem. Biol.* **2014**, *10*, 281–285: A Wax Ester Promotes Collective Host Finding in the Nematode *Pristionchus pacificus*.
241. A. Kunfermann, M. Witschel, B. Illarionov, R. Martin, M. Rottmann, H. W. Höffken, M. Seet, W. Eisenreich, H.-J. Knölker, M. Fischer, A. Bacher, M. Groll, F. Diederich, *Angew. Chem.* **2014**, *126*, 2267–2272; *Angew. Chem. Int. Ed.* **2014**, *53*, 2235–2239: Pseudilins: Halogenated, Allosteric Inhibitors of the Non-Mevalonate Pathway Enzyme IspD.
240. C. Thomas, O. Kataeva, A. W. Schmidt, H.-J. Knölker, *Org. Biomol. Chem.* **2014**, *12*, 872–875: Transition Metals in Organic Synthesis, Part 112. Regioselective Prenylation of Bromocarbazoles by Palladium(0)-Catalysed Cross Coupling – Synthesis of *O*-Methylsiamenol, *O*-Methylmicro-meline and Carquinostatin A.
239. I. Bauer, H.-J. Knölker in *The Chemistry of Organoiron Compounds – PATAI's Chemistry of Functional Groups*; I. Marek, Z. Rappoport, Eds.; Wiley, Chichester, **2014**; chap. 5, pp. 155–231: The Chemistry of Diene–Iron and Dienyl–Iron Complexes.
238. P. Gupta, N. C. Gauthier, Y. Cheng-Han, Y. Zuanning, B. Pontes, M. Ohmstede, R. Martin, H.-J. Knölker, H.-G. Döbereiner, M. Krendel, M. Sheetz, *Biology Open* **2013**, *2*, 1288–1299: Myosin 1E Localizes to Actin Polymerization Sites in Lamellipodia, Affecting Actin Dynamics and Adhesion Formation.
237. A. W. Schmidt, T. A. Choi, G. Theumer, S. G. Franzblau, H.-J. Knölker, *Bioorg. Med. Chem. Lett.* **2013**, *23*, 6111–6113: Inhibitory Effect of Oxygenated Cholestan-3 $\beta$ -ol Derivatives on the Growth of *Mycobacterium tuberculosis*.
236. V. P. Kumar, K. K. Gruner, O. Kataeva, H.-J. Knölker, *Angew. Chem.* **2013**, *125*, 11279–11283; *Angew. Chem. Int. Ed.* **2013**, *52*, 11073–11077: Transition Metals in Organic Synthesis, Part 110. Total Synthesis of the Biscarbazole Alkaloids Murrastifoline A–D by a Domino Sonogashira Coupling/Claisen Rearrangement/Electrocyclization Reaction.



235. R. Hesse, K. K. Gruner, O. Kataeva, A. W. Schmidt, H.-J. Knölker, *Chem. Eur. J.* **2013**, *19*, 14098–14111: Transition Metals in Organic Synthesis, Part 109. Efficient Construction of Pyrano[3,2-*a*]carbazoles: Application to a Biomimetic Total Synthesis of Cyclized Monoterpenoid Pyrano[3,2-*a*]carbazole Alkaloids.
234. A. Berndt, M. Gruner, A. W. Schmidt, H.-J. Knölker, *Synlett* **2013**, *24*, 2102–2106: Transition Metals in Organic Synthesis, Part 111. First Total Synthesis and Structural Revision of Antipathine A.
233. U. Haußmann, O. Jahn, P. Linning, C. Janßen, T. Liepold, E. Portelius, H. Zetterberg, C. Bauer, J. Schuchhardt, H.-J. Knölker, H. Klafki, J. Wiltfang, *Anal. Chem.* **2013**, *85*, 8142–8149: Analysis of Amino-terminal Variants of Amyloid- $\beta$  Peptides by Capillary Isoelectric Focusing Immunoassay.
232. F. Liu, C.-X. He, L.-J. Luo, Q.-L. Zou, Y.-X. Zhao, R. Saini, S.-F. Han, H.-J. Knölker, L.-S. Wang, B.-X. Ge, *PLOS Pathog.* **2013**, *9*, e1003545: Nuclear Hormone Receptor Regulation of MicroRNAs Controls Innate Immune Responses in *C. elegans*.
231. S. Agarwal, C. Schroeder, G. Schlechtingen, T. Braxmeier, G. Jennings, H.-J. Knölker, *Bioorg. Med. Chem. Lett.* **2013**, *23*, 5165–5169: Evaluation of Steroidal Amines as Lipid Raft Modulators and Potential Anti-Influenza Agents.
230. R. Saini, O. Kataeva, A. W. Schmidt, Y. Wang, A. Meljon, W. J. Griffiths, H.-J. Knölker, *Bioorg. Med. Chem.* **2013**, *21*, 5794–5798: Synthesis and Biological Activity of (24*E*)- and (24*Z*)-26-Hydroxydesmosterol.
229. H.-J. Knölker in *Organometallics in Synthesis – Third Manual*; M. Schlosser, Ed.; Wiley, Hoboken, **2013**; chap. 4, pp. 545–776: Organoiron Chemistry.
228. C. Hauler, R. Martin, H.-J. Knölker, C. Gaus, J. F. Mueller, W. Vetter, *Environ. Poll.* **2013**, *178*, 329–335: Discovery and Widespread Occurrence of Polyhalogenated 1,1'-Dimethyl-2,2'-bipyrroles (PDBPs) in Marine Biota.
227. C. Thomas, H.-J. Knölker, *Tetrahedron Lett.* **2013**, *54*, 591–593: Transition Metals in Organic Synthesis, Part 108. First Total Synthesis of Ekeberginine.
226. S. Agarwal, O. Kataeva, U. Schmidt, H.-J. Knölker, *RSC Adv.* **2013**, *3*, 1089–1096: Transition Metals in Organic Synthesis, Part 107. Silver(I)-Promoted Oxidative Cyclization to Pyrrolo[2,1-*a*]isoquinolines and Application to the Synthesis of ( $\pm$ )-Crispine A.
225. M. P. Krahl, O. Kataeva, A. W. Schmidt, H.-J. Knölker, *Eur. J. Org. Chem.* **2013**, 59–64: Transition Metals in Organic Synthesis, Part 106. Iron-Mediated Total Synthesis of 2,7-Dioxygenated Carbazole Alkaloids.
224. S. Agarwal, U. Pässler, H.-J. Knölker, *Arkivoc* **2013**, *ii*, 6–12: Transition Metals in Organic Synthesis, Part 105. Synthesis of Pyrroles by Silver(I)-Promoted Oxidative Cyclization.
223. M. P. Krahl, A. W. Schmidt, H.-J. Knölker, *Heterocycles* **2012**, *86*, 357–370: Transition Metals in Organic Synthesis, Part 104. Iron-Mediated Total Synthesis of Furoclausine-A.
222. G. Schlechtingen, H.-J. Knölker, T. Friedrichson, G. Jennings, T. Braxmeier, PCT WO 2012/160188, 29.11.2012 (Int. Appl. PCT/EP2012/059813, 25.05.2012): Hydroxy-Substituted Amino and Ammonium Derivatives and their Medical Use.

221. G. Schlechtingen, H.-J. Knölker, T. Friedrichson, G. Jennings, T. Braxmeier, PCT WO 2012/160187, 29.11.2012 (Int. Appl. PCT/EP2012/059812, 25.05.2012): Amino- or Ammonium-Containing Sulfonic Acid, Phosphonic Acid and Carboxylic Acid Derivatives and their Medical Use.
220. G. Schlechtingen, H.-J. Knölker, T. Friedrichson, G. Jennings, T. Braxmeier, PCT WO 2012/160186, 29.11.2012 (Int. Appl. PCT/EP2012/059810, 25.05.2012): Oxygenated Amino- or Ammonium-Containing Sulfonic Acid, Phosphonic Acid and Carboxylic Acid Derivatives and their Medical Use.
219. A. Meljon, S. Theofilopoulos, C. H. L. Shackleton, G. L. Watson, N. B. Javitt, H.-J. Knölker, R. Saini, E. Arenas, Y. Wang, W. J. Griffiths, *J. Lipid Res.* **2012**, *53*, 2469–2483: Analysis of Bioactive Oxysterols in Newborn Mouse Brain by LC/MS.
218. P. Linning, U. Haussmann, I. Beyer, S. Weidlich, H. Schieb, J. Wiltfang, H.-W. Klafki, H.-J. Knölker, *Org. Biomol. Chem.* **2012**, *10*, 8216–8235: Optimization of BACE1 Inhibition of Tripartite Structures by Modification of Membrane Anchors, Spacers and Pharmacophores – Development of Potential Agents for the Treatment of Alzheimer’s Disease.
217. C. Börger, O. Kataeva, H.-J. Knölker, *Org. Biomol. Chem.* **2012**, *10*, 7269–7273: Transition Metals in Organic Synthesis, Part 103. Novel Approach to Biscarbazole Alkaloids *via* Ullmann Coupling – Synthesis of Murrastifoline-A and Bismurrayafoline-A.
216. C. Börger, H.-J. Knölker, *Tetrahedron* **2012**, *68*, 6727–6736: Transition Metals in Organic Synthesis, Part 101. Convergent Total Synthesis of 1,6-Dioxygenated Carbazole Alkaloids.
215. C. Börger, M. P. Krahl, M. Gruner, O. Kataeva, H.-J. Knölker, *Org. Biomol. Chem.* **2012**, *10*, 5189–5193: Transition Metals in Organic Synthesis, Part 102. First Total Synthesis of the Biscarbazole Alkaloid Oxydimurrayafoline.
214. A. W. Schmidt, K. R. Reddy, H.-J. Knölker, *Chem. Rev.* **2012**, *112*, 3193–3328: Occurrence, Biogenesis, and Synthesis of Biologically Active Carbazole Alkaloids.
213. G. Rouillé, M. Steglich, Y. Carpentier, C. Jäger, F. Huisken, T. Henning, R. Czerwonka, G. Theumer, C. Börger, I. Bauer, H.-J. Knölker, *Astrophys. J.* **2012**, *752*, 25: On the Relevance of Polyynyl-Substituted PAHs to Astrophysics.
212. R. Saini, S. Boland, O. Kataeva, A. W. Schmidt, T. V. Kurzchalia, H.-J. Knölker, *Org. Biomol. Chem.* **2012**, *10*, 4159–4163: Stereoselective Synthesis and Hormonal Activity of Novel Dafachronic Acids and Naturally Occurring Steroids Isolated from Corals.
211. L. Huet, R. Forke, A. Jäger, H.-J. Knölker, *Synlett* **2012**, *23*, 1230–1234: Transition Metals in Organic Synthesis, Part 100. Highly Efficient Palladium(II)-Catalyzed Oxidative Cyclization to the 1,7,8-Trioxxygenated Carbazole Alkaloid Murrayastine.
210. W. Fröhner, K. R. Reddy, H.-J. Knölker, *Arkivoc* **2012**, *iii*, 330–342: Transition Metals in Organic Synthesis, Part 98. Transition Metal Mediated Total Synthesis of the Potent Neuronal Cell Protecting Alkaloid (±)-Lavanduquinocin.
209. T. Gensch, M. Rönnefahrt, R. Czerwonka, A. Jäger, O. Kataeva, I. Bauer, H.-J. Knölker, *Chem. Eur. J.* **2012**, *18*, 770–776: Transition Metals in Organic Synthesis, Part 99. Snapshot of the

Palladium(II)-Catalyzed Oxidative Biaryl Bond Formation by X-Ray Analysis of the Intermediate Diaryl Palladium(II) Complex.

208. I. Bauer, H.-J. Knölker, *Top. Curr. Chem.* **2012**, *309*, 203–253: Synthesis of Pyrrole and Carbazole Alkaloids.
207. U. Pässler, H.-J. Knölker in *The Alkaloids*; H.-J. Knölker, Ed.; Academic Press, London, **2011**; Vol. 70, chap. 2, pp. 79–151: The Pyrrolo[2,1-*a*]isoquinoline Alkaloids.
206. R. Martin, A. Jäger, H.-J. Knölker, *Synlett* **2011**, 2795–2798: Transition Metals in Organic Synthesis, Part 97. Silver-Catalyzed Synthesis of Hexahalogenated 2,2'-Bipyrrroles.
205. C. Thomas, O. Kataeva, H.-J. Knölker, *Synlett* **2011**, 2663–2666: Transition Metals in Organic Synthesis, Part 96. First Total Synthesis of Streptovercillin: Unambiguous Confirmation of the Absolute Configuration.
204. U. Pässler, M. Gruner, S. Penkov, T. V. Kurzchalia, H.-J. Knölker, *Synlett* **2011**, 2482–2486: Synthesis of Ten Members of the Maradolipid Family: Novel Diacyltrehalose Glycolipids from *Caenorhabditis elegans*.
203. M. Fuchsenberger, R. Forke, H.-J. Knölker, *Synlett* **2011**, 2056–2058: Transition Metals in Organic Synthesis, Part 95. First Total Synthesis of the 1,7-Dioxygenated Carbazole Alkaloids Clausine Q and Clausine R.
202. K. Chinthalapudi, M. H. Taft, R. Martin, S. M. Heissler, M. Preller, F. K. Hartmann, H. Brandstaetter, J. Kendrick-Jones, G. Tsiavaliaris, H. O. Gutzeit, R. Fedorov, F. Buss, H.-J. Knölker, L. M. Coluccio, D. J. Manstein, *J. Biol. Chem.* **2011**, *286*, 29700–29708: Mechanism and Specificity of Pentachloropseudilin-Mediated Inhibition of Myosin Motor Activity.
201. D. Hochbaum, Y. Zhang, C. Stuckenholtz, P. Labhart, V. Alexiadis, R. Martin, H.-J. Knölker, A. L. Fisher, *PLoS Genetics* **2011**, *7*, e1002179: DAF-12 Regulates a Connected Network of Genes to Ensure Robust Developmental Decisions.
200. G. Rouillé, M. Steglich, C. Jäger, F. Huisken, T. Henning, G. Theumer, I. Bauer, H.-J. Knölker, *ChemPhysChem* **2011**, *12*, 2131–2137: Spectroscopy of Dibenzorubicene: Experimental Data for a Search in Interstellar Spectra.
199. K. K. Gruner, H.-J. Knölker in *Heterocycles in Natural Product Synthesis*; K. C. Majumdar, S. K. Chattopadhyay, Eds.; Wiley-VCH, Weinheim, **2011**; chap. 10, pp. 341–376: Carbazoles and Acridines.
198. M. Preller, K. Chinthalapudi, R. Martin, H.-J. Knölker, D. J. Manstein, *J. Med. Chem.* **2011**, *54*, 3675–3685: Inhibition of Myosin ATPase Activity by Halogenated Pseudilins: A Structure–Activity Study.
197. K. K. Gruner, T. Hopfmann, K. Matsumoto, A. Jäger, T. Katsuki, H.-J. Knölker, *Org. Biomol. Chem.* **2011**, *9*, 2057–2061: Transition Metals in Organic Synthesis, Part 94. Efficient Iron-Mediated Approach to Pyrano[3,2-*a*]carbazole Alkaloids – First Total Synthesis of *O*-Methylmurrayamine A and 7-Methoxymurrayacine, First Asymmetric Synthesis and Assignment of the Absolute Configuration of (–)-*trans*-Dihydroxygirinimbine.
196. H. Schieb, S. Weidlich, G. Schlechtingen, P. Linning, G. Jennings, M. Gruner, J. Wiltfang, H.-W. Klafki, H.-J. Knölker, *Chem. Eur. J.* **2010**, *16*, 14412–14423: Structural Design, Solid Phase

Synthesis and Activity of Membrane-Anchored  $\beta$ -Secretase Inhibitors on A $\beta$  Generation from Wild-Type and Swedish-Mutant APP.

195. T. Kurzchalia, T. Hannich, E. Entchev, H.-J. Knölker, R. Martin, PCT WO 2010/146062, 23.12.2010 (Int. Appl. PCT/EP2010/058408, 15.06.2010): Novel Anti-Helminthic Therapies.
194. S. Penkov, F. Mende, V. Zagoriy, C. Erkut, R. Martin, U. Pässler, K. Schuhmann, D. Schwudke, M. Gruner, J. Mäntler, T. Reichert-Müller, A. Shevchenko, H.-J. Knölker, T. V. Kurzchalia, *Angew. Chem.* **2010**, *122*, 9620–9625; *Angew. Chem. Int. Ed.* **2010**, *49*, 9430–9435: Maradolipids: Diacyltrehalose Glycolipids Specific to Dauer Larva in *Caenorhabditis elegans*.
193. R. Forke, K. K. Gruner, K. E. Knott, S. Auschill, S. Agarwal, R. Martin, M. Böhl, S. Richter, G. Tsiavaliaris, R. Fedorov, D. J. Manstein, H. O. Gutzeit, H.-J. Knölker, *Pure Appl. Chem.* **2010**, *82*, 1975–1991: Transition Metals in Organic Synthesis, Part 93. Total Synthesis of Biologically Active Alkaloids Using Transition Metals.
192. A. W. Schmidt, H.-J. Knölker, *Synlett* **2010**, 2207–2239 (*Account*): Cycloadditions of Allylsilanes, Part 22. Stereoselective Synthesis of Cyclopentanes and Cyclobutanes by Lewis Acid Promoted [3+2] and [2+2] Cycloadditions of Allylsilanes.
191. A. W. Schmidt, T. Olpp, E. Baum, T. Stiffel, H.-J. Knölker, *Org. Biomol. Chem.* **2010**, *8*, 4562–4568: Cycloadditions of Allylsilanes, Part 21. Organosilicon-Mediated Total Synthesis of the Triquinane Sesquiterpenes ( $\pm$ )- $\beta$ -Isocomene and ( $\pm$ )-Isocomene.
190. R. Martin, S. Agarwal, A. Jäger, M. Böhl, S. Richter, G. Tsiavaliaris, R. Fedorov, D. J. Manstein, H. O. Gutzeit, H.-J. Knölker in *The Chemistry and Biological Activity of Synthetic and Natural Compounds – Modern Aspects of Chemistry of Heterocycles*; V. G. Kartsev, Ed.; ICSPF Press, Moscow, **2010**; pp. 110–117: Specific Inhibitors of Myosin ATPase via Silver-Catalyzed Synthesis of Pyrroles.
189. A. R. Fischer, N. T. P. Lan, C. Wiedemann, P. Heide, P. Werner, A. W. Schmidt, G. Theumer, H.-J. Knölker, *J. Chromatogr. A* **2010**, *1217*, 2950–2955: Determination of 4-Nonylphenol in Water Samples Using 4-(2,6-Dimethylhept-3-yl)phenol as New Internal Standard.
188. R. Martin, J. Kirst, S. Weidlich, H. Schieb, G. Schlechtingen, A. Jäger, L. Rajendran, M. Böhl, S. Richter, R. Fedorov, D. J. Manstein, H. O. Gutzeit, H. Klafki, J. Wiltfang, K. Simons, H.-J. Knölker, *Med. Chem. Res.* **2010**, *19*, S23–S26: Biomolecular Chemistry Directed Towards Drug Development.
187. R. Martin, E. V. Entchev, T. V. Kurzchalia, H.-J. Knölker, *Org. Biomol. Chem.* **2010**, *8*, 739–750 (*Perspective Article*): Steroid Hormones Controlling the Life Cycle of the Nematode *Caenorhabditis elegans*: Stereoselective Synthesis and Biology.
186. L. Rajendran, H.-J. Knölker, K. Simons, *Nat. Rev. Drug Discov.* **2010**, *9*, 29–42: Subcellular Targeting Strategies for Drug Design and Delivery.
185. R. Martin, A. Jäger, M. Böhl, S. Richter, R. Fedorov, D. J. Manstein, H. O. Gutzeit, H.-J. Knölker, *Angew. Chem.* **2009**, *121*, 8186–8190; *Angew. Chem. Int. Ed.* **2009**, *48*, 8042–8046: Transition Metals in Organic Synthesis, Part 92. Total Synthesis of Pentabromo- and Pentachloropseudilin, and Synthetic Analogues – Allosteric Inhibitors of Myosin ATPase.

184. R. Martin, T. Schäfer, G. Theumer, E. V. Entchev, T. V. Kurzchalia, H.-J. Knölker, *Synthesis* **2009**, 3488–3492: Improved Synthesis of an Ascaroside Pheromone Controlling Dauer Larva Development in *Caenorhabditis elegans*.
183. I. Bauer, H.-J. Knölker in *Science of Synthesis*; V. H. Rawal, S. A. Kozmin, Eds.; Thieme, Stuttgart, **2009**; Vol. 46, chap. 46.13, pp. 637–668: Synthesis via Metal Complexes of Dienes.
182. M. Schmidt, H.-J. Knölker, *Synlett* **2009**, 2421–2424: Transition Metals in Organic Synthesis, Part 91. Palladium-Catalyzed Approach to 2,6-Dioxygenated Carbazole Alkaloids – First Total Synthesis of the Phytoalexin Carbalexin C.
181. H.-J. Knölker, S. Agarwal, G. Schlechtingen, T. Braxmeier, C. Schroeder, G. Jennings, PCT WO 2009/090063, 23.07.2009 (Int. Appl. PCT/EP2009/000216, 15.01.2009): Steroid Sapogenin, Androstane and Triterpenoid Sapogenin Derivatives for the Treatment and Prevention of Infectious Diseases.
180. R. Martin, E. V. Entchev, F. Däbritz, T. V. Kurzchalia, H.-J. Knölker, *Eur. J. Org. Chem.* **2009**, 3703–3714: Synthesis and Hormonal Activity of the (25*S*)-Cholesten-26-oic Acids – Potent Ligands for the DAF-12 Receptor in *Caenorhabditis elegans*.
179. J. T. Hannich, E. V. Entchev, F. Mende, H. Boytchev, R. Martin, V. Zagoriy, G. Theumer, I. Riezmann, H. Riezmann, H.-J. Knölker, T. V. Kurzchalia, *Dev. Cell* **2009**, *16*, 833–843: Methylation of the Sterol Nucleus by STRM-1 Regulates Dauer Larva Formation in *Caenorhabditis elegans*.
178. A. W. Schmidt, T. Olpp, S. Schmid, A. Jäger, H.-J. Knölker, *Tetrahedron* **2009**, *65*, 5484–5490 (in *Tetrahedron Symposium-in-Print, Number 143: Recent Advances in Organosilicon Chemistry Directed towards Organic Synthesis*; P. Langer, Ed.): Cycloadditions of Allylsilanes – Part 20. Organosilicon-Mediated Total Synthesis of (±)-Cameroonanol.
177. D. Manstein, R. Fedorov, G. Tsiavaliaris, H.-J. Knölker, R. Martin, J. Kirst, H. Gutzeit, M. Böhl, M. Furch, PCT WO 2009/065600, 28.05.2009 (Int. Appl. PCT/EP2008/009891, 21.11.2008): Means for Treating Myosin-Related Diseases.
176. R. Martin, R. Saini, I. Bauer, M. Gruner, O. Kataeva, V. Zagoriy, E. V. Entchev, T. V. Kurzchalia, H.-J. Knölker, *Org. Biomol. Chem.* **2009**, *7*, 2303–2309: 4 $\alpha$ -Bromo-5 $\alpha$ -cholestan-3 $\beta$ -ol and Nor-5 $\alpha$ -cholestan-3 $\beta$ -ol Derivatives – Stereoselective Synthesis and Hormonal Activity in *Caenorhabditis elegans*.
175. R. Beckert, E. Fanghänel, W. D. Habicher, H.-J. Knölker, P. Metz, K. Schwetlick, *Organikum – Organisch-chemisches Grundpraktikum, 23. Auflage*; Wiley-VCH, Weinheim, **2009**; pp. 1–861.
174. K. E. Knott, S. Ausschill, A. Jäger, H.-J. Knölker, *Chem. Commun.* **2009**, 1467–1469: Transition Metals in Organic Synthesis, Part 90. First Total Synthesis of the Whole Series of the Antiostatins A and B.
173. R. Martin, A. W. Schmidt, G. Theumer, T. Krause, E. V. Entchev, T. V. Kurzchalia, H.-J. Knölker, *Org. Biomol. Chem.* **2009**, *7*, 909–920: Synthesis and Biological Activity of the (25*R*)-Cholesten-26-oic Acids – Ligands for the Hormonal Receptor DAF-12 in *Caenorhabditis elegans*.

172. R. Fedorov, M. Böhl, G. Tsiavaliaris, F. K. Hartmann, M. H. Taft, P. Baruch, B. Brenner, R. Martin, H.-J. Knölker, H. O. Gutzeit, D. J. Manstein, *Nat. Struct. Mol. Biol.* **2009**, *16*, 80–88: The Mechanism of Pentabromopseudilin Inhibition of Myosin Motor Activity.
171. H.-J. Knölker, *Chem. Lett.* **2009**, *38*, 8–13 (*Highlight Review*): Transition Metals in Organic Synthesis, Part 89. Synthesis of Biologically Active Carbazole Alkaloids Using Selective Transition Metal-Catalyzed Coupling Reactions.
170. R. Martin, F. Däbritz, E. V. Entchev, T. V. Kurzchalia, H.-J. Knölker, *Org. Biomol. Chem.* **2008**, *6*, 4293–4295: Stereoselective Synthesis of the Hormonally Active (25*S*)- $\Delta^7$ -Dafachronic Acid, (25*S*)- $\Delta^4$ -Dafachronic Acid, (25*S*)-Dafachronic Acid, and (25*S*)-Cholestenoic Acid.
169. K. K. Gruner, H.-J. Knölker, *Org. Biomol. Chem.* **2008**, *6*, 3902–3904: Transition Metals in Organic Synthesis, Part 88. Palladium-Catalyzed Total Synthesis of Euchrestifoline Using a One-Pot Wacker Oxidation and Double Aromatic C–H Bond Activation.
168. G. Rouillé, C. Jäger, M. Steglich, F. Huisken, T. Henning, G. Theumer, I. Bauer, H.-J. Knölker, *ChemPhysChem* **2008**, *9*, 2085–2091: IR, Raman, and UV/Vis Spectra of Corannulene for Use in Possible Interstellar Identification.
167. I. Bauer, H.-J. Knölker in *Iron Catalysis in Organic Chemistry – Reactions and Applications*; B. Plietker, Ed.; Wiley-VCH, Weinheim, **2008**; chap. 1, pp. 1–27: Iron Complexes in Organic Chemistry.
166. D. C. Carrer, A. W. Schmidt, H.-J. Knölker, P. Schwille, *Langmuir* **2008**, *24*, 8807–8812: Membrane Domain-Disrupting Effects of 4-Substituted Cholesterol Derivatives.
165. R. Martin, A. W. Schmidt, G. Theumer, T. V. Kurzchalia, H.-J. Knölker, *Synlett* **2008**, 1965–1968: Stereoselective Synthesis of (25*R*)-Dafachronic Acids and (25*R*)-Cholestenoic Acid as Potential Ligands for the DAF-12 Receptor in *Caenorhabditis elegans*.
164. T. A. Choi, R. Czerwonka, R. Forke, A. Jäger, J. Knöll, M. P. Krahl, T. Krause, K. R. Reddy, S. G. Franzblau, H.-J. Knölker, *Med. Chem. Res.* **2008**, *17*, 374–385: Transition Metals in Organic Synthesis, Part 83. Synthesis and Pharmacological Potential of Carbazoles.
163. R. Forke, M. P. Krahl, F. Däbritz, A. Jäger, H.-J. Knölker, *Synlett* **2008**, 1870–1876: Transition Metals in Organic Synthesis, Part 87. A Palladium-Catalyzed Route to 2-Oxygenated and 2,7-Dioxygenated Carbazole Alkaloids – Total Synthesis of 2-Methoxy-3-methylcarbazole, Glycosinine, Clausine L, Mukonidine, and Clausine V.
162. R. Forke, A. Jäger, H.-J. Knölker, *Org. Biomol. Chem.* **2008**, *6*, 2481–2483: Transition Metals in Organic Synthesis, Part 86. First Total Synthesis of Clausine L and Pityriazole, a Metabolite of the Human Pathogenic Yeast *Malassezia furfur*.
161. H.-J. Knölker, *Sitzungsberichte der Sächsischen Akademie der Wissenschaften zu Leipzig – Mathematisch-naturwissenschaftliche Klasse*, S. Hirzel, Stuttgart/Leipzig, **2008**, Band 131, Heft 1, S. 1–24: Von der Heilpflanze zu neuen Medikamenten – Welche Beiträge kann die organische Synthese leisten?
160. H.-J. Knölker, S. Agarwal, G. Schlechtingen, T. Braxmeier, C. Schroeder, PCT WO 2008/068037, 12.06.2008 (Int. Appl. PCT/EP2007/010675, 07.12.2007): Cholesterylamines for the Treatment and Prevention of Infectious Diseases.

159. C. Börger, H.-J. Knölker, *Synlett* **2008**, 1698–1702: Transition Metals in Organic Synthesis, Part 85. A General Approach to 1,6-Dioxygenated Carbazole Alkaloids – First Total Synthesis of Clausine G, Clausine I, and Clausine Z.
158. H.-J. Knölker, K. R. Reddy in *The Alkaloids*; G. A. Cordell, Ed.; Academic Press, London, **2008**; Vol. 65, pp. 1–430: Chemistry and Biology of Carbazole Alkaloids.
157. L. Rajendran, A. Schneider, G. Schlechtingen, S. Weidlich, J. Ries, T. Braxmeier, P. Schwillle, J. B. Schulz, C. Schroeder, M. Simons, G. Jennings, H.-J. Knölker, K. Simons, *Science* **2008**, *320*, 520–523: Efficient Inhibition of the Alzheimer's Disease  $\beta$ -Secretase by Membrane Targeting.
156. H.-J. Knölker in *Modern Alkaloids – Structure, Isolation, Synthesis and Biology*; E. Fattorusso, O. Tagliatalata-Scafati, Eds.; Wiley-VCH, Weinheim, **2008**; chap. 15, pp. 475–501: Synthesis of Alkaloids by Transition Metal-Mediated Oxidative Cyclization.
155. W. Fröhner, K. R. Reddy, H.-J. Knölker, *Heterocycles* **2007**, *74*, 895–912 (*Special Issue Dedicated to Professor Ekkehard Winterfeldt*): Transition Metals in Organic Synthesis, Part 84. Application of Iron- and Nickel-Mediated Coupling Reactions to the Total Synthesis of the Neuronal Cell Protecting Substance ( $\pm$ )-Carquinostatin A.
154. A. W. Schmidt, J. R. Suresh, G. Theumer, H.-J. Knölker, *Chem. Lett.* **2007**, *36*, 1478–1479: Cycloadditions of Allylsilanes, Part 19. Synthetic Approach Towards the Sex Pheromone of the Female Oleander Scale *Aspidiotus Nerii*.
153. A. W. Schmidt, T. Olpp, E. Baum, T. Stiffel, H.-J. Knölker, *Synlett* **2007**, 2371–2374: Cycloadditions of Allylsilanes, Part 18. Stereoselective Total Synthesis of the Sesquiterpene ( $\pm$ )- $\beta$ -Isocomene.
152. A. W. Schmidt, T. Olpp, S. Schmid, S. Goutal, A. Jäger, H.-J. Knölker, *Synlett* **2007**, 1549–1552: Cycloadditions of Allylsilanes, Part 17. Stereoselective Total Synthesis of the Sesquiterpene ( $\pm$ )-Cameroonanol.
151. R. Forke, M. P. Krahl, T. Krause, G. Schlechtingen, H.-J. Knölker, *Synlett* **2007**, 268–272: Transition Metals in Organic Synthesis, Part 82. First Total Synthesis of Methyl 6-methoxycarbazole-3-carboxylate, Glycomaurrol, the Anti-TB Active Micromeline, and the Furo[2,3-*c*]carbazole Alkaloid Eustifoline-D.
150. T. A. Choi, R. Czerwonka, J. Knöll, M. P. Krahl, K. R. Reddy, S. G. Franzblau, H.-J. Knölker, *Med. Chem. Res.* **2006**, *15*, 28–30: Novel Syntheses and Pharmacological Activity of Carbazole Derivatives.
149. M. P. Krahl, A. Jäger, T. Krause, H.-J. Knölker, *Org. Biomol. Chem.* **2006**, *4*, 3215–3219: Transition Metal Complexes in Organic Synthesis, Part 81. First Total Synthesis of the 7-Oxygenated Carbazole Alkaloids Clauszoline-K, 3-Formyl-7-hydroxycarbazole, Clausine M, Clausine N and the Anti-HIV Active Siamenol Using a Highly Efficient Palladium-Catalyzed Approach.
148. J. Knöll, H.-J. Knölker, *Tetrahedron Lett.* **2006**, *47*, 6079–6082: Transition Metal Complexes in Organic Synthesis, Part 80. First Total Synthesis of ( $\pm$ )-Epocarbazolin A and Epocarbazolin B, and Asymmetric Synthesis of (–)-Epocarbazolin A *via* Shi Epoxidation.

147. T. A. Choi, R. Czerwonka, W. Fröhner, M. P. Krahl, K. R. Reddy, S. G. Franzblau, H.-J. Knölker, *ChemMedChem* **2006**, *1*, 812–815: Transition Metal Complexes in Organic Synthesis, Part 79. Synthesis and Activity of Carbazole Derivatives Against *Mycobacterium tuberculosis*.
146. A. W. Schmidt, T. Doert, S. Goutal, M. Gruner, F. Mende, T. V. Kurzchalia, H.-J. Knölker, *Eur. J. Org. Chem.* **2006**, 3687–3706: Regio- and Stereospecific Synthesis of Cholesterol Derivatives and their Hormonal Activity in *Caenorhabditis elegans*.
145. S. Agarwal, S. Filali, W. Fröhner, J. Knöll, M. P. Krahl, K. R. Reddy, H.-J. Knölker in *The Chemistry and Biological Activity of Synthetic and Natural Compounds – Nitrogen-Containing Heterocycles*; V. G. Kartsev, Ed.; ICSPF Press, Moscow, **2006**; Vol. 1, pp. 176–186: Application of Oxidative Cyclizations to the Synthesis of Bioactive Nitrogen-Containing Heterocycles.
144. J. Knöll, H.-J. Knölker, *Synlett* **2006**, 651–653: Transition Metal Complexes in Organic Synthesis, Part 78. First Total Synthesis and Assignment of the Absolute Configuration of the Neuronal Cell Protecting Agent Carbazomadurin B.
143. R. Czerwonka, K. R. Reddy, E. Baum, H.-J. Knölker, *Chem. Commun.* **2006**, 711–713: Transition Metal Complexes in Organic Synthesis, Part 77. First Enantioselective Total Synthesis of Neocarazostatin B, Determination of its Absolute Configuration and Transformation into Carquinostatin A.
142. T. Braxmeier, T. Friedrichson, W. Fröhner, G. Jennings, G. Schlechtingen, C. Schroeder, H.-J. Knölker, K. Simons, M. Zerial, T. Kurzchalia, PCT WO 2006/002909, 12.01.2006 (Int. Appl. PCT/EP2005/007033, 29.06.2005): Sphingolipid-Derived Pharmaceutical Compositions.
141. T. Braxmeier, T. Friedrichson, W. Fröhner, G. Jennings, G. Schlechtingen, C. Schroeder, H.-J. Knölker, K. Simons, M. Zerial, T. Kurzchalia, PCT WO 2006/002908, 12.01.2006 (Int. Appl. PCT/EP2005/007032, 29.06.2005): Carbazole-Derived Pharmaceutical Compositions.
140. T. Braxmeier, T. Friedrichson, W. Fröhner, G. Jennings, G. Schlechtingen, C. Schroeder, H.-J. Knölker, K. Simons, M. Zerial, T. Kurzchalia, PCT WO 2006/002907, 12.01.2006 (Int. Appl. PCT/EP2005/007031, 29.06.2005): Use of Steroid-Derived Pharmaceutical Compositions for Treating Disorders Relating to Pathological Processes in Lipid Rafts.
139. H.-J. Knölker, K. R. Reddy in *Selected Methods for Synthesis and Modification of Heterocycles – The Chemistry and Biological Activity of Natural Indole Systems (Part 1)*; V. G. Kartsev, Ed.; ICSPF Press, Moscow, **2005**; Vol. 4, pp. 166–181: Total Synthesis of Furocarbazole Alkaloids.
138. T. Braxmeier, T. Friedrichson, W. Fröhner, G. Jennings, M. Munick, G. Schlechtingen, C. Schroeder, H.-J. Knölker, K. Simons, M. Zerial, T. Kurzchalia, PCT WO 2005/097199, 20.10.2005 (Int. Appl. PCT/EP2005/003740, 08.04.2005): Tripartite Conjugates Containing a Structure Interacting with Cell Membrane Rafts and Their Use.
137. S. Agarwal, J. Knöll, M. P. Krahl, H.-J. Knölker, *Journal of Fudan University (Natural Science)* **2005**, *44*, 699–700: Synthesis of Heterocyclic Ring Systems Using Organometallic Reagents.
136. S. Agarwal, S. Cämmerer, S. Filali, W. Fröhner, J. Knöll, M. P. Krahl, K. R. Reddy, H.-J. Knölker, *Curr. Org. Chem.* **2005**, *9*, 1601–1614 (*Special Issue: Recent Progress in Alkaloid Chemistry*; H.-J. Knölker, Ed.): Transition Metal Complexes in Organic Synthesis, Part 75. Novel Routes to Pyrroles, Indoles and Carbazoles – Applications in Natural Product Synthesis.



135. O. Kataeva, M. P. Krahl, H.-J. Knölker, *Org. Biomol. Chem.* **2005**, *3*, 3099–3101: Transition Metal Complexes in Organic Synthesis, Part 76. First Total Synthesis of the Biologically Active 2,7-Dioxygenated Tricyclic Carbazole Alkaloids 7-Methoxy-*O*-methylnukonal, Clausine H (Clauszoline-C), Clausine K (Clauszoline-J) and Clausine O.
134. H.-J. Knölker, *Top. Curr. Chem.* **2005**, *244*, 115–148: Occurrence, Biological Activity, and Convergent Organometallic Synthesis of Carbazole Alkaloids.
133. H.-J. Knölker, S. Agarwal, *Tetrahedron Lett.* **2005**, *46*, 1173–1175: Total Synthesis of the Antitumor Active Pyrrolo[2,1-*a*]isoquinoline Alkaloid (±)-Crispine A.
132. H.-J. Knölker, W. Fröhner, R. Heinrich, *Synlett* **2004**, 2705–2708: Transition Metal Complexes in Organic Synthesis, Part 74. Total Synthesis of the Marine Alkaloid 6-Chlorohyellazole.
131. S. Agarwal, H.-J. Knölker, *Org. Biomol. Chem.* **2004**, *2*, 3060–3062: A Novel Pyrrole Synthesis.
130. V. Matyash, E. V. Entchev, F. Mende, M. Wilsch-Bräuninger, C. Thiele, A. W. Schmidt, H.-J. Knölker, S. Ward, T. V. Kurzchalia, *PLoS Biol.* **2004**, *2*, e280: Sterol-Derived Hormone(s) Controls Entry into Diapause in *Caenorhabditis elegans* by Consecutive Activation of DAF-12 and DAF-16.
129. W. Fröhner, M. P. Krahl, K. R. Reddy, H.-J. Knölker, *Heterocycles* **2004**, *63*, 2393–2407: Transition Metal Complexes in Organic Synthesis, Part 73. Synthetic Routes to Naturally Occurring Furocarbazoles.
128. H.-J. Knölker, *Curr. Org. Synth.* **2004**, *1*, 309–331: Transition Metal Complexes in Organic Synthesis, Part 70. Synthesis of Biologically Active Carbazole Alkaloids Using Organometallic Chemistry.
127. H.-J. Knölker in *Transition Metals for Organic Synthesis – Building Blocks and Fine Chemicals, Second Edition*; M. Beller, C. Bolm, Eds.; Wiley-VCH, Weinheim, **2004**; Vol. 1, chap. 3.11, pp. 585–599: Iron–Diene Complexes.
126. H.-J. Knölker, E. Baum, M. Kosub, *Synlett* **2004**, 1769–1771: Transition Metal Complexes in Organic Synthesis, Part 72. Iron-Mediated Diastereoselective Spiroannulation of Dimethyl Aminomalonate to the 2-Azaspiro[4.5]decane Ring System.
125. H.-J. Knölker, S. Agarwal, *Synlett* **2004**, 1767–1768: Novel Three-Step Synthesis of (±)-Harmicine.
124. H.-J. Knölker, M. P. Krahl, *Synlett* **2004**, 528–530: Transition Metal Complexes in Organic Synthesis, Part 71. First Total Synthesis of Furoclausine A.
123. H.-J. Knölker, S. Filali, *Synlett* **2003**, 1752–1754: Transition Metal Complexes in Organic Synthesis, Part 69. Total Synthesis of the *Amaryllidaceae* Alkaloids Anhydrolycorinone and Hippadine Using Iron- and Palladium-Mediated Coupling Reactions.
122. H.-J. Knölker, M. Wolpert, *Tetrahedron* **2003**, *59*, 5317–5322: Transition Metal Complexes in Organic Synthesis, Part 68. Iron-Mediated Total Synthesis of Mukonine and Mukonidine by Oxidative Cyclization with Air as the Oxidizing Agent.
121. H.-J. Knölker, J. Knöll, *Chem. Commun.* **2003**, 1170–1171: Transition Metal Complexes in Organic Synthesis, Part 67. First Total Synthesis of the Neuronal Cell Protecting Carbazole Alkaloid Carbazomadurin A by Sequential Transition Metal-Catalyzed Reactions.

120. H.-J. Knölker, K. R. Reddy, *Heterocycles* **2003**, *60*, 1049–1052: Indoloquinones, Part 8. Palladium(II)-Catalyzed Total Synthesis of Murrayaquinone A, Koeniginequinone A, and Koeniginequinone B.
119. H.-J. Knölker, W. Fröhner, K. R. Reddy, *Eur. J. Org. Chem.* **2003**, 740–746: Transition Metal Complexes in Organic Synthesis, Part 66. Iron-Mediated Synthesis of Carbazomycin G and Carbazomycin H, the First Carbazole-1,4-quinol Alkaloids from *Streptoverticillium ehimensense*.
118. H.-J. Knölker, K. R. Reddy, *Chem. Rev.* **2002**, *102*, 4303–4427: Isolation and Synthesis of Biologically Active Carbazole Alkaloids.
117. H.-J. Knölker, T. Hopfmann, *Tetrahedron* **2002**, *58*, 8937–8945: Transition Metal Complexes in Organic Synthesis, Part 65. Iron-Mediated Synthesis of Carazostatin, a Free Radical Scavenger from *Streptomyces chromofuscus*, and *O*-Methylcarazostatin.
116. H.-J. Knölker, W. Fröhner, K. R. Reddy, *Synthesis* **2002**, 557–564 (*Feature Article*): Indoloquinones, Part 7. Total Synthesis of the Potent Lipid Peroxidation Inhibitor Carbazomycin C by an Intramolecular Palladium-Catalyzed Oxidative Coupling of an Anilino-1,4-benzoquinone.
115. H.-J. Knölker, A. Braier, D. J. Bröcher, S. Cämmerer, W. Fröhner, P. Gonser, H. Hermann, D. Herzberg, K. R. Reddy, G. Rohde, *Pure Appl. Chem.* **2001**, *73*, 1075–1086: Transition Metal Complexes in Organic Synthesis, Part 64. Recent Applications of Tricarbonyliron–Diene Complexes to Organic Synthesis.
114. H.-J. Knölker, W. Fröhner, *Synthesis* **2000**, 2131–2136 (in *Special Topic: Alkaloids*; E. M. Carreira, Ed.): Transition Metal Complexes in Organic Synthesis, Part 63. Convergent Iron-Mediated Syntheses of the Furo[3,2-*a*]carbazole Alkaloid Furostifoline.
113. H.-J. Knölker, *Chem. Rev.* **2000**, *100*, 2941–2961 (*Special Issue: Organometallics in Organic Synthesis*; A. de Meijere, Ed.): Transition Metal Complexes in Organic Synthesis, Part 60. Efficient Synthesis of Tricarbonyliron-Diene Complexes – Development of an Asymmetric Catalytic Complexation.
112. H.-J. Knölker, K. R. Reddy, *Tetrahedron* **2000**, *56*, 4733–4737: Transition Metal Complexes in Organic Synthesis, Part 61. Convergent Synthesis of Indolo[2,3-*b*]carbazole by an Iron-Mediated Bidirectional Annulation of Two Indole Rings.
111. H.-J. Knölker, S. Cämmerer, *Tetrahedron Lett.* **2000**, *41*, 5035–5038: Transition Metal Complexes in Organic Synthesis, Part 62. Total Synthesis of (±)-Demethoxycarbonyldihydrogambirtannine and Norketoyobyrine by an Iron-Mediated [2+2+1] Cycloaddition.
110. H.-J. Knölker, E. Baum, K. R. Reddy, *Chirality* **2000**, *12*, 526–528 (*Special Issue Dedicated to Professor Ryoji Noyori*; M. Kitamura, Ed.): Transition Metal Complexes in Organic Synthesis, Part 59. First Enantioselective Total Synthesis of Lavanduquinocin, a Potent Neuronal Cell Protecting Substance from *Streptomyces viridochromogenes*.
109. H.-J. Knölker, B. Ahrens, P. Gonser, M. Heininger, P. G. Jones, *Tetrahedron* **2000**, *56*, 2259–2271 (in *Tetrahedron Symposium-in-Print, Number 77: Transition Metal Organometallics in Organic Synthesis*; K. M. Nicholas, Ed.): Transition Metal Complexes in Organic Synthesis, Part 57. Synthesis of 1-Azabuta-1,3-dienes and Application to Catalytic Complexation of Buta-1,3-dienes and Cycloalkadienes by the Tricarbonyliron Fragment.

108. H.-J. Knölker, E. Baum, K. R. Reddy, *Tetrahedron Lett.* **2000**, *41*, 1171–1174: Transition Metal Complexes in Organic Synthesis, Part 58. First Enantioselective Total Synthesis of the Potent Neuronal Cell Protecting Substance Carquinostatin A from (*R*)-Propene Oxide.
107. H.-J. Knölker, E. Baum, H. Goesmann, H. Gössel, K. Hartmann, M. Kosub, U. Locher, T. Sommer, *Angew. Chem.* **2000**, *112*, 797–800; *Angew. Chem. Int. Ed.* **2000**, *39*, 781–784: Transition Metal Complexes in Organic Synthesis, Part 56. Iron-Mediated Diastereoselective Spiroannulations with Vinylogous Urethanes – A Novel Access to Spiroannulated Carbo- and Heterocycles.
106. H.-J. Knölker, A. Braier, D. J. Bröcher, P. G. Jones, H. Piotrowski, *Tetrahedron Lett.* **1999**, *40*, 8075–8078: Transition Metal Complexes in Organic Synthesis, Part 55. Synthesis of Corannulene via an Iron-Mediated [2+2+1] Cycloaddition.
105. H.-J. Knölker, W. Fröhner, *Tetrahedron Lett.* **1999**, *40*, 6915–6918: Transition Metal Complexes in Organic Synthesis, Part 54. Improved Total Syntheses of the Antibiotic Alkaloids Carbazomycin A and B.
104. H.-J. Knölker, G. Baum, O. Schmitt, G. Wanzl, *Chem. Commun.* **1999**, 1737–1738: Cycloadditions of Allylsilanes, Part 16. Stereoselective Total Synthesis of ( $\pm$ )-Fragranol by TiCl<sub>4</sub> Promoted [2+2] Cycloaddition of Allyl-*tert*-butyldiphenylsilane and Methyl Methacrylate.
103. H.-J. Knölker, E. Baum, R. Graf, P. G. Jones, O. Spieß, *Angew. Chem.* **1999**, *111*, 2742–2745; *Angew. Chem. Int. Ed.* **1999**, *38*, 2583–2585: Cycloadditions of Allylsilanes, Part 15. An Unprecedented Domino Double Allylsilane [3+2] Cycloaddition/Wagner-Meerwein Rearrangement/Friedel-Crafts Alkylation/Elimination Reaction Sequence Leading to a Novel Pentacyclic Ring System.
102. H.-J. Knölker, E. Baum, T. Hopfmann, *Tetrahedron* **1999**, *55*, 10391–10412: Transition Metal Complexes in Organic Synthesis, Part 53. Iron-Mediated Synthesis of Hyellazole and Isohyellazole.
101. H.-J. Knölker, E. Baum, H. Goesmann, R. Klaus, *Angew. Chem.* **1999**, *111*, 2196–2199; *Angew. Chem. Int. Ed.* **1999**, *38*, 2064–2066: Transition Metal Complexes in Organic Synthesis, Part 51. Demetalation of Tricarbonyl(cyclopentadienone)iron Complexes Initiated by a Ligand Exchange Reaction with NaOH – X-Ray Analysis of a Complex with Nearly Square-Planar Coordinated Sodium.
100. H.-J. Knölker, *Chem. Soc. Rev.* **1999**, *28*, 151–157: Transition Metal Complexes in Organic Synthesis, Part 47. Organic Synthesis via Tricarbonyl( $\eta^4$ -diene)iron Complexes.
99. H.-J. Knölker, H. Hermann, D. Herzberg, *Chem. Commun.* **1999**, 831–832: Transition Metal Complexes in Organic Synthesis, Part 52. Photolytic Induction of the Asymmetric Catalytic Complexation of Prochiral Cyclohexa-1,3-dienes by the Tricarbonyliron Fragment.
98. H.-J. Knölker, K. R. Reddy, *Synlett* **1999**, 596–598: Indoloquinones, Part 6. First Palladium-Mediated Oxidative Cyclization of Arylamino-1,2-benzoquinones to Carbazole-3,4-quinones – Application to the Total Synthesis of Carbazomycin C and ( $\pm$ )-Carquinostatin A.
97. H.-J. Knölker, N. Foitzik, O. Schmitt, *Tetrahedron Lett.* **1999**, *40*, 3557–3560: Cycloadditions of Allylsilanes, Part 14. Enantiospecific Synthesis of Bicyclo[4.3.0]nonanes by Asymmetric [3+2] Cycloaddition of Chiral Allylsilanes.

96. H.-J. Knölker, D. Herzberg, *Tetrahedron Lett.* **1999**, *40*, 3547–3548: Transition Metal Complexes in Organic Synthesis, Part 50. Asymmetric Catalytic Complexation of 1-Methoxycyclohexa-1,3-diene by the Tricarbonyliron Fragment using Amino Acid-Derived 1-Azabuta-1,3-dienes.
95. H.-J. Knölker, H. Goesmann, H. Hermann, D. Herzberg, G. Rohde, *Synlett* **1999**, 421–425: Transition Metal Complexes in Organic Synthesis, Part 49. Development of Novel Chiral Catalysts for the Asymmetric Catalytic Complexation of Prochiral Cyclohexa-1,3-dienes by the Tricarbonyliron Fragment – Mechanism of the Asymmetric Catalysis and Involvement of a Dinuclear Iron Cluster.
94. H.-J. Knölker, H. Goesmann, R. Klauss, *Angew. Chem.* **1999**, *111*, 727–731; *Angew. Chem. Int. Ed.* **1999**, *38*, 702–705: Transition Metal Complexes in Organic Synthesis, Part 48. A Novel Method for the Demetalation of Tricarbonyliron–Diene Complexes by a Photolytically Induced Ligand Exchange Reaction with Acetonitrile.
93. H.-J. Knölker, N. Foitzik, C. Gabler, R. Graf, *Synthesis* **1999**, 145–151: Cycloadditions of Allylsilanes, Part 12. Regio- and Stereoselective Transformations of Silylbicyclo[*n*.3.0]alkanes.
92. H.-J. Knölker, T. Braxmeier, *Tetrahedron Lett.* **1998**, *39*, 9407–9410: Isocyanates, Part 5. Synthesis of Oxazolidin-2-ones and Imidazolidin-2-ones via DMAP-Catalyzed Isocyanation of Amines with Di-*tert*-butyl Dicarboxylate.
91. H.-J. Knölker, K. R. Reddy, A. Wagner, *Tetrahedron Lett.* **1998**, *39*, 8267–8270: Indoloquinones, Part 5. Palladium-Catalyzed Total Synthesis of the Potent Lipid Peroxidation Inhibitor Carbazoloquinone C.
90. H.-J. Knölker, E. Baum, O. Schmitt, *Tetrahedron Lett.* **1998**, *39*, 7705–7708: Cycloadditions of Allylsilanes, Part 13. Lewis Acid-Promoted Stereospecific [2+2] Cycloaddition of Crotylsilanes and Methyl Propynoate.
89. H.-J. Knölker in *Transition Metals for Organic Synthesis – Building Blocks and Fine Chemicals*; M. Beller, C. Bolm, Eds.; Wiley-VCH, Weinheim, **1998**; Vol. 1, chap. 3.13, pp. 534–549: Iron–Diene Complexes.
88. H.-J. Knölker, E. Baum, P. Gonser, G. Rohde, H. Röttele, *Organometallics* **1998**, *17*, 3916–3925: Transition Metal Complexes in Organic Synthesis, Part 45. 1,4-Diaryl-1-azabuta-1,3-diene-Catalyzed Complexation of Cyclohexa-1,3-diene by the Tricarbonyliron Fragment – Development of Highly Efficient Catalysts, Optimization of the Reaction Conditions, and Proposed Mechanism.
87. H.-J. Knölker, M. Graf, U. Mangei, *J. Prakt. Chem.* **1998**, *340*, 530–535: Transition Metal Complexes in Organic Synthesis, Part 46. Synthesis of 5-Arylmethyl-substituted Tricarbonyl(1-4- $\eta$ -cyclohexa-1,3-diene)iron Complexes.
86. H.-J. Knölker, G. Baum, N. Foitzik, H. Goesmann, P. Gonser, P. G. Jones, H. Röttele, *Eur. J. Inorg. Chem.* **1998**, 993–1007: Transition Metal Complexes in Organic Synthesis, Part 41. Synthesis, Molecular Structure, Fluxional Behavior, and Tricarbonyliron Transfer Reactions of ( $\eta^4$ -1-Azabuta-1,3-diene)tricarbonyliron Complexes.
85. H.-J. Knölker, K. R. Reddy, *Tetrahedron Lett.* **1998**, *39*, 4007–4008: Transition Metal Complexes in Organic Synthesis, Part 44. Iron-Mediated Synthesis of Indolo[2,3-*b*]carbazole.

84. H.-J. Knölker, P. G. Jones, G. Wanzl, *Synlett* **1998**, 613–616: Cycloadditions of Allylsilanes, Part 11. Stereoselective Synthesis of Hydroxycyclopentanes and Hydroxymethylcyclobutanes by Titanium Tetrachloride Promoted [3+2] and [2+2] Cycloadditions of Sterically Hindered Allylsilanes and Subsequent Oxidative Cleavage of the Carbon Silicon Bond.
83. H.-J. Knölker, W. Fröhner, A. Wagner, *Tetrahedron Lett.* **1998**, 39, 2947: Transition Metal Complexes in Organic Synthesis, Part 43. First Total Synthesis of the Free Radical Scavenger (±)-Neocarazostatin B via Iron- and Nickel-Mediated Coupling Reactions.
82. H.-J. Knölker, W. Fröhner, *Tetrahedron Lett.* **1998**, 39, 2537: Transition Metal Complexes in Organic Synthesis, Part 42. First Total Synthesis of the Potent Neuronal Cell Protecting Substance (±)-Lavanduquinocin via Iron- and Nickel-Mediated Coupling Reactions.
81. H.-J. Knölker, W. Fröhner, *J. Chem. Soc. Perkin Trans. 1* **1998**, 173–175: Indoloquinones, Part 4. Palladium-Catalyzed Total Synthesis of the Antibiotic Carbazole Alkaloids Carbazomycin G and H.
80. H.-J. Knölker, E. Baum, M. Heininger, *Tetrahedron Lett.* **1997**, 38, 8021–8024: Transition Metal Complexes in Organic Synthesis, Part 40. Diastereoselective Synthesis of Substituted Perhydroacenaphthene Derivatives via Intramolecular Diels-Alder Cycloadditions.
79. H.-J. Knölker, T. Braxmeier, H. Oberhammer, *J. Mol. Struct.* **1997**, 413–414, 211–216 (*Special Issue: Structural Chemistry*): Tert-Butyl Isocyanate, a Non-Rigid Molecule.
78. H.-J. Knölker, W. Fröhner, *Synlett* **1997**, 1108: Transition Metal Complexes in Organic Synthesis, Part 39. First Total Synthesis of the Potent Neuronal Cell Protecting Substance (±)-Carquinostatin A via Iron- and Nickel-Mediated Coupling Reactions.
77. H.-J. Knölker, T. Braxmeier, *Synlett* **1997**, 925: Isocyanates, Part 4. Convenient Phosgene-Free Method for the Synthesis and Derivatization of Enantiopure  $\alpha$ -Isocyanato Carboxylic Acid Esters.
76. H.-J. Knölker, W. Fröhner, *Tetrahedron Lett.* **1997**, 38, 4051: Transition Metal Complexes in Organic Synthesis, Part 38. First Total Synthesis of Carbazomycin G and H.
75. H.-J. Knölker, *J. Prakt. Chem.* **1997**, 339, 304–314 (*Special Issue Dedicated to Professor Ekkehard Winterfeldt*): Cycloadditions of Allylsilanes, Part 10. Stereoselective Construction of Ring Systems by Cycloaddition Reactions of Allyltriisopropylsilane.
74. H.-J. Knölker, N. Foitzik, H. Goesmann, R. Graf, P. G. Jones, G. Wanzl, *Chem. Eur. J.* **1997**, 3, 538–551: Cycloadditions of Allylsilanes, Part 9. Highly Stereoselective Synthesis of Bicyclo[*n*.3.0]alkanes by Titanium Tetrachloride Promoted [3+2] Cycloaddition of Allylsilanes and 1-Acetylcycloalkenes.
73. H.-J. Knölker, W. Fröhner, *Tetrahedron Lett.* **1997**, 38, 1535–1538: Transition Metal Complexes in Organic Synthesis, Part 37. Convergent Iron-Mediated Total Synthesis of the Potent Lipid Peroxidation Inhibitor Carbazomycin C.
72. H.-J. Knölker, G. Schlechtingen, *J. Chem. Soc. Perkin Trans. 1* **1997**, 349: Transition Metal Complexes in Organic Synthesis, Part 34. First Total Synthesis of Carbazomycin C and D.
71. H.-J. Knölker, M. Wolpert, *Tetrahedron Lett.* **1997**, 38, 533–536: Transition Metal Complexes in Organic Synthesis, Part 36. Cyclization of Tricarbonyliron Complexes by Oxygen to 4a,9a-Dihydro-9*H*-carbazoles: Application to the Synthesis of Mukonine, Mukonidine, and Pyrido[3,2,1-*jk*]carbazoles.

70. H.-J. Knölker, T. Braxmeier, G. Schlechtingen, German Patent DE 19526081, **1997** [(Cl. C07C265/00), 23 Jan 1997, DE Appl. 19526081.3, 18.07.1995]; *Chem. Abstr.* **1997**, 126, 172036c: Verfahren zur Herstellung von sterisch gehinderten organischen Mono- und Polyisocyanaten.
69. H.-J. Knölker, A. Ecker, P. Struwe, A. Steinmeyer, G. Müller, G. Neef, *Tetrahedron* **1997**, 53, 91–108: Enantioselective Synthesis of Calcitriol A-Ring Fragments.
68. H.-J. Knölker, W. Fröhner, *Tetrahedron Lett.* **1996**, 37, 9183: Transition Metal Complexes in Organic Synthesis, Part 35. First Total Synthesis of Furostifoline.
67. H.-J. Knölker, P. G. Jones, R. Graf, *Synlett* **1996**, 1155–1158: Cycloadditions of Allylsilanes, Part 8. Diastereoselective Synthesis of Spirocyclopentanes by Lewis Acid Promoted [3+2] Cycloaddition of Allyltriisopropylsilane and 2-Alkylidenecycloalkan-1-ones.
66. H.-J. Knölker, C. Hofmann, *Tetrahedron Lett.* **1996**, 37, 7947: Transition Metal Complexes in Organic Synthesis, Part 33. Molybdenum-Mediated Total Synthesis of Girinimbine, Murrayacine, and Dihydroxygirinimbine.
65. H.-J. Knölker, H. Goesmann, P. Gonser, *Tetrahedron Lett.* **1996**, 37, 6543: Transition Metal Complexes in Organic Synthesis, Part 32. Fluxionality of ( $\eta^4$ -1-Aza-1,3-butadiene)tricarbonyliron Complexes.
64. H.-J. Knölker, H. Goesmann, C. Hofmann, *Synlett* **1996**, 737–740: Transition Metal Complexes in Organic Synthesis, Part 31. A Novel Molybdenum-Mediated Synthesis of Carbazole Derivatives: Application to the Total Synthesis of Mukonal and 1,1'-Bis(2-hydroxy-3-methylcarbazole).
63. H.-J. Knölker, T. Braxmeier, *Tetrahedron Lett.* **1996**, 37, 5861: Isocyanates, Part 3. Synthesis of Carbamates by DMAP-Catalyzed Reaction of Amines with Di-*tert*-butyldicarbonate and Alcohols.
62. H.-J. Knölker, F. Budei, J.-B. Pannek, G. Schlechtingen, *Synlett* **1996**, 587–589: Transition Metal-Diene Complexes in Organic Synthesis, Part 30. On the Mechanism of the Oxidative Cyclizations of Tricarbonyl( $\eta^4$ -cyclohexadiene)iron Complexes: Unequivocal Determination of the Regioselectivity and the Stereospecificity of the Cyclization Process by Deuterium Labeling Studies.
61. H.-J. Knölker, T. Braxmeier, G. Schlechtingen, *Synlett* **1996**, 502: Isocyanates, Part 2. Synthesis of Symmetrical and Unsymmetrical Ureas by DMAP-Catalyzed Reaction of Alkyl- and Arylamines with Di-*tert*-butyldicarbonate.
60. H.-J. Knölker, G. Baum, J.-B. Pannek, *Tetrahedron* **1996**, 52, 7345–7362 (in *Tetrahedron Symposium-in-Print, Number 61: New Synthetic Methods-IV. Organometallics in Organic Chemistry*; I. E. Markó, Ed.): Transition Metal-Diene Complexes in Organic Synthesis, Part 27. Synthesis and Reactivity of 4a,9a-Dihydro-9*H*-carbazoles.
59. H.-J. Knölker, P. Gonser, T. Koegler, *Tetrahedron Lett.* **1996**, 37, 2405: Transition Metal-Diene Complexes in Organic Synthesis, Part 29. Separation of Planar Chiral Tricarbonyliron-Diene Complexes at Cyclodextrin Bonded Chiral Stationary Phases by HPLC.
58. H.-J. Knölker, *J. Prakt. Chem.* **1996**, 338, 190–192: The Reagent. Trimethylamine *N*-oxide – A Useful Oxidizing Reagent.
57. A. Steinmeyer, G. Neef, G. Müller, H.-J. Knölker, German Patent DE 4423669, **1996** [PCT Int. Appl. WO 9600207 (Cl. C07C69/013), 4 Jan 1996, DE Appl. 4423669, 23.06.1994]; *Chem. Abstr.*

- 1996**, 124, 202734g: Cyclohexanon-Derivate, Verfahren zu deren Herstellung und Zwischenprodukte des Verfahrens.
56. H.-J. Knölker, H. Hermann, *Angew. Chem.* **1996**, 108, 363–365; *Angew. Chem. Int. Ed. Engl.* **1996**, 35, 341–344: Transition Metal-Diene Complexes in Organic Synthesis, Part 28. Asymmetric Catalysis in the Complexation of Prochiral Dienes by the Tricarbonyliron Fragment: A Novel Methodology for the Enantioselective Synthesis of Planar Chiral Tricarbonyl(diene)iron Complexes.
55. H.-J. Knölker, T. Braxmeier, G. Schlechtingen, *Angew. Chem.* **1995**, 107, 2746–2749; *Angew. Chem. Int. Ed. Engl.* **1995**, 34, 2497–2500: A Novel Method for the Synthesis of Isocyanates Under Mild Conditions.
54. H.-J. Knölker, G. Baum, P. Gonser, *Tetrahedron Lett.* **1995**, 36, 8191–8194: Transition Metal-Diene Complexes in Organic Synthesis, Part 26. Synthesis of Enantiopure ( $\eta^4$ -1-Aza-1,3-butadiene)tricarbonyliron Complexes.
53. H.-J. Knölker in *Encyclopedia of Reagents for Organic Synthesis*; L. A. Paquette, Ed.; Wiley, Chichester **1995**; Vol. 1, p. 333: ( $\eta^4$ -Benzylideneacetone)tricarbonyliron.
52. H.-J. Knölker, E. Baum, J. Heber, *Tetrahedron Lett.* **1995**, 36, 7647–7650: Transition Metal-Diene Complexes in Organic Synthesis, Part 25. Cycloadditions of Annulated 2,5-Bis(trimethylsilyl)cyclopentadienones.
51. H.-J. Knölker, T. Hopfmann, *Synlett* **1995**, 981: Transition Metal-Diene Complexes in Organic Synthesis, Part 24. Total Synthesis of the Naturally Occurring Free Radical Scavenger Carazostatin.
50. H.-J. Knölker, E. Baum, T. Hopfmann, *Tetrahedron Lett.* **1995**, 36, 5339: Transition Metal-Diene Complexes in Organic Synthesis, Part 23. Total Synthesis of the Marine Alkaloid Hyellazole.
49. H.-J. Knölker, M. Bauermeister, J.-B. Pannek, M. Wolpert, *Synthesis* **1995**, 397: Transition Metal-Diene Complexes in Organic Synthesis, Part 22. The Iron-Mediated Quinone Imine Cyclization: A General Route to 3-Hydroxycarbazoles.
48. H.-J. Knölker, G. Wanzl, *Synlett* **1995**, 378–382: Cycloadditions of Allylsilanes, Part 7. Stereoselective Synthesis of Hydroxycyclopentanes from Silylcyclopentanes by Oxidative Cleavage of the Carbon-Silicon Bond.
47. H.-J. Knölker in *Advances in Nitrogen Heterocycles*; C. J. Moody, Ed.; JAI Press, Greenwich (CT), **1995**; Vol. 1, pp. 173–204: Transition Metal-Mediated Synthesis of Carbazole Derivatives.
46. H.-J. Knölker, *J. Prakt. Chem.* **1995**, 337, 75–77: The Reagent. Manganese Dioxide, a Versatile Oxidizing Reagent.
45. H.-J. Knölker, G. Baum, M. Kosub, *Synlett* **1994**, 1012: Transition Metal-Diene Complexes in Organic Synthesis, Part 21. Iron-Mediated Diastereoselective Cyclizations to 1-Oxaspiro[4.5]decanes.
44. H.-J. Knölker, N. O'Sullivan, *Tetrahedron* **1994**, 50, 10893–10908: Indoloquinones, Part 3. Palladium-Promoted Synthesis of Hydroxy-Substituted 5-Cyano-5H-benzo[b]carbazole-6,11-diones.
43. H.-J. Knölker, G. Baum, R. Graf, *Angew. Chem.* **1994**, 106, 1705–1707; *Angew. Chem. Int. Ed. Engl.* **1994**, 33, 1612–1615: Cycloadditions of Allylsilanes, Part 6. Lewis Acid Promoted [2+2]

Cycloaddition of Allylsilanes and Unsaturated Esters: A Novel Method for Cyclobutane Construction.

42. H.-J. Knölker, P. Gonser, P. G. Jones, *Synlett* **1994**, 405–408: Transition Metal-Diene Complexes in Organic Synthesis, Part 20. Development of Highly Efficient 1-Aza-1,3-butadiene Catalysts for the Complexation of 1,3-Dienes by the Tricarbonyliron Fragment.
41. H.-J. Knölker, M. Bauermeister, *J. Indian Chem. Soc.* **1994**, *71*, 345 (*Special Issue Dedicated to Professor D. P. Chakraborty*): Transition Metal-Diene Complexes in Organic Synthesis, Part 17. Studies Directed Towards the Iron-Mediated Synthesis of 2-Oxygenated Carbazole Alkaloids.
40. H.-J. Knölker, R. Hitzemann, *Tetrahedron Lett.* **1994**, *35*, 2157: Imidazole Derivatives, Part IX. Selective Reactions of Functionalized Imidazo[1,2-*a*]pyridines: Stereospecific Synthesis of 5,6-Dihydroimidazo[1,2-*a*]pyridines.
39. H.-J. Knölker, *J. Prakt. Chem.* **1994**, *336*, 277–279: The Reagent. Pentacarbonyliron – Fe[CO]<sub>5</sub>.
38. H.-J. Knölker, N. O'Sullivan, *Tetrahedron Lett.* **1994**, *35*, 1695–1698: Indoloquinones, Part 2. Palladium-Promoted Synthesis of a 7-Deoxyprekinamycin Isomer.
37. H.-J. Knölker, A.-A. El-Ahl, G. Weingärtner, *Synlett* **1994**, 194–196: Transition Metal-Diene Complexes in Organic Synthesis, Part 19. Oxidative Cyclization of Alkylamines at Tricarbonyliron-Cyclohexadiene Complexes: A Simple Access to Indole Derivatives.
36. H.-J. Knölker, R. Graf, *Synlett* **1994**, 131–133: [3+2] Cycloadditions of Allylsilanes, Part 5. Synthesis of Bicyclo[3.3.0]octanes by Domino [3+2] Cycloadditions of Allylsilanes and 3-Butyn-2-one.
35. H.-J. Knölker, J. Heber, *Synlett* **1993**, 924–926: Transition Metal-Diene Complexes in Organic Synthesis, Part 18. Iron-Mediated [2+2+1] Cycloadditions of Diynes and Carbon Monoxide: Selective Demetalation Reactions.
34. H.-J. Knölker, M. Bauermeister, *Tetrahedron* **1993**, *49*, 11221–11236: Transition Metal-Diene Complexes in Organic Synthesis, Part 16. Iron-Mediated Total Synthesis of 1-Oxygenated Carbazole Alkaloids.
33. H.-J. Knölker, N. Foitzik, R. Graf, J.-B. Pannek, P. G. Jones, *Tetrahedron* **1993**, *49*, 9955–9972: [3+2] Cycloadditions of Allylsilanes, Part 4. Dual Reactivity of Allyltrimethylsilane: Sakurai Reaction versus Trimethylsilylcyclopentane Annulation.
32. H.-J. Knölker, M. Bauermeister, *Helv. Chim. Acta* **1993**, *76*, 2500–2514: Transition Metal-Diene Complexes in Organic Synthesis, Part 15. Iron-Mediated Total Synthesis of Carbazomycin A and B.
31. H.-J. Knölker, K. Hartmann, *Synlett* **1993**, 755–757: Indoloquinones, Part 1. Synthesis of 4,7-Dibenzyloxyindole and Selective Transformations to 4,7-Indoloquinones.
30. H.-J. Knölker, R. Graf, *Tetrahedron Lett.* **1993**, *34*, 4765–4768: [3+2] Cycloadditions of Allylsilanes, Part 3. Diastereoselective Construction of Two Contiguous Quaternary Carbon Centers by [3+2] Cycloaddition of Allyltris(isopropyl)silane.
29. H.-J. Knölker, N. Foitzik, H. Goesmann, R. Graf, *Angew. Chem.* **1993**, *105*, 1104–1106; *Angew. Chem. Int. Ed. Engl.* **1993**, *32*, 1081–1083: [3+2] Cycloadditions of Allylsilanes, Part 2. A Versatile and Efficient Synthesis of Annulated Cyclopentanes by Stereoselective [3+2] Cycloaddition of Allylsilanes and Cycloalkenyl Methyl Ketones.



28. H.-J. Knölker, A.-A. El-Ahl, *Heterocycles* **1993**, *36*, 1381: Imidazole Derivatives, Part VIII. Stereoselective Formation of 1-[(*E*) 3-(1-Imidazolyl)-2-alkenoyl]imidazoles.
27. H.-J. Knölker, M. Bauermeister, J.-B. Pannek, D. Bläser, R. Boese, *Tetrahedron* **1993**, *49*, 841–862: Transition Metal-Diene Complexes in Organic Synthesis, Part 13. Highly Chemo- and Stereoselective Oxidations of Tricarbonyliron-Cyclohexadiene Complexes: Synthesis of 4-Deoxycarbazomycin B.
26. H.-J. Knölker, J. Heber, C. H. Mahler, *Synlett* **1992**, 1002–1004: Transition Metal-Diene Complexes in Organic Synthesis, Part 14. Regioselective Iron-Mediated [2+2+1] Cycloadditions of Alkynes and Carbon Monoxide: Synthesis of Substituted Cyclopentadienones.
25. H.-J. Knölker, M. Bauermeister, J.-B. Pannek, *Chem. Ber.* **1992**, *125*, 2783: Transition Metal-Diene Complexes in Organic Synthesis, Part 12. Regio- and Stereoselectivity of Electrophilic Substitutions of Arylamines by Tricarbonyliron-Complexed Cyclohexadienylium Cations and Oxidative Cyclizations to Carbazoles.
24. H.-J. Knölker, R. Boese, D. Döring, A.-A. El-Ahl, R. Hitzemann, P. G. Jones, *Chem. Ber.* **1992**, *125*, 1939–1951: Imidazole Derivatives, VII. Reaction of 1-Acylimidazoles with Dialkyl Acetylenedicarboxylates: Synthesis of Imidazo[1,2-*a*]pyridines, 2-Imidazolylmaleates, 1,5-Dihydroimidazo[1,2-*a*]pyridines, Furo[2',3':2,3]pyrrolo[1,2-*a*]imidazoles, Furo[2',3':2,3]pyrrolo[1,2-*a*]benzimidazoles, and 7*H*-Pyrrolo[1,2-*a*]imidazoles.
23. H.-J. Knölker, P. Gonser, *Synlett* **1992**, 517–520: Transition Metal-Diene Complexes in Organic Synthesis, Part 11. Tricarbonyl( $\eta^4$ -1-aza-1,3-butadiene)iron Complexes as Iron Tricarbonyl Transfer Reagents: 1-Aza-1,3-butadiene-Catalyzed Transfer of the Iron Tricarbonyl Fragment and Complexation of 1,3-Dienes by Polymer-Supported Iron Tricarbonyl.
22. H.-J. Knölker, *Synlett* **1992**, 371–387 (*Account*): Transition Metal-Diene Complexes in Organic Synthesis, Part 10. Iron-Mediated Synthesis of Heterocyclic Ring Systems and Applications in Alkaloid Chemistry.
21. H.-J. Knölker, M. Bauermeister, *Heterocycles* **1991**, *32*, 2443–2450: Transition Metal-Diene Complexes in Organic Synthesis, Part 9. First Total Synthesis of Carbazomycinal.
20. H.-J. Knölker, K. Hartmann, *Synlett* **1991**, 428–430: Transition Metal-Diene Complexes in Organic Synthesis, Part 8. Iron-Mediated Approach to the Discorhabdin and Prianosin Alkaloids.
19. H.-J. Knölker, R. Boese, K. Hartmann, *Tetrahedron Lett.* **1991**, *32*, 1953–1956: Transition Metal-Diene Complexes in Organic Synthesis, Part 7. Regioselectivity Control in Iron-Mediated Diastereoselective Spiroannulations of Arylamines: Cyclization to 1-Aza- versus 3-Azaspiro[5.5]undecanes.
18. H.-J. Knölker, D. Döring, A.-A. El-Ahl, P. G. Jones, *Synlett* **1991**, 241: Imidazole Derivatives, Part VI. A Diastereoselective Spirobicyclization Reaction Leading to the Novel Imidazo[1',2':1,2]-pyrrolo[2,3-*b*]furans.
17. H.-J. Knölker, P. G. Jones, J.-B. Pannek, A. Weinkauff, *Synlett* **1991**, 147: Transition Metal-Diene Complexes in Organic Synthesis, Part 6. Stereoselective Synthesis of Iron-Complexed 4b,8a-Dihydrocarbazol-3-ones: A Novel Route to 4a,9a-Dihydro-9*H*-carbazoles and Highly Chemo-, Regio-, and Stereoselective Sakurai Reactions.

16. H.-J. Knölker in *Organic Synthesis via Organometallics*; K. H. Dötz, R. W. Hoffmann, Eds.; Vieweg, Braunschweig **1991**, p. 119: Transition Metal-Diene Complexes in Organic Synthesis, Part 5. Applications of Iron-Diene Complexes to Natural Product Synthesis.
15. H.-J. Knölker in *40 Jahre Fonds der Chemischen Industrie 1950-1990*; Verband der Chemischen Industrie, Ed.; Frankfurt **1990**, S. 219: Eisen-vermittelte Synthese von Heterocyclen.
14. H.-J. Knölker, R. Boese, R. Hitzemann, *Heterocycles* **1990**, *31*, 1435: Imidazole Derivatives, Part V. Imidazo[1',2':1,6]pyrido[2,3-*d*]pyridazine: Synthesis, Structure, and Preliminary Chemistry of a Novel Heterocyclic Ring System.
13. H.-J. Knölker, P. G. Jones, J.-B. Pannek, *Synlett* **1990**, 429–430: Conjugate Addition of Allylsilanes with Subsequent Sila-Wagner-Meerwein Rearrangement: A Novel Methodology for Stereoselective Trimethylsilylcyclopentane Annulation.
12. H.-J. Knölker, R. Boese, *J. Chem. Soc. Perkin Trans. 1* **1990**, 1821: Imidazole Derivatives, Part 4. A Novel and Direct Synthesis of 7*H*-Pyrrolo[1,2-*a*]imidazoles.
11. H.-J. Knölker, M. Bauermeister, *J. Chem. Soc. Chem. Commun.* **1990**, 664–665: Transition Metal-Diene Complexes in Organic Synthesis, Part 4. Iron-Mediated Total Synthesis of the Cytotoxic Carbazole Koenoline and Related Alkaloids.
10. H.-J. Knölker, R. Boese, R. Hitzemann, *Chem. Ber.* **1990**, *123*, 327: Imidazole Derivatives, III. Regiospecific Synthesis, Structure and Fluorescence Properties of Highly Substituted Imidazo[1,2-*a*]pyridines and Pyrido[1,2-*a*]benzimidazoles.
9. H.-J. Knölker, R. Boese, K. Hartmann, *Angew. Chem.* **1989**, *101*, 1745; *Angew. Chem. Int. Ed. Engl.* **1989**, *28*, 1678–1679: Transition Metal-Diene Complexes in Organic Synthesis, Part 3. Iron-mediated Diastereoselective Spiroannulation to the Spiro[1,2,3,4-tetrahydroquinoline-4,1'-cyclohexane] System and a Novel Rearrangement to 2,3-Dihydroindole Derivatives.
8. H.-J. Knölker, M. Bauermeister, *J. Chem. Soc. Chem. Commun.* **1989**, 1468–1470: Transition Metal-Diene Complexes in Organic Synthesis, Part 2. The Total Synthesis of the Carbazole Antibiotic Carbazomycin B and an Improved Route to Carbazomycin A.
7. H.-J. Knölker, R. Boese, R. Hitzemann, *Heterocycles* **1989**, *29*, 1551: Imidazole Derivatives, Part II. Synthesis of Imidazo[1,2-*a*]pyridin-5-ones.
6. H.-J. Knölker, M. Bauermeister, D. Bläser, R. Boese, J.-B. Pannek, *Angew. Chem.* **1989**, *101*, 225–227; *Angew. Chem. Int. Ed. Engl.* **1989**, *28*, 223–225: Transition Metal-Diene Complexes in Organic Synthesis, Part 1. Highly Selective Oxidations of Fe(CO)<sub>3</sub>-Cyclohexadiene Complexes: Synthesis of 4b,8a-Dihydrocarbazol-3-ones and the First Total Synthesis of Carbazomycin A.
5. H.-J. Knölker, R. Boese, *J. Chem. Soc. Chem. Commun.* **1988**, 1151: A Novel Synthesis of the Imidazo[1,2-*a*]pyridine Ring System.
4. R. Boese, H.-J. Knölker, K.P.C. Vollhardt, *Angew. Chem.* **1987**, *99*, 1067; *Angew. Chem. Int. Ed. Engl.* **1987**, *26*, 1035: Cobalt-Mediated [2+2+2] Cycloadditions of Alkynes to the Imidazole 4,5-Double Bond. First Synthesis of the 3a,7a-Dihydrobenzimidazole Nucleus and Its Preliminary Chemistry Including a Novel Quinoline Construction.

3. P. Hölscher, H.-J. Knölker, E. Winterfeldt, *Isr. J. Chem.* **1991**, *31*, 187: An Enantioselective Total Synthesis of (+)-Elenoic Acid and the Non-Natural Enantiomers of Tetrahydroalstonine, Aricine, and Reserpine.
2. P. Hölscher, H.-J. Knölker, E. Winterfeldt, *Tetrahedron Lett.* **1990**, *31*, 2705: Enantioselective Total Synthesis of (+)-Tetrahydroalstonine, (+)-Aricine, and (+)-Reserpine.
1. H.-J. Knölker, E. Winterfeldt, *Liebigs Ann. Chem.* **1986**, 465: Stereoselective Routes to Bicyclo[3.3.0]octanones.