

## SELECTED PUBLICATIONS

<i>Title</i>	<i>Journal</i>	<i>Year</i>	<i>Vol</i>	<i>Page init</i>	<i>Page end</i>	<i>DOI</i>
Methane Catalytic Amidation via a Plausible Copper-Nitrene Intermediate	<i>J. Am. Chem. Soc.</i>	<b>2026</b>	148	9057	9065	10.1021/jacs.5c22747
Characterization of a Silver Vinylcarbene Intermediate in Carbene–Alkyne Metathesis and Its Concerted C(sp <sup>2</sup> )–H Bond Insertion	<i>J. Am. Chem. Soc.</i>	<b>2026</b>	148	3689	3696	10.1021/jacs.5c19806
Functionalization of Polyolefins via Catalytic Nitrene Addition	<i>Angew. Chem. Int. Ed.</i>	<b>2025</b>	64	e22659		10.1002/anie.202522659
Introducing the Aziridination of Fluorinated Olefins by Metal-Catalyzed Nitrene Transfer	<i>Angew. Chem. Int. Ed.</i>	<b>2025</b>	64	e202419188		10.1002/anie.202419188
Alkanes C1-C6 C-H Bond Activation via a Barrierless Potential Energy Path: Trifluoromethyl Carbenes Enhance Primary C-H Bond Functionalization	<i>J. Am. Chem. Soc.</i>	<b>2024</b>	146	34014	34022	10.1021/jacs.4c13065
A copper-masked monosubstituted carbene as a general transmetalating agent toward stable carbene complexes	<i>Chem</i>	<b>2024</b>	10	1576	1592	10.1016/j.chempr.2024.03.009
Molecular Dynamic Simulations of Aqueous Micellar Organometallic Catalysis: Methane Functionalization as a Case Study	<i>Angew. Chem. Int. Ed.</i>	<b>2024</b>	63	e202314773		10.1002/anie.202314773

## SELECTED PUBLICATIONS

<i>Title</i>	<i>Journal</i>	<i>Year</i>	<i>Vol</i>	<i>Page init</i>	<i>Page end</i>	<i>DOI</i>
Intramolecular Interception of the Remote Position of Vinylcarbene Silver Complex Intermediates by C(sp <sup>3</sup> )-H Bond Insertion	<i>Angew. Chem. Int. Ed.</i>	<b>2023</b>	62	e202215163		10.1002/anie.202215163
Introducing the Catalytic Amination of Silanes via Nitrene Insertion	<i>J. Am. Chem. Soc.</i>	<b>2022</b>	144	10608	10614	10.1021/jacs.2c03739
Carbene-Controlled Regioselective Functionalization of Linear Alkanes under Silver Catalysis	<i>J. Am. Chem. Soc.</i>	<b>2022</b>	144	23275	23279	10.1021/jacs.2c11707
Copper-Catalyzed Dehydrogenative Amidation of Light Alkanes	<i>Angew. Chem. Int. Ed.</i>	<b>2021</b>	60	18467	18471	10.1002/anie.202104737
Two Copper-Carbenes from One Diazo Compound	<i>J. Am. Chem. Soc.</i>	<b>2021</b>	143	4837	4843	10.1021/jacs.1c01483
A Quantitative Model for Alkane Nucleophilicity Based on C-H Bond Structural/Topological Descriptors	<i>Angew. Chem. Int. Ed.</i>	<b>2020</b>	59	3112	3116	10.1002/anie.201914386
Intermolecular Allene Functionalization by Silver-Nitrene Catalysis	<i>J. Am. Chem. Soc.</i>	<b>2020</b>	142	13062	13071	10.1021/jacs.0c04395

## SELECTED PUBLICATIONS

<i>Title</i>	<i>Journal</i>	<i>Year</i>	<i>Vol</i>	<i>Page init</i>	<i>Page end</i>	<i>DOI</i>
Copper-Catalyzed N-F Bond Activation for Uniform Intramolecular C-H Amination Yielding Pyrrolidines and Piperidines	<i>Angew. Chem. Int. Ed.</i>	<b>2019</b>	58	8912	8916	10.1002/anie.201902716
Measuring the Relative Reactivity of the Carbon-Hydrogen Bonds of Alkanes as Nucleophiles	<i>Angew. Chem. Int. Ed.</i>	<b>2018</b>	57	13848	13852	10.1002/anie.201807448
Enantio- and Diastereoselective Cyclopropanation of 1-Alkenylboronates: Synthesis of 1-Boryl-2,3-Disubstituted Cyclopropanes	<i>Angew. Chem. Int. Ed.</i>	<b>2018</b>	57	2334	+	10.1002/anie.201710415
Catalytic Nitrene Transfer To Alkynes: A Novel and Versatile Route for the Synthesis of Sulfinamides and Isothiazoles	<i>Angew. Chem. Int. Ed.</i>	<b>2017</b>	56	12842	+	10.1002/anie.201705664
Functional-Group-Tolerant, Silver-Catalyzed N-N Bond Formation by Nitrene Transfer to Amines	<i>J. Am. Chem. Soc.</i>	<b>2017</b>	139	2216	2223	10.1021/jacs.6b08219
Iron and Manganese Catalysts for the Selective Functionalization of Arene C(sp <sup>2</sup> )-H Bonds by Carbene Insertion	<i>Angew. Chem. Int. Ed.</i>	<b>2016</b>	55	6530	6534	10.1002/anie.201601750
Chemo-, Regio-, and Stereoselective Silver-Catalyzed Aziridination of Dienes: Scope, Mechanistic Studies, and Ring-Opening Reactions	<i>J. Am. Chem. Soc.</i>	<b>2014</b>	136	5342	5350	10.1021/ja412547r

## SELECTED PUBLICATIONS

<i>Title</i>	<i>Journal</i>	<i>Year</i>	<i>Vol</i>	<i>Page init</i>	<i>Page end</i>	<i>DOI</i>
Supercritical Carbon Dioxide: A Promoter of Carbon-Halogen Bond Heterolysis	<i>Angew. Chem. Int. Ed.</i>	<b>2013</b>	52	13298	13301	10.1002/anie.201303819
Introducing Copper as Catalyst for Oxidative Alkane Dehydrogenation	<i>J. Am. Chem. Soc.</i>	<b>2013</b>	135	3887	3896	10.1021/ja310866k
A General Mechanism for the Copper- and Silver-Catalyzed Olefin Aziridination Reactions: Concomitant Involvement of the Singlet and Triplet Pathways	<i>J. Am. Chem. Soc.</i>	<b>2013</b>	135	1338	1348	10.1021/ja307229e
Regioselective Formation of 2,5-Disubstituted Oxazoles Via Copper(I)-Catalyzed Cycloaddition of Acyl Azides and 1-Alkynes	<i>J. Am. Chem. Soc.</i>	<b>2011</b>	133	191	193	10.1021/ja109732s
Silver-Catalyzed C-C Bond Formation Between Methane and Ethyl Diazoacetate in Supercritical CO <sub>2</sub>	<i>Science</i>	<b>2011</b>	332	835	838	10.1126/science.1204131
Selective Synthesis of N-Substituted 1,2-Dihydropyridines from Furans by Copper-Induced Concurrent Tandem Catalysis	<i>J. Am. Chem. Soc.</i>	<b>2010</b>	132	4600	4607	10.1021/ja1006614
Efficient Silver-Catalyzed Regio- and Stereospecific Aziridination of Dienes	<i>Angew. Chem. Int. Ed.</i>	<b>2010</b>	49	7092	7095	10.1002/anie.201003167

## SELECTED PUBLICATIONS

<i>Title</i>	<i>Journal</i>	<i>Year</i>	<i>Vol</i>	<i>Page init</i>	<i>Page end</i>	<i>DOI</i>
Facile amine formation by intermolecular catalytic amidation of carbon-hydrogen bonds	<i>J. Am. Chem. Soc.</i>	<b>2006</b>	128	11784	11791	10.1021/ja0627850
A gold catalyst for carbene-transfer reactions from ethyl diazoacetate	<i>Angew. Chem. Int. Ed.</i>	<b>2005</b>	44	5284	5288	10.1002/anie.200501056
Complete control of the chemoselectivity in catalytic carbene transfer reactions from ethyl diazoacetate: An N-heterocyclic carbene-Cu system that suppresses diazo coupling	<i>J. Am. Chem. Soc.</i>	<b>2004</b>	126	10846	10847	10.1021/ja047284y
Highly regioselective functionalization of aliphatic carbon-hydrogen bonds with a perbromohomoscorpionate copper(I) catalyst	<i>J. Am. Chem. Soc.</i>	<b>2003</b>	125	1446	1447	10.1021/ja0291484
Cyclohexane and benzene amination by catalytic nitrene insertion into C-H bonds with the copper-homoscorpionate catalyst TpBr <sub>3</sub> Cu(NCMe)	<i>J. Am. Chem. Soc.</i>	<b>2003</b>	125	12078	12079	10.1021/ja037072l
Copper(I)-homoscorpionate catalysts for the preferential, kinetically controlled cis cyclopropanation of $\alpha$ -olefins with ethyl diazoacetate	<i>J. Am. Chem. Soc.</i>	<b>2002</b>	124	978	983	10.1021/ja011895y

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Intermolecular copper-catalyzed carbon-hydrogen bond activation via carbene insertion	<i>J. Am. Chem. Soc.</i>	<b>2002</b>	124	896	897	10.1021/ja016798j
Unprecedented highly cis-diastereoselective olefin cyclopropanation using copper homoscorpionate catalysts	<i>J. Am. Chem. Soc.</i>	<b>2001</b>	123	3167	3168	10.1021/ja0155736