

## List of all Publications Prof. Dr. C.C. Lu

[ 74 ]

### Varying Reversible C-H Bond Activation of Unactivated Arenes by a Nickel-Silylene Complex

Gomm, L.; Zhu, H.; Schnakenburg, G.; Nozinovic, S.; Grimme, S.\*; Lu, C. C.\*  
*J. Am. Chem. Soc.* **2025**, ASAP.

<https://doi.org/10.1021/jacs.5c10922>

[ 73 ]

### Varying Lewis Acidity, Covalency, and Halide Mobility to Govern Oxidative Addition Reactivity of Ni-Group 13 Bimetallic Complexes

Schwartz, T. M.; Zhu, H.; Graziano, B. J.; Schnakenburg, G.; Grimme, S.\*; Lu, C. C.\*  
*Organometallics* **2024**, *43*, 2872-2881.

<https://doi.org/10.1021/acs.organomet.4c00299>

[ 72 ]

### Comparing the reaction profiles of single iron catalytic sites in enzymes and in reticular frameworks for methane-to-methanol oxidation

Vitillo, J. G.; Lu, C. C.; Bhan, A.; Gagliardi, L.  
*Rep. Phys. Sci* **2024**, *4*, 101422

<https://doi.org/10.1016/j.xcrp.2023.101422>

[ 71 ]

### Structure and Site Evolution of Framework Ni Species in MIL-128 MOFs for Propylene Oligomerization Catalysis

Yeh, B.; Chheda, S.; Prinslow, S. D.; Hoffman, A. S.; Hong, J.; Perez-Aguilar, J. E.; Bare, S. R.; Lu, C. C.; Gagliardi, L.; Bhan, A.

*J. Am. Phys. Chem. Soc.* **2023**, *145*, 6, 3408-3418

<https://doi.org/10.1021/jacs.2c10551>

[ 70 ]

### Light-Driven Hydrodefluorination of Electron-Rich Aryl Fluorides by an Anionic Rhodium-Gallium Photoredox Catalyst

Moore, J. T.; Dorantes, M. J.; Pengmei, Z.; Schwartz, T. M.; Schaffner, J.; Apps, S. L.; Gaggioli, C. A.; Das, U.; Gagliardi, L.; Blank, D. A.; Lu, C. C.\* *Angew. Chem. Int. Ed.* **2022**, e202205575

<https://doi.org/10.1002/anie.202205575>

[ 69 ]

### Toggling the Z-Type Interaction Off-On in Nickel-Boron Dihydrogen and Anionic Hydride Complexes.

Prat, J. R.; Cammarota, R. C.; Graziano, B. J.; Moore, J. T.; Lu, C. C.\*  
*Chem. Comm.* **2022**, *58*, 8798-8801

<https://doi.org/10.1039/D2CC03219H>

[ 68 ]

### One-electron Bonds in Copper-Aluminum and Copper-Gallium Complexes

Graziano, B. J.; Scott, T. R.; Vollmer, M. V.; Dorantes, M. J.; Young, Jr., V. G.; Bill, E.\* Gagliardi, L.\*; Lu, C. C.\*  
*Chem. Sci.* **2022**, *13*, 6525 - 6531

<https://doi.org/10.1039/D2SC01998A>

(Highlight: Tibbets, I. "First examples of odd-electron  $\sigma$  bonds for aluminium and gallium." *Chemistry World*, May 23, 2022. <https://www.chemistryworld.com/news/first-examples-of-odd-electron--bonds-for-aluminium-and-gallium/4015710.article>)

[ 67 ]

### Site Densities, Rates, and Mechanism of Stable Ni/UiO-66 Ethylene Oligomerization Catalysts

Yeh, B.; Vicchio, S. P.; Chheda, S.; Zheng, J.; Schmid, J.; Löbber, L.; Bermejo-Deval, R.; Gutiérrez, O. Y.; Lercher, J. A.; Lu, C. C.; Neurock, M.; Getman, R. B.; Gagliardi, L.\*; Bhan, A.\*

*J. Am. Chem. Soc.* **2021**, *143*, 20274–20280

<https://doi.org/10.1021/jacs.1c09320>

[ 66 ]

### Site Densities, Rates, and Mechanism of Stable Ni/UiO-66 Ethylene Oligomerization Catalysts

Taylor, M. G.; Nandy, A.; Lu, C. C.; Kulik, H. J.\*

*J. Phys. Chem.* **2021**, *12*, 9812–9820

<https://doi.org/10.1021/acs.jpcclett.1c02852>

[ 65 ]

### Beyond Radical Rebound: Methane Oxidation to Methanol Catalyzed by Iron Species in Metal–Organic Framework Nodes

Simons, M. C.; Prinslow, S. D.; Babucci, M.; Hoffman, A. S.; Hong, J.; Vitillo, J. G.; Bare, S. R.; Gates, B. C.; Lu, C. C.; Gagliardi, L.; Bhan, A.\*

*J. Am. Chem. Soc.* **2021**, *143*, 12165-12174

<https://doi.org/10.1021/jacs.1c04766>

[ 64 ]

**Cooperative Bond Activation and Facile Intramolecular Aryl Transfer of Nickel-Aluminum Pincer-type Complexes**

Graziano, B. J.; Vollmer, M. V.; Lu, C. C.\*  
*Angew. Chem. Int. Ed. Engl.* **2021**, *60*, 15087-15094  
<http://dx.doi.org/10.1002/anie.202104050>

(Featured as a Hot article;highlight: A. J. Bissette, "[Nickel-aluminium pincer complexes undergo cooperative bond activation](#)." *Commun. Chem.* **2021**, *4*, 80.)

[ 63 ]

**Influence of First and Second Coordination Environment on Structural Fe(II) Sites in MIL-101 for CH Bond Activation in Methane**

Vitillo, J.\*; Lu, C. C.; Cramer, C. J.; Bhan, A.; Gagliardi, L.\*  
*ACS Catal.* **2021**, *11*, 579-589  
<https://doi.org/10.1021/acscatal.0c03906>

[ 62 ]

**Bioinspired Nickel Complexes Supported by an Iron Metalloligand**

Prat, J. R.; Gaggioli, C. A.; Cammarota, R. C.; Bill, E.; Gagliardi, L.; Lu, C. C.\*  
*Inorg. Chem.* **2020**, *59*, 14251-14262  
<https://doi.org/10.1021/acs.inorgchem.0c02041>

[ 61 ]

**Bimetallic Iron-Tin Catalyst for N<sub>2</sub> to NH<sub>3</sub> and a Silyldiazenido Model Intermediate** Dorantes, M. J. †; Moore, J. T. †; Bill, E.; Mienert, B.; Lu, C. C.\*

*Chem. Comm.* **2020**, *56*, 11030-11033  
<https://doi.org/10.1039/D0CC04563B> (Featured as a ChemComm HOT article.)

[ 60 ]

**Catalytic Hydrogenolysis of Aryl C-F Bonds Using a Bimetallic Rhodium-Indium Complex**

Moore, J.T.; Lu, C.C.\*  
*J. Am. Chem. Soc.* **2020**, *142*, 11641-11646  
<https://doi.org/10.1021/jacs.0c04937>

[ 59 ]

**Size Control of the MOF NU-1000 through Manipulation of the Modulator/Linker Competition**

Webber, T. E.; Desai, S. P.; Combs, R. L.; Bingham, S.; Lu, C. C.; Penn, R. L.  
*Cryst. Growth Des.* **2020**, *20*, 2965-2972.  
<https://doi.org/10.1021/acs.cgd.9b01590>

[ 58 ]

**Rare-Earth Supported Nickel Catalysts for Alkyne Semihydrogenation: Chemo- and Regioselectivity Impacted by the Lewis Acidity and Size of the Support**

Ramirez, B. L.; Lu, C. C.\*  
*J. Am. Chem. Soc.* **2020**, *142*, 11, 5396-5407  
<https://doi.org/10.2021/jacs.0c00905>

(Featured in the ACS Select virtual issue "JACS Early Career Investigators," which highlights outstanding work published by young investigators in JACS in 2020.)

[ 57 ]

**Cobalt-Group 13 Complexes Catalyze CO<sub>2</sub> Hydrogenation via a Co(-I)/Co(I) Redox Cycle**

Vollmer, M. V.†; Ye, J. †; Linehan, J. C.; Graziano, B. J.; Preston, A.; Wiedner, E. S.; Lu, C. C.  
*ACS Catal.* **2020**, *10*, 2459-2470  
<https://pubs.acs.org/doi/10.1021/acscatal.9b03534>

[ 56 ]

**Structure, Dynamics, and Reactivity for Light Alkane Oxidation of Fe(II) Sites Situated in the Nodes of a Metal–Organic Framework**

Simons, M. C.; Vitillo, J. G.; Babucci, M.; Hoffman, A. S.; Boubnov, A.; Beauvais, M. L.; Chen, Z.; Cramer, C. J.; Chapman, K. W.; Bare, S. R.; Gates, B. C.; Lu, C. C.; Gagliardi, L.\*  
*J. Am. Chem. Soc.* **2019**, *141*, 18142-18151  
<https://pubs.acs.org/doi/10.1021/jacs.9b08686>

[ 55 ]

**Mechanistic Study on the Origin of the Trans Selectivity in Alkyne Semihydrogenation by a Heterobimetallic Rhodium–Gallium Catalyst in a Metal–Organic Framework**

Desai, S. P., Ye, J.; Islamoglu, T.; Farha, O.; Lu, C. C.  
*Organometallics* **2019**, *38*, 3466-3473  
(Special issue on "Organometallic Chemistry within Metal-Organic Frameworks," edited by P. Chirik, M. Dincă, F. Gabbaï, L. Schafer, and J. R. Long.)  
<https://pubs.acs.org/doi/10.1021/acs.organomet.9b00331>

[ 54 ]

**Multiple Bonds in Uranium–Transition Metal Complexes**

Sharma, P.; Pahls, D. R.; Ramirez, B.; Lu, C. C.; Gagliardi, L.

*Inorg. Chem.* **2019**, *58*, 10139-10147

<https://pubs.acs.org/doi/10.1021/acs.inorgchem.9b01264>

[ 53 ]

**Thermodynamic and kinetic studies of H<sub>2</sub> and N<sub>2</sub> binding to bimetallic nickel-group 13 complexes and neutron structure of a Ni( $\eta^2$ -H<sub>2</sub>) adduct**

Ryan C. Cammarota<sup>†</sup>, Jing Xie J. <sup>†</sup>, Samantha A. Burgess, Matthew V. Vollmer,<sup>a</sup> Konstantinos D. Vogiatzis, Jingyun Ye, John C. Linehan, Aaron M. Appel, Christina Hoffmann, Xiaoping Wang, Victor G. Young, Jr.<sup>a</sup> and Connie C. Lu<sup>\*</sup>

*Chem. Sci.* **2019**, *10*, 7029-7042

<https://pubs.rsc.org/en/content/articlelanding/2019/SC/C9SC02018G>

[ 52 ]

**Enhanced Fe-Centered Redox Flexibility in Fe–Ti Heterobimetallic Complexes**

Moore, J. T.<sup>†</sup> Chatterjee, S.<sup>†</sup>; Tarrago, M.<sup>†</sup>; Clouston, L. J.; Sproules, S.; Bill, E.; Bernales, V.; Gagliardi, L.; Ye, S.\*; Lancaster, K. M.\*; Lu, C. C.\*

*Inorganic. Chem.* **2019**, *58*, 6199-6214

<https://pubs.acs.org/doi/10.1021/acs.inorgchem.9b00442>

[ 51 ]

**Bimetallic Nickel-Lutetium Complexes: Tuning the Properties and Catalytic Hydrogenation Activity of the Ni Site by Varying the Lu Coordination Environment**

Ramirez, B. L.; Sharma, P.; Eisenhart, R. J.; Gagliardi, L.; Lu, C. C.\*

*Chem. Sci.*, **2019**, *10*, 3375-3384

[ 50 ]

**Reductive Disproportionation of CO<sub>2</sub> Mediated by Bimetallic Nickelate(–I)/Group 13 Complexes**

Vollmer, M. V.; Cammarota, R. C.; Lu, C. C.\*

*Eur. J. Inorg. Chem.* **2019**, 2140-2145

<http://dx.doi.org/10.1002/ejic.201801452>

[ 49 ]

**Quantum Chemical Characterization of Structural Single Fe(II) Sites in MIL-Type Metal Organic Frameworks for Oxidation of Methane to Methanol and Ethane to Ethanol**

Vitillo, J. G.\*; Bhan, A.; Cramer, C. J.; Lu, C. C.; Gagliardi, L.\*

*ACS Catal.* **2019**, *9*, 2870-2879

<http://dx.doi.org/10.1021/acscatal.8b04813>

[ 48 ]

**Well-Defined Rhodium-Gallium Catalytic Sites in a Metal-Organic Framework: Promoter-Controlled Selectivity in Alkyne Semi-Hydrogenation**

Desai, S. P.; Ye, J.; Zheng, J.; Ferrandon, M.; Weber, T. E.; Platero-Prats, A. E.; Duan, J.; Holley, P. G.; Camaioni, D.; Chapman, K. W.; Delferro, M.; Farha, O. K.; Fulton, J. L.; Gagliardi, L.; Lercher, J. A.; Penn, R. L.; Stein, A. S.; Lu, C. C.\*

*J. Am. Chem. Soc.* **2018**, *140*, 15309-15318

<http://dx.doi.org/10.1002/anie.201803356>

[ 47 ]

**Formal Nickelate(–I) Complexes Supported by Group 13 Ions**

Vollmer, M. V.<sup>†</sup>; Xie, J.<sup>†</sup>; Cammarota, R. C.; Young, Jr, V. G.; Bill, E.\*; Gagliardi, L.\*; Lu, C. C.\*

*Angew. Chem. Int. Ed.* **2018**, *57*, 7815-7819

<http://dx.doi.org/10.1002/anie.201803356>

[ 46 ]

**Rationalizing the Reactivity of Bimetallic Molecular Catalysts for CO<sub>2</sub> Hydrogenation**

Ye, J.\*; Cammarota, R. C.; Xie, J.; Vollmer, M. V.; Truhlar, D. G.; Cramer, C. J.; Lu, C. C.\*; Gagliardi, L.

*ACS Catal.* **2018**, *8*, 4955-4968

<http://dx.doi.org/10.1021/acscatal.8b00803>

[ 45 ]

**Role of a Modulator in the Synthesis of Phase-Pure NU-1000**

Webber, T. E.; Liu, W.-G.; Desai, S. P.; Lu, C. C., Truhlar, D. G.; Penn, R. L.\*

*ACS Appl. Mater. Interfaces* **2017**, *9*, 39342-39346

<http://dx.doi.org/10.1021/acscami.7b11348>

[ 44 ]

**A Bimetallic Nickel-Gallium Complex Catalyzes CO<sub>2</sub> Hydrogenation via the Intermediacy of an Anionic d<sup>10</sup> Nickel Hydride**

Cammarota, R. C.; Vollmer, M. V.; Xie, J.; Ye, J.; Linehan, J. C.; Burgess, S. A.; Appel, A. M.; Gagliardi, L.; Lu, C. C.\*

*J. Am. Chem. Soc.* **2017**, *139*, 14244-142

<http://dx.doi.org/10.1021/jacs.7b07911>

[ 43 ]

**Stable Dihydrogen Complexes of Cobalt(-I) Suggest an Inverse trans-Influence of Lewis Acidic Group 13 Metalloligands**

Vollmer, M. V.; Xie, J.; Lu, C. C.\*

*J. Am. Chem. Soc.* **2017**, *139*, 6570-6573

<http://dx.doi.org/10.1021/jacs.7b02870>

(Featured in the ACS Select virtual issue "JACS Young Investigators," which highlights outstanding work published by young investigators in JACS in 2017. <https://pubs.acs.org/page/jacsat/vi/young-investigator2018.html>)

[ 42 ]

**Assembly of Dicobalt and Cobalt-Aluminum Oxide Clusters on Metal-Organic Framework and Nanocast Silica Supports**

*Farad. Discuss.* **2017**, *201*, 287-302

<http://dx.doi.org/10.1039/C7FD00055C>

[ 41 ]

**Structure and Dynamic NMR Behavior of Rhodium Complexes Supported by Lewis Acidic Group 13 Metallatranes**

Moore, J. T.; Smith, N. E.; Lu, C. C.\*

*Dalton Trans.* **2017**, *46*, 5689-5701

<http://dx.doi.org/10.1039/C6DT04769F> (invited article)

[ 40 ]

**Redox Pairs of Diiron and Iron-Cobalt Complexes with High-Spin Ground States**

Miller, D. L.; Siedschlag, R. B.; Clouston, L. J.; Young, V.G., Jr.; Chen, Y.-S.; Bill, E.\*; Gagliardi, L.\*; Lu, C. C.\*

*Inorg. Chem.* **2016**, *55*, 9725-9735

<http://dx.doi.org/10.1021/acs.inorgchem.6b01487>

[ 39 ]

**Installing Heterobimetallic Cobalt-Aluminum Single Sites on a Metal Organic Framework Support**

Thompson, A. B.; Pahls, D. R.; Bernales, V.; Gallington, L. C.; Malonzo, C. D.; Webber, T.; Tereniak, S. J.; Wang, T. C.; Desai, S. P.; Li, Z.; Kim, I. S.; Gagliardi, L.; Penn, R. L.; Chapman, K. W.; Stein, A.; Farha, O. K.; Hupp, J. T.; Martinson, A. B. F.; Lu, C. C.\*

*Chem. Mater.* **2016**, *28*, 6753-6762

<http://dx.doi.org/10.1021/acs.chemmater.6b03244>

[ 38 ]

**Leveraging Molecular Metal-Support Interactions for H<sub>2</sub> and N<sub>2</sub> Activation**

Cammarota, R. C.\*; Clouston, L. J.; Lu, C. C.\*

*Coord. Chem. Rev.* **2017**, *334*, 100-111

<http://dx.doi.org/10.1016/j.ccr.2016.06.014>

[ 37 ]

**Thermal Stabilization of Metal–Organic Framework-Derived Single-Site Catalytic Clusters through Nanocasting**

Malonzo, C. D.; Shaker, S. M.; Ren, L.; Prinslow, S. D.; Platero-Prats, A. E.; Gallington, L. C.; Borycz, J.; Thompson, A. B.; Wang, T. C.; Farha, O. K.; Hupp, J. T.; Lu, C. C.; Chapman, K. W.; Myers, J. C.; Penn, R. L.; Gagliardi, L.; Tsapatsis, M.; Stein, A.\*

*J. Am. Chem. Soc.* **2016**, *138*, 2739-2748

<http://dx.doi.org/10.1021/jacs.5b12688>

[ 36 ]

**Heterobimetallic Complexes that Bond Vanadium to Iron, Cobalt, and Nickel**

Clouston, L. J.; Bernales, V.; Cammarota, R. C.; Carlson, R. K.; Bill, E.; Gagliardi, L.\*; Lu, C. C.\*

*Inorg. Chem.* **2015**, *54*, 11669–11679

<http://dx.doi.org/10.1021/acs.inorgchem.5b01631>

[ 35 ]

**Influence of Copper Oxidation State on the Bonding and Electronic Structure of Cobalt-Copper Complexes**

Eisenhart, R. J.; Carlson, R. K.; Clouston, L. J.; Young, V. G., Jr.; Cheng, Y.-S.; Bill, E.\*; Gagliardi, L.\*; Lu, C. C.\*

*Inorg. Chem.* **2015**, *54*, 11330-11338

<http://dx.doi.org/10.1021/acs.inorgchem.5b01950>

[ 34 ]

**Configuring Bonds Between First-Row Transition Metals**

Eisenhart, R. J.; Clouston, L. J.; Lu, C. C.\*

*Acc. Chem. Res.* **2015**, 2885–2894. (invited article)

<http://dx.doi.org/10.1021/acs.accounts.5b00336>

[ 33 ]

**Tuning Nickel with Lewis Acidic Group 13 Metalloligands for Catalytic Olefin Hydrogenation**

Cammarota, R. C.; Lu, C. C.\*

*J. Am. Chem. Soc.* **2015**, 137, 12486–12489

<http://dx.doi.org/10.1021/jacs.5b08313>

[ 32 ]

**Can Multiconfigurational Self-Consistent Field Theory and Density Functional Theory Correctly Predict the Ground State of Metal-Metal Bonded Complexes?**

Carlson, R. K.; Odoh, S. O.; Tereniak, S. J.; Lu, C. C.; Gagliardi, L.\*

*J. Chem. Theory Comput.* **2015**, 11, 4093–4101

<http://dx.doi.org/10.1021/acs.jctc.5b00412>

[ 31 ]

**Pushing the Limits of Delta Bonding in Metal-Chromium Complexes with Redox Changes and Metal Swapping**

Eisenhart, R. J.†; Rudd, P. A.†; Planas, N.; Boyce, D. W.; Carlson, R. K.; Tolman, W. B.; Bill, E.\*; Gagliardi, L.\*; Lu, C. C.\*

*Inorg. Chem.* **2015**, 54, 7579–7592

<http://dx.doi.org/10.1021/acs.jctc.5b00412>

[ 30 ]

**Bimetallic Cobalt-Dinitrogen Complexes: Impact of the Supporting Metal on N<sub>2</sub> Activation**

Clouston, L. J.; Bernales, V.; Carlson, R. K.; Gagliardi, L.\*; Lu, C. C.\*

*Inorg. Chem.* **2015**, 54, 9263–9270

<http://dx.doi.org/10.1021/acs.inorgchem.5b00983> (invited article)

[ 29 ]

**Catalytic Silylation of Dinitrogen with a Dicobalt Complex**

Siedschlag, R. B.; Bernales, V.; Vogiatzis, K. D.; Planas, N.; Clouston, L. J.; Bill, E.; Gagliardi, L.\*; Lu, C. C.\*

*J. Am. Chem. Soc.* **2015**, 137, 4638–4641

<http://dx.doi.org/10.1021/jacs.5b01445>

(Highlight: Williams, S. G. “Two Cobalts Are Better Than One.” *Frontiers in Energy Research*, Autumn 2015. A newsletter of the US Department of Energy, Energy Research Frontier

Centers. <http://www.energyfrontier.us/newsletter/201509/two-cobalts-are-better-one>

[ 28 ]

**Synthesis and Redox Reactivity of a Phosphine-ligated Dichromium Paddlewheel**

Eisenhart, R. J.; Carlson, R. K.; Boyle, K. M.; Gagliardi, L.; Lu, C. C.\*

*Inorg. Chim. Acta* **2015**, 424, 336–344

<http://dx.doi.org/10.1016/j.ica.2014.10.013> (invited article)

[ 27 ]

**Photochemical Route to Actinide-Transition Metal Bonds: Synthesis, Characterization and Reactivity of a Series of Thorium and Uranium Heterobimetallic Complexes**

Ward, A. L.; Lukens, W. W.; Lu, C. C.; Arnold, J.\*

*J. Am. Chem. Soc.* **2014**, 136, 3647–3654

<http://dx.doi.org/10.1021/ja413192m>

[ 26 ]

**Role of the Metal in the Bonding and Properties of Bimetallic Complexes with Metal-Metal Interactions Involving Manganese, Iron, and Cobalt**

Tereniak, S. J.; Carlson, R. K.; Clouston, L. J.; Young, V. G., Jr.; Bill, E.\*; Maurice, R.; Cheng, Y.-S.; Kim, H. J.; Gagliardi, L.\*; Lu, C. C.\*

*Am. Chem. Soc.* **2014**, 136, 1842–1855

<http://dx.doi.org/10.1021/ja409016w>

(Cover of the *JACS* issue on February 5, 2014 and *JACS* spotlight. Annual highlight of the Advanced Photon Source, Argonne National Laboratory. Bradley, D. “Investigating the Ties that Bind: Catalysts with Paired-Up Metals,” *APS Science*, **2014**, ANL-15/03, ISSN 1931-5007, pp. 80–81.)

[ 25 ]

**Systematic Variation of Metal-Metal Bond Order in Metal-Chromium Complexes**

Clouston, L. J.; Siedschlag, R. B.; Rudd, P. A.; Planas, N.; Hu, S.; Miller, A. D.; Gagliardi, L.; Lu, C. C.\*

*J. Am. Chem. Soc.* **2013**, 135, 13142–13148

<http://dx.doi.org/10.1021/ja406506m>

(Highlight: Ritter, S. K. “Family of Multiply Bonded Bimetallic Complexes Grows.” *Chemical & Engineering News* 2013, 91(35), 43. <http://cen.acs.org/articles/91/i35/Family-Multiply-Bonded-Bimetallic-Complexes.html>)

[ 24 ]

**Mixed-Valent Dicobalt and Iron-Cobalt Complexes with High-Spin Configurations and Short Metal-Metal Bonds**

Zall, C. M.; Clouston, L. J.; Young, V. G., Jr.; Ding, K.; Kim, H. J.; Zherebetsky, D.; Cheng, Y.-S.; Bill, E.\*; Gagliardi, L.\*; Lu, C. C.\*

*Inorg. Chem.* **2013**, *52*, 9216-9228

<http://dx.doi.org/10.1021/ic400292g>

[ 23 ]

**CO<sub>2</sub> reduction by Fe(I): solvent control of C-O cleavage versus C-C coupling**

Saouma, C. T.; Lu, C. C.; Day, M.; Peters, J. C.\*

*Chem. Sci.* **2013**, *4*, 4042-4051

<http://dx.doi.org/10.1039/C3SC51262B>

[ 22 ]

**Dinitrogen Activation at Iron and Cobalt Metallalumtranes**

Rudd, P. A.; Planas, N.; Bill, E.; Gagliardi, L.; Lu, C. C.\*

*Eur. J. Inorg. Chem.* **2013**, 3898-3906. (invited article)

<http://dx.doi.org/10.1002/ejic.201300272>

[ 21 ]

**Multiple Metal-Metal Bonds in Iron-Chromium Complexes**

Rudd, P. A.; Liu, S.; Planas, N.; Bill, E.; Gagliardi, L.\*; Lu, C. C.\*

*Angew. Chem. Int. Ed. Engl.* **2013**, *52*, 4449-4452

<http://dx.doi.org/10.1002/anie.201208686>

(Highlight: Doherty, R. "Heterometallic complexes: Meeting of the metals." *Nature Chemistry*, **2013**, *5*, 358-359. <http://dx.doi.org/10.1038/nchem.1638>)

[ 20 ]

**Mononuclear Five- and Six-Coordinate Iron Hydrazido and Hydrazine Species**

Saouma, C. T.; Lu, C. C.; Peters, J. C.\*

*Inorg. Chem.* **2012**, *51*, 10043-10054

<http://dx.doi.org/10.1021/ic301704f>

[ 19 ]

**One-electron Ni(II/I) Redox Couple: Potential Role in Hydrogen Activation and Production**

Tereniak, S. J.; Marlier, E. E.; Lu, C. C.\*

*Dalton Trans.* **2012**, *41*, 7862-7865 (New Talent: Americas issue)

<http://dx.doi.org/10.1039/C2DT30176H>

[ 18 ]

**Encapsulating Zinc(II) Within a Hydrophobic Cavity**

Miller, D. L.; Lu, C. C.\*

*Dalton Trans.* **2012**, *41*, 7464-7466

<http://dx.doi.org/10.1039/C2DT30529A>

[ 17 ]

**A Combined Spectroscopic and Computational Study of a High-spin S = 7/2 Diron Complex with a Short Iron-Iron Bond**

Zall, C. M.; Zherebetsky, D.; Dzubak, A. L.; Bill, E.\*; Gagliardi, L.\*; Lu, C. C.\*

*Inorg. Chem.* **2012**, *51*, 728-736

<http://dx.doi.org/10.1021/ic202384b>

[ 16 ]

**Metal-Alane Adducts with Zero-Valent Nickel, Cobalt, and Iron**

Rudd, P. A.; Liu, S.; Gagliardi, L.; Lu, C. C.\*

*J. Am. Chem. Soc.* **2011**, *133*, 20724-20727

<http://dx.doi.org/10.1021/ja2099744>

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**First-Row Transition-Metal Chloride Complexes of the Wide Bite-Angle Diphosphine <sup>i</sup>PrDPDBFphos and Reactivity Studies of Monovalent Nickel**

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