

ORDERED LIST OF PUBLICATIONS AND WORKS

1. International Peer-reviewed ORIGINAL ARTICLES

High-visibility Works

155. Tuning of the optical properties of *cis*- and *trans*-bis-tetrazo[1,2-*b*]indazoles guided by predictive DFT: an Isomer Story. Lemetayer, L.; Le Breton, G.; Bousfiha, A.; Cordier, M.; Rousselin, Y.; Cattey, H.; Hierso, J.-C.; Roger, J.; Fleurat-Lessard, P.; Bouit, P. A. **Advanced Optical Materials (2026)**, under revision 16/01/2026.
154. A Multivariate Correlation Analysis Method Identifying Key Synthetic Parameters of Nickel Nanocatalysts Active in H₂ Production from Ammonia-Borane Solvolysis. Roubert, D.; Klein, H.; Poinot, D.; Taillardat, J.; Karacaoglan, G.; Pirio, N.; Fleurat-Lessard, P.; Colliere, V.; Carnide, G.; Lecante, P.; Fajerweg, K.; Marty, J.-D.; Mingotaud, C.; Clergereaux, R.; Stafford, L.; Zargarian, D.; Hierso, J.-C.; Kahn, M. L. **Chemistry - A European Journal (2025)**, e02782. doi.org/10.1002/chem.202502782.
153. Phosphine→Borane-Functionalized Pyrenes and Anthracenes. Le Gac, A.; Mallet-Ladeira, S.; Roger, J.; Hierso, J.-C.; Miqueu, K.; Bouhadir, G.; Bourissou, D. **Angewandte Chemie, International Edition (2025)**, 64, e202501178.
152. Rhodium-Catalyzed Oxidative C-H *o*-Arylation of *s*-Aryltetrazines with Aryl Boronic Acids: One-Step Selective Access to T-Shaped and Z-Shaped Polyaromatics. Abidi, O.; Divoux, G.; Gelin, L.; Cattey, H.; Fleurat-Lessard, P.; Hierso, J.-C.; Roger, J. **Advanced Synthesis & Catalysis (2025)**, 367, e7002.
151. Rhodacycles Activity in P-Directed Rhodium-Catalyzed Synthesis of π -Extended Aromatic Fluoranthenyl Phosphines. Sire, C.; Tsivery, A.; Sabbadin, H.; Cattey, H.; Penouilh, M.-J.; Fleurat-Lessard, P.; Hierso, J.-C.; Roger, J. **European Journal of Inorganic Chemistry (2025)**, 28, e202400721.
150. Sulfur functionalized diamondoid phosphines enable building nanocomposites interfacing sp³-carbon and gold nanolayers. Bouzid, M.; Poinot, D.; Mboyi, C. D.; Ochmann, L.; Domenichini, B.; Schreiner, P. R.; Hierso, J.-C. **Nanoscale (2025)**, 17, 4123-4131.
149. Substituent Effect on the Nucleophilic Aromatic Substitution of Thiophenes with Pyrrolidine: Theoretical Mechanistic and Reactivity Study. Pouzens, J.-T.; Souissi, S.; Ludwig, B.; Le Breton, G.; Ingrosso, F.; Ayachi, S.; Hierso, J.-C.; Boubaker, T.; Fleurat-Lessard, P. **Journal of Computational Chemistry (2025)**, 46, e70169.
148. Understanding Ion-Exchange Processes in the Synthesis of ZnS_x@ZnO_{1-x} Heterostructures from Controlled Sulfidation of ZnO Nanocrystals. Bellan, E.; Jakoobi, M.; Colliere, V.; Coppel, Y.; Trebosc, J.; Lafon, O.; Lecante, P.; Fleurat-Lessard, P.; Dupont, C.; Hierso, J.-C.; Fau, P.; Fajerweg, K.; Pautrot-d'Alencon, L.; Le Mercier, T.; Kahn, M. L. **Chemistry of Materials (2024)**, 36, 11781-11794.
147. Spontaneous Emulsification of Organometallic Complexes Applied to the Synthesis of Nanocapsules Active for H₂ Release from Ammonia-Borane. Gazil, O.; Rault, L.; Iglicki, D.; Collière, V.; Karacaoglan, G.; Poinot, D.; Bouzid, M.; Hierso, J.-C.; Kahn, Myrtil L.; Virgilio, N.; Gauffre, F. **Langmuir (2024)** 40, 16824-16832.
146. Advanced composite for sp³-carbon-based gas sensing application from gold organometallic single nanolayering on diamondoids. Bouzid, M.; Poinot, D.; Mboyi, C. D.; Krystianiak, A.; Herbst, F.; Heintz, O.; Domenichini, B.; Bouvet, M.; Hierso, J.-C. **Advanced Materials Technologies (2024)**, 9, 2301456.
145. Molecular engineering of 3-arylated tetrazo[1,2-*b*]indazoles: divergent synthesis and structure-property relationships. Bousfiha, A.; Abidi, O.; Lemetayer, L.; Sood, N.; Tolbatov, I.; Barrois, F.; Daher, A.; Cattey, H.; Cordier, M.; Hissler, M.; Hierso, J.-C.; Fleurat-Lessard, P.; Bouit, P. A.; Roger, J. **Dalton Transactions (2024)**, 53, 10737-10743.
144. Direct Palladium-Catalyzed C5-Arylation of 1,3,4-Oxadiazoles with Aryl Chlorides Promoted by Bis(di-isopropylphosphino) Ferrocene. Gelin, L.; Sabbadin, H.; Cattey, H.; Fleurat-Lessard, P.; Hierso, J.-C.; Roger, J. **European Journal of Organic Chemistry (2024)**, 27, e202400212.

143. Synthesis and Reactivity of *s*-Aryltetrazines Palladacycles Toward a Direct *o*-Aryl C-H Bond Halogenation Achieved by Electrocatalysis. Bousfiha, A.; Fournier, S.; Cattey, H.; Fleurat-Lessard, P.; Devillers, C. H.; Lucas, D.; Hierso, J.-C.; Roger, J. **Organometallics** (2024), 43, 807-816.
142. Tetrazo[1,2-*b*]indazoles: Straightforward access to Nitrogen-Rich Polyaromatics from *s*-Tetrazines. Daher, A.; Bousfiha, A.; Tolbatov, I.; Mboyi, C. D.; Cattey, H.; Roisnel, T.; Fleurat-Lessard, P.; Hissler, M.; Hierso, J.-C.; Bouit, P. A.; Roger, J. **Angewandte Chemie, International Edition** (2023), 62, e2023005.
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140. Aryl Triflates in Phosphorus-Directed Rhodium(III)-Catalyzed C-H Activation. Roger, J.; Sire, C.; Tsivery, A.; Cattey, H.; Hierso, J.-C. **Synthesis** (2023), 55, 3589-3599.
139. Hybrid Phosphine/Amino-Acid Ligands Built on Phenyl and Ferrocenyl Platforms: Application in the Suzuki Coupling of *o*-Dibromobenzene with Fluorophenylboronic Acid. Radal, L.; Almallah, H.; Labonde, M.; Roger, J.; Cattey, H.; Sabbadin, H.; Amardeil, R.; Pirio, N.; Hierso, J.-C. **Chemistry Open** (2023), 12, e202200190.
138. Distinguishing "Through-Space" from "Through-Bonds" Contribution in Indirect Nuclear Spin-Spin Coupling: General Approaches Applied to Complex J_{PP} and J_{PSe} Scalar Couplings. Malkina, O. L.; Hierso, J.-C.; Malkin, Vladimir G. **Journal of the American Chemical Society** (2022), 144, 10768-10784.
137. Tetranuclear Dicationic Auophilic Gold(I) Catalysts in Enyne Cycloisomerization: Cooperativity for a Dramatic Shift in Selectivity. Nguyen, Tuan-Anh; Daiann Sosa Carrizo, E.; Cattey, Helene; Fleurat-Lessard, Paul; Roger, Julien; Hierso, J.-C. **Chemistry - A European Journal** (2022), 28, e202200769.
136. High Recyclability Magnetic Iron Oxide-Supported Ruthenium Nanocatalyst for H₂ Release from Ammonia-Borane Solvolysis. Poinot, D.; Bouzid, M.; Burlot, A.; Mboyi, C. D.; Doulain, P.-E.; Paris, J.; Heintz, O.; Domenichini, B.; Colliere, V.; Kahn, M. L.; Hierso, J.-C. **ChemNanoMat** (2022), 8, e202200285.
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133. Phosphorus-Directed Rhodium-Catalyzed C-H Arylation of 1-Pyrenylphosphines Selective at the *K*-Region. Sire, C.; Cattey, H.; Tsivery, A.; Hierso, J.-C.; Roger, J. **Advanced Synthesis and Catalysis** (2022), 364, 440-452.
132. Nanocatalysts for High Selectivity Enyne Cyclization: Oxidative Surface Reorganization of Gold Sub-2-nm Nanoparticle Networks. Nasrallah, H. O.; Min, Y.; Lerayer, E.; Nguyen, T.-A.; Poinot, Didier; Roger, Julien; Brandes, S.; Heintz, O.; Roblin, P.; Jolibois, F.; Poteau, R.; Coppel, Y.; Kahn, M. L.; Gerber, I. C.; Axet, M. R.; Serp, P.; Hierso, J.-C. **JACS Au** (2021), 1, 187-200.
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130. Synthesis and Catalytic Use of Polar Phosphinoferrocene Amidosulfonates Bearing Bulky Substituents at the Ferrocene Backbone. Vosahlo, P.; Radal, L.; Labonde, M.; Cisarova, I.; Roger, J.; Pirio, N.; Hierso, J.-C.; Stepnicka, P. **Organometallics** (2021), 40, 1934-1944.

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128. Coordination chemistry of a bis(tetrazine) tweezer: a case of host-guest behavior with silver salt. Mboyi, Cleve D.; Amamou, Ons; Fleurat-Lessard, Paul; Roger, Julien; Cattey, Helene; Devillers, Charles H.; Meyer, Michel; Boubaker, Taoufik; Hierso, J.-C. **Molecules** (2021), 26, 2705. (Special issue « Tetrazine » P. Audebert and J.-C. Hierso Guest Editors).
127. Bridge-Clamp Bis(tetrazine)s with $[N]_8$ π -Stacking Interactions and Azido-s-Aryl Tetrazines: Two Classes of Doubly Clickable Tetrazines. Mboyi, C. D.; Vivier, D.; Daher, A.; Fleurat-Lessard, P.; Cattey, H.; Devillers, C. H.; Bernhard, C.; Denat, F.; Roger, J.; Hierso, J.-C. **Angewandte Chemie, International Edition** (2020), 59, 1149–1154. (Hot Topic – Click Chemistry).
126. Gold(I) Complexes Nuclearity in Constrained Ferrocenyl Diphosphines: Dramatic Effect in Gold-Catalyzed Enyne Cycloisomerization. Nguyen, T.-A.; Roger, J.; Nasrallah, H.; Rampazzi, V.; Fournier, S.; Cattey, H.; Sosa Carrizo, E. D.; Fleurat-Lessard, P.; Devillers, C. H.; Pirio, N.; Lucas, D.; Hierso, J.-C. **Chemistry, an Asian journal** (2020), 15, 2879–2885.
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