# Rebecca L Melen

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 80 papers | 2,444 citations | 201674 27 h-index | 223800 46 g-index |
| 83 all docs | 83 docs citations | 83 times ranked | 1776 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Tris(pentafluorophenyl)borane and Beyond: Modern Advances in Borylation Chemistry. Inorganic Chemistry, 2017, 56, 8627-8643. | 4.0 | 183 |
| 2 | Frontiers in molecular p-block chemistry: From structure to reactivity. Science, 2019, 363, 479-484. | 12.6 | 179 |
| 3 | Halogenated triarylboranes: synthesis, properties and applications in catalysis. Chemical Society Reviews, 2020, 49, 1706-1725. | 38.1 | 115 |
| 4 | Dehydrocoupling routes to elementâ€"element bonds catalysed by main group compounds. Chemical Society Reviews, 2016, 45, 775-788. | 38.1 | 109 |
| 5 | Tris(2,4,6â€trifluorophenyl)borane: An Efficient Hydroboration Catalyst. Chemistry - A European Journal, 2017, 23, 10997-11000. | 3.3 | 109 |
| 6 | Applications of pentafluorophenyl boron reagents in the synthesis of heterocyclic and aromatic compounds. Chemical Communications, 2014, 50, 1161-1174. | 4.1 | 101 |
| 7 | Cyclopropanation/Carboboration Reactions of Enynes with B(C<sub>6</sub>F<sub>5</sub>)<sub>3</sub>. Journal of the American Chemical Society, 2015, 137, 15469-15477. | 13.7 | 77 |
| 8 | A Step Closer to Metalâ€Free Dinitrogen Activation: A New Chapter in the Chemistry of Frustrated Lewis Pairs. Angewandte Chemie - International Edition, 2018, 57, 880-882. | 13.8 | 77 |
| 9 | Cyclisation versus 1,1â€Carboboration: Reactions of B(C<sub>6</sub>F<sub>5</sub>)<sub>3</sub> with Propargyl Amides. Chemistry - A European Journal, 2013, 19, 11928-11938. | 3.3 | 71 |
| 10 | Activation of Alkynes with B(C<sub>6</sub>F<sub>5</sub>)<sub>3</sub> â€" Boron Allylation Reagents Derived from Propargyl Esters. Journal of the American Chemical Society, 2014, 136, 777-782. | 13.7 | 71 |
| 11 | Borane-Catalyzed Stereoselective Câ€"H Insertion, Cyclopropanation, and Ring-Opening Reactions. CheM, 2020, 6, 2364-2381. | 11.7 | 70 |
| 12 | BAr<sup>F</sup><sub>3</sub>-Catalyzed Imine Hydroboration with Pinacolborane Not Requiring the Assistance of an Additional Lewis Base. Organometallics, 2017, 36, 2381-2384. | 2.3 | 65 |
| 13 | Electron deficient borane-mediated hydride abstraction in amines: stoichiometric and catalytic processes. Chemical Society Reviews, 2021, 50, 3720-3737. | 38.1 | 54 |
| 14 | B(C<sub>6</sub>F<sub>5</sub>)<sub>3</sub>-Catalyzed Direct C3 Alkylation of Indoles and Oxindoles. ACS Catalysis, 2020, 10, 4835-4840. | 11.2 | 53 |
| 15 | Unlocking the catalytic potential of tris(3,4,5-trifluorophenyl)borane with microwave irradiation. Chemical Communications, 2019, 55, 318-321. | 4.1 | 48 |
| 16 | Metalâ€Free Tandem Rearrangement/Lactonization: Access to 3,3â€Disubstituted Benzofuranâ€2â€(3<i>H</i>)â€ones. Angewandte Chemie - International Edition, 2019, 58, 7861-7865. | 13.8 | 47 |
| 17 | Frustrated Radical Pairs: Insights from EPR Spectroscopy. Angewandte Chemie - International Edition, 2021, 60, 53-65. | 13.8 | 45 |
| 18 | Stoichiometric and Catalytic Câˆ’C and Câˆ’H Bond Formation with B(C<sub>6</sub>F<sub>5</sub>)<sub>3</sub> via Cationic Intermediates. Angewandte Chemie - International Edition, 2017, 56, 11995-11999. | 13.8 | 44 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Diverging Pathways in the Activation of Allenes with Lewis Acids and Bases: Addition, 1,2-Carboboration, and Cyclization. Organometallics, 2015, 34, 4127-4137. | 2.3 | 43 |
| 20 | FLPâ€Catalyzed Transfer Hydrogenation of Silyl Enol Ethers. Angewandte Chemie - International Edition, 2018, 57, 12356-12359. | 13.8 | 41 |
| 21 | Radical Reactivity of Frustrated Lewis Pairs with Diaryl Esters. Cell Reports Physical Science, 2020, 1, 100016. | 5.6 | 40 |
| 22 | Hydroelementation of diynes. Chemical Society Reviews, 2022, 51, 869-994. | 38.1 | 38 |
| 23 | Contrasting Frustrated Lewis Pair Reactivity with Seleniumâ€• and Boronâ€Based Lewis Acids. Angewandte Chemie - International Edition, 2016, 55, 11292-11295. | 13.8 | 34 |
| 24 | B(C<sub>6</sub>F<sub>5</sub>)<sub>3</sub> promoted cyclisation of internal propargyl esters: structural characterisation of 1,3-dioxolium compounds. Chemical Communications, 2014, 50, 7243-7245. | 4.1 | 33 |
| 25 | Frustrated Lewis Pair (FLP)-Catalyzed Hydrogenation of Aza-Moritaâ€"Baylisâ€"Hillman Adducts and Sequential Organo-FLP Catalysis. ACS Catalysis, 2017, 7, 7748-7752. | 11.2 | 33 |
| 26 | An International Study Evaluating Elemental Analysis. ACS Central Science, 2022, 8, 855-863. | 11.3 | 33 |
| 27 | Triarylboraneâ€Catalyzed Alkenylation Reactions of Aryl Esters with Diazo Compounds. Angewandte Chemie - International Edition, 2020, 59, 15492-15496. | 13.8 | 32 |
| 28 | Push and pull: the potential role of boron in N<sub>2</sub> activation. Dalton Transactions, 2018, 47, 10377-10381. | 3.3 | 30 |
| 29 | Reactions promoted by hypervalent iodine reagents and boron Lewis acids. Organic and Biomolecular Chemistry, 2021, 19, 4852-4865. | 2.8 | 29 |
| 30 | Investigations into the Photophysical and Electronic Properties of Pnictoles and Their Pnictenium Counterparts. Organometallics, 2018, 37, 712-719. | 2.3 | 28 |
| 31 | Site-Selective C<sub>sp<sup>3</sup></sub>â€"C<sub>sp</sub>/C<sub>sp<sup>3</sup></sub>â€"C<sub>sp<sup>2</sup></sub> Cross-Coupling Reactions Using Frustrated Lewis Pairs. Journal of the American Chemical Society, 2021, 143, 4451-4464. | 13.7 | 28 |
| 32 | Pathways to Functionalized Heterocycles: Propargyl Rearrangement using B(C<sub>6</sub>F<sub>5</sub>)<sub>3</sub>. Organometallics, 2015, 34, 5298-5309. | 2.3 | 27 |
| 33 | Metallfreie Stickstoffaktivierung: Ein neues Kapitel in der Chemie frustrierter Lewisâ€Paare. Angewandte Chemie, 2018, 130, 890-892. | 2.0 | 27 |
| 34 | Arsenic Catalysis: Hydroboration of Aldehydes Using aâ€‰Benzoâ€Fused Diazaâ€benzyloxyâ€arsole. Chemistry - A European Journal, 2018, 24, 15201-15204. | 3.3 | 27 |
| 35 | Triarylborane Catalyzed Carbene Transfer Reactions Using Diazo Precursors. ACS Catalysis, 2022, 12, 442-452. | 11.2 | 25 |
| 36 | The Propargyl Rearrangement to Functionalised Allylâ€Boron and Borocation Compounds. Chemistry - A European Journal, 2016, 22, 14618-14624. | 3.3 | 22 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Lewis acidâ€“base 1,2-addition reactions: synthesis of pyrylium borates from en-ynoate precursors. Dalton Transactions, 2016, 45, 5929-5932. | 3.3 | 22 |
| 38 | Alternative Strategies with Iodine: Fast Access to Previously Inaccessible Iodine(III) Compounds. Angewandte Chemie - International Edition, 2018, 57, 8306-8309. | 13.8 | 21 |
| 39 | Borane catalysed cyclopropenation of arylacetylenes. Chemical Communications, 2021, 57, 6736-6739. | 4.1 | 20 |
| 40 | Diazaphospholene and Diazaarsolene Derived Homogeneous Catalysis. Chemistry - A European Journal, 2020, 26, 9835-9845. | 3.3 | 19 |
| 41 | Tris(pentafluorophenyl)boraneâ€Catalyzed Carbenium Ion Generation and Autocatalytic Pyrazole Synthesisâ€”A Computational and Experimental Study. Angewandte Chemie - International Edition, 2021, 60, 24395-24399. | 13.8 | 18 |
| 42 | Synthesis and Reactivity of Fluorinated Triaryl Aluminum Complexes. Inorganic Chemistry, 2020, 59, 14891-14898. | 4.0 | 15 |
| 43 | Metallfreie Tandemâ€Umlagerung/Lactonisierung: Zugang zu 3,3â€disubstituierten Benzofuranâ€2â€(3 H )â€onen. Angewandte Chemie, 2019, 131, 7943-7947. | 2.0 | 14 |
| 44 | Asymmetric ketone hydroboration catalyzed by alkali metal complexes derived from BINOL ligands. Dalton Transactions, 2020, 49, 2417-2420. | 3.3 | 13 |
| 45 | Exploring Multistep Continuousâ€Flow Hydrosilylation Reactions Catalyzed by Tris(pentafluorophenyl)borane. Advanced Synthesis and Catalysis, 2017, 359, 2580-2584. | 4.3 | 12 |
| 46 | 1,3-Carboboration of iodonium ylides. Chemical Communications, 2020, 56, 3345-3348. | 4.1 | 12 |
| 47 | Synthesis and photophysical properties of imine borane adducts towards vapochromic materials. Dalton Transactions, 2018, 47, 12656-12660. | 3.3 | 11 |
| 48 | Lewis and BrÃ¸nsted basicity of phosphine-diazomethane derivatives. Dalton Transactions, 2018, 47, 12742-12749. | 3.3 | 11 |
| 49 | Structureâ€“property-reactivity studies on dithiaphospholes. Dalton Transactions, 2019, 48, 16922-16935. | 3.3 | 11 |
| 50 | Understanding the Influence of Donorâ€Acceptor Diazo Compounds on the Catalyst Efficiency of B(C<sub>6</sub>F<sub>5</sub>)<sub>3</sub> Towards Carbene Formation. Chemistry - A European Journal, 2022, 28, . | 3.3 | 11 |
| 51 | Supramolecular aggregation in dithia-arsoles: chlorides, cations and N-centred paddlewheels. CrystEngComm, 2017, 19, 4696-4699. | 2.6 | 10 |
| 52 | Frustrated Radical Pairs: Insights from EPR Spectroscopy. Angewandte Chemie, 2021, 133, 53-65. | 2.0 | 10 |
| 53 | Borane Catalyzed Selective Diazo Crossâ€Coupling Towards Pyrazoles. Advanced Synthesis and Catalysis, 2022, 364, 773-780. | 4.3 | 10 |
| 54 | StÃ¶chiometrische und katalytische Câ€Câ€• und Câ€Hâ€Bindungsbildung mit B(C<sub>6</sub>F<sub>5</sub>)<sub>3</sub> Ã¼ber kationische Zwischenstufen. Angewandte Chemie, 2017, 129, 12157-12161. | 2.0 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Illuminating Lewis Acidity Strength. CheM, 2019, 5, 1362-1363. | 11.7 | 9 |
| 56 | Synthesis and reactivity of N,Nâ€²-1,4-diazabutadiene derived borocations. Dalton Transactions, 2016, 45, 16177-16181. | 3.3 | 8 |
| 57 | Amidine functionalized phosphines: tuneable ligands for transition metals. Dalton Transactions, 2017, 46, 14234-14243. | 3.3 | 8 |
| 58 | Alternative Strategien mit Iod: schneller Zugang zu bisher unzugÃnglichen Iod(III)â€Verbindungen. Angewandte Chemie, 2018, 130, 8438-8442. | 2.0 | 8 |
| 59 | Triarylborane catalysed<i>N</i>-alkylation of amines with aryl esters. Catalysis Science and Technology, 2020, 10, 7523-7530. | 4.1 | 8 |
| 60 | Reactions of biologically inspired hydride sources with B(C <sub>6</sub> F <sub>5</sub> ) <sub>3</sub>. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20170009. | 3.4 | 7 |
| 61 | Divergent Elementoboration: 1,3â€Haloboration versus 1,1â€Carboboration of Propargyl Esters. Chemistry - A European Journal, 2018, 24, 7364-7368. | 3.3 | 7 |
| 62 | FLPâ€Catalyzed Transfer Hydrogenation of Silyl Enol Ethers. Angewandte Chemie, 2018, 130, 12536-12539. | 2.0 | 7 |
| 63 | Cycloaddition reactions of (C6F5)2BN3 with dialkyl acetylenedicarboxylates. Dalton Transactions, 2015, 44, 5045-5048. | 3.3 | 6 |
| 64 | Borane-Catalyzed Heterocycle Synthesis. Trends in Chemistry, 2019, 1, 625-626. | 8.5 | 6 |
| 65 | GegensÃtzliche ReaktivitÃt frustrierter Lewisâ€Paare mit Selenâ€und Borâ€basierten Lewisâ€SÃuren. Angewandte Chemie, 2016, 128, 11462-11465. | 2.0 | 5 |
| 66 | Triarylboranâ€katalysierte Alkenylierungen von Arylestern mit Diazoverbindungen. Angewandte Chemie, 2020, 132, 15621-15626. | 2.0 | 5 |
| 67 | Comparative study of fluorinated triarylalanes and their borane counterparts. Cell Reports Physical Science, 2021, 2, 100595. | 5.6 | 5 |
| 68 | Reactions of hydrazones and hydrazides with Lewis acidic boranes. Dalton Transactions, 2019, 48, 12391-12395. | 3.3 | 4 |
| 69 | Lewis Acid Assisted BrÃ¸nsted Acid Catalysed Decarbonylation of Isocyanates: A Combined DFT and Experimental Study. Chemistry - A European Journal, 2022, , . | 3.3 | 3 |
| 70 | Tris(pentafluorophenyl)borane Catalyzed Carbenium Ion Generation and Autocatalytic Pyrazole Synthesis â€" A Computational and Experimental Study. Angewandte Chemie, 0, , . | 2.0 | 2 |
| 71 | Lewis Acidic Boranes in Frustrated Lewis Pair Chemistry. Molecular Catalysis, 2021, , 209-235. | 1.3 | 2 |
| 72 | Borane promoted aryl transfer reaction for the synthesis of Î±-aryl functionalised Î²-hydroxy and Î²-keto esters. Organic and Biomolecular Chemistry, 2022, 20, 4298-4302. | 2.8 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Electrophilic boron carboxylate and phosphinate complexes. Dalton Transactions, 2019, 48, 2038-2045. | 3.3 | 1 |
| 74 | Main group transformations. Dalton Transactions, 2016, 45, 5879-5879. | 3.3 | 0 |
| 75 | Innentitelbild: Metallfreie Tandemâ€Umlagerung/Lactonisierung: Zugang zu 3,3â€disubstituierten Benzofuranâ€2â€(3<i>H</i>)â€onen (Angew. Chem. 23/2019). Angewandte Chemie, 2019, 131, 7578-7578. | 2.0 | 0 |
| 76 | Frontispiece: Diazaphospholene and Diazaarsolene Derived Homogeneous Catalysis. Chemistry - A European Journal, 2020, 26, . | 3.3 | 0 |
| 77 | Computational design of an intramolecular frustrated lewis pair catalyst for enantioselective hydrogenation. Journal of Theoretical and Computational Chemistry, 2020, 19, 2050009. | 1.8 | 0 |
| 78 | Frustrated Lewis Pairs in Organic Synthesis. , 2021, , . | | 0 |
| 79 | Frustrated Lewis pairs in catalysis. , 2021, , . | | 0 |
| 80 | Recent applications of fluorinated arylborane derivatives. Advances in Organometallic Chemistry, 2022, , . | 1.0 | 0 |