

CORRECTION

[View Article Online](#)
[View Journal](#) | [View Issue](#)Cite this: *Chem. Sci.*, 2021, 12, 12847

Correction: Suppressing carboxylate nucleophilicity with inorganic salts enables selective electrocarboxylation without sacrificial anodes

Nathan Corbin, Deng-Tao Yang, Nikifar Lazouski, Katherine Steinberg and Karthish Manthiram*

DOI: 10.1039/d1sc90196f

rsc.li/chemical-scienceCorrection for 'Suppressing carboxylate nucleophilicity with inorganic salts enables selective electrocarboxylation without sacrificial anodes' by Nathan Corbin *et al.*, *Chem. Sci.*, 2021, DOI: 10.1039/D1SC02413B.

We regret that there was a minor error in the structure of the benzyl chloride in Scheme 2, Fig. 2 and the ESI. The structure of the benzyl chloride should be 4-methyl benzyl chloride but was instead given as 3-methyl benzyl. The correct figure and scheme are shown below, and the ESI has been updated.



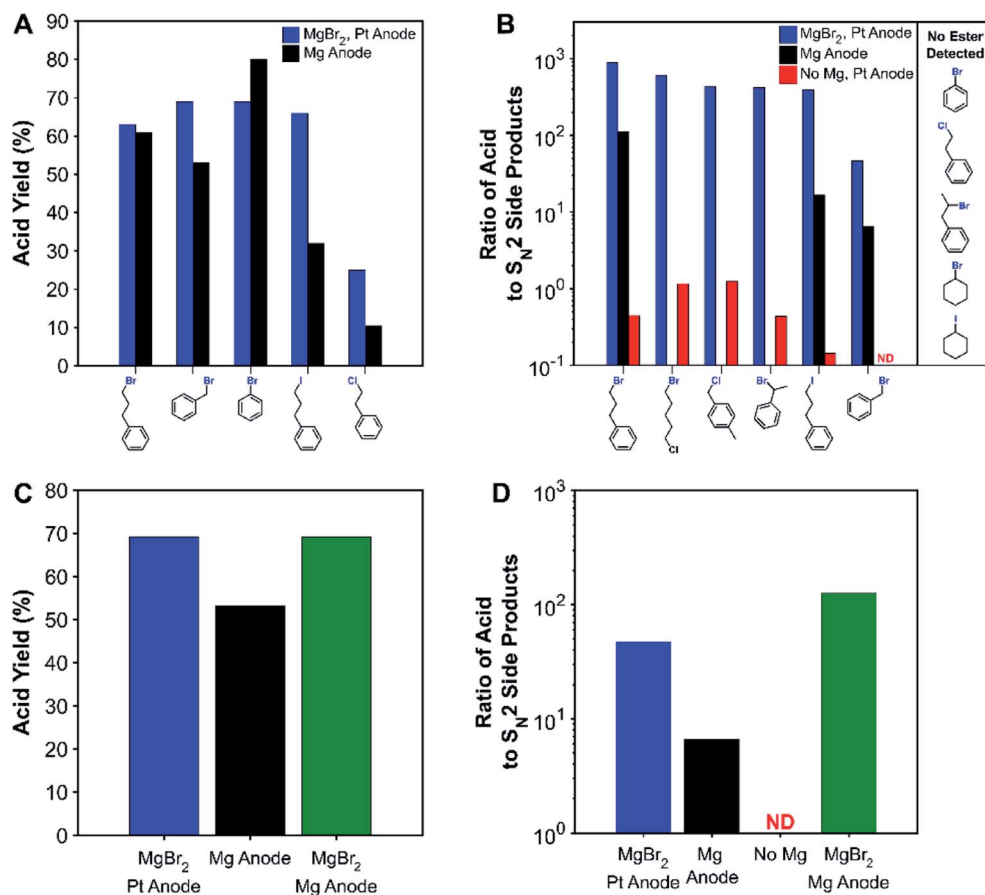
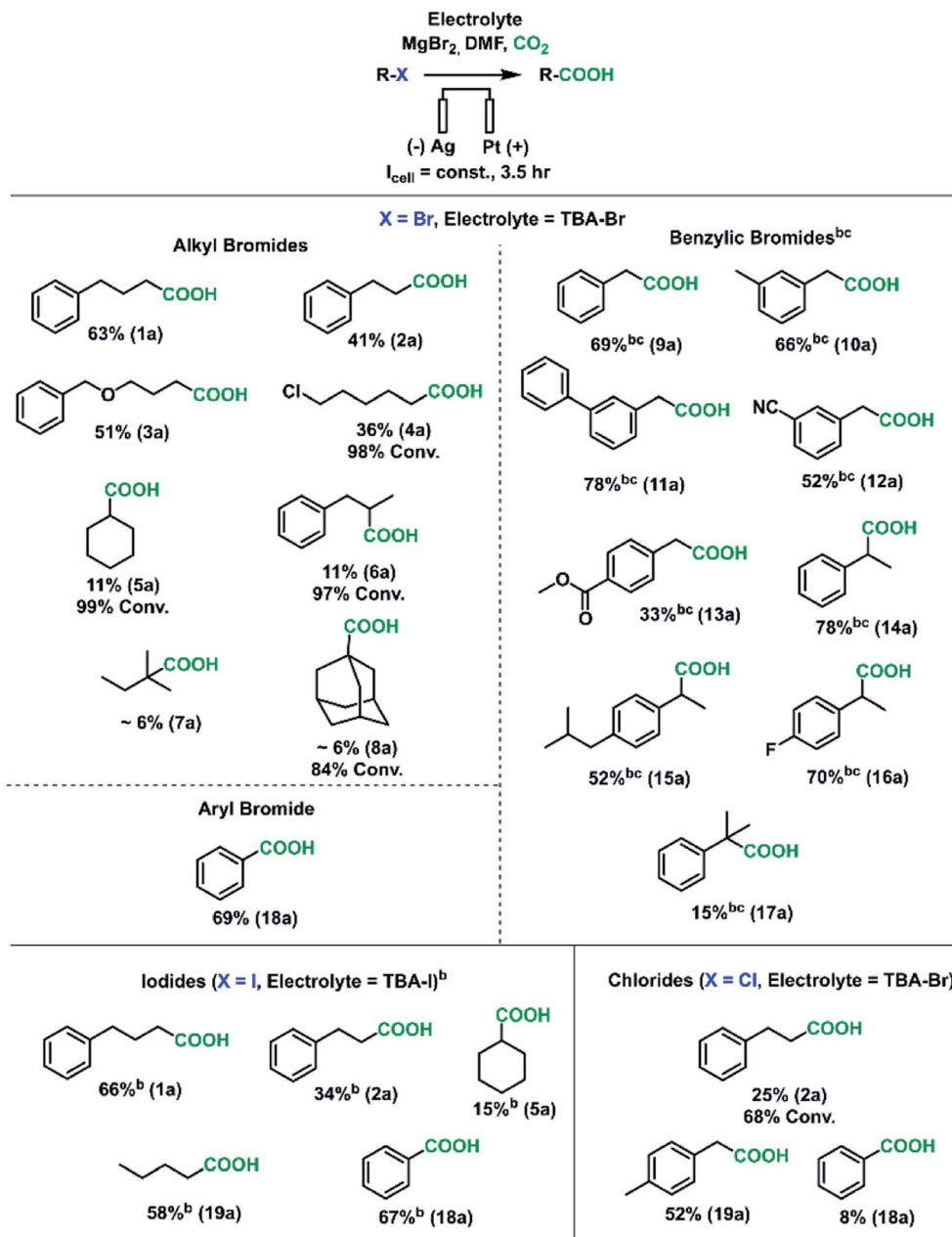


Fig. 2 (A) Comparison of acid yields for non-sacrificial-anode and sacrificial-anode carboxylation of various substrates. (B) Ratio of carboxylic acid to nucleophilic side products (ester + carbonate + alcohol) for various systems and substrates. Effect of adding MgBr₂ to the sacrificial-anode system on the (C) acid yield and (D) ratio of acid to S_N2 side products for benzyl bromide. Acid yields are tabulated in Table S6.† ND: acid not detected (acid-to-S_N2 ratio <0.1).





Scheme 2 Substrate scope for the sacrificial-anode-free electrochemical carboxylation of organic halides. ^aStandard reaction conditions: 100 mM electrolyte, 100 mM substrate, 100 mM MgBr_2 , silver cathode, platinum anode, 20 sccm CO_2 , 2.2 mL DMF, -20 mA cm^{-2} for 3.5 h. TBA-Br was used for chlorinated substrates because bromide oxidizes more readily than chloride, and only a small amount of chloride was replaced by bromide (<1% for the alkyl chloride, ~4% for the benzylic chloride). Yields are referenced to the initial amount of substrate and were calculated from ^1H NMR spectroscopy using either 1,3,5-trimethoxybenzene or ethylene carbonate as internal standards. ^b -15 mA cm^{-2} instead of -20 mA cm^{-2} . ^c150 mM MgBr_2 instead of 100 mM MgBr_2 .

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

