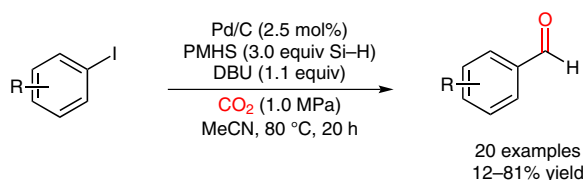
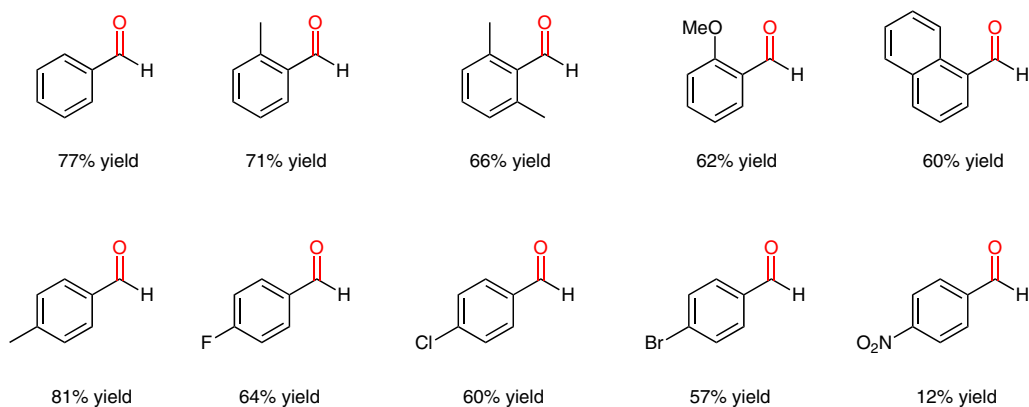


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Pd/C-Catalyzed Direct Formylation of Aromatic Iodides to Aryl Aldehydes Using Carbon Dioxide as a C1 Resource  
*Chem. Commun.* **2014**, 50, 2330–2333.

## Formylation of Aryl Iodides with CO<sub>2</sub> Using Palladium on Carbon



### Selected examples:



**Significance:** Palladium on carbon (Pd/C) catalyzed the formylation of aryl iodides in the presence of poly(methylhydrosiloxane) (PMHS) and 1,8-diazabicyclo[5.4.0]undec-7-ene (DBU) under a CO<sub>2</sub> atmosphere in acetonitrile to give aryl aldehydes in up to 81% yield (20 examples).

**Comment:** The formylation of aryl iodides to aryl aldehydes using CO<sub>2</sub> as a C1 resource was achieved. The authors previously reported the cyclization of *ortho*-phenylenediamines to benzimidazoles (*Green Chem.* **2013**, 15, 95) and 2-aminothiophenol to benzothiazolone (*ACS Catal.* **2013**, 3, 2076) using CO<sub>2</sub> as a C1 resource.

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Synthesis

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aryl aldehydes

carbon dioxide

formylation

palladium on  
carbon

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*of the month*

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