Supporting Information
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Supporting Information

Synthesis of Iminonitriles by Oxone-TBAB-Mediated One-Pot Oxidative Three-Component Strecker Reaction

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### General information:

Reagents and solvents were purchased from commercial sources and preserved under argon. More sensitive compounds were stored in a desiccator or glove-box if required. Reagents were used without further purification unless otherwise noted.

All reactions were performed under argon (or nitrogen) and stirring unless otherwise noted. When needed glassware was dried overnight in an oven (T°>100 °C) or under vacuum with a heat gun (T°>200 °C).

When solvents are indicated as dry they were either purchased as such, distilled prior to use or were dried by a passage through a column of anhydrous alumina or copper based on the Grubbs’ design [Pangborn, A. B. et al. Organometallics **1996**, 15, 1518–1520].
Flash column chromatography was performed using 230-400 mesh (40-63 μm) silica. Reactions were monitored using alumina silica plates. TLC’s were revealed by UV fluorescence (254 nm) then one of the following: KMnO₄, phosphomolybdic acid, ninhydrine, pancaldi, p-anisaldehyde, vanillin.

NMR spectra were recorded at room temperature, ¹H frequency is at 400.13 MHz, ¹³C frequency is at 100. Chemical shifts (δ) were reported in parts per million (ppm) relative to residual solvent peaks rounded to the nearest 0.01 for proton and 0.1 for carbon (ref: CHCl₃ [¹H: 7.26, ¹³C: 77.2], MeOH [¹H: 3.31, ¹³C 49.0], DMSO [¹H: 2.50, ¹³C 39.5]). Coupling constants (J) were reported in Hz to the nearest 0.1 Hz. Peak multiplicity is indicated as follows s (singlet), d (doublet), t (triplet), q (quartet), m (multiplet) and br (broad). Attribution of peaks was done using the multiplicities and integrals of the peaks. When needed, a COSY and/or HSQC experiments were used to confirm the attribution.

IR spectra were recorded as neat films compressed onto a Zinc Selenide. The spectra were reported in cm⁻¹.

Mass spectra were determined by electron ionisation (ESI-TOF).

For all general procedures the order of addition of reagents has to be respected.

Previously reported α-iminonitriles match references.¹

The image contains a diagram of a chemical structure labeled with various chemical shifts in ppm. The structure includes a cyanide group (CN) and a phenyl group (Ph). The chemical shifts are marked at different ppm values: 7.313, 7.320, 7.327, 7.334, 7.341, 4.073, 4.091, 4.109, 6.595, 6.611, 7.232, 7.242, 7.252, 7.260, 7.295, 7.313, and 7.332 ppm. The diagram also shows other chemical shifts at 0.511, 1.522, 2.533, 3.544, 4.555, 5.566, 6.577, and 7.588 ppm.