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Corrigendum to “AlCl₃-promoted reaction of cycloalkanones with hydrazones: A convenient direct synthesis of 4,5,6,7-tetrahydro-1H-indazoles and their analogues” [Tetrahedron Lett. 60 (2019) 150988]



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The authors regret that the printed version of the above article contained errors in Tables 1 and 2. A plausible mechanism was proposed using 1-benzylidene-2-phenylhydrazine **1a** and cyclohexanone **2a** as model reactants (Scheme 2). The formation of aluminum enolate **4** is followed by the addition of hydrazone to afford hydrazinoketone **5** [24]. Cyclization provides the corresponding 2,3,4,5,6,7-hexahydro-1H-indazole *via* the elimination

of water. The final aromatization step results from oxidation by atmospheric oxygen, either during the reaction or upon workup [13, 25]. This proposal is in agreement with the observed regioselectivity in the case of *b*-tetralone **3af** resulting from the more stable enolate. Corrections are shown below. The authors would like to sincerely apologise for any inconvenience caused.

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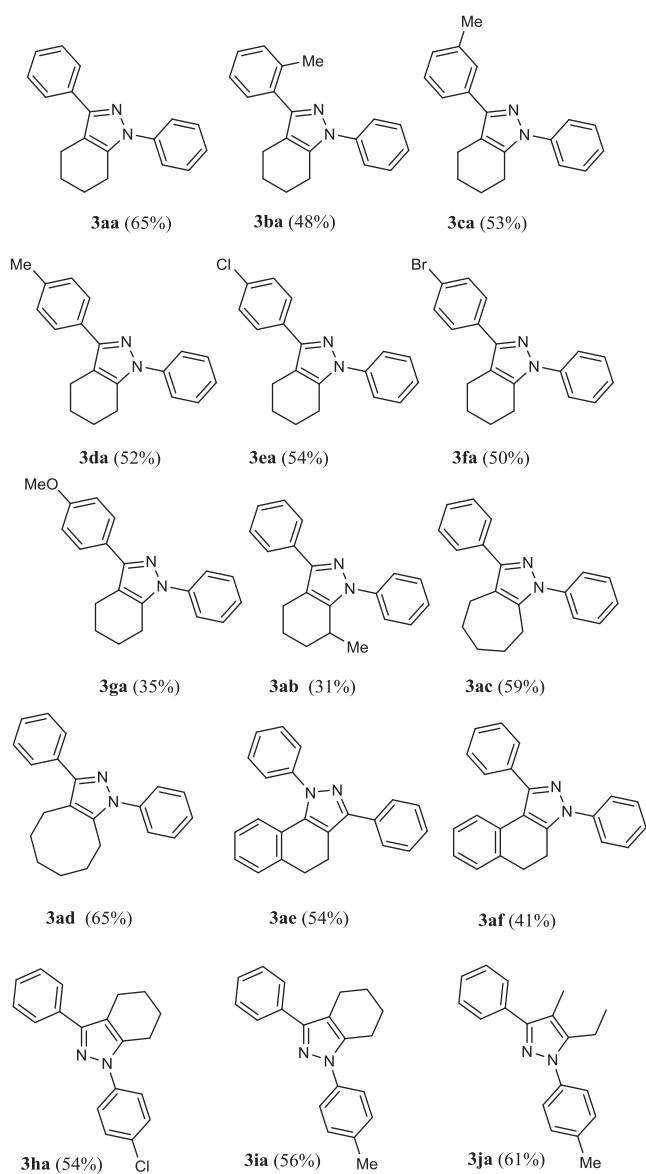
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Table 1
Optimization of the reaction conditions.

Entry	Acid	2a (equiv.)	Acid (equiv.)	Yield 3aa (%) ^a
1	AlCl ₃	1	1	49
2	FeCl ₃	1	1	45
3	Yb(OTf) ₃	1	0.1	35
4	PhB(OH) ₂	1	1	0
5	TosOH	1	1	0
6	AlCl ₃	1.5	2	72
7	AlCl ₃	1	2	53
8	AlCl ₃	2	2	45

^a Yield was calculated using the ¹H NMR of the crude product with 1,3,5-trimethoxybenzene as an internal standard.

Table 2
Scope of the AlCl₃-catalyzed reaction of alkanones with hydrazones.^{a,b}



^a Reagents and conditions: **1** (1 mmol), alkanone **2** (1.5 mmol), AlCl₃, (2 mmol), 1,2-dichloroethane (5 mL), 80 °C, 16 h.

^b Isolated yields after purification by column chromatography.