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Tetrahedron Letters
T L 46 (2005) 3927 3929

An efficient synthesis of aryl α-keto esters

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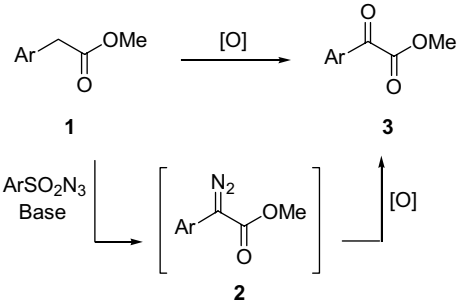
R 8 N 2004; 4 M 2005; 9 M 2005
A 12 A 2005

Abstract—A - α-

α-K -
. O ,
. T
α- G
, [1] α- -1H -1- [2]
[3] T
, -
G
A ,
. [4] F , W .
- ( )
α- . [4] R .
α- -
. [5]

T
α- . F , W
-
. [6] O , -
. [7] S
, . H -
, .

. F , N ,
N- /C II/O2
para -
ortho . [7] O
C ., *tert*-
(TBHP)
. [7] U ,
, -
o- . T
70 °C (20 96).
H , -
α- ,
O ® (S 1).



Scheme 1.

* C . T .: +8610 6275 7248; : +8610 6275 1708; - : J @ .

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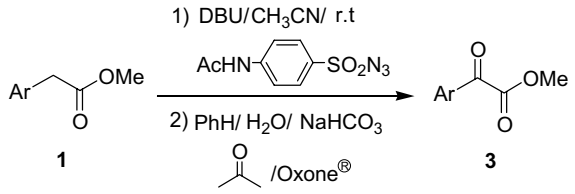
:10.1016/J .2005.03.199



Scheme 2.

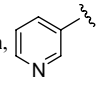
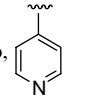
I .[8] O , [8,9] O® . S- [10] O® - . T , **1a** *p*- -/DBU CH3CN . A TLC, O®/N HCO3/ J/H2O/ 0 °C. T - 25 TLC, α- **3a** 83% (S 2).

T - T 1.[11] T . T

. I - - (5 6, T 1). I , α- G . T - . F , - , , - - ( ). O , - - , . I , *p*- . O - , .

I - . T - - , - (11 12, T 1). F , . T - α- .[12] I

Table 1. T α-[11]

E	**1** (A =)	RT ( )	RT ( )	Y (%)
1	**1a**, C_6H_5	12	25	83
2	**1b**, 1-	48	30	84
3	**1c**, *o*-C C_6H_4	24	60	88
4	**1d**, *m*-C C_6H_4	12	90	83
5	**1e**, *o*,*p*-C $_2C_6H_3$	24	60	92
6	**1f**, *m*,*p*-C $_2C_6H_3$	12	20	81
7	**1g**, *o*-FC_6H_4	12	90	81
8	**1h**, *o*-B C_6H_4	24	40	74
9	**1i**, *p*-B C_6H_4	14	25	84
10	**1j**, *m*-M C_6H_4	24	25	73
11	**1k**, *p*-M OC_6H_4	48	15	13(83)
12	**1l**, *p*-$O_2NC_6H_4$	2	120	48
13	**1m**, 	12	30	86
14	**1n**, 	12	30	99
15	**1o**, 	12	30	99

I .
N **1k** .
T , . T 65 98%.
T .
P *N*- .

. T
(S 3).

T . F , ,
β- .[13] T - -
/ , -
β- **4** α- **5** (S 4).

O , -
,[14]
(S 5).

I ,
α- -
. T
(
0 °C), ,

, .

Acknowledgements

T N S
F C (G N . 20225205, 20390050).

References and notes

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