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Contents

Graphical Abstracts

Study of isolated constituents of Artemisia Persica Boiss from isfahan area by nano pp 543-545 scale injection

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Compound ^a	A, %	RI ^b	Compound ^a	A, %	RI ^b
α-Pinene	0.4	935	Menthone	0.8	1150
β - Pinene	0.5	969	cis- Chrysanthenol	0.6	1160
Sabinene	1.7	972	Terpinene-4-ol	1.9	1172
ß -Myrcene	0.7	990	α -Terpineol	3.2	1186
α -Terpinene	6.4	1016	Citronellol	0.2	1224
para-Cymene	5.5	1024	cis-Ocimenone	30.8	1225
ß -Phellanderene	6.3	1027	Cis-Carveol	0.8	1226
1,8-Cineol	1.7	1031	Piperitone	2.5	1250
Cis- ß- Ocimene	0.2	1036	Cis-Chrysanthenyl acetate	0.9	1264
γ-Terpinene	0.4	1058	iso-Ascaridol	26.3	1301
cis-ß-Terpineol	6.3	1142	Total identified	99. 4	
Isopulegol	1.3	1148			

A novel synthesis of pyrimidins from an efficient one-pot multicomponent reaction pp 547-551 of isocyanides and dialkyl-acetylene dicarboxlate in the presence of urea derivatives

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_	R	R'	R"
4	Cyclohexyl	Me	Н
5	<i>tert</i> -but	Me	Н
6	<i>tert</i> -but	Me	Me

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Synthesis of 1,2-dihydroisoquinolin derivatives *via* the multicomponent reaction between OH-acids, acetylenic esters and isoquinolin

pp 553-556

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Investigation of organometallic compounds adsorption in cigarette smoke via extracted humic acid

pp 557-562

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Cigarette smoke contains organometallic compounds of Cr, Pb, Ni, Co, As, Se and V. Consumption of cigarette causes to exchange of Ca, Zn and Fe in body by these metals or association of them and derange of body systems. Humic acid (HA) contains functional groups such as COOH, (OH), C=O and connect easily with multivalence cation, chelate groups and some oxides. Humic acid is appropriate absorbent for metal compounds. In this study humic acid was extracted from soil then leachated and added to cigarette filter. Organometallic compounds are adsorbed on the humic acid extracted by methanol and then studied by Gas Chromatography/Mass Spectrometry (GC-MS).

Synthesis and biological evaluation of some *N*-ethoxyphthalimido-4-phenyl-6-subsitutedphenyl-2,3*a*,4,5-tetrahydro-3*H*-indazol-3-one via Robinson annulations reaction

pp 563-572

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Compounds 4-[4-substitutedphenyl]-6-phenyl-2,3a,4,5-tetrahydro-3H-indazol-3-one (**3a-d**) were synthesized via robinson annulation. Robinson annulation is michael addition reaction followed by aldol condentation. α β unsaturated carbonyl compounds (**1a-d**) were cyclized with ethylacetoacetate produced ethyl 6-[4-substitutedphenyl]-2-oxo-4-phenyl cyclohex-3-ene-1-carboxylate (**2a-d**). Compounds (**2a-d**) were refluxed with hydrazine hydrate in the presence of acetic acid yielded 4-[4-substitutedphenyl]-6-phenyl-2,3a,4,5-tetrahydro-3H-indazol-3-one (**3a-d**). In the final step compounds (**3a-d**) were treated with bromoethoxyphthalimide gave final products N-ethoxyphthalimido-4-[4-substituted phenyl]-6-phenyl-2,3a,4,5-tetrahydro-3H-indazol-3-one (**5a-d**).

Nano silica gel supported perchloric acid/wet SiO₂: an efficient reagent for onepot synthesis of azo dyes based on 1-naphthol in room temperature and solventfree conditions

pp 573-576

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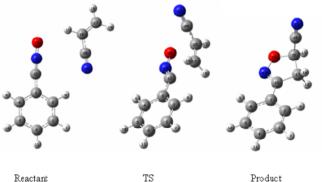
nano-SPCA
$$ONa$$
 OH $N=N$ $NaNO_2$ $NaNO_2$ $Nano-SiO_2.ClO_4$ $Nano-SiO_2.ClO_4$ $Nano-SiO_2.ClO_4$

A theoretical study of 1,3-dipolar cycloaddition of BNO with Acryl-nitrile

pp 577-580

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An improved and scaleable preparation of cefradine

pp 581-583

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Cefradine (I) is prepared from 7-amino desacetoxy cephalosporanic acid (7-ADCA) (II) condensing with mixed anhydride that is obtained from reaction of dihydrophenylglycine methyl dane sodium salt (IV) with pivaloyl chloride in presence of triethyl amine.

Toward the synthesis of α-methylamino-α-phenyl-cycloheptanone

pp 585-589

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Comparative study of using ionic liquid and organic solvent for the preparation of optically active organosoluble polyamides with pendent 4-(2-phthalimidiyl-propanoylamino) benzamide groups

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In this study, the direct polycondensation of chiral dicarboxylic acid monomer, 5-[3-phenyl-2-(9,10-dihydro-9,10-ethanoanthracene-11,12-dicarboximido)propanoylamino]isophthalic acid (1) with diverse aromatic diamines (2a-2h) was investigated in IL, 1,3-dipropylimidazolium bromide as replacement for volatile toxic organic solvents. The polymerization reactions were effectively preceded in IL, and triphenyl phosphite as an activating agent, and the resulting optically active polyamides (PA)s were obtained in a yield of 89-96% and inherent viscosities in the range of 0.54-0.71 dLg⁻¹. The yields and inherent viscosities were comparative in this IL compared with analogous in organic solvents under milder reaction conditions.

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