

## Curriculum Vitae

### Farhad Panahi

Organic Chemistry (PhD)

Shiraz University, Department of Chemistry, College of Science, Shiraz, Iran

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<https://scholar.google.com/citations?user=sYuOPlwAAAAJ&hl=en>

### Personal Information

Date of birth: 23 August 1984

Gender: Male

Marital status: Married

Nationality: Iranian

Languages: Persian, English, Deutsch (Beginning levels)

### Academic Records

- Postdoctoral, Organic Chemistry (Alexander von Humboldt Fellowship) 2017-2019

Albert-Ludwigs-Universität Freiburg, Freiburg, Germany (Prof. B. Breit)

Rhodium-Catalyzed synthesis of alpha amino acids with quaternary carbon stereocenters

- Postdoctoral, Organic Chemistry (Iran Science Elites Federation) 2016-2017  
Alzahra University, Tehran, Iran (Prof. M. M. Heravi)

Ni-catalyzed Carbon-carbon bond formations via C-O Bond Activation: Synthesis of Nitriles and Amides

- Postdoctoral, Organic Chemistry (Iranian National Elite Foundation) 2013-2016

Shiraz University, Shiraz, Iran (Prof. N. Iranpoor)

Ni-catalyzed Reductive Coupling Reactions, Carbon-carbon and carbon-heteroatom bond formations via C-O Bond Activation

- Ph.D., Organic Chemistry 2008-2013

Shiraz University, Shiraz, Iran (Prof. A. Khalafi-Nezhad)

Preparation and characterization of heterogeneous Palladium and Ruthenium catalysts for application in C-C bond formation reactions under green conditions

- M.S., Organic Chemistry 2006-2008

Persian Gulf University, Bushehr, Iran (Prof. K. Niknam)

Synthesis of novel  $\pi$ -conjugated organic semiconductor materials for application in organic light emitting diodes (OLED)

- B.S., Pure Chemistry 2002-2006

Shiraz University, Shiraz, Iran

### Personal Research Interests

- Transition Metal Catalysis
- Heterogeneous Catalysis
- Synthesis of Organic Electronics Materials
- Synthesis of Biologically Active compounds
- Green Chemistry

### Career achievements and Awards

- Postdoctoral research flow from Alexander von Humboldt Foundation (2017)
- 16<sup>th</sup> Khwarizmi Youth Award (2014)
- TWAS, Yong researcher in Organic Chemistry (2014)
- Postdoctoral research flow from Iranian National Elite Foundation (2013)
- Membership of Iranian National Elite Foundation (2013-now)
- Ranked 1 in the PhD entrance exam in Organic Chemistry, Shiraz University-Iran, 2008
- Being top 1% among over one million students in the national entrance exam for undergraduate degree in 2002

### Teaching Experiences

- General Chemistry, 1 semester, Shiraz University, Shiraz, Iran
- Organic Chemistry II Lab, 1 semester, Shiraz University, Shiraz, Iran
- Physical Organic Chemistry, 1 semester, Shiraz University, Shiraz, Iran
- Organic Chemistry I, 3 semesters, Amirkabir University of Technology, Tehran, Iran
- Organic Chemistry II, 2 semesters, Amirkabir University of Technology, Tehran, Iran
- Organic Chemistry Lab I, 2 semesters, Shiraz University, Shiraz, Iran
- Organic Chemistry Lab II, 2 semesters, Shiraz University, Shiraz, Iran
- General Chemistry I Lab, 1 semester, Shiraz University, Shiraz, Iran
- General Chemistry II Lab, 1 semester, Shiraz University, Shiraz, Iran

List of Publications	Year
<b>92.</b> Reduction of Aldehydes with Formic acid in Ethanol using Immobilized Iridium Nanoparticles on a Triazine-phosphanimine Polymeric Organic Support <b>F Panahi</b> , F Haghghi, A Khalafi-Nezhad Applied Organometallic Chemistry, e5880	<b>2020</b>
<b>91.</b> Synthesis of new curcumin derivatives as influential antidiabetic $\alpha$ -glucosidase and $\alpha$ -amylase inhibitors with anti-oxidant activity Z Tavaf, S Khajeh Dangolani, R Yousefi, <b>F Panahi</b> , M B Shahsavani, A Khalafi-Nezhad Carbohydrate Research, 108069	<b>2020</b>
<b>90.</b> Photophysical Properties of a Donor- $\pi$ -Acceptor Distyrylbenzene Derivative in Solution and Solid state FS Miri, SG Kandi, <b>F Panahi</b> Journal of Fluorescence, 30, 917-926	<b>2020</b>
<b>89.</b> Synthesis of new curcumin-based aminocarbonitrile derivatives incorporating 4H-pyran and 1, 4-dihydropyridine heterocycles.  S Khajeh Dangolani, <b>F Panahi</b> , A Khalafi-Nezhad  Molecular Diversity	<b>2020</b>
<b>88.</b> Palladium-Catalyzed Cyanation of Aryl Halides Using Formamide and Cyanuric Chloride as a New "CN" Source  E Niknam, <b>F Panahi</b> , A. Khalafi-Nezhad  European Journal of Organic Chemistry	<b>2020</b>
<b>87.</b> Immobilized Pd on a NHC functionalized metal-organic framework MIL-101 (Cr): an efficient heterogeneous catalyst in Suzuki-Miyaura coupling reaction in water  E Niknam, F Panahi, A Khalafi-Nezhad  Applied Organometallic Chemistry, e5470	<b>2020</b>
<b>86.</b> Nickel-catalyzed Reductive Amidation of Aryl-triazine Ethers  MM Heravi, <b>F Panahi</b> , N Iranpoor  Chemical Communications 56, 1992-1995	<b>2020</b>
<b>85.</b> Immobilized palladium nanoparticles on a cyclodextrin-polyurethane nanosponge (Pd-CD-PU-NS): An efficient catalyst for cyanation reaction in aqueous media  SK Dangolani, S Sharifat, <b>F Panahi</b> , A Khalafi-Nezhad  Inorganica Chimica Acta 494, 256-265	<b>2019</b>
<b>84.</b> Biological evaluation of 9-(1 <i>H</i> -Indol-3-yl) xanthen-4-(9 <i>H</i> )-ones derivatives as	<b>2019</b>

noncompetitive  $\alpha$ -glucosidase inhibitors: kinetics and molecular mechanisms

M Nourisefat, N Salehi, S Yousefinejad, **F Panahi**, K Bagherzadeh, M Amanlou, A Khalafi-Nezhad, M H Karimi-Jafari, N Sheibani, A A Moosavi-Movahedi

Structural Chemistry 30 (3), 703-714

**83.** Amino acids and peptides as reactants in multicomponent reactions: modification of peptides with heterocycle backbones through combinatorial chemistry **2019**

M Nourisefat, **F Panahi**, A Khalafi-Nezhad

Molecular diversity 23 (2), 317-331

**82.** Correction to "Synthesis and Antioxidant Activity Evaluation of Some Novel Aminocarbonitrile Derivatives Incorporating Carbohydrate Moieties" **2019**

SK Dangolani, **F Panahi**, Z Tavaf, M Nourisefat, R Yousefi, A. Khalafi-Nezhad

ACS omega 4 (3), 5862

**81.** Efficient and selective microwave-assisted O-methylation of phenolic compounds using tetramethylammonium hydroxide (TMAH) **2019**

F Gholipour, M Rahmani, **F Panahi**

Green Processing and Synthesis 8 (1), 584-589

**80.** Metal-Organic Framework MIL-101 (Cr) as an Efficient Heterogeneous Catalyst for Clean Synthesis of Benzoazoles **2018**

E Niknam, **F Panahi**, F Daneshgar, F Bahrami, A Khalafi-Nezhad

ACS omega 3 (12), 17135-17144

**79.** Synthesis and Antioxidant Activity Evaluation of Some Novel Aminocarbonitrile Derivatives Incorporating Carbohydrate Moieties **2018**

S Khajeh Dangolani, **F Panahi**, Z Tavaf, M Nourisefat, R Yousefi, A. Khalafi-Nezhad

ACS omega 3 (8), 10341-10350

**78.** A novel tetra-stilbene-based fluorescent compound: Synthesis, characterization and photophysical properties evaluation **2018**

A Mahmoodi, **F Panahi**, F Eshghi, E Kimiaei

Journal of Luminescence 199, 165-173

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- 77.** Nickel-Catalyzed Deoxycyanation of Activated Phenols via Cyanurate Intermediates with  $Zn(CN)_2$ : A Route to Aryl Nitriles **2018**  
MM Heravi, **F Panahi**, N Iranpoor  
Organic letters 20 (9), 2753-2756
- 76.** Nickel-Catalyzed Reductive Etherification of Aldehydes at Room Temperature: C–O vs C–C Bond Formation **2018**  
S Rahimi, **F Panahi**, M Bahmani, N Iranpoor  
The Journal of organic chemistry 83 (2), 973-979
- 75.** Supported palladium on magnetic nanoparticles–starch substrate (Pd-MNPSS): highly efficient magnetic reusable catalyst for C–C coupling reactions in water **2018**  
M Tukhani, **F Panahi**, A Khalafi-Nezhad  
ACS Sustainable Chemistry & Engineering 6 (1), 1456-1467
- 74.** Synthesis and characterization of a novel oxo-bridged binuclear iron (III) complex: its catalytic application in the synthesis of benzoxazoles using benzyl alcohol in water **2018**  
E Safaei, Z Alaji, **F Panahi**, A Wojtczak, JZ Jagličić  
New Journal of Chemistry 42 (9), 7230-7236
- 73.** Immobilized Pd nanoparticles on silica-starch substrate (PNP-SSS): efficient heterogeneous catalyst in Buchwald–Hartwig C–N cross coupling reaction **2017**  
**F Panahi**, F Daneshgar, F Haghighi, A Khalafi-Nezhad  
Journal of Organometallic Chemistry 851, 210-217
- 72.** Magnetic nanoparticles grafted l-carnosine dipeptide: remarkable catalytic activity in water at room temperature **2017**  
**F Panahi**, F Bahrami, A Khalafi-Nezhad  
Journal of the Iranian Chemical Society 14 (10), 2211-2220
- 71.** Immobilized copper iodide on a porous organic polymer bearing P, N-ligation sites: a highly efficient heterogeneous catalyst for CO bond formation reaction **2017**  
N Iranpoor, **F Panahi**, F Roozbin, S Rahimi, MG Haghighi  
Molecular Catalysis 438, 214-223
-

- 70.** Evaluation of antibacterial, antibiofilm and antioxidant activities of synthesized silver nanoparticles (AgNPs) and casein peptide fragments against streptococcus mutans **2017**  
Z Tavaf, M Tabatabaei, A Khalafi-Nezhad, **F Panahi**  
European Journal of Integrative Medicine 12, 163-171
- 69.** Selective and Efficient Formylation of Indoles (C3) and Pyrroles (C2) Using 2, 4, 6-Trichloro-1, 3, 5-Triazine/Dimethylformamide (TCT/DMF) Mixed Reagent **2017**  
N Iranpoor, **F Panahi**, S Erfan, F Roozbin  
Journal of Heterocyclic Chemistry 54 (2), 904-910
- 68.** Graphene Grafted N-Methyl-4-pyridinamine (G-NMPA): An Efficient Heterogeneous Organocatalyst for Acetylation of Alcohols **2017**  
F Panahi, R Fareghi-Alamdari, S Khajeh Dangolani, A Khalafi-Nezhad, M Golestanzadeh  
ChemistrySelect 2 (1), 474-479
- 67.** New bis(N-heterocyclic carbene) palladium complex immobilized on magnetic nanoparticles: as a magnetic reusable catalyst in Suzuki-Miyaura cross coupling ... **2017**  
R Fareghi-Alamdari, MS Saeedi, F Panahi  
Applied Organometallic Chemistry 31 (12), e3870
- 66.** Transition metal-free N-fluoroalkylation of amines using cyanurate activated fluoroalcohols **2017**  
F Haghghi, **F Panahi**, MG Haghghi, A Khalafi-Nezhad  
Chemical Communications 53 (94), 12650-12653
- 65.** Multicomponent synthesis of new curcumin-based pyrano [2, 3-d] pyrimidine derivatives using a nano-magnetic solid acid catalyst **2017**  
**F Panahi**, E Niknam, S Sarikhani, F Haghghi, A Khalafi-Nezhad  
New Journal of Chemistry 41 (20), 12293-12302
- 64.** Synthesis of imidazole and theophylline derivatives incorporating pyrimidine-fused heterocycles using magnetic nanoparticles-supported tungstic acid (MNP-TA) catalyst **2017**  
M Divar, **F Panahi**, SR Shariatipour, A Khalafi-Nezhad  
Journal of Heterocyclic Chemistry 54 (1), 660-669

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- 63.** L-Cysteine-functionalized magnetic nanoparticles (LCMNP): as a magnetic reusable organocatalyst for one-pot synthesis of 9-(1H-indol-3-yl) xanthen-4-(9H)-ones **2016**  
M Nourisefat, **F Panahi**, M Nabipour, S Heidari, A Khalafi-Nezhad  
Journal of the Iranian Chemical Society 13 (10), 1853-1865
- 62.** Synthesis of a Novel Magnetic Reusable Organocatalyst Based on 4-Dialkylaminopyridines for Acyl Transformations **2016**  
**F Panahi**, SK Dangolani, A Khalafi-Nezhad  
ChemistrySelect 1 (13), 3541-3547
- 61.** Palladium-Catalyzed Aminocarbonylation of Aryl Halides with 2, 4, 6-Trichloro-1, 3, 5-triazine/Formamide Mixed Reagent **2016**  
N Iranpoor, **F Panahi**, F Roozbin, S Erfan, S Rahimi  
European Journal of Organic Chemistry 2016 (9), 1781-1787
- 60.** Nickel-Catalyzed Reductive Addition of Aryl/Benzyl Halides and Pseudohalides to Carbodiimides for the Synthesis of Amides **2016**  
**F Panahi**, F Jamedi, N Iranpoor  
European Journal of Organic Chemistry 2016 (4), 780-788
- 59.** In situ generated and stabilized Pd nanoparticles by N<sup>2</sup>, N<sup>4</sup>, N<sup>6</sup>-tridodecyl-1, 3, 5-triazine-2, 4, 6-triamine (TDTAT) as a reactive and efficient catalyst for the Suzuki ... **2016**  
N Iranpoor, S Rahimi, **F Panahi**  
RSC advances
- 58.** Immobilized NNN Pd-complex on magnetic nanoparticles: efficient and reusable catalyst for Heck and Sonogashira coupling reactions **2016**  
FD Firuzabadi, Z Asadi, **F Panahi**  
RSC advances 6 (103), 101061-101070
- 57.** 4-Dialkylaminopyridine modified magnetic nanoparticles: as an efficient nano-organocatalyst for one-pot synthesis of 2-amino-4 H-chromene-3-carbonitrile derivatives in water **2016**  
SK Dangolani, **F Panahi**, M Nourisefat, A Khalafi-Nezhad  
RSC advances 6 (95), 92316-92324
-

- 56.** A triazine-phosphite polymeric ligand bearing cage-like P, N-ligation sites: an efficient ligand in the nickel-catalyzed amination of aryl chlorides and phenols **2016**  
**F Panahi**, F Roozbin, S Rahimi, M Moayyed, A Valaei, N Iranpoor  
RSC advances 6 (84), 80670-80678
- 55.** Synthesis of new  $\alpha$ -aminophosphonate derivatives incorporating benzimidazole, theophylline and adenine nucleobases using L-cysteine functionalized magnetic nanoparticles (LCMNP ... **2016**  
F Bahrami, **F Panahi**, F Daneshgar, R Yousefi, MB Shahsavani, A. Khalafi-Nezhad  
RSC advances 6 (7), 5915-5924
- 54.** In situ generated and stabilized Pd nanoparticles by N 2, N 4, N 6-tridodecyl-1, 3, 5-triazine-2, 4, 6-triamine (TDTAT) as a reactive and efficient catalyst for the Suzuki ... **2016**  
N Iranpoor, S Rahimi, **F Panahi**  
RSC Advances 6 (4), 3084-3090
- 53.** Phosphanamine-functionalized magnetic nanoparticles (PAFMNP): an efficient magnetic recyclable ligand for the Pd-catalyzed Heck reaction of chloroarenes **2016**  
**F Panahi**, N Zarnaghash, A Khalafi-Nezhad  
New Journal of Chemistry 40 (2), 1250-1255
- 52.** The interaction of carbon monoxide to Fe (III)(salen)-PEDOT: PSS composite as a gas sensor **2015**  
F Arabloo, S Javadpour, R Memarzadeh, **F Panahi**, MD Emami, ...  
Synthetic Metals 209, 192-199
- 51.** Buchwald–Hartwig amination reaction using supported palladium on phosphine-functionalized magnetic nanoparticles **2015**  
N Zarnaghash, **F Panahi**, A Khalafi-Nezhad  
Journal of the Iranian Chemical Society 12 (11), 2057-2064
- 50.** Novel curcumin-based pyrano [2, 3-d] pyrimidine anti-oxidant inhibitors for  $\alpha$ -amylase and  $\alpha$ -glucosidase: Implications for their pleiotropic effects against diabetes complications **2015**  
A Yousefi, R Yousefi, **F Panahi**, S Sarikhani, AR Zolghadr, A Bahaoddini, ...  
International journal of biological macromolecules 78, 46-55



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**49.** Design and synthesis of new antidiabetic  $\alpha$ -glucosidase and  $\alpha$ -amylase inhibitors based on pyrimidine-fused heterocycles **2015**

S Shahidpour, **F Panahi**, R Yousefi, M Nourisefat, M Nabipoor, ...

Medicinal Chemistry Research 24 (7), 3086-3096

**48.** Synthesis of novel poly-hydroxyl functionalized acridine derivatives as inhibitors of  $\alpha$ -glucosidase and  $\alpha$ -amylase **2015**

Z Toobaei, R Yousefi, **F Panahi**, S Shahidpour, M Nourisefat, ...

Carbohydrate research 411, 22-32

**47.** Green synthesis of silver nanoparticles by reduced glycated casein adducts: Assessment of their antibacterial and antioxidant activity against *Streptococcus mutans* **2015**

Z Tavaf, M Tabatabaei, A Khalafi-Nezhad, **F Panahi**, A Hosseini

European Journal of Integrative Medicine 7 (3), 294-302

**46.** Nickel-Catalyzed Reductive Benzylolation of Aldehydes with Benzyl Halides and Pseudohalides **2015**

**F Panahi**, M Bahmani, N Iranpoor

Advanced Synthesis & Catalysis 357 (6), 1211-1220

**45.** Nickel-catalyzed one-pot synthesis of biaryls from phenols and arylboronic acids via C–O activation using TCT reagent **2015**

N Iranpoor, **F Panahi**, F Jamedi

Journal of Organometallic Chemistry 781, 6-10

**44.** Nickel-catalyzed one-pot deoxygenation and reductive homocoupling of phenols via C–O Activation using TCT reagent **2015**

N Iranpoor, **F Panahi**

Organic letters 17 (2), 214-217

**43.** L-Cysteine functionalized magnetic nanoparticles (LCMNP): a novel magnetically separable organocatalyst for one-pot synthesis of 2-amino-4 H-chromene-3-carbonitriles in water **2015**

A Khalafi-Nezhad, M Nourisefat, **F Panahi**

Organic & biomolecular chemistry 13 (28), 7772-7779

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<b>42.</b> Synthesis of new surfactant-like triazine-functionalized ligands for Pd-catalyzed Heck and Sonogashira reactions in water	<b>2015</b>
N Iranpoor, S Rahimi, <b>F Panahi</b>	
RSC Advances 5 (61), 49559-49567	
<b>41.</b> Magnetic nanoparticles-supported tungstic acid (MNP-TA): an efficient magnetic recyclable catalyst for the one-pot synthesis of spirooxindoles in water	<b>2015</b>
A Khalafi-Nezhad, M Divar, <b>F Panahi</b>	
RSC Advances 5 (3), 2223-2230	
<b>40.</b> Direct Nickel-Catalyzed Amination of Phenols via C-O Bond Activation using 2, 4, 6-Trichloro-1, 3, 5-triazine (TCT) as Reagent	<b>2014</b>
N Iranpoor, <b>F Panahi</b>	
Advanced Synthesis & Catalysis 356 (14-15), 3067-3073	
<b>39.</b> Magnetic nanoparticles-supported tungstosilicic acid: as an efficient magnetically separable solid acid for the synthesis of benzoazoles in water	<b>2014</b>
A Khalafi-Nezhad, <b>F Panahi</b> , R Yousefi, S Sarrafi, Y Gholamalipour	
Journal of the Iranian Chemical Society 11 (5), 1311-1319	
<b>38.</b> Trimethylsilyl iodide as a multifunctional agent in the one-pot synthesis of 9-(1H-Indol-3-yl) xanthen-4-(9H)-ones from O-methyl protected Salicylaldehydes, indoles, and $\beta$ -Dicarbonyl Compounds	<b>2014</b>
A Khalafi-Nezhad, M Nourisefat, <b>F Panahi</b>	
synthesis 46 (15), 2071-2078	
<b>37.</b> An efficient procedure for the synthesis of phenacyl and benzyl azolium salts using fluorous alcohols	<b>2014</b>
A Khalafi-Nezhad, <b>F Panahi</b> , R Yousefi, Y Gholamalipour, S Sarrafi	
Journal of the Iranian Chemical Society 11 (4), 1189-1196	
<b>36.</b> Ruthenium-catalyzed synthesis of benzoxazoles using acceptorless dehydrogenative coupling reaction of primary alcohols with 2-aminophenol under heterogeneous conditions	<b>2014</b>
A Khalafi-Nezhad, <b>F Panahi</b>	

ACS Catalysis 4 (6), 1686-1692

**35.** Size-controlled synthesis of palladium nanoparticles on a silica–cyclodextrin substrate: **2014**  
A novel palladium catalyst system for the Heck reaction in water

A Khalafi-Nezhad, **F Panahi**

ACS Sustainable Chemistry & Engineering 2 (5), 1177-1186

**34.** Photo-switching effect in stilbene organic field effect transistors **2014**

H Karimi-Alavijeh, **F Panahi**, A Gharavi

Journal of Applied Physics 115 (9), 093706

**33.** Blue to red electroluminescence emission from organic light-emitting diodes based on **2014**  
 $\pi$ -conjugated organic semiconductor materials

MT Sharbati, **F Panahi**, AR Nekoei, F Emami, K Niknam

Journal of Photonics for Energy 4 (1), 043599

**32.** L-Proline-modified magnetic nanoparticles (LPMNP): a novel magnetically separable **2014**  
organocatalyst

A Khalafi-Nezhad, M Nourisefat, **F Panahi**

RSC Advances 4 (43), 22497-22500

**31.** Carbohydrates as a reagent in multicomponent reactions: one-pot access to a new **2014**  
library of hydrophilic substituted pyrimidine-fused heterocycles

M Nourisefat, **F Panahi**, A Khalafi-Nezhad

Organic & biomolecular chemistry 12 (46), 9419-9426

**30.** Pyrimidine-fused heterocycle derivatives as a novel class of inhibitors for  $\alpha$ - **2013**  
glucosidase

R Yousefi, MM Alavian-Mehr, F Mokhtari, **F Panahi**, MH Mehraban, A. Khalafi-Nezhad

Journal of enzyme inhibition and medicinal chemistry 28 (6), 1228-1235

**29.** Binding study of novel anti-diabetic pyrimidine fused heterocycles to  $\beta$ -lactoglobulin **2013**  
as a carrier protein

MH Mehraban, R Yousefi, A Taheri-Kafrani, **F Panahi**, A Khalafi-Nezhad

Colloids and Surfaces B: Biointerfaces 112, 374-379

- 28.** Immobilized palladium nanoparticles on silica functionalized N-propylpiperazine sodium N-propionate (SBPPSP): catalytic activity evaluation in copper-free Sonogashira reaction **2013**  
K Niknam, A Deris, **F Panahi**, MRH Nezhad  
Journal of the Iranian Chemical Society 10 (6), 1291-1296
- 27.** A new silica-supported organocatalyst based on L-proline: An efficient heterogeneous catalyst for one-pot synthesis of spiroindolones in water **2013**  
A Khalafi-Nezhad, ES Shahidzadeh, S Sarikhani, **F Panahi**  
Journal of Molecular Catalysis A: Chemical 379, 1-8
- 26.** Synthesis of  $\alpha$ -aminonitriles with benzimidazolic and theophyllinic backbones using the strecker reaction **2013**  
A Khalafi-Nezhad, M Divar, **F Panahi**  
The Journal of organic chemistry 78 (21), 10902-10908
- 25.** Synthesis of new pyrimidine-fused derivatives as potent and selective antidiabetic  $\alpha$ -glucosidase inhibitors **2013**  
**F Panahi**, R Yousefi, MH Mehraban, A Khalafi-Nezhad  
Carbohydrate research 380, 81-91
- 24.** Phosphine-functionalized magnetic nanoparticles (PFMN) as a magnetic recyclable phosphorus ligand: Preparation of its palladium (II) complex for Heck reaction of chloroarenes **2013**  
A Khalafi-Nezhad, **F Panahi**  
Journal of Organometallic Chemistry 741, 7-14
- 23.** Nano-TiO<sub>2</sub> on Dodecyl-Sulfated Silica: As an Efficient Heterogeneous Lewis Acid-Surfactant-Combined Catalyst (HLASC) for Reaction in Aqueous Media **2013**  
A Khalafi-Nezhad, S Mowlazadeh Haghighi, **F Panahi**  
ACS Sustainable Chemistry & Engineering 1 (8), 1015-1023
- 22.** One-Pot Synthesis of 5,7,8,9,9a,10-Hexahydro-8-thioxotetrahydropyrido[2,3-*d*: 6,5-*d'*]dipyrimidine-2,4,6(1*H*,3*H*,5a*H*)-triones *via* a Four-Component ... **2013**  
A Khalafi-Nezhad, **F Panahi**, B Golesorkhi

Helvetica Chimica Acta 96 (6), 1155-1162

**21.** Modification of silica using piperazine for immobilization of palladium nanoparticles: a study of its catalytic activity as an efficient heterogeneous catalyst for Heck and ... **2013**

K Niknam, MS Habibabad, A Deris, **F Panahi**, MRH Nezhad

Journal of the Iranian Chemical Society 10 (3), 527-534

**20.** A green and efficient procedure for one-pot synthesis of xanthenes and acridines using silica boron-sulfuric acid nanoparticles (SBSANs) as a solid Lewis-protic acid **2013**

A Khalafi-Nezhad, **F Panahi**, S Mohammadi, HO Foroughi

Journal of the Iranian Chemical Society 10 (2), 189-200

**19.** Silica-functionalized N-propylpiperazine for immobilization of palladium nanoparticles as efficient heterogeneous catalyst for cyanation reactions **2013**

K Niknam, A Deris, **F Panahi**

Chinese Journal of Catalysis 34 (4), 718-722

**18.** Nucleosides as reagents in multicomponent reactions: one-pot synthesis of heterocyclic nucleoside analogues incorporating pyrimidine-fused rings **2013**

A Khalafi-Nezhad, M Divar, **F Panahi**

Tetrahedron Letters 54 (3), 220-222

**17.** Carbon monoxide sensor based on a B2HDDT-doped PEDOT: PSS layer **2013**

R Memarzadeh, HB Noh, S Javadpour, **F Panahi**, A Feizpour, YB Shim

Bulletin of the Korean Chemical Society 34 (8), 2291-2296

**16.** Near-infrared electroluminescence from organic light emitting diode based on Imine oligomer with low turn on voltage **2013**

MT Sharbati, **F Panahi**, A Shourvarzi, S Khademi, F Emami

Optik 124 (1), 52-54

**15.** Silica Boron Sulfuric Acid Nanoparticles: As an Efficient and Reusable Catalyst for the Large-Scale Synthesis of  $\alpha$ -Amino Nitriles Using the Strecker Reaction **2013**

A Khalafi-Nezhad, HO Foroughi, **F Panahi**

Heteroatom Chemistry 24 (1), 1-8

- 14.** Immobilized palladium nanoparticles on silica–starch substrate (PNP–SSS): As a stable and efficient heterogeneous catalyst for synthesis of p-teraryls using Suzuki reaction **2012**  
A Khalafi-Nezhad, **F Panahi**  
Journal of Organometallic Chemistry 717, 141-146
- 13.** Structure–cytotoxicity relationship of a novel series of miconazole-like compounds **2012**  
R Yousefi, A Khalafi-Nezhad, MNS Rad, S Behrouz, **F Panahi**, M Esmaili, S M Ghaffari, A Niazi, A Akbar Moosavi-Movahedi  
Medicinal Chemistry Research 21 (8), 1921-1928
- 12.** An efficient one-pot access to quinazolinone derivatives using TiO<sub>2</sub> nanoparticles as catalyst: synthesis and vasorelaxant activity evaluation **2012**  
A Khalafi-Nezhad, SM Haghighi, A Purkhosrow, **F Panahi**  
Synlett 23 (06), 920-924
- 11.** The Interaction of CO to the Co (salen) Complex in to PEDOT: PSS Film and Sensor Application **2012**  
R Memarzadeh, **F Panahi**, S Javadpour, KN Ali, HB Noh, YB Shim  
Bulletin of the Korean Chemical Society 33 (4), 1297-1302
- 10.** L-Proline-promoted three-component reaction of anilines, aldehydes and barbituric acids/malononitrile: regioselective synthesis of 5-arylpyrimido [4, 5-b] quinoline-diones and ... **2012**  
A Khalafi-Nezhad, S Sarikhani, ES Shahidzadeh, **F Panahi**  
Green Chemistry 14 (10), 2876-2884
- 9.** Synthesis of some new 1, 4-distyrylbenzenes using immobilized palladium nanoparticles on silica functionalized morpholine as a recyclable catalyst **2011**  
K Niknam, A Gharavi, MRH Nezhad, **F Panahi**, MT Sharbati  
Synthesis 2011 (10), 1609-1615
- 8.** Assembly of Cyclometalated Platinum (II) Complexes via 1, 1'-Bis (diphenylphosphino) ferrocene Ligand: Kinetics and Mechanisms **2011**  
SM Nabavizadeh, H Amini, HR Shahsavari, M Namdar, M Rashidi, R Kia, B Hemmateenejad, M Nekoeinia, A Ariaifard, FN Hosseini, A Gharavi, A Khalafi-Nezhad, M T Sharbati, **F Panahi**

Organometallics 30 (6), 1466-1477	
7. Synthesis of new dihydropyrimido [4, 5-b] quinolinetriene derivatives using a four-component coupling reaction	2011
A Khalafi-Nezhad, <b>F Panahi</b>	
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6. Silica boron-sulfuric acid nanoparticles (SBSANs): preparation, characterization and their catalytic application in the Ritter reaction for the synthesis of amide derivatives	2011
A Khalafi-Nezhad, H ollah Foroughi, MM Doroodmand, <b>F Panahi</b>	
Journal of Materials Chemistry 21 (34), 12842-12851	
5. Immobilized palladium nanoparticles on a silica-starch substrate (PNP-SSS): as an efficient heterogeneous catalyst for Heck and copper-free Sonogashira reactions in water	2011
A Khalafi-Nezhad, <b>F Panahi</b>	
Green Chemistry 13 (9), 2408-2415	
4. Near-infrared organic light-emitting diodes based on donor-pi-acceptor oligomers	2010
MT Sharbati, <b>F Panahi</b> , A Gharavi	
IEEE Photonics Technology Letters 22 (22), 1695-1697	
3. Silica-bonded <i>S</i> -sulfonic acid as recyclable catalyst for the synthesis of 1,8-dioxo-decahydroacridines and 1,8-dioxo-octahydroxanthenes	2010
K Niknam, <b>F Panahi</b> , D Saberi, M Mohagheghnejad	
Journal of Heterocyclic Chemistry 47 (2), 292-300	
2. Morpholine doped poly (3, 4-ethylenedioxy) thiophene-poly (styrenesulfonate) as a low temperature and quick carbon monoxide sensor	2009
S Javadpour, A Gharavi, A Feizpour, A Khanehzar, <b>F Panahi</b>	
Sensors and Actuators B: Chemical 142 (1), 152-158	
1. Trityl chloride as a novel and efficient organic catalyst for room temperature preparation of bis (indolyl) methanes under solvent-free conditions in neutral media	2008
A Khalafi-Nezhad, A Parhami, A Zare, ARM Zare, A Hasaninejad, <b>F Panahi</b>	
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<b>Highlighted Papers</b>	<b>Year</b>
Access to modified peptides with heterocycle backbones using combinatorial chemistry <a href="https://atlasofscience.org/access-to-modified-peptides-with-heterocycle-backbones-using-combinatorial-chemistry/">https://atlasofscience.org/access-to-modified-peptides-with-heterocycle-backbones-using-combinatorial-chemistry/</a>	<b>2020</b>
Formamide and Cyanuric Chloride as a New Cyanation Agent <a href="https://www.chemistryviews.org/details/ezone/11230135/Formamide_and_Cyanuric_Chloride_as_a_New_Cyanation_Agent.html">https://www.chemistryviews.org/details/ezone/11230135/Formamide_and_Cyanuric_Chloride_as_a_New_Cyanation_Agent.html</a>	<b>2020</b>
A New CN Source for the Palladium-Catalyzed Cyanation of Aryl Halides Y Uozumi, R Niimi Synfacts 2020; 16(08): 0952	<b>2020</b>
C-C Bond Formation by Using a Supported Palladium-Schiff Base Complex  Y Uozumi, S Pan  Synfacts 13 (02), 0218-0218	<b>2017</b>
Nanoorganocatalyst for the Synthesis of 2-Amino-4H-chromene-3-carbonitriles  Y Uozumi, A Tazawa  Synfacts 13 (01), 0102-0102	<b>2017</b>
Synthesis of $\alpha$ -Aminophosphonates with l-Cysteine Functionalized MNPs  Y Uozumi, H Baek  Synfacts 12 (04), 0425-0425	<b>2016</b>
One-Pot Synthesis of 2-Amino-4H-chromene-3-carbonitrile Derivatives Y Uozumi, YMA Yamada, H Baek Synfacts 11 (11), 1226-1226	<b>2015</b>

<b>ISC Papers</b>	<b>Year</b>
Investigation of the Behavior of Conjugated Fluorescence Dyes as Amine Sensors F Miri, S Gorji, F Panahi Journal of studies in color world, Volume:8 Issue:3, 2018, PP 55 -70	<b>2018</b>
F Arabloo Narehee , R Memarzadeh, F Panahi, M Davazdah Emami, S Javadpour, M H Shariat Advanced Processes in Materials Engineering, Volume:12 Issue:44, 2018, PP 1 -10	<b>2018</b>
Catalytic Evaluation of Palladium Nanoparticles on Silica-Grafted n-Propyl-Diaza-15-Crown-5 (PNP-SGPDC) in the Heck and Suzuki Reactions D Saberi, K Niknam, F Panahi, MR Hormozi-Nezhad Organic Chemistry Research 1 (1), 45-52	<b>2015</b>
Optimal Conditions for Synthesis of Tin Oxide Nanoparticles by Taguchi Design Method R Memarzadeh, S Javadpour, F Panahi New Materials, Volume:2 Issue:3, 2012, P 11	<b>2012</b>



Conferences	Year
14. Synthesis of a New Surfactant-like Triazine-functionalized Ligand for Carbon-Carbon and Carbon-Heteroatom Bond Formations 24th Iranian Seminar of Organic Chemistry S. Rahimi, <b>F. Panahi</b> , N. Iranpoor 24-26 Aug. 2016 Azarbaijan Shahid Madani University	<b>2016</b>
13. Transition metal-catalyzed reductive and acceptorless dehydrogenative coupling reactions Invited Speaker. 18th Iranian Chemistry congress, Semnan University. August 30-September 1, 2015. 2014	<b>2015</b>
12. Pyrimidine-Fused Heterocycle Derivatives as Potent and Selective Antidiabetic $\alpha$ -Glucosidase Inhibitors (Presentation) The national conference on protein and peptide sciences: from basic to medical and industrial applications. 10-11 December, 2014, Shiraz University, Shiraz.	<b>2014</b>
11. M. H. Mehraban, Z. Moafiyan, F. Panahi, A. Khalafi-Nezhad, R. Yousefi Recent discovery of $\alpha$ -glucosidase inhibitors with pyrimidine scaffold The national conference on protein and peptide sciences: from basic to medical and industrial applications. 10-11 December, 2014, Shiraz University, Shiraz. DOI: 10.13140/2.1.3095.4565	<b>2014</b>
10. Magnetic nanoparticles-supported tungstosilicic acid: as an efficient and reusable magnetically separable solid acid for the synthesis of spiroindolones in water A. Ahalafi-Nezhad, M. Nourisefat, F. Panahi IRANIAN SEMINAR OF ORGANIC CHEMISTR IRANIAN CHEMICAL SOCIETY, BUALI SINA UNIVERSITY	<b>2013</b>
9. M. H. Mehraban, Z. Moafiyan, A. Taheri-Kafrani, F. Panahi, A. Khalafi-Nezhad, R. Yousefi $\beta$ -Lactoglobulin; a new transport vehicle for anti-diabetic drugs The national conference on protein and peptide sciences: from basic to medical and industrial applications. 10-11 December, 2014, Shiraz University, Shiraz. DOI: 10.13140/2.1.5192.6086.	<b>2014</b>

8. A rapid and convenient procedure for the synthesis of benzoxazole and benzothiazole derivatives in presence of silica boron sulfuric acid nanoparticles (SBSAN) as a heterogeneous efficient catalyst H.O. Foroughi, F. Panahi 19th Iranian Seminar on Organic Chemistry, Vali-e-Asr University of Rafsanjan, 5-7 Sep. 2012.	<b>2012</b>
7. Aromatic substitution on the Pyrimidine-fused heterocycle molecules significantly enhances their inhibitory properties against alpha-glucosidase First International Conference on Biophysical Chemistry, June 13, 2012 – June 15, 2012, Ardabil University of Medical Sciences, Ardabil, Iran. DOI: 10.13140/2.1.4668.3208.	<b>2012</b>
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5. Fabrication of a near infrared OLED using a new organic chromospheres M. T. Sharbati, F. Emami, A. Gharavi, F. Panahi INMIC 2009, IEEE 13th International Multitopic Conference , art. no. 5383102.	<b>2009</b>
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3. Silica-bonded S-sulfonic acid: as recyclable catalyst for the synthesis of 1,8dioxodecahydroacridines and 1,8-dioxo-octahydroxanthenes K. Niknam, F. Panahi, D. Saberi The 8th Lakeland Symposium on Heterocyclic Chemistry, Grasmere, cumbria, UK, 7th-11th May, 2009.	<b>2009</b>
2. Fabrivation and Electrical Characterization of Single-Layer Organic Light-Emitting Diodes (OLEDs) A. Gharavi, M.A. Baghban, M. T. Sharbati, F. Panahi, H. Karimi-Alavijeh 15th Iranian Conference on Optic and Photonics and 1th Iranian Conference on Photonics Engineering, University of Isfahan, 27-29 January 2009.	<b>2009</b>
1. Fabrication of Single-Layer Organic Light Emitting Diode Using NIR Organic Material M.T. Sharbati, F. Panahi, A. Gharavi, F. Emami, K.Niknam, 16th Iranian Conference on Optic and Photonics, University of Yazd, 2009.	<b>2009</b>