Curriculum Vitae

First Name: Saeed Surname: Balalaie

Date of Birth: Sep 26th 1965 Place of birth: Rasht-Iran

Nationality: Iranian Marital Status: Married

Contact

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Position:

- Professor of Organic Chemistry
- Professor: from September 2007- now
- Associate Professor: 2003-September 2007
- Assistant Professor: 1997-2003

Academic Qualifications:

Ph.D. 1992 - 1997, Sharif University of Technology (IRAN) Faculty of Chemistry, 6 months research in Justus Liebig Universität (Prof. J. Ipaktschi, Giessen-Germany) Dissertation: Photoxygenation of Organic Compounds by Singlet Oxygen, Supervisor: Prof. M. M. Hashemi.

MSc. 1990 - 1992, Shahid Beheshti University (National University of Iran) (IRAN), Department of Chemistry

Thesis: Extraction and Structure Elucidation of Guainolide in Centaurea Xanthocephala, Supervisor: Prof. A. Rustaiyan.

B.Sc. 1984-1989 University of Tehran (IRAN), Faculty of Science, Chemistry Department

Awards:

1. Distinguished University Professor in Iran selected by Ministry of Science, Research and Technology 2021
2. Distinguished University Professor at K. N. Toosi University of Technology 2021
3. Award for the Iran's National Book Award 2021 (Book Title: Peptide Chemistry in Persian)
4. Distinguished researcher in K. N. Toosi University of Technology 2020
5. Selected as first laureate applied research in 33rd Khwarizmi International Award February 2020
6. Selected researcher by Ministry of Science, Research and Technology 2019
7. Distinguished researcher in K. N. Toosi University of Technology 2019
8. Initiation International collaboration project supported by DFG with Prof. Gebhard Haberhauer (2019-2020), University of Duisburg-Essen, Germany
9. Research Group Linkage Program Award supported by Alexander von Humboldt Foundation, collaboration with Prof. B. Breit, University of Freiburg (2018-2020), Germany
10. Selected researcher by Iran's National Elites Foundation 2018, 2019, and 2020.
11. Ambassador Scientist Alexander von Humboldt foundation in Iran from January 2018-2020
12. Alexander von Humboldt Research fellowship July-September 2017, Reference Prof. Dr. Bernhard Breit, Institute of Organic Chemistry, University of Freiburg
13. Distinguished researcher in K. N. Toosi University of Technology 2016

14. Ambassador Scientist Alexander von Humboldt foundation in Iran from January 2015-2017

15. Alexander von Humboldt Research fellowship 2014

    Reference: Prof. Dr. T. J. J. Mueller, Organisch Chemisches Institut der HeinrichHeine Universitaet Duesseldorf, Germany

16. Distinguished Organic Chemistry Professor in Iran selected by Iranian Chemical Society (2013)

17. Alexander von Humboldt Research fellowship July 2011- Sep. 2011

    Reference: Prof. Dr. R. Gleiter, Organisch Chemisches Institut der Universitaet Heidelberg, Im Neuenheimer Feld 270, D-69120 Heidelberg, Germany

18. Distinguished researcher in K. N. Toosi University of Technology 2011

19. Alexander von Humboldt Research fellowship July 2007- Sep. 2007

    Reference: Prof. Dr. R. Gleiter, Organisch Chemisches Institut der Universitaet Heidelberg, Im Neuenheimer Feld 270, D-69120 Heidelberg, Germany

20. Distinguished researcher in K. N. Toosi University of Technology 2006

21. Alexander von Humboldt Research fellowship July 2004- Sep. 2004

    Reference: Prof. Dr. R. Gleiter, Organisch Chemisches Institut der Universität Heidelberg, Im Neuenheimer Feld 270, D-69120 Heidelberg, Germany
    (Equipment and Book Donation from Alexander von Humboldt Foundation)

22. Alexander von Humboldt Research fellowship Oct.2001- Jan. 2003

    Reference: Prof. Dr. R. Gleiter, Organisch Chemisches Institut der Universität Heidelberg, Im Neuenheimer Feld 270, D-69120 Heidelberg, Germany

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Research Interests:

1. Designing and synthesis of bioactive peptides and synthesis of pharmaceutical peptides in solid and solution phase
2. New Methodologies in Organic Synthesis

3. Designing of novel multicomponent and domino reactions in organic synthesis to access multifunctional compounds
4. Asymmetric Organic Synthesis
5. Synthesis of Active Pharmaceutical Ingredients (API) compounds

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Publications:

(2022)

1. Alatat, K.; Kejani, A. A.; Bijanzadeh, H. R.; **Balalaie, S**.; Metal-Free Tandem Dehydrogenative α-Arylation Reaction of Propargylic Alcohols with 2-Alkynylbenzaldoximes toward the Synthesis of α-(4-Bromo-isoquinolin-1-yl)-propenone Skeletons. *Org. Biomol. Chem.*, **2022**, DOI: https://doi.org/10.1039/D1OB02114A.
2. Shakeri, P.; Asghari, M.; Panahi Kokhdan, E.; Fathi Vavsari, V.; Golmohammadi, F.; Ghasempour, A.; **Balalaie, S.** Synthesis, Molecular Modelling and Functional Evaluation of a GnRH Antagonist, *J. Iran. Chem. Soc*. **2022**, https://doi.org/10.1007/s13738-021-02484-6.
3. Seyed Hashtroudi, M.; Fathi Vavsari, V.; **Balalaie, S.** DABSO as a SO_2 Gas Surrogate in the Synthesis of Organic Structures, *Org. Biomol. Chem.*, **2022**, (Accepted for Publication)
4. Ayoubi, M.; Nikbakht, A.; Amiri, K.; Abbasi Kejani, A.; Zahedian Tejeneki, H.; **Balalaie, S.** Efficient Synthesis of Isoquinoline Derivatives through Sequential Cyclization/deoxygenation Reaction of 2-alkynylbenzaldoximes, *SynOpen*, **2022** (Accepted for Publication)
5. Khosravi, H.; Janatian Ghazvini, H.; Kamangar, M. Rominger, F.; Balalaie, S. Migratory Cycloisomerization of 1, 3-Dien-5-ynes Conjugated with Pseudopeptides in Assembly of Benzo[7]annulenes, *Chem. Commun.*, **2022** (Under Revision)
6. Fathi Vavsari, V.; Nikbakht, A.; **Balalaie, S.** Annulation of 2-Alkynylanilines: The Versatile Chemical Compounds, *Asian J. Org. Chem.* **2022**, https://doi.org/10.1002/ajoc.202100772.

7. Fathi Vavsari, V.; **Balalaie, S.** An Overview on the two Recent Decades Study of Peptides Synthesis and Biological Activities in Iran., *J. Iran. Chem. Soc.* **2021**, *19*, 331–351.

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8. Hayatgheybi, S.; Khosravi, H.; Zahedian Tejeneki, H.; **Balalaie, S**.; Synthesis of N-(Isoquinolin-1-yl)sulfonamides via Ag_2O-catalyzed Tandem Reaction of *ortho*-Alkynylbenzaldoximes with Bench-top Stabilized Ketenimines. *Org. Lett*. **2021**, *23*, 3524-3529.
9. Esfandiari Mazandaran, K.; Baharloui, M.; Houshdar Tehrani, M. H. Mirshokraee, S. A.; **Balalaie, S**. "The Synthesis of Conjugated Peptides Containing Triazole and Quinolone-3-Carboxamide Moieties Designed as Anticancer Agents." *Iran. J. Biotechnol.*, **2021**, *4*, e2917.
10. Krasavin, M.; Dar'in D.; **Balalaie, S**. "Post-condensational modifications of the Groebke-Blackburn-Bienaymé reaction products for scaffold-oriented synthesis." *Tetrahedron Lett.*, **2021**, *86*, 15352.
11. Ansari, F.; Khosravi, H.; Armaghan, M.; Frank, W.; **Balalaie, S**.; Jafarpour, F.; Metal-Free Oxidative Cyclization Reaction of Enynals to Access Pyrane-2-one Derivatives. *Org. Biomol. Chem.* **2021**, *19*, 4263-4267.
12. Meghrazi Ahadi E.; Azizian, H.; Fathi Vavsari V.; Aliahmadi, A.; Shahsavari, Z.; Bijanzadeh, H.; **Balalaie**, **S**. Synthesis and Decarboxylation of Functionalized 2-Pyridone-3-carboxylic Acids and Evaluation of their Antimicrobial Activity and Molecular Docking, *Iran J Pharm Res*, **2021**, 20, 456-475.
13. Abbasi Kejani, A.; Khosravi, H.; Rominger, F.; **Balalaie, S**.; Breit, B.; Metal-Free Domino Oligocyclization Reactions of Enynals and Enynones with Molecular Oxygen. *Org. Lett*. **2021**, 23, 1291-1295.
14. Nikbakht, A.; Amiri, K.; Khosravi, H.; Zhou, Y.; **Balalaie, S.**; Breit, B. Copper-Catalyzed Cycloisomerization of Unactivated Allene-Tethered *O*-Propargyl Oximes: A Domino Reaction Sequence toward the Synthesis of Hexahydropyrrolo[3,4-*b*]azepin-5(4*H*)-ones *Org. Lett.* **2021**, *23*, 3343-3348.

15. Manavi, B.; Zahedian Tejeneki, H.; Rominger, F.; Armaghan, M.; Frank, W.; Bijanzadeh, H. R.; **Balalaie, S.** Copper (I)-Catalyzed Intramolecular Cyclization of o-Propargyloxy Diketopiperazines to Access Diverse Diazabicyclic and Spiro-Diketopiperazinochromanes *Adv. Synth. Catal.* **2021**, *363*, 4190-4196.

16. Nayebzadeh, B.; Amiri, K.; Khosravi, H.; Rominger, F.; Dar'in, D.; Krasavin,M.; Bijanzadeh, H. R.; **Balalaie, S.** Synthesis of Spiro[chromene-imidazo[1,2-*a*]pyridin]-3'-imines *via* Transition Metal-Free 6-*exo*-dig Cyclization Reaction ; *J. Org. Chem.* **2021**, *86*, 13693-13701.

17. Meghrazi Ahadi, E.; Abbasi Kejani, A.; Khosravi, H.; Fathi Vavsari, V.; **Balalaie, S.**; Rominger, F.; Bijanzadeh, H. R.; Domino Palladium-Catalyzed Decarboxylative Arylation and C-O Selective Bond Formation toward Chromeno[2,3-*b*]pyridine-2-one skeletons; *J. Org. Chem.* **2021**,86, 12705-12713.

18. Nikbakht, A.; Mohammadi, F.; Mousavi, M.S.; Amiri, K.; **Balalaie, S**.; Rominger, F.; Bijanzadeh, H. R. A Domino Approach for the Synthesis of 4-Carboxamide Oxazolines from Azirines, *Synthesis*, **2021**, 53, 4654-4661.

19. Valipour, A.; Heidari, B.; Asghari, S. M.; **Balalaie, S**.; Rabouti, H.; Omidian, N.; The effect of different exogenous kisspeptins on sex hormones and reproductive indices of the goldfish (Carassius auratus) broodstock. *J. Fish Biol*. **2021**, 98, 1137-1143.

20. Fathi Vavsari, V. ; **Balalaie, S. ;** Annulation of 2-alkynylbenzamides: The versatile chemical compounds, in Targets in Heterocyclic Systems, **2021**, Vol 25, 426-438.

21. Janatian Ghazvini, H.; Khosravi, H.; Mirzaei, S.; **Balalaie, S**. Breit, B.; Rhodium-Catalyzed Regio- and Diastereoselective Hydroaryla-tion of Allenes: An Unprecedented Ene Reaction, *ACS Catal.*, **2021**, *11*, 14570–14574.

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22. Golmohammadi, F.; **Balalaie, S**.; Fathi Vavsari, V.; Anwar, M. U.; Al-Harrasi, A.; Synthesis of Spiro-β-lactam-pyrroloquinolines as Fused

Heterocyclic Scaffolds through Post-transformation Reactions. *J. Org. Chem.* **2020**, 85, 13141-13152.

23. Talaei, B.; Fathi Vavsari, V.; **Balalaie, S**.; Arabanian, A.; Bijanzadeh, H. R.; Synthesis of Novel Peptides Using Unusual Amino Acids. *Iran J. Pharm. Res.,* **2020**, 19, 370-382.

24. Zahedian Tejeneki, H.; Nikbakht, A.; **Balalaie, S**.; Rominger, F.; Regio-And Diastereoselective Indium-Catalyzed Conia-Ene Reaction of ortho-Alkynyl Diketopiperazines to Access Fused Diketopiperazinoindolines, *J. Org. Chem*. **2020**, 85, 8544–8552.

25. Sadremomtaz, A.; Ali, A. M.; Jouyandeh, F.; **Balalaie, S**.; Navari, R.; Broussy, S.; Mansouri, K.; Groves, M. R. Asghari, S. M.; Molecular docking, synthesis and biological evaluation of Vascular Endothelial Growth Factor (VEGF) B based peptide as antiangiogenic agent targeting the second domain of the Vascular Endothelial Growth Factor Receptor 1 (VEGFR1D2) for anticancer application. *Signal Transduct Target Ther*, **2020**, 5, 1-4.

26. Moayedi, S.; Yadegar, A.; **Balalaie, S.**; Yarmohammadi, M.; Zali, M.R.; Suzuki, H.; Fricker, G.; Haririan, I.; Sugar Codes Conjugated Alginate: An Innovative Platform to Make a Strategic Breakthrough in Simultaneous Prophylaxis of GERD and Helicobacter pylori Infection. *Drug Des. Devel. Ther.* **2020**, 14, 2405-2412.

27. Salehi Ashani, R.; Azizian, H.; Sadeghi Alavijeh, N.; Fathi Vavsari, V.; Mahernia, Sh.; Sheysi, N.; Biglar, M.; Amanlou, M.; **Balalaie, S**.; Synthesis, Biological Evaluation and Molecular Docking of Deferasirox and Substituted 1,2,4-Triazole Derivatives as Novel Potent Urease Inhibitors: Proposing Repositioning Candidate, *Chem. Biodivers.* **2020**, 17, e1900710.

28. Fathi Vavsari, V.; Shakeri, P.; **Balalaie, S**.; Application of Chiral Isocyanides in Multicomponent Reactions, *Curr. Org. Chem.* **2020**, *24*, 162-183.

29. Azizian, H.; Esmailnejad, A.; Fathi Vavsari, V.; Mahernia, Sh.; Amanlou, M.; **Balalaie, S**.; Pantoprazole Derivatives: Synthesis, Urease Inhibition Assay and In Silico Molecular Modeling Studies, *ChemistrySelect*. **2020**, *5*. 4580-4587.

30. Fathi Vavsari, V.; **Balalaie, S**.; Recent Advances in Green Synthesis of Chromones, *Chemistry of Heterocyclic Compounds*. **2020**, *56*, 404–407.

31. Sohbati, H.; Alipour, M.; Hosseinkhani, S.; **Balalaie, S.**; Hamdan, F.; Design, Synthesis and Biological Evaluation of Triptorelin Analogs Containing Tetrazole Moiety, *ChemistrySelect*, **2020**, *5*, 1443-1449.

32. Nashta Rahimi, A.; Janatian Ghazvini, H.; **Balalaie, S**.; Rominger, F.; Zahedian Tejenek, H.; Bijanzadeh, H. R. Ultrasound-Activated Atom-Economical Approach to the Synthesis of Highly Substituted Pyrrolidin-2-ones through a Four-Component Ugi/5-endo-trig Intramolecular Radical Cyclization Reaction, Synlett. **2020,** 31, 871-877.

33. Amiri, K.; **Balalaie, S**.; Anwar, M. U.; Al-Harrasi, A.; Synthesis of 3-Oxoisoindoline-1-carboxamides through Sequential Four-Component Ugi Reaction/Oxidative Nucleophilic Substitution of Hydrogen, Synlett. **2020**, 31, 861-865.

34. Akbarikalani, N.; Amiri, K.; Al-Harrasi, A.; **Balalaie, S**. Copper (triazole-5-yl) methanamine complexes onto MCM-41: the synthesis of pyridine-containing pseudopeptides through the 6-endo-dig cyclization of 1, 5-enynes. *RSC Adv.*, **2020**, *10*, 10577-10583.

35. Takallou, A.; Habibi, A.; Ziyaei Halimehjan, A.; **Balalaie, S**.; NHC-assisted Ni (II)-catalyzed acceptorless dehydronation of amines and secondary alcohols, *Appl. Organomet. Chem.* **2020**, *34*, e5379.

36. Adibi, H.; Mehrabi, M.; Amiri, K.; **Balalaie, S**.; Khodarahmi, R. Synthesis and characterization of 2-benzylidene-1, 3-indandione derivatives as in vitro quantification of amyloid fibrils. *J. Iran Chem. Soc*., **2020**, *17*, 423-432.

37. Ghodrati, A.; Firoozpour, L.; **Balalaie, S.**; Hosseini, F.; Ramezanpour, S.; Edraki, N.; Mohtavinejad, N.; Amanlou, M.; Design, Synthesis and Enzymatic Inhibition of Novel Unusual Amino Acids as a Transition State Analogue of Amyloid Precursor Protein Peptide, *Int J Pept Res Ther*, **2020**, (DOI 10.1007/s10989-020-10015-9).

38. Ahmadi, S.; Dabbagh, H. A.; Grieco, P.; **Balalaie, S**.; A cystine-based dual chemosensor for fluorescent-colorimetric detection of CN− and fluorescent

detection of Fe^{3+} in aqueous media: Synthesis, spectroscopic, and DFT studies. *Spectrochim Acta A.*, **2020**, *228*, 117696.

39. Pejman, S.; Kamarehei, M.; Riazi, G.; Pooyan, S.; **Balalaie, S.**; Ac-SDKP ameliorates the progression of experimental autoimmune encephalomyelitis via inhibition of ER stress and oxidative stress in the hippocampus of C57BL/6 mice, *Brain Res.*, **2020**, *154*, 21-31.

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40. Ghiasi, P.; Hosseinkhani, S.; Ansari, H.; Aghdami, N.; **Balalaei, S**.; Pahlavan, S.; Baharvand, H.; Reversible permeabilization of the mitochondrial membrane promotes human cardiomyocyte differentiation from embryonic stem cells, *J. Cell Physiol*. **2019**, *234*, 521-536.

41. Balalaie, A.; Rezvani, M. B.; Basir, M. M.; Rezadoost, H.; **Balalaie, S.;** A New Approach for Determining the Minimum Concentration of Proanthocyanidin for Preservation of Collagen in H Dentin, *Eur J Prosthodont Restor Dent*, **2019**, *27*, 154-163.

42. Amiri, K.; Khosravi, H.; **Balalaie, S.;** Golmohammadi, F.; Anwar, M U.; Al-Harrasi, A.; Regio- and chemo-selective cyclization of allenic-Ugi products for the synthesis of 3-pyrroline skeletons, *Org. Biomol. Chem.*, **2019**, *17*, 8858-8870.

43. Janatian Ghazvini, H.; Armaghan, M.; Janiak, C.; **Balalaie, S.;** Müller, T. J. J.; Coupling-isomerization-cycloisomerization reaction (CICIR) - An unexpected and efficient domino approach to luminescent 2-(hydroxymethylene)indenones, *Eur. J. Org. Chem*. **2019,** *14*, 7058-7062.

44. Nikbakht, A.; **Balalaie, S.;** Breit, B.; Synthesis of 2-(isoquinolin-1-yl) prop-2-en-1-ones via silver(I)- catalyzed one-pot tandem reaction of ortho-alkynylbenzaldoximes with propargylic alcohols, *Org. Lett*. **2019**, *21*, 7645−7648.

45. Janatian Ghazvini, H.; Müller, T. J. J.; Rominger, F.; **Balalaie, S.;** Highly substituted medium-sized ring-fused azocinoquinoline scaffolds by post-Ugi-4CR reductive carbopalladation cyclization, *J. Org. Chem*. **2019**, *84*, 10740−10748.

46. Abdollahpour-Alitappeh, M.; Lotfinia, M.; Bagheri, N.; Sineh Sepehr, K.; Habibi-Anbouhi, M.; Kobarfard, F.; **Balalaie, S.;** Foroumadi, A.; Abbaszadeh-Goudarzi ,G.; Abbaszadeh-Goudarzi, K.; Abolhassani, M.; Trastuzumab-monomethyl auristatin E conjugate exhibits potent cytotoxic activity in vitro against HER2-positive human breast cancer, *J. Cell Physiol.* **2019**, *234*, 2693-2704.

47. Ghalehshahi, H. G.; **Balalaie, S.;** Sohbati, H. R.; Azizian, H.; Alavijeh, M. S.; Synthesis, CYP 450 evaluation, and docking simulation of novel 4-aminopyridine and coumarin derivatives, *Arch. Pharm. Chem. Life Sci*. **2019**, *352*, 1-14.

48. Hamdan, F.; Bigdeli, Z.; **Balalaie, S.;** Sewald, N.; Michalek, C.; Efficient synthesis of novel RGD based peptides and the conjugation of the pyrazine moiety to their N-terminus, *New J. Chem*. **2019**, *43*, 2702-2709.

49. Hamdan, F.; Bigdeli, Z.; Asghari, S. M.; Sadremomtaz, A.; **Balalaie, S.;** Synthesis of modified RGD-based peptides and their in vitro activity, *ChemMedChem* **2019**, *14*, 282-288.

50. Navari, R.; **Balalaie, S.;** Mehrparvar, S.; Darvish, F.; Rominger, F.; Hamdan, F; Mirzaie, S.; Efficient synthesis of pyrazolopyridines containing a chromane backbone through domino reaction, *Beilstein J. Org. Chem.* **2019**, *15*, 874-880.

51. Poursan, S.; Ahadi, S.; **Balalaie, S.**; Rominger, F.; Bijanzadeh, H. R.; Design and synthesis of novel functionalized fused oxazepine and diazepine analogues containing coumarin backbone through domino reaction, *ChemistrySelect* **2019**, *4*, 6403-6407.

52. **Balalaie**, S.; Doroudian, Y.; Zarezadeh, N.; Zahedian Tejeneki, H.; Rominger, F.; Regiocontrolled synthesis of fused heterocyclic skeletons containing pyranocoumarin backbones, *ChemistrySelect* **2019**, *4*, 8921-8924.

53. Jamaati, H.; **Balalaie, S.**; Kazemi Miraki, M.; Rominger, F.; Bijanzadeh, H. R.; Choline chloride/ urea as mild media for the synthesis of the chromonyl amidodiester fragments and succinimide derivatives, *ChemistrySelect* **2019**, *4*, 9074-9078.

54. Mottaghi, M.; Khosravi, H.; **Balalaie, S**.; Rominger, F.; Catalytic formal [4 + 1] isocyanide-based cycloaddition: an efficient strategy for the synthesis of 1*H*-cyclopenta[*b*]quinolin-1-one derivatives, *Org. Biomol. Chem*. **2019**, *17*, 275-282.

55. **Balalaie, S.;** Malakoutikhah, M.; Teixido, M.; Fathi Vavsari, V.; Giralt, E.; Haghighatnia, Y.; Hamdan, F.; Arabanian, A.; Efficient synthesis of norbuprenorphines coupled with enkephalins and investigation of their permeability, *Iran. J. Pharm. Res.* **2019**, 18, 1277-1287.

56. Takallou, A.; Habibi, A.; Ziyaei Halimehjani, A.; **Balalaie, S.**; Bis(imidazolium) chloride based on 1,2-phenylenediamine as efficient ligand precursor for palladium-catalyzed Mizoroki-Heck cross-coupling reaction, *J. Organomet. Chem.* **2019,** *888*, 24-28.

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57. Mahdavi, M.; Asghari, S.; Rahnamay, M.; Dehghan, G.; Feizi, M.A.H.; **Balalaie, S.;** Cytotoxicity, oxidative stress, and apoptosis in K562 leukemia cells induced by an active compound from pyrano-pyridine derivatives, *Human Exp. Toxicol*. **2018**, *37*, 1105-1116.

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60. **Balalaie, S**.; Vaezghaemi, A.; Zarezadeh, N.; Rominger, F.; Bijanzadeh, H. R.; Catalyst-free synthesis of fused triazolo-diazepino[5,6-*b*]quinoline derivatives via a sequential Ugi-4CR–nucleophilic substitution–intramolecular Click reaction, *Synlett* **2018**, *29*, 1095-1101.

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62. **Balalaie, S**.; Esmaeilabadi, H.; Mehrparvar, S.; Rominger, F.; Hamdan, F.; Bijanzadeh, H. R.; Synthesis of functionalized dihydropyrido[2,3-*d*]pyrimidines in aqueous medium, *SynOpen* **2018**, *2*, 1–5.

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64. Moosavi-Zare, A. R.; Zolfigol, M. A., Derakhshan-Panah, F.; **Balalaie, S.;** Synthesis and characterization of 4,4′-bipyridinium sulfonic acid chloride as a new and efficient catalyst for the preparation of amidoalkyl phenols and bis amidoalkyl phenols, *Mol. Catal*. **2018**, *449*, 142-151.

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