CURRICULUM VITAE (Manolis Stratakis-November 2022)

Born in Thrapsano, Heraklion Crete in 1963.

Married with 2 children (24 and 22 years old).

B.Sc. in Chemistry, University of Thessaloniki, Greece **1986**.

Ph.D. in Organic Chemistry, University of Crete, Greece **1991**. Thesis title: "Mechanistic studies and synthetic transformations of catalytic photooxidations" (supervisor: prof. M. Orfanopoulos).

Postdoctoral research associate, University of California at Berkeley **1991-1993** (advisor: prof. A. Streitwieser).

Visiting Scholar, University of California at Los Angeles, **1995** (advisor: prof. C. S. Foote).

Assistant professor, Department of Chemistry, University of Cyprus, Nicosia, Cyprus **1996-1999**.

Assistant professor and then tenured assistant professor, Department of Chemistry, University of Crete, Greece **1999-2004**.

Associate professor, **2004-2009**.

Professor, **2009**-.

HOBBIES

Ancient Greek, Mountain hiking, Cultivation of olive trees, Byzantine music

RESEARCH INTERESTS AND ACTIVITIES

I. Applications of heterogeneous catalysis in organic transformations.

II. Biomimetic natural product synthesis.

III Synthetic organic methodology

Professor Stratakis has published so far 105 articles in peer-review journals, the majority of them in the most respected journals of the field of organic chemistry. His work has received ~4200 citations and has an H-index =33. Professor Stratakis does on the average 15-20 reviewing activities per year, many of them in high impact factor journals such as: Journal of the American Chemical Society, Angewandte Chemie, Chemical Communications, Organic Letters, Journal of Organic Chemistry, Chemical Science, ACS Catalysis, etc.

Professor Stratakis has participated in more than 30 conferences, symposiums and invited presentations during the past 20 years with the most prestigious participation being an invited speaker at the European Symposium on Organic Chemistry (ESOC-2003), Dubrovnik, Croatia.

SUPERVISOR

Dr. M. Stratakis has supervised at the Department of Chemistry, University of Crete ~30 postgraduate students, 8 PhD students and 8 postdocs.

ADMINISTRATIVE AND OTHER SCIENTIFIC ACTIVITIES

Dean of the School of Natural and Technological Sciences of the University of Crete (2020-today)

Vice chairman of the Department of Chemistry (2004-2006 and 2016-2018)

Representative of the Department of Chemistry in the Research Committee of the University of Crete (2011-2014)

Chairman of the graduate program of the Department of Chemistry (2016-today).

Representative of the South-East European States in the scientific committee of the European Symposium of Organic Chemistry, ESOC (2011-2019).

Member of the editorial board of the journal *Nanomaterials*.

AWARDS

Hildegard-Zervas award issued by the Academy of Athens (**2012**) regarding the article “Oxidative cycloaddition of 1,1,3,3-tetramethyldisiloxane to alkynes catalyzed by supported gold nanoparticles” published in the *J. Am. Chem. Soc*.

PUBLICATIONS

1. Orfanopoulos, M.; Stratakis, M.; Elemes, Y. *Tetrahedron Lett.* **1989**, *30*, 4875-78 "Regioselective reaction of singlet oxygen with cis alkenes"

2. Elemes, Y.; Stratakis, M.; Orfanopoulos, M. *Tetrahedron Lett.* **1989**, *30*, 6903-06. "Reactions of triazolinediones with cis alkenes. A highly regioselective ene reaction"

3. Orfanopoulos, M.; Stratakis, M.; Elemes, Y. *J. Am. Chem. Soc.* **1990**, *112*, 6417-18. "Geminal selectivity of the singlet oxygen ene reactions. The nonbonding large group effect"

4. Orfanopoulos, M.; Elemes, Y.; Stratakis, M. *Tetrahedron Lett.* **1990**, *31*, 5775-78. "Reactions of triazolinediones with alkenes. A remarkable geminal selectivity"

5. Stratakis, M.; Orfanopoulos, M.; Foote, C. S. *Tetrahedron Lett.* **1991**, *32*, 863-66. "Nucleophilic oxygen transfer from a perepoxide to phosphites"

6. Orfanopoulos, M; Stratakis, M.; Elemes, Y.; Jensen, F. *J. Am. Chem. Soc.* **1991**, *113*, 3180-81. "Do rotational barriers dictate the regioselectivity in the ene reactions of singlet oxygen and triazolinediones with alkenes?"

7. Orfanopoulos, M; Stratakis, M. *Tetrahedron Lett.* **1991**, *32*, 7321-24. "Solvent effects on the side selectivity of singlet oxygen with α,β-unsaturated esters. New evidence for a perepoxide intermediate"

8. Stratakis, M.; Orfanopoulos, M. *Synth. Commun.* **1993**, 425-29. "Regioselective formation of cyclic and allylic hydroperoxides"

9. Stratakis, M.; Streitwieser, A. *J. Org. Chem.* **1993**, *58*, 1988-89. "Ion pair acidities of 9,9'-bifluorenyl in tetrahydrofuran; pK_2 is lower than pK_1"

10. Stratakis, M.; Orfanopoulos, M. *Tetrahedron Lett.* **1995**, *36*, 4291-94. "Anti cis effect selectivity in the reaction of singlet oxygen with trisubstituted alkenes"

11. Abu-Hasanayan, F.; Stratakis, M.; Streitwieser, A. *J. Org. Chem.* **1995**, *60*, 4688-89. "Aggregation and alkylation kinetics of the lithium enolate of *p*-(phenylsulfonyl)isobutyrophenone"

12. Stratakis, M.; Wang, P. G.; Streitwieser, A. *J. Org. Chem.* **1996**, *61*, 3145-50. "Equilibrium ion pair acidities of polyhalogenated benzenes in THF. Extrapolation to benzene"

13. Stratakis, M.; Orfanopoulos, M.; Chen, J. S.; Foote, C. S. *Tetrahedron Lett.* **1996**, *37*, 4105-08. "Reaction profile in the photooxygenation of trisubstituted alkenes"

14. Vassilikogiannakis, G.; Stratakis, M.; Karabatsos, G. J.; Orfanopoulos, M. *J. Heterocyclic Chem.* **1996**, *33*, 993-95. "Mechanistic studies in the reaction of 4-phenyl-1,2,4-triazoline-3,5-dione (PTAD) with 2,5-dimethyl-2,4-hexadiene"

15. Stratakis, M.; Orfanopoulos, M.; Foote C. S. *Tetrahedron Lett.* **1996**, *37*, 7159-62. "Solvent effects in the stereoselectivity of the ene reaction of singlet oxygen with allylic alcohols"

16. Stratakis, M.; Orfanopoulos M. *Tetrahedron Lett.* **1997**, *38*, 1067-71. "Regioselectivity in the ene reaction of singlet oxygen with alkenes bearing at the β-position an electron withdrawing group"

17. Stratakis, M. *J. Org. Chem.* **1997**, *62*, 3024-25. "On the mechanism of the ortho directed metalation of anisole by n-butyllithium"

18. Elemes, Y.; Stratakis, M.; Orfanopoulos, M. *Tetrahedron Lett*. **1997**, *38*, 6437-40. "An interplay in the regioselectivity induced by non bonding interactions in the ene reactions of singlet oxygen and triazolinediones with tetrasubstituted alkenes"

19. Stratakis, M.; Orfanopoulos, M.; Foote, C. S. *J. Org. Chem*. **1998**, *63*, 1315-18. "Reactions of singlet oxygen and N-methyltriazolinedione with β,β-dimethylstyrene. Exceptional *syn* selectivity in the ene products"

20. Abbotto, A.; Streitwieser, A.; Stratakis, M.; Krom, J. A. *J. Am. Chem. Soc.* **1998**, *120*, 1718-23. "Ion pair properies of lithium and cesium salts of carbazole"

21. Stratakis, M.; Vassilikogiannakis, G.; Orfanopoulos, M. *Tetrahedron Lett*. **1998**, *39*, 2393-96. "Diastereoselective ene reactions of triazolinediones with chiral allylic alcohols. Evidence for a hydroxyl-enophile steering effect"

22. Streitweiser, A.; Wang, D. Z.; Stratakis, M.; Faccetti, A.; Garyeyev, R.; Abbotto, A.; Krom, J.; Kilway, K. V. *Can. J. Chem.* **1998**, *76*, 765-69. "Extended lithium ion pair indicator scale in tetrahydrofuran"

23. Vassilikogiannakis, G.; Stratakis, M.; Orfanopoulos, M. *J. Org. Chem*. **1998**, *63*, 6390-93. "Primary and secondary isotope effects in the photooxidation of 2,5-dimethyl-2,4-hexadiene. Elucidation of the energy reaction profile"

24. Vassilikogiannakis, G.; Stratakis, M.; Orfanopoulos, M.; Foote, C. S. *J. Org. Chem*. **1999**, *64*, 4130-39. "A mechanistic comparison of the stereoselectivity and the diastereoselectivity in the ene reactions of singlet oxygen and triazolinediones with allylic alcohols"

25. Streitweiser, A.; Wang, D. Z.; Stratakis, M. *J. Org. Chem*. **1999**, *64*, 4860-64. "Aggregation and alkylation of the cesium enolate of 2-p-biphenylcyclohexanone"

26. Stratakis, M.; Orfanopoulos, M. *Tetrahedron* **2000**, *56*, 1595-615 (review article). "Regioselectivity in the ene reaction of singlet oxygen with alkenes"

27. Stratakis, M.; Froudakis, G. *Org. Lett.* **2000**, *2*, 1369-72. "Site specificity in the photooxidation of some trisubstituted alkenes within thionin-supported zeolite Na-Y. On the role of the alkali metal cation"

28. Vassilikogiannakis, G.; Stratakis, M.; Orfanopoulos, M. *Org. Lett.* **2000**, *2*, 2245-48. "Isotope effects and syn selectivity in the ene reaction of triazolinedione with conjugated enones. Aziridinium imide or an open intermediate mechanism?"

29. Stratakis, M.; Hatzimarinaki, M.; Froudakis, G. E.; Orfanopoulos, M. *J. Org. Chem.* **2001**, *66*, 3682-87. "Stereochemistry in the reaction of 4-methyl-1,2,4-triazoline-3,5-dione (MTAD) with β,β-dimethyl-*p*-methoxystyrene. Are open biradicals the reaction intermediates?"

30. Stratakis, M.; Rabalakos, C. *Tetrahedron Lett*. **2001**, *42*, 4545-47. "Chemoselective hydroperoxidation of alkenylarenes within thionin-supported zeolite Na-Y"

31. Stratakis, M.; Kosmas, G. *Tetrahedron Lett*. **2001**, *42*, 6007-09. "Enhanced diastereoselectivity of an ene hydroperoxidation reaction by confinement within zeolite Na-Y; a stereoisotopic study"

32. Stratakis, M.; Stavroulakis, M. *Tetrahedron Lett*. **2001**, *42*, 6409-11. "Electron transfer-induced dehydrogenation reactions within methyl viologen-supported zeolite Na-Y under non-irradiative conditions"

33. Stratakis, M.; Sofikiti, N. *J. Chem. Res. (S)* **2002**, 374-75. "Intrazeolite photooxygenation of (*R*)-(-)-α-phellandrene"

34. Adam, W.; Krebs, O.; Orfanopoulos, M.; Stratakis, M. *J. Org. Chem.* **2002**, *67*, 8395-99. "Control of regioselectivity by the *lone* substituent through steric and electronic effects in the nitrosoarene ene reaction of deuterium-labeled trisubstituted alkenes"

35. Adam, W.; Bottke, N.; Krebs, O.; Lykakis, I.; Orfanopoulos, M.; Stratakis, M. *J. Am. Chem. Soc.* **2002**, *124*, 14403-09. "Ene reaction of singlet oxygen, triazolinedione and nitrosoarene with chiral deuterium-labeled allylic alcohols: The interdependence of diastereoselectivity and regioselectivity discloses mechanistic insights into the hydroxy-group directivity"

36. Stratakis, M.; Nencka, R.; Rabalakos, C.; Adam, W.; Krebs, O. *J. Org. Chem.* **2002**, *67*, 8758-63. "Thionin-sensitized intrazeolite photooxygenation of trisubstituted alkenes: Substituent effects on the regioselectivity as probed through isotopic labeling"

37. Vassilikogiannakis, G.; Stratakis, M.; Orfanopoulos, M. *Arkivoc* **2002**, *xiii*, 9-16 (special issue dedicated to professor G. J. Karabatsos, invited). "Primary and secondary H/D isotope effects in the addition of triazolinedione to 2,5-dimethyl-2,4-hexadiene. Mechanistic insights into the reaction pathways"

38. Stratakis, M.; Stavroulakis, M.; Sofikiti, N. *J. Phys. Org. Chem*. **2003**, *16*, 16-20. "Thermal transformation of monoterpenes within thionin-supported zeolite Na-Y. Acid-catalyzed or electron transfer-induced?"

39. Stratakis, M.; Rabalakos, C.; Sofikiti, N. *Tetrahedron Lett.* **2003**, *44*, 349-51. "Selective deoxygenation of aryl selenoxides by triaryl phosphites. Evidence for a concerted transformation"

40. Froudakis, G. E.; Stratakis, M. *Eur. J. Org. Chem.* **2003**, 359-64. "A DFT study of the Li^+ and Na^+ interaction to alkyl-substituted ethenes"

41. Sofikiti, N.; Stratakis, M. *Arkivoc* **2003**, *vi*, 30-35 (special issue dedicated to professor A. Varvoglis, invited). "An indirect method for the oxidation of aryl phosphites to phosphates and aryl selenoxides to selenones"

42. Adam, W.; Krebs, O.; Orfanopoulos, M.; Stratakis, M.; Vougioukalakis, G. C. *J. Org. Chem.* **2003**, *68*, 2420-25. "Intermolecular and intramolecular kinetic isotope effects (KIE) in the nitrosoarene ene reaction: Experimental evidence for reversible intermediate formation"

43. Stratakis, M.; Rabalakos, C.; Mpourmpakis, G.; Froudakis, G. E. *J. Org. Chem.* **2003**, *68*, 2839-43. "Ene hydroperoxidation of isobutenylarenes within dye-exchanged zeolite Na-Y: Control of site selectivity by cation - arene interactions"

44. Stratakis, M.; Kalaitzakis, D.; Stavroulakis, D.; Kosmas, G.; Tsangarakis, C. *Org. Lett.* **2003**, *5*, 3471-74. "Remarkable change of the diastereoselection in the dye-sensitized ene hydroperoxidation of chiral alkenes by zeolite confinement"

45. Vassilikogiannakis, G.; Stratakis, M. *Angew. Chem., Int. Ed.* **2003**, *42*, 5465-68. "Biomimetic total synthesis of litseaverticillols A, C, D, F and G: Singlet oxygen-initiated cascades"

46. Sofikiti, N.; Rabalakos, C.; Stratakis, M. *Tetrahedron Lett.* **2004**, *45*, 1335-37. "Efficient trapping of the intermediates in the photooxygenation of sulfides by aryl selenides and selenoxides"

47. Stratakis, M.; Sofikiti, N.; Baskakis, C.; Raptis, C. *Tetrahedron Lett*. **2004**, *45*, 5433-36. "Dye-sensitized intrazeolite photooxygenation of 4-substituted cyclohexenes. Remote substituent effects in regioselectivity and diastereoselectivity"

48. Stratakis, M. *Curr. Org. Synth.* **2005**, *2*, 281-99. (invited review article) "Oxyfunctionalization of alkenes by dye-sensitized intrazeolite photooxygenation"

49. Sofikiti, N.; Tofi, M.; Montagnon, T.; Vassilikogiannakis, G.; Stratakis, M. *Org. Lett.* **2005**, 7, 2357-59. "Synthesis of the spirocyclic core of the prunolides using a singlet oxygen-mediated cascade sequence"

50. Tsangarakis, C.; Stratakis, M. *Adv. Synth. Catal.* **2005**, *347*, 1280-84. "Biomimetic cyclization of small terpenoids promoted by zeolite NaY. Tandem formation of α-ambrinol from geranylacetone"

51. Tsangarakis, C.; Zaravinos, I.-P.; Stratakis, M. *Synlett* **2005**, 1857-60. "Highly regioselective and diastereoselective photooxygenation of α-cyclogeranyl derivatives"

52. Vassilikogiannakis, G.; Margaros, G.; Montagnon, T.; Stratakis, M. *Chem. Eur. J.* **2005**, *11*, 5899-907. "Illustrating the power of singlet oxygen chemistry in a synthetic context: Biomimetic syntheses of litseaverticillols A-G, I, and J and the structure reassignment of litseaverticillol E"

53. Tsangarakis, C.; Stratakis, M. *Eur. J. Org. Chem.* **2006**, 4435-39. "Stereoselective disposition of the geminal dimethyl group in the cyclization of geranyl acetate under zeolite confinement conditions"

54. Stratakis, M.; Raptis, C.; Sofikiti, N.; Tsangarakis, C.; Kosmas, G.; Zaravinos, I.-P.; Kalaitzakis, D.; Stavroulakis, D.; Baskakis, C.; Stathoulopoulou, A. *Tetrahedron* **2006**, *62*, 10623-32 (invited). "Intrazeolite photooxygenation of chiral alkenes: Control of facial selectivity by confinement and cation – π interactions"

55. Hatzakis, M.; Opsenica, I.; Solaja, B. A.; Stratakis, M. *Arkivoc* **2007**, *viii*, 124-35 (special issue dedicated to professor W. Adam, invited). "Synthesis of novel polar derivatives of the antimalarial endoperoxides ascaridole and dihydroascaridole"

56. Tsangarakis, C.; Arkoudis, E.; Raptis, C.; Stratakis, M. *Org. Lett.* **2007**, *9*, 583-86. "Selective monocyclization of epoxy terpenoids promoted by zeolite NaY. A short biomimetic synthesis of elegansidiol and farnesiferols B-D"

57. Opsenica, I.; Opsenica, D.; Jadranin, M.; Smith, K. S.; Milhous, W. K.; Stratakis, M.; Solaja, B. *J. Serb. Chem. Soc.* **2007**, *72*, 1181-90. "On peroxide antimalarials"

58. Tsangarakis, C.; Lykakis, I. N.; Stratakis, M. *J. Org. Chem.* **2008**, *73*, 2905-08. "Zeolite NaY-promoted cyclization of farnesal: A short route to nanaimoal"

59. Arkoudis, E.; Stratakis, M. *J. Org. Chem.* **2008**, *73*, 4484-90. "Synthesis of cordiaquinones B, C, J and K on the basis of a bio-inspired approach, and the revision of the relative stereochemistry of cordiaquinone C"

60. Efe, C.; Tsangarakis, C.; Lykakis, I. N.; Raptis C.; Stratakis, M. *Synlett* **2008**, 1635-38. "Zeolite NaY-promoted tandem 1,5-diene-carbonyl-ene dicyclization of α-geranyl-substituted carbonyl compounds"

61. Tsangarakis, C.; Raptis, C.; Arkoudis, E.; Stratakis, M. *Adv. Synth. Catal.* **2008**, *350*, 1587-600. "Zeolite NaY-promoted monocyclization of epoxy polyene terpenes: A unique route for the direct synthesis of incompletely cyclized naturally occurring terpenols"

62. Raptis, C.; Garcia, H.; Stratakis, M. *Angew. Chem., Int. Ed.* **2009**, *48*, 3133-36. "Selective isomerization of epoxides to allylic alcohols catalyzed by TiO_2-supported gold nanoparticles"

63. Arkoudis, E.; Lykakis, I. N.; Gryparis, C.; Stratakis, M. *Org. Lett.* **2009**, *11*, 2988-91. "Biomimetic synthesis of dimeric metabolite acremine G via a highly regioselective and stereoselective Diels-Alder reaction"

64. Lykakis, I. N.; Zaravinos, I.-P.; Raptis, C; Stratakis, M. *J. Org. Chem.* **2009**, *74*, 6339-42. "Divergent synthesis of the co-isolated mycotoxins longianone, isopatulin, and (*Z*)-ascladiol via furan oxidation"

65. Raptis, C.; Lykakis, I. N.; Tsangarakis, C.; Stratakis, M. *Chem. Eur. J.* **2009**, *15*, 11918-27. "Acid-catalyzed cyclization of terpenes under homogeneous and heterogeneous conditions as probed through stereoisotopic studies: A concerted process with competing preorganized chair and boat transition states"

66. Efe, C.; Lykakis, I. N.; Stratakis, M. *Chem. Commun.* **2011**, *47*, 803-05. "Gold nanoparticles supported on TiO_2 catalyse the cycloisomerisation/oxidative dimerisation of aryl propargyl ethers"

67. Lykakis, I. N.; Efe, C.; Gryparis, C.; Stratakis, M. *Eur. J. Org. Chem.* **2011**, 2334-38. "$Ph_3PAuNTf_2$ as a superior catalyst for the selective synthesis of 2*H*-chromenes from the cycloisomerisation of substituted aryl propargyl ethers. Application to the concise synthesis of benzopyran natural products"

68. Lykakis, I. N.; Psyllaki, A.; Stratakis, M. *J. Am. Chem. Soc.* **2011**, *133*, 10426-29. "Oxidative cycloaddition of 1,1,3,3-tetramethyldisiloxane to alkynes catalyzed by supported gold nanoparticles" (Highlighted as SYNFACT of the month; *Synfacts* **2011**, *7*, 1137).

69. Gryparis, C.; Lykakis, I. N.; Efe, C.; Zaravinos, I.-P.; Vidali, T.; Kladou, E.; Stratakis, M. *Org. Biomol. Chem*. **2011**, *9*, 5655-58. "Functionalized 3(2*H*)-furanones via photooxygenation of (β-keto)-2-substituted furans: Application to the biomimetic synthesis of merrekentrone C"

70. Tamiolakis, I.; Lykakis, I. N.; Katsoulidis, A.; Stratakis, M.; Armatas, G. *Chem. Mater.* **2011**, *23*, 4204-11. "Mesoporous Cr_2O_3-phosphomolybdic acid solid solution frameworks with high catalytic activity"

71. Gryparis, C.; Efe, C.; Raptis, C.; Lykakis, I. N.; Stratakis, M. *Org. Lett.* **2012**, *14*, 2956-59. "Cyclization of 1,6-enynes catalyzed by gold nanoparticles supported on TiO_2: Significant changes in selectivity and mechanism as compared to homogeneous Au-catalysis"

72. Stratakis, M.; Garcia, H. *Chem. Rev.* **2012**, *112*, 4469-506. "Catalysis by supported gold nanoparticles: Beyond aerobic oxidative processes"

73. Psyllaki, A.; Lykakis, I. N.; Stratakis, M. *Tetrahedron* **2012**, *68*, 8724-31. "Reaction of hydrosilanes with alkynes catalyzed by gold nanoparticles supported on TiO_2" [Highlighted in SYNFACTS; *Synfacts* **2012**, *8*, 1382].

74. Gryparis, C.; Stratakis, M. *Chem. Commun.* **2012**, *48*, 10751-53. "Gold nanoparticles-catalyzed activation of 1,2-disilanes: Hydrolysis, silyl protection of alcohols and reduction of *tert*-benzylic alcohols" [Highlighted in SYNFACTS; *Synfacts* **2013**, *9*, 112].

75. Kotzabasaki, V.; Lykakis, I. N.; Gryparis, C.; Psyllaki, A.; Vasilikogiannaki, E.; Stratakis, M. *Organometallics* **2013**, *32*, 665-72. "Gold-catalyzed dehydrogenative cycloaddition of tethered 1,n-dihydrodisilanes to alkynes"

76. Vasilikogiannaki, E.; Gryparis, C.; Kotzabasaki, V.; Lykakis, I. N.; Stratakis, M. *Adv. Synth. Catal.* **2013**, *355*, 907-11. "Activation of ammonia-borane complex by gold nanoparticles: Facile reduction of nitroarenes into anilines and nitroalkanes into hydroxylamines" [Highlighted in SYNFACTS; *Synfacts* **2013**, *9*, 674].

77. Gkizis, P. L.; Stratakis, M.; Lykakis, I. N. *Catal. Commun.* **2013**, *36*, 48-51. "Catalytic activation of hydrazine hydrate by gold nanoparticles: Chemoselective reduction of nitro compounds into amines"

78. Velegraki, G.; Stratakis, M. *J. Org. Chem.* **2013**, *78*, 8880-84. "Aryl-substituted cyclopropyl acetylenes as sensitive mechanistic probes in the gold-catalyzed hydration of alkynes. Comparison to the Ag(I), Hg(II) and Fe(III)-catalyzed processes"

79. Gryparis, C.; Kidonakis, M.; Stratakis, M. *Org. Lett.* **2013**, *15*, 6038-41. "Supported gold nanoparticle-catalyzed *cis*-selective disilylation of terminal alkynes by σ disilanes" [Highlighted in SYNFACTS; *Synfacts* **2014**, *10*, 332].

80. Gryparis, C.; Stratakis, M. *Org. Lett.* **2014**, *16*, 1430-33. "Nanogold-catalyzed *cis*-silaboration of alkynes with abnormal regioselectivity"

81. Vasilikogiannaki, E.; Titilas, I.; Gryparis, C.; Louka, A.; Lykakis, I. N.; Stratakis, M. *Tetrahedron* **2014**, *70*, 6106-13. (Invited article for the special issue: Nanotek for organic synthesis and organic synthesis for nanotek). "Efficient hydrosilylation of carbonyl compounds by 1,1,3,3-tetramethyldisiloxane catalyzed by Au/TiO_2"

82. Montagnon, T.; Kalaitzakis, D.; Triantafyllakis, M.; Stratakis, M.; Vassilikogiannakis, G. *Chem. Commun.* **2014**, *50*, 15480-98. "Furans and singlet oxygen – why there is more to come from this powerful partnership"

83. Vasilikogiannaki, E.; Titilas, I.; Vassilikogiannakis, G.; Stratakis, M. *Chem. Commun.* **2015**, *51*, 2384-87. "*cis*-Semihydrogenation of alkynes with amine borane complexes catalyzed by gold nanoparticles under mild conditions"

84. Louka, A.; Gryparis, C.; Stratakis, M. *Arkivoc* **2015**, *iii*, 38-51 (special issue dedicated to professor M. Orfanopoulos, invited). "Reduction of quinolines to 1,2,3,4-tetrahydroquinolines with hydrosilane/ethanol catalyzed by TiO_2-supported gold nanoparticles under solvent free conditions"

85. Titilas, I.; Kidonakis, M.; Gryparis, C.; Stratakis, M. *Organometallics* **2015**, *34*, 1597-600. "Tandem Si-Si and Si-H activation of 1,1,2,2-tetramethyldisilane by gold nanoparticles in its reaction with alkynes: Synthesis of substituted 1,4-disila-2,5-cyclohexadienes"

86. Kidonakis, M.; Stratakis, M. *Org. Lett.* **2015**, *17*, 4538-41. "Ligandless regioselective hydrosilylation of allenes catalyzed by gold nanoparticles"

87. Kotzabasaki, V.; Vassilikogiannakis, G.; Stratakis, M. *J. Org. Chem*. **2016**, *81*, 4406-11. "Regiocontrolled synthesis of γ-hydroxybutenolides via singlet oxygen-mediated oxidation of 2-thiophenyl furans"

88. Kotzabasaki, V.; Vassilikogiannakis, G.; Stratakis, M. *Org. Lett.* **2016**, *18*, 4982-85. "Total synthesis and structural revision of (+)-yaoshanenolide B" [Highlighted in Organic Chemistry Portal; August 21, 2017]

89. Vasilikogiannaki, E.; Louka, A.; Stratakis, M. *Organometallics* **2016**, *35*, 3895-902. "Gold-nanoparticle-catalyzed silaboration of oxetanes and unactivated epoxides" [Highlighted in SYNFACTS; *Synfacts* **2017**, *13*, 197].

90. Kidonakis, M.; Stratakis, M. *Eur. J. Org. Chem.* **2017**, 4265-71. "Gold nanoparticles-catalysed mild diboration and the indirect silaboration of alkynes without using silylboranes"

91. Metaxas, I.; Vasilikogiannaki, E.; Stratakis, M. *Nanomaterials* **2017**, *7*, 440; doi:10.3390/nano7120440. (Invited article for the special issue "Noble Metal Nanoparticles in Catalysis"). "Synthesis of formate esters and formamides using a Au/TiO_2-catalyzed aerobic oxidative coupling of paraformaldehyde"

92. Kidonakis, M.; Stratakis, M. *ACS Catal.* **2018**, *8*, 1227-30. "Regioselective diboration and silaboration of allenes catalyzed by Au nanoparticles"

93. Saridakis, I.; Kidonakis, M.; Stratakis, M. *ChemCatChem* **2018**, *10*, 980-83. "Unique reactivity of dihydrosilanes under catalysis by supported Au nanoparticles: *cis*-1,2-dehydrogenative disilylation of alkynes"

94. Kidonakis, M.; Stratakis, M. *Org. Lett.* **2018**, *20*, 4086-89. "Au nanoparticle-catalyzed insertion of carbenes from α-diazocarbonyl compounds into hydrosilanes" [Highlighted in Organic Chemistry Portal].

95. Kidonakis, M.; Mullaj, A.; Stratakis, M. *J. Org. Chem.* **2018**, *83*, 15553-57. "Reaction of aromatic aldehydes and ketones with silylborane catalyzed by Au nanoparticles: Silylative pinacol-type reductive dimerization via a radical pathway"

96. Stratakis, M.; Lykakis, I. N. *Synthesis* **2019**, *51*, 2435-54. (Invited review article) "Nanogold(0)-catalyzed addition of heteroelement σ linkages to functional groups"

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