List of all publications: ¥equal contribution, *corresponding author, IF = impact factor of 2020

[A1] Peer-reviewed original article publications

(61) Schäkel, L.; Mirza, S.; Pietsch, M.; Lee, S.Y.; Keuler, T.; Sylvester, K.; Pelletier, J.; Sévigny, J.; **Pillaiyar, T.**; Namasivayam, V.; Gütschow, M.; Müller, C.E.* 2-Substituted thienotetrahydropyridine derivatives: Allosteric ectonucleotidase inhibitors. *Arch. Pharm.* (Weinheim). **2021**:e2100300. doi: 10.1002/ardp.202100300. IF = 3.751

(60) Braune, M.; Scherf, N.; Heine, C.; Sygnecka, K.; **Pillaiyar, T**.; Parravicini, C.; Heimrich, B.; Abbracchio, M.P.; Müller, C.E.; Franke, H.* Involvement of GPR17 in Neuronal Fibre Outgrowth. *Int. J. Mol. Sci.* **2021**, *22*, 11683; doi.org/10.3390/ijms222111683. IF = 5.923

(59) **Pillaiyar, T**.;* Rosato, F.; Wozniak, M.; Blavier, J.; Charles, M.; Laschet, C.; Kronenberger, T.; Müller, C.E.; Hanson, J. Structure-activity relationships of agonists for the orphan G protein-coupled receptor GPR27. *Eur. J. Med. Chem.* **2021** ;225:113777. doi: 10.1016/j.ejmech.2021.113777. IF = 6.514

(58) Konno, S.; Kobayashi, K.; Senda, M.; Funai, Y.; Seki, Y.; Tamai, I.; Schäkel, L.; Sakata, K.; **Pillaiyar, T.;** Taguchi, A.; Taniguchi, A.; Gütschow, M.; Müller, C.E.; Takeuchi, K.; Hirohama, M.; Kawaguchi, A.; Kojima, M.; Senda, T.; Shirasaka, Y.; Kamitani, W.; Hayashi, Y.* 3CL Protease inhibitors with an electrophilic arylketone moiety as anti-SARS-CoV-2 agents. *J. Med. Chem.* **2021** (accepted). IF = 7.446

(57) **Pillaiyar, T**.;* Sedaghati, M.; Mahardhika, A.B.; Wendt, L. L.; Müller, C. E.* Iodine-catalyzed electrophilic substitution of indoles: Synthesis of (un)symmetrical diindolylmethanes with a quaternary carbon center. *Beilstein J Org Chem.* **2021**, *17*, 1464-1475. IF = 2.880

(56) Breidenbach, J.; ¥ Lemke, C.; ¥ **Pillaiyar, T.;** ¥ Schäkel, L.; ¥ Al Hamwi, G.; Diett, M.; Gedschold, R.; Geiger, N.; Lopez, V.; Mirza, S.; Namasivayam, V.; Schiedel, A.C.; Sylvester, K.; Thimm, D.; Vielmuth, C.; Phuong Vu, L.; Zyulina, M.; Bodem, J.; Gütschow, M.; * Müller, C.E.* Targeting the Main Protease of SARS-CoV-2: From the Establishment of High Throughput Screening to the Design of Tailored Inhibitors. *Angew. Chem. Int. Ed. Engl.* **2021,** *60*, 10423-10429. IF = 15.336

(55) Manickam, M.; Boggu, P.R.; Pillaiyar, T.; Nam, Y.J.; Abdullah, M.; Lee, S.J.; Kang, J.S.; Jung, S.H.* Design, synthesis and anticancer activity of 2-amidomethoxy-1,4-naphthoquinones and its conjugates with Biotin/polyamine. *Bioorg. Med. Chem. Lett.* **2021**, *31*, 127685. IF = 2.823

(54) Chen, Y.; McNamara, N.; May, O.; **Pillaiyar**, **T**.; Blakemore D. C, Ley, S. V.*

Photoredox generation of sulfonyl radicals and coupling with electron deficient olefins. *Org. Lett*. **2020**, *22*, 5746-5748. IF = 6.005

(53) **Pillaiyar**, **T**.;* Sedaghati, M.; Schnakenburg, G.; Reaction of indoles with aromatic fluoromethyl ketones: An efficient synthesis of trifluoromethylindolyl-phenylethanols using K_2CO_3/nBu_4PBr in water. *Beilstein J. Org. Chem*. **2020**, *16*, 778-790. IF = 2.880

(52) Baqi, Y.;[¥] **Pillaiyar**, **T**.;[¥] Abdelrahman, A.; Kaufmann, O.; Alshaibani, S.; Rafehi, M.; Ghasimi, S.; Akkari, R.; Ritter, K.; Simon, K.; Spinrath, A.; Kostenis, E.; Zhao, Q.; Köse, M.; Namasivayam, V.; Müller, C. E.* 3-(2-Carboxyethyl)indole-2-carboxylic acid derivatives: Structural requirements and properties of potent agonists of the orphan G protein-coupled receptor GPR17. *J. Med. Chem.* **2018**, *61*, 8136-8154. IF = 7.446

(51) Köse, M.;[¥] **Pillaiyar**, **T**.;[¥] Namasivayam, V.;[¥] De Filippo, E.; Sylvester, K.; Ulven, T.; von Kügelgen, I.; Müller, C. E.* An agonist radioligand for the proinflammatory lipid-activated G protein-coupled receptor GPR84 providing structural insights. *J. Med. Chem.* **2020**, *63*, 2391-2410. IF = 7.446

(50) Sangeetha, M.; Manickam, M.; **Pillaiyar**, **T**.* Exploration of imidazole and imidazopyridine dimers as anticancer agents: Design, synthesis and structure-activity relationship study. *Arch. Pharm. Chem. Life Sci.* **2019**, *352*, e1900011. IF = 3.751

(49) **Pillaiyar**, **T**.;* Uzair, M.; Ullah, S.; Schnakenburg, G.; Müller C. E. Decarboxylative coupling reaction of 2-(1*H*-indol-3-yl) acetic acids with indole, azaindole, benzimidazole and indazole derivatives. *Adv. Synth. Catal*. **2019**, *361*, 4286-4293. IF = 5.837

(48) **Pillaiyar**, **T**.; Funke, M.; Weyler, S.; Ivanova, S.; Schlegel, J.; Abdelrahman, A.; Müller C. E.* Design, synthesis and biological evaluation of suramin-derived dual antagonists of the proinflammatory G protein-coupled receptors $P2Y_2$ and GPR17. *Eur. J. Med. Chem.* **2020** *15*, 111789. IF = 6.514

(47) Manickam, M.; **Pillaiyar**, **T**.; Boggu, P. R.; Sharma, N.; Jalani H. B.; Venkateswararao, E.; Lee. Y.-J.; Jeon, E.-S.; Son, M.-J.; Woo, S.-H.; Jung, S.-H.* Design and synthesis of sulfonamidophenylethylamides as novel cardiac myosin activator. *Bioorg. Med. Chem.* **2019**, *27*, 4110-4123. IF = 3.641

(46) **Pillaiyar**, **T**.;* Gorska, E.; Schnakenburg, G.; Müller C. E.* General synthesis of unsymmetrical 3,3'-(aza)diindolylmethane derivatives. *J. Org. Chem*. **2018**, *83*, 9902-9913. IF = 4.354

(45) Manickam, M.; Boggu, P. R.; **Pillaiyar**, **T**.; Sharma, N.; Jalani H. B.; Venkateswararao, E.; Jung, S.-H.* Exploration of diphenylalkyloxadiazoles as novel cardiac myosin activator. *Bioorg. Med. Chem. Lett.* **2018**, *28*, 2369-2374. IF = 2.833

(44) **Pillaiyar**, **T**.;* Dawood, M.; Irum, H.; Müller, C. E. A rapid, efficient and versatile green synthesis of 3,3'-diindolylmethanes. *Arkovic* **2018**, *part iii*, 1-19. IF = 1.253

(43) **Pillaiyar**, **T**.; Köse, M.; Namasivayam, V.; Sylvester, K.; Borges, G.; Thimm, D.; von Kügelgen, I.; Müller, C. E.* 6-(Ar)alkylamino-substituted uracil derivatives: Lipid mimetics with potent activity at the orphan G protein-coupled receptor 84 (GPR84). *ACS Omega* **2018**, *3*, 3365-3383. IF = 3.512

(42) Manickam, M.; Jalani, H. B.; **Pillaiyar**, **T**.; Boggu, P. R.; Sharma, N.; Venkateswararao, E.; Lee, Y. J.; Jeon, E. S.; Son, M. J.; Woo, S. H.; Jung, S.-H.* Design and synthesis of sulfonamidophenylethylureas as novel cardiac myosin activator. *Eur. J. Med. Chem.* **2018**, *143*, 1869-1887. IF = 6.514

(41) Manickam, M.; Jalani, H. B.; **Pillaiyar**, **T**.; Sharma, N.; Boggu, P. R, Venkateswararao, E.; Lee, Y. J.; Jeon, E. S.; Jung, S.-H.* Exploration of flexible phenylpropylurea scaffold as novel cardiac myosin activators for the treatment of systolic heart failure. *Eur. J. Med. Chem.* **2017**, *134*, 379-391. IF = 6.514

(40) **Pillaiyar**, **T**.; Köse, M.; Sylvester, K.; Weighardt, H.; Thimm, D.; Borges, G.; Förster, I.; von Kügelgen, I.; Müller, C. E.* Diindolylmethane derivatives: Potent agonists of the immunostimulatory orphan G protein-coupled receptor GPR84. *J. Med. Chem*. **2017***, 60,* 3636-3655. IF = 7.446

(39) Hess, C.;[¥] Schoeder, C. T.;[¥] **Pillaiyar**, **T**.; Madea B, Müller, C. E.* Pharmacological evaluation of synthetic cannabinoids identified as constituents of spice. *Forensic Toxicol.* **2016**, *34*, 329-343. IF = 4.096

(38) Manickam, M.; **Pillaiyar**, **T**.; Boggu, P.; Venkateswararao, E.; Jalani, H. B.; Kim, N. D.; Lee, S. K.; Jeon, J. S.; Kim, S. K.; Jung, S.-H.* Discovery of enantioselectivity of urea inhibitors of soluble epoxide hydrolase. *Eur. J. Med. Chem.* **2016**, *117*, 113-124. IF = 6.514

(37) Taguchi, A.; Hamada, K.; Kotake, M.; Shiozuka, M.; Nakaminami, H.; **Pillaiyar**, **T**.; Takayama, K.; Yakushiji, F.; Noguchi, N.; Usui, T.; Matsuda, R.; Hayashi, Y.* Discovery of natural products possessing selective eukaryotic readthrough activity: 3-Epi-deoxynegamycin and its leucine adduct. *ChemMedChem*. **2014**, *10*, 2233-2237. IF = 3.466

(36) **Pillaiyar**, **T**.; Yamamoto, T.; Koiwai, Y.; Takayama, K.; Yakushiji, F.; Akaji, K.; Kawasaki, Y.; Chen, S.-E.; Tavakolian, A. N.; Schön, A.; Freire, E.; Hayashi, Y.* Development of novel dipeptide-type inhibitors with novel P3-scaffolds against SARS-CoV $3CL^{pro}$: Design, synthesis, biological evaluation and molecular docking study. *Eur. J. Med. Chem.* **2013**, *68*, 372-384. IF = 6.514

(35) **Pillaiyar**, **T**.; Yamamoto, T.; Koiwai, Y.; Takayama, K.; Yakushiji, F.; Akaji, K.; Kawasaki, Y.; Chen, S.-E.; Tavakolian, A. N.; Schön, A.; Freire, E.; Hayashi, Y.* Design, synthesis, and biological evaluation of dipeptide-type SARS-CoV 3CL protease inhibitors: Structure-activity relationship study. *Eur. J. Med. Chem.* **2013**, *65,* 436-447. IF = 6.514

(34) Konno, S.;[¥] **Pillaiyar**, **T**.;[¥] Nakada, K.; Yamamoto, T.; Yamazaki, Y.; Yakushiji, F.; Akaji, K.; Kiso, Y.; Kawasaki, Y.; Freire, E.; Hayashi, Y.* Design, synthesis of new tripeptide-type SARS-CoV $3CL^{pro}$ Inhibitors containing an electrophilic aryl ketone moiety. *Bioorg. Med. Chem.* **2013**, *21*, 412-424. IF = 3.641

(33) Ki, D. H.; Jung, H. C.; Noh, Y. W.; **Pillaiyar**, **T**.; Kim, B. H.; Shin, S. C.; Jung, S.-H.; Cho. C. W.* Preformulation and formulation of newly synthesized QNT3-18 for development of a skin-whitening agent. *Drug Dev. Ind. Pharm.* **2013**, *39*, 526-533. IF = 3.225

(32) **Pillaiyar**, **T**.; Rao, E. V.; Lee, K. C.; Sharma, V. K.; Roh, E.; Kim, Y.; Jung, S.-H.* Structure-activity relationship of naphthaldehydethiosemicarbazones in melanogenesis inhibition. *Bioorg. Med. Chem. Lett.* **2012**, *22*, 886-889. IF = 2.823

(31) **Pillaiyar, T**.; Lee, K. C.; Sharma, V. K.; Joo, C.; Cho, W. J.; Roh, E.; Kim, Y.; Jung, S.-H.* Structural requirements of phenylthiourea analogs for their inhibitory activity of melanogenesis and tyrosinase. *Bioorg. Med. Chem. Lett*. **2011**, *21*, 6824-6828. IF = 2.5823

(30) **Pillaiyar**, **T**.; Lee, K. C.; Sharma, V. K.; Roh, E.; Kim, Y.; Jung, S.-H.* Identification of indoline-2-thione analogs as novel potent inhibitors of α-melanocyte stimulating hormone induced melanogenesis. *Chem. Pharm. Bull.* **2011**, *59*, 1285-1288. IF = 1.645

(29) Sharma, V. K.; Hung, D. T.; Lee, K. C.; **Pillaiyar**, **T**.; Kang, J. S.; Kim, H. M.; Jung, S.-H.* Effect of the isosteric replacement of the phenyl motif with furyl (or thienyl) of 4-phenyl-*N*-arylsulfonylimidazolones as broad and potent anticancer agents. *MedChemCommun (or RSC MedChem.).* **2011**, *2*, 731-734. IF =

(28) **Pillaiyar**, **T**.; Lee, K. C.; Sharma, V. K.; Roh, E.; Kim, Y.; Jung, S.-H.* Ketothiosemicarbazones: Structure-activity relationships for their melanogenesis inhibition. *Bioorg. Med. Chem. Lett.* **2011**, *21*, 3527-3530. IF = 2.823

(27) Santhosh, S.; Kim, N. S.; **Pillaiyar**, **T**.; Sharma, V. K.; Lee, K. C.; Kang, J. S.; Kim, H. M.; Jung, S.-H.* Structure–activity relationship studies of novel arylsulfonylimidazolidinones for their anticancer activity. *Eur. J. Med. Chem.* **2011**, *46*, 3258-3264. IF = 6.514

(26) **Pillaiyar**, **T**.; Lee, K. C.; Sharma, V. K.; Yun, J. H.; Roh, E.; Kim, Y.; Jung, S.-H.* Structural requirements of (*E*)-6-benzylidene-4a-methyl-4,4a,5,6,7,8-hexahydronaphthalen-2(*3H*)-one derivatives as novel melanogenesis inhibitors. *Bioorg. Med. Chem. Lett.* **2011**, *21*, 1922-1925. IF = 2.823

(25) Lee, K. C.; **Pillaiyar**, **T**.; Sharma, V. K.; Roh, E.; Kim, Y.; Jung, S.-H.* Structural requirements of benzaldehydethiosemicarbazones as inhibitors of melanogenesis. *Bioorg. Med. Chem. Lett.* **2010**, *20*, 6794-6796. IF = 2.823

(24) **Pillaiyar**, **T**.; Sharma, V. K.; Lee, K. C.; Yun, C. Y.; Kim, Y.; Jung, S.-H.* Refinement of the pharmacophore of 3,4-dihydroquinazoline-2(*1H*)-thiones for their anti-melanogenesis activity. *Bioorg. Med. Chem. Lett.* **2010**, *20*, 4771-4773. IF = 2.823

(23) **Pillaiyar**, **T**.; Lee, K. C.; Sharma, V. K.; Yun, J. H.; Kim, Y.; Jung, S.-H.* Design and synthesis of novel hydroxyalkylaminomethylchromones for their IL-5 inhibitory activity. *Bioorg. Med. Chem.* **2010**, *18*, 4625-4629. IF = 3.641

(22) **Pillaiyar**, **T**.; Yang, H. M.; Sharma, V. K.; Kim, Y.; Jung, S.-H.* The scope of thallium nitrate oxidative cyclization of chalcones; Synthesis and evaluation of isoflavone and aurone analogs for their inhibitory activity against interleukin-5. *Bioorg. Med. Chem.* **2010**, *18*, 4441-4445. IF = 3.641

(21) Lee, J. H.; **Pillaiyar**, **T**.; Lee, K. C.; Sharma, V. K.; Bang, S. C.; Yun, J. H.; Roh, E.; Kim, Y.; Jung, S.-H.* Novel benzo[*d*]imidazole-2(*3H*)-thiones as potent inhibitors of the *α*-MSH induced melanogenesis in melanoma B16 cells. *Chem. Pharm. Bull.* **2010**, *58*, 918-921. IF = 1.645

(20) [$]**Pillaiyar**, **T**.; Le Hoang, T. A.; Lee, K. C.; Bang, S. C.; Sharma, V. K.; Yun, C. Y.; Roh, E.; Hwang, B. Y.; Kim, Y.; Jung, S.-H.* Structural requirement(s) of *N*-phenylthioureas and benzaldehydethiosemicarbazones as inhibitors of melanogenesis in melanoma B16 cells. *Bioorg. Med. Chem. Lett.* **2010**, *20*, 2991-2993. ([$]Top 25 Cited Author in 2010-2011). IF = 2.823

(19) **Pillaiyar**, **T**.; Lee, K. C.; Sharma, V. K.; Bang, S. C.; Yun, J. H.; Roh, E.; Kim, Y.; Jung, S.-H.* Synthesis and evaluation of novel chromone analogs for their inhibitory activity against interleukin-5. *Eur. J. Med. Chem.* **2010**, *45*, 2531-2536. IF = 6.541

(18) **Pillaiyar**, **T**.; Lee, K. C.; Bang, S. C.; Lee, J. H.; Yun, C. Y.; Roh, E.; Hwang, B. Y.; Kim, Y.; Jung, S.-H.* Evaluation of 3,4-dihydroquinazoline-2(*1H*)-thiones as inhibitors of *α*-MSH induced melanin production in melanoma B16 cells. *Bioorg. Med. Chem.* **2010**, *18*, 1555-1562. IF = 3.641

(17) **Pillaiyar**, **T**.; Lee, K. C.; Bang, S. C.; Lee, J. H.; Yun, C. Y.; Roh, E.; Hwang, B. Y.; Kim, Y.; Jung, S.-H.* Inhibitory effect of novel tetrahydropyrimidine-2(*1H*)-thiones on melanogenesis. *Bioorg. Med. Chem.* **2010**, *18*, 1135-1142. IF = 3.641

[A2] **Peer-reviewed review articles**

(16) Manickam, M.; Meenakshisundaram, S.; **Pillaiyar**, **T**.;* Activating endogenous resolution pathway by soluble epoxide hydrolase inhibitors for the management of COVID-19. *Arch. Pharm.* (Weinheim). **2021** (accepted). IF = 3.751.

(15) **Pillaiyar, T**.;* Laufer, S.* Kinases as potential therapeutic targets for anti-coronaviral therapy. *J. Med. Chem*. **2021** Jun 3:acs.jmedchem.1c00335. IF = 7.446

(14) Pallaval, V.B.; Kanithi, M.; Meenakshisundaram, S.; Jagadeesh, A.; Alavala, M.; **Pillaiyar, T.;** Manickam, M.; Chidipi, B.* Chloroquine analogs: An overview of natural and synthetic quinolines as broad spectrum antiviral agents. *Curr. Pharm. Des.* **2021**, 27, 1185-1193. IF = 3.116.

(13) **Pillaiyar, T**.;* Wendt, L.; Manickam, M.; Easwaran, M. The recent outbreaks of human coronaviruses: A medicinal chemistry perspective. *Med. Res. Rev.* **2020** (https://doi.org/10.1002/med.21724) IF = 12.944

(12) **Pillaiyar**, **T**.;* Sangeetha, M.; Manickam, M.; Murugesan, S. A medicinal chemistry perspective of drug repositioning: Recent advances and challenges in drug discovery. *Eur. J. Med. Chem.* **2020** (https://doi.org/10.1016/j.ejmech.2020.112275). IF = 6.541

(11) **Pillaiyar**, **T**.;* Sangeetha, M.; Manickam, M. Recent discovery and development of inhibitors targeting human coronaviruses. *Drug Discov. Today* **2020**, *25*, 668-698. IF = 7.851

(10) **Pillaiyar**, **T**.;* Namasivayam, V.; Manickam, M.; Jung, S.-H. Inhibitors of melanogenesis: An updated review. *J. Med. Chem.* **2018**, *61*, 7395-7418. IF = 7.446

(9) **Pillaiyar**, **T**.;* Manickam, M.; Jung, S.-H. Recent development of signaling pathways inhibitors of melanogenesis. *Cell. Signal*. **2017**, *40*, 99-115. IF = 4.315

(8) **Pillaiyar**, **T**.;* Manickam, M.; Namasivayam, V. Skin whitening agents: Medicinal chemistry perspective of tyrosinase inhibitors. *J. Enzyme Inhib. Med. Chem.* **2017**, *32*, 403-425. IF = 5.051

(7) **Pillaiyar**, **T**.;* Manickam, M.; Jung, S-H. Down regulation of melanogenesis: Drug discovery and therapeutic options. *Drug Discov. Today.* **2017***, 22*, 282-298. IF = 7.851

(6) **Pillaiyar**, **T**.;* Manickam, M.; Namasivayam, V.; Hayashi, Y.; Jung, S.-H.* An overview of severe acute respiratory syndrome-coronavirus (SARS-CoV) 3CL protease inhibitors: Peptidomimetics and small molecule chemotherapy. *J. Med. Chem.* **2016**, *59*, 6595-6628. IF = 7.446

(5) **Pillaiyar**, **T**.;* Manickam, M.; Namasivayam, V. Macrocyclic hepatitis C virus NS3/4A protease inhibitors: An overview of medicinal chemistry. *Curr. Med. Chem.* 2**016**, *23*, 3404-3447. IF = 4.53

(4) **Pillaiyar**, **T**.;* Manickam, M.; Jung, S.-H. Inhibitors of melanogenesis: A patent review (2009-2014). *Expert Opin. Ther. Pat*. **2015**, *25*, 775-88. IF = 6.674

(3) **Pillaiyar**, **T**.;* Manickam, M.; Jung, S.-H. Middle East respiratory syndrome-coronavirus (MERS-CoV): An updated overview and pharmacotherapeutics. *Med. Chem.* **2015**, *5*, 361-372. IF =

[A3] **Non peer-reviewed publications**

(2) **Pillaiyar**, **T**.;* Sedaghati, M.; Schnakenburg, G.; Reaction of indoles with aromatic fluoromethyl ketones: An efficient synthesis of trifluoromethyl-indolyl-phenylethanols using K_2CO_3/nBu_4PBr in water. *Beilstein Archives **2020** (1), 17.*

(1) Lee, K. C.; Kim, M. S.; **Pillaiyar**, **T**.; Sharma, V. K.; Park, K. L.; Kim, Y.; Jung, S.-H.* Effective conformation of chalcones for their inhibitory activity against interleukin-5. *J. Pharm. Sci. (CNU).* **2010**, *25*, 16-23.

[A4] **Editorials (peer-reviewed)**

(1) **Pillaiyar, T**.;* Laufer, S. Kinase inhibitors as antiviral agents. *Pharma Focus Asia* (https://www.pharmafocusasia.com/articles/kinase-inhibitors-as-antiviral-agents).

[B] Book Chapter (International)

(1) **Pillaiyar, T.;** Manickam, M.; Meenakshisundaram, S.; Benjamine, A.J. Candidate drugs for the potential treatment of coronavirus diseases. In Silico Modeling of Drugs Against Coronaviruses: Computational Tools and Protocols. Methods in Pharmacology and Toxicology. Springer Nature-Springer US. 2021.

[C] Conference Presentation and Proceedings (International)

Poster Presentation:

(23) **Pillaiyar, T.;** Flury, P.; Schäkel, L.; Petry, M. R.I.; Gütschow, M.; Müller, C.E.; Laufer, S. Design, synthesis and biological evaluation of SARS-CoV-2 main protease inhibitors. DPhG Annual Meeting **2021,** Trends and Perspectives in Pharmaceutical Sciences. September 28 - October 01, 2021 – Virtual Meeting. Germany.

(22) Schäkel, L.; Breidenbach, J.; Lemke, C.; **Pillaiyar, T.;** ¥ Al Hamwi, G.; Diett, M.; Gedschold, R.; Lopez, V.; Mirza, S.; Namasivayam, V.; Schiedel, A.C.; Sylvester, K.; Thimm, D.; Vielmuth, C.; Phuong Vu, L.; Zyulina, M.; Gütschow, M.; Müller, C.E. Targeting the Main Protease of SARS-CoV-2: Design and Development of Potent Inhibitors of the SARS-CoV-2 Main Protease. GDCh Frontiers in Medicinal Chemistry. March 8-10,2021. Annual meeting, Online, Germany.

(21) Lemke, C.; Breidenbach, J.; Schäkel, L.; **Pillaiyar, T.;** ¥ Al Hamwi, G.; Diett, M.; Gedschold, R.; Lopez, V.; Mirza, S.; Namasivayam, V.; Schiedel, A.C.; Sylvester, K.; Thimm, D.; Vielmuth, C.; Phuong Vu, L.; Zyulina, M.; Müller, C.E.; Gütschow, M.; Establishment and optimization of a SARS-CoV-2 main protease in vitro assay GDCh Frontiers in Medicinal Chemistry. March 8-10,2021. Annual meeting, Online, Germany.

(20) **Pillaiyar**, **T**.; Müller, C. E. Design, synthesis and structure-activity relationships of agonists for the proinflammatory lipid-activated G protein-coupled receptor GPR84. ACS Fall 2020 virtual meeting & expo: Moving chemistry from bench to market, August 17-20, **2020**.

(19) **Pillaiyar**, **T**.; Müller, C. E. General synthesis of unsymmetrical 3,3'-(aza)diindolylmethane derivatives. BOSS XVI 16th Belgian Organic Synthesis Symposium, Brussels, Belgium, July 8-13, **2018**.

(18) **Pillaiyar**, **T**.; Köse, M.; Sylvester, K.; Thimm, D.; Borges, G.; von Kügelgen, I.; Müller C. E. Diindolylmethane derivatives–potent agonists of the immunostimulatory orphan G protein-coupled receptor GPR84. Frontiers in Medicinal Chemistry 2017 in Bern, Switzerland, February 12-15, **2017**.

(17) **Pillaiyar**, **T**.; Köse, M.; Attah, I.; Müller, C. E. Diindolylmethanes (DIMs): From nutrients to multitarget anti-cancer drugs. MuTaLig COST ACTION CA15135, WG meeting 2016, Budapest, Hungary, November 19-20, **2016**.

(16) **Pillaiyar**, **T**.; Baqi, Y.; Alshaibani, S.; Tokar, Y.; Abdelrahman, A.; Namasivayam, V.; Kostenis, E.; Müller, C. E. Structure-activity relationship studies of 2-carboxy-1*H*-indole-3-propionic acid derivatives as potent GPR17 agonists. Frontiers in Medicinal Chemistry 2016 (International Conference), Bonn, Germany, July 14-16, **2016**.

(15) **Pillaiyar**, **T**.; Baqi, Y.; Alshaibani, S.; Abdelrahman, A.; Namasivayam, V.; Kostenis, E.; Müller, C. E. Design, synthesis and structure-activity relationship studies of 4/6-substituted 2-carboxy-1*H*-indole-3-propionic acid derivatives as GPR17 agonists. Purines 2014 in Bonn (International Conference), Bonn, Germany, July 23-27, **2014**.

(14) **Pillaiyar**, **T**.; Köse, M.; Sylvester, K.; Müller, C. E. Development of small molecule agonists for GPR84, an orphan G-protein coupled receptor with potential as a drug target. Network Meeting of the Alexander von Humboldt Foundation, Humboldt-Universität zu Berlin, Berlin, Germany, April 9-11, **2014**.

(13) Konno, S.; Nakada, K.; **Pillaiyar**, **T**.; Kakiuchi, R.; Yamamoto, T.; Yamazaki, Y.; Yakushiji, F.; Akaji, K.; Kiso, Y.; Kawasaki, Y.; Freire, E.; Hayashi. Y. Development of SARS coronavirus 3CL protease inhibitors with an electrophilic aryl ketone structure. 8th AFMC international medicinal chemistry symposium, Tokyo, Japan, November 29 to December 2,

2011.

(12) Konno, S.; Nakada, K.; **Pillaiyar**, **T**.; Yamamoto, T.; Yamazaki, Y.; Yakushiji, F.; Akaji, K.; Kiso, Y.; Kawasaki, Y.; Freire, E.; Hayashi, Y. Peptidic cysteine protease inhibitors with an arylketone warhead for SARS Coronavirus: The sixth peptide engineering meeting (PEM6), Atlanta, USA, October 2-5, **2012**.

(11) Taguchi, A.; Nishiguchi, S.; Shiozuka, M.; **Pillaiyar**, **T**.; Yamazaki, Y.; Yakushiji, F.; Kiso, Y.; Nonomura, Y.; Matsuda, R.; Hayashi, Y. Identification of negamycin analogs with readthrough-promoting activity as potential drug candidates for Duchenne muscular dystrophy. 244th ACS national meeting & exposition, Philadelphia, USA, August 19-23**, 2012**.

(10) Yamamoto, T.; Konno, S.; Nakada, K.; **Pillaiyar**, **T**.; Yamazaki, Y.; Yakushiji, F.; Akaji, K.; Kawasaki, Y.; Freire, E.; Hayashi, Y. Development of tripeptide-type SARS coronavirus 3CL protease inhibitors with an electrophilic 2-benzothiazole ketone structure. 244th ACS national meeting & exposition, Philadelphia, USA, August 19-23, **2012**.

(9) Yamamoto, T.; Konno, X.; Kiyoshi, N.; **Pillaiyar**, **T**.; Kakiuchi, R.; Yamazaki, R.; Wenhua, Y.; Kenichi, R.; Kiso, Y.; Yuko, K.; Freire, E.; Yoshio, H. Development of tripeptide type SARS coronavirus 3CL protease inhibitor-P4 and structure-activity relationship studies at the site. Pharmaceutical Society of Japan 132nd annual meeting, Sapporo, Japan, March **2012**.

(8) **Pillaiyar**, **T**.; Jung, S.-H.; Lee, K. C.; Kim, M.; Sharma, V. K.; Yun, J. H.; Roh, E.; Kim, Y. Design and synthesis of novel hydroxyalkylamino derivatives of chromone for their IL-5 inhibitory activity. The 2010 international chemical congress of bacific basin societies. Honolulu, Hawaii, USA, December 15-20, **2010**.

(7) **Pillaiyar**, **T**.; Lee, K. C.; Kim, M. S.; Sharma, V. K.; Yun, J. H.; Roh, E.; Kim, Y.; Jung, S.-H. Phenylthioureas are the inhibitors of melanogenesis in melanoma B16 cells. Convergence networking of pharmaceutical sciences for drug discovery by the pharmaceutical society of Korea. EXCO, Daegu, Korea, April **2010**.

(6) **Pillaiyar**, **T**.; Le Hoang, T. A.; Lee, K. C.; Kim, M. S.; Sharma, V. K.; Yun, J. H.; Roh, E.; Kim, Y.; Jung, S.-H. Structural requirements of novel chromone analogues for their inhibitory activity against interleukin-5. Convergence networking of pharmaceutical sciences for drug discovery by the pharmaceutical society of Korea. EXCO, Daegu, Korea, April **2010**.

(5) **Pillaiyar**, **T**.; Lee, K. C.; Kim, M. S.; Sharma, V. K.; Yun, J. H.; Roh, E.; Kim, Y.; Jung, S.-H. Novel amino alcohol derivatives of chromone for their IL-5 inhibitory activity. Convergence networking of pharmaceutical sciences for drug discovery by the pharmaceutical society of Korea. EXCO, Daegu, Korea, April **2010**.

(4) **Pillaiyar**, **T**.; Lee, K. C.; Babu Kumar, S.; Yun, C. Y.; Hwang, B. Y.; Kim, Y.; Jung, S.-H.

Hypopigmenting effect of tetrahydropyrimidine-2(1*H*)-thione analogs. 7th AFMC (Asian federation for medicinal chemistry) international medicinal chemistry symposium, AIMECS 09, Queensland, Australia, August 23-27, 2**009**.

(3) **Pillaiyar, T**.; Lee, K. C.; Babu Kumar, S.; Jung, S.-H. Inhibitory effects of tetrahydropyrimidine-2(1*H*)-thiones on B16 melanoma cell. 103rd spring meeting of the Korean Chemical Society. Convention and Exhibition. Korea, April 16-17, **2009**.

(2) **Pillaiyar, T**.; Bang, S. C.; Le Hoang, T. A.; Lee, K. C.; Lee, J. H.; Chang, E. J.; Lee, W. H.; Kim, Y.; Jung, S.-H. Analogues of tetrahydropyrimidine-2(1*H*)-thione as inhibitors of IBMX-induced melanin production. Proceedings of the fall international convention of the Pharmaceutical Society of Korea, Seoul, Korea, October **2008**.

(1) **Pillaiyar, T**.; Bang, S. C.; Le Hoang, T. A.; Lee, K. C.; Lee, J. H.; Chang, E. J.; Lee, W. H.; Kim, Y.; Jung, S.-H. Novel benzimidazole-2-thione and their hypopigmenting effect. Proceedings of the spring international convention of the Pharmaceutical Society of Korea, Jeju, Korea, April **2008**.

[D] Proceedings

Konno, S.; Kobayashi, K.; Senda, M.; Funai, Y.; Seki, Y.; Tamai, I.; Schäkel, L.; Sakata, K.; **Pillaiyar, T.**; Taguchi, A.; Taniguchi, A.; Gütschow, M.; Müller, C.E.; Takeuchi, K.; Hirohama, M.; Kawaguchi, A.; Kojima, M.; Senda, T.; Shirasaka, Y.; Kamitani, W.; Hayashi, Y. 3CL Protease inhibitor with an arylketone warhead group as anti-SARS-CoV-2 agents. Proceedings of the 58th Japanese peptide society symposium, Japan, October 20-22, **2021**.

(1). Konno, S.; Nakada, K.; **Pillaiyar, T**.; Kakiuchi, R.; Yamamoto, T.; Yamazaki, Y.; Yakushiji, F.; Akaji, K.; Kiso, Y.; Kawasaki, Y.; Freire, E.; Hayashi. Y. Design, synthesis and evaluation of tripeptidomimetics with arylketone as inhibitors of SARS-CoV 3CL protease. Proceedings of the 48th Japanese peptide society symposium, Sapporo, Japan, 151-154, September 27-29, **2011** (Poster presentation)

[D] List of Scientific Talks

(11) Pillaiyar, T.; Flury, P.; Schäkel, L.; Petry, M.R.I.; Gütschow, M.; Müller, C.E. & Laufer, S. Design, synthesis and biological evaluation of SARS-CoV-2 Main Protease inhibitors. DPhG Annual Meeting 2021, Trends and Perspectives in Pharmaceutical Sciences, September 28 – October 01, **2021**-Virtual Meeting, Germany.

(10) Pillaiyar, T.; Schäkel, L.; Petry, M.R.I.; Gütschow, M.;. Müller, C.E. & Laufer, S. Design and development of potent inhibitors targeting the main protease of SARS-CoV-2. HIPS Symposium 2021, May 20, **2021**, Online meeting, Germany.

(9) Thanigaimalai Pillaiyar. Small molecules approaches for the development of anti –SARS-CoV-2 drugs. Smart & Sustainable Developments in Material & Medicinal Chemistry. Nirmala college for Women, July 19-20, **2021**. Coimbatore – 641018, TamilNadu, India. Online meeting.

(8) **Pillaiyar, T**.; Strategies for the development of antivirals targeting SARS-CoV-1&2, webinar on frontiers in chemical sciences, organized by Department of Chemistry, National Institute of Technology, Rourkela, Odisha - 769 008, 6th to 10th July **2020**. India. Online meeting.

(7) **Pillaiyar, T.**; "Medicinal chemistry efforts toward the development of SARS-CoV and COVID-19 therapeutics, international webinar series on "Futuristic Medicinal and Materials Chemistry" international webinar series organized by Department of Chemistry, Crescent Institute of Science & Technology, Tamilnadu, India, 9th-13th June **2020.** Online meeting.

(6) **Pillaiyar, T.**; Drug development and Medicinal Chemistry researches toward SARS-CoV and COVID19 therapeutics "International Webinar on COVID-19: Research Strategies & Therapeutics (IWCRST), Adikavi Nannaya University, Rajamahendravaram Andhra Pradesh, India 533296. 6th June **2020**. Online meeting.

(5) **Pillaiyar, T**.; Köse, M.; Müller, C. E. Design, synthesis and structure-activity relationships of agonists for the immunostimulatory orphan G protein-coupled receptor GPR84. EFMC-ISMC 2018, XXV EFMC International Symposium on Medicinal Chemistry, Ljubljana, Slovenia, September 2-6, **2018**. (DAAD travel grant awarded).

(4) **Pillaiyar, T**.; Köse, M.; Sylvester, K.; Müller, C. E. Development of potent small molecule agonists for the immunostimulatory orphan G protein-coupled receptor GPR84. International PhD Students/Postdoc meeting of the German Pharmaceutical Society (DPhG), Bad Dürkheim, Germany, March 14-16, **2018**.

(3) **Pillaiyar, T**.; Köse, M.; Mahardhika, A. B.; Schoeder, C. T.; Müller, C. E. Diindolylmethanes (DIMs) as novel anti-cancer agents targeting GPR84 and cannabinoid receptors. EpiChemBio (CM1406) and MuTaLig COST (CA15135) actions joint meeting, Annual meeting 2017, Porto, Portugal, September 22-24, **2017**.

(2) **Pillaiyar, T**.; Lee, K. C.; Babu Kumar, S.; Jung, S.-H. Design, synthesis and evaluation of tetrahydropyrimidine-2(1*H*)-thiones on B16 melanoma cell. Pharmaceutical Society of Korea (PSK), Seoul, South Korea, June **2009** (Award winner).

(1) **Pillaiyar, T**.; Bang, S. C.; Le Hoang, T. A.; Lee, K. C.; Lee, J. H.; Chang, E. J.; Lee, W. H.; Kim, Y.; Jung, S.-H. Synthetic analogues of tetrahydropyrimidine-2-(1*H*)-thione as inhibitors of IBMX-induced melanin production. International conference on industrialization of institutional research on phytomedicines, PSGR Krishnamal College for women, Coimbatore, Tamilnadu, India, January 8-9, **2009**.