

Paolo Coghi, PhD

Email:
coghips@must.edu.mo



The Praia PARK
Estr. De Seac Pac V.,
Macau SAR, China

- Profile** Assistant Professor specializing in Organic/Bioorganic Chemistry with previous Lecturer and postdoctoral research experience covering Pharmaceutical Science, Drug Design, Biochemistry, organic chemistry with over 80 peer reviewed journals internationally.
- Education**
- Dec 2008 PhD in Pharmaceutical Science, University of Milan, Italy**
Title: "Synthesis and mechanism of action of antimalarial compounds"
Supervisor : Dr. Diego Monti (National Research Council, ISTM-CNR, Milan)
Final grade: excellent
- Jul 2005 MSc in Chemistry and Pharmaceutical Technology, University of Milan, Italy**
Title: "Parallel synthesis and antileishmanial activity of ether-linked phospholipid"
Supervisor: Prof. Sergio Romeo (University of Milan, Department of Pharmaceutical Science). Final grade 103/110
- Jun 1991 Institute "Facchinetti" Castellanza, Milan, Italy — High School Diploma**
Qualified Industrial Chemist
- Professional Experience**
- 2023**
Assistant Professor at School of Pharmacy Macau University of Science and Technology, Macau
Courses: Basic Chemistry and lab **BAPZ003 BAPZ002** / Organic Chemistry **BAPZ007/** Medicinal Chemistry and lab **BAPZ023 BAPZ022** / Analytical Chemistry **BAPZ013**
Course : Advanced Medicinal Chemistry **MPPE04** (Master)
- 2022**
Assistant Professor at School of Pharmacy Macau University of Science and Technology, Macau
Courses: Basic Chemistry **BAPZ003 BAPZ002** / Organic Chemistry **BAPZ007/** Medicinal Chemistry **BAPZ023 BAPZ022** / Analytical Chemistry **BAPZ013**
- 2017-2021**
Senior Lecturer/ Lecturer at School of Pharmacy Macau University of Science and Technology, Macau
Courses: Basic Chemistry **BAPZ003** / Pharmaceutical Chemistry **BAPZ007/** Medicinal Chemistry **BAPZ023** / Analytical Chemistry **BAPZ013**
- Sep 2015-Sep 2017, Macau University of Science and Technology, Macau**
Postdoc
Title: "Lead optimization of triterpenoids as sarcoplasmic/endoplasmic reticulum

Ca-ATPase (SERCA) pro-inhibitor for therapeutic intervention of prostate cancer
Supervisor: Dr. Vincent Kam Wai Wong (State Key Laboratory of Quality Research in Chinese Medicine)

Oct 2013-Mar 2015, University of Milan Bicocca, Italy
Postdoc

Title: "Study of morphology of photosensible polymers"
Supervisor: Prof. Antonio Papagni, Dr. Vincenzo Malatesta (Milan Bicocca) in collaboration with Research Center "Donegani Institute" of ENI (Novara, Italy)

Oct 2011-Sep 2013, University of Milan Bicocca, Italy
Postdoc

Title: "Study and analysis of new photosensible polymers"
Supervisor: Prof. Antonio Papagni, Dr. Vincenzo Malatesta (University of Milan Bicocca) in collaboration with Research Center "Donegani Institute" of ENI (Novara, Italy)

Jan 2011-Jul 2013

Undergraduate Teaching Assistant at Department of Chemistry, University of Milan, Italy

Aug 2009-Jun 2011, University of Milan, Italy
Postdoc

Title: "Hybrid nanoparticles with biomedical applications"
Supervisor: Prof. Pierfausto Seneci at CISI (Center for biomolecular interdisciplinary studies and industrial applications) and National Research Council ISTM-CNR Milan; Dr. Diego Monti (National Research Council)

Jan 2009-Jul 2009, University of Milan, Italy

Postdoctoral Researcher at Department of Chemistry

Supervisor: Dr. Diego Monti (National Research Council, ISTM-CNR, Milan)

Jan 2009-Jul 2009

Undergraduate Teaching Assistant at Department of Chemistry, University of Milan, Italy

Jul 2005-Dec 2005

Undergraduate Teaching Assistant at Faculty of Pharmacy, University of Milan, Italy

Sep 2015-Sep 2017, Macau University of Science and Technology, Macau

Title: "Lead optimization of triterpenoids as sarcoplasmic/endoplasmic reticulum Ca-ATPase (SERCA) pro-inhibitor for therapeutic intervention of prostate cancer"
Supervisor: Dr. Vincent Kam Wai Wong (State Key Laboratory of Quality Research in Chinese Medicine)

Publications

- 1) **Coghi, P.**; Coluccini, C. Editorial of Conjugated Polymers: Preparation, Properties and Applications. *Polymers* **2025**, 17, 710. <https://doi.org/10.3390/polym17060710> IF=4.7
- 2) **P. Coghi**#, Ivan A. Yaremenko#, P. Prommana, Li Jun Yang, Yulia. Yu. Belyakova, Peter S. Radulov, Chairat Uthaibull*, Vincent Kam Wai Wong*, and Alexander O. Terent'ev N-substituted Bridged Azaozonides as Promising Antimalarial Agents", *Chemmedchem*, **2025** IF=3.6
- 3) Jerome P. L. Ng §, Yun Xiao Yun §, Ali Adnan Nasim, Alessandra Giannoncelli, Betty Yuan Kwan Law, Giovanni Ribaud*, Vincent Kam Wai Wong*, and **Paolo Coghi*** Synthesis, docking studies and biological evaluation of 1*H*-1,2,3-triazole-7-chloroquinoline derivatives against SARS-CoV-2 (*Biorganic chemistry*, 29:141:106882, september **2023** IF=5.1). <https://doi.org/10.1016/j.bioorg.2023.106882>
- 4) Yingun Zhnag#, **Paolo Coghi**#, Zimo Ren, Narayan Hosmane, Yinghui Zhu 1,*Radionuclide Drug Conjugates (RDC) vs Boron Neutron Capture Therapy (BNCT): An Overview of Targeted Alpha-particle Therapy *Med Res Rev.* 2024 Dec 17. doi: 10.1002/med.22093 IF=10.9
- 5) Anyanwu, Margrate; Giannangeli, Matteo; Fan, Xing-Xing; **Coghi, Paolo**; Ribaud, Giovanni; Giannoncelli, Alessandra 9,10-Bis[(4-(2-hydroxyethyl)piperazine-1-yl)prop-2-yn-1-yl]anthracene: Insights into Telomeric G-Quadruplex Selectivity and Bioactivity in Lung Cancer Cell Lines (*Medicinal Chemistry Letters* July **2024**) doi.org/10.1021/acsmedchemlett.4c00340

- 6) Amol T Mahajan, Shivani, Ashok K. Datusalia, Carmine Coluccini*, **Paolo Coghi*** Sandeep Chaudhary*Pyrazolo[1,5-a]pyrimidine: A Prominent Framework for Tropomyosin Receptor Kinase (TRK) Inhibitors – Synthetic Strategies and SAR Insights (*Molecules*, june **2024**) IF=4.92 doi.org/10.3390/molecules29153560
- 7) Wan-Ying Zhang, Xiao-Li Zhen, **Paolo Saul Coghi**, Jun-Hui Chen, Bing-Jun Dong *, Xing-Xing Fan *, AI-Driven Drug Discovery: Unveiling a New Era in Cancer Vaccine Adjuvant Design with Big Data Insights(*Frontiers*, july **2024**) IF=5.7 <https://doi.org/10.3389/fimmu.2024.1438030>
- 8) Paolo Coghi , Carmine coluccini Literature Review on Conjugated Polymers as Light-Sensitive Materials for Photovoltaic and Light-Emitting Devices in Photonic Biomaterial Applications (*Polymers*, 2024 May 15;16(10):1407) IF=5.1 <https://doi.org/10.3390/polym16101407>
- 9) Chemo-/regio-selective ultrasound-assisted synthesis of new spirooxindole-pyrrolidines/spirooxindole-pyrrolizines: Synthesis, antimicrobial and antitubercular activities, SAR and *in silico* studies
Ritu Sharma,^{a,†} Richa Sharma,^{a,†} Lalit Yadav, Kunal Prakash, Nawal Kishore Sahu,[†]Manas Mathur, Ramendra Pratap, Dharmendra K. Yadav, Sirish K. Ippagunta, Magda H. Abd El Lattif,* **Paolo Coghi**,* and Sandeep Chaudhary.* *Journal of Molecular structure*, **2024**, 138377) IF=4
- 10) Ding-qi, Zhang#; Meng-chu Yang*; Yulia Yu Belyakova, Qin-hai, Ma; Rui-hong, Chen; Li-jun Yang; Jing-yuan Wei, Ivan A. Yaremenko, Alexander O. Terent'ev, Zi-feng, Yang; **Paolo Coghi***; Vincent Kam Wai Wong*. Peroxides Derivatives as SARS-CoV-2 Entry Inhibitors (*Virus Research* 12:340:199295 january **2024**) <http://10.1016/j.virusres.2023.199295> IF=5
- 11) **Paolo Coghi** *, Tanzeela Fazal, Narayan S. Hosmane , and Yinghuai Zhu.* Diagnostic and theranostic technologies used in boron neutron capture therapy - A brief review (*Inorganic Chemistry Communications*, november **2023**, 159, 111698) <https://doi.org/10.1016/j.inoche.2023.111698> IF=3.8
- 12) P.**Coghi**# , Jinxin Li , Narayan S. Hosmane , and Yinghuai Zhu ,* Next generation of Neutron Capture Therapy (NCT) Drugs for Cancer Treatment (*Medicinal Research Reviews*, April **2023**) <https://doi.org/10.1002/med.21964> IF= 13
- 13) Richa Sharma, Ali Adnan Nasim , Lalit Yadav, Chen Ruihong , Neha Kumari, , Fan Ruiqi , Ashoke Sharon, , Nawal K. Sahu,a,c Jyoti Joshi, Sirish K. Ippagunta, **Paolo Coghi**,* Vincent Kam Wai Wong,* and Sandeep Chaudhary*. Chemo-/Regio-Selective Synthesis of Novel Functionalized Spiro[pyrrolidine-2,3'-oxindoles] under Microwave Irradiation and Their Anticancer Activity. (*Molecules*, **2023**, 28(18), 6503, september **2023**) IF=4.92 <https://www.mdpi.com/1420-3049/28/18/6503>
- 14) Nawal Kishore Sahu, Ritu Sharma Kshirsagar P. Suhas, Jyoti Joshi, Kunal Prakash, Richa Sharma, Ramendra Pratap, Xiwen Hu, Sukhbir Kaur, Mukesh Jain, Carmine Coluccini*, **Paolo S. Coghi***, and Sandeep Chaudhary*, Natural-Product-Inspired Microwave-Assisted Synthesis of Novel Spirooxindoles as Antileishmanial Agents: Synthesis, Stereochemical Assignment, Bioevaluation, SAR, and Molecular Docking Studies (*Molecules* **2023**, 28(12), 4817; June **2023**) <https://doi.org/10.3390/molecules28124817> IF= 4.92
- 15) Richa Sharma#, **Paolo Coghi**#, Mohit K. Tiwari, Dharmendra K. Yadav, Vincent Kam Wai Wong,* Sandeep Chaudhary* Artemisinin-inspired novel functionalized aryloxy-arylvinyl-1,2,4-trioxanes as potent anticancer agents: Design, synthesis, bioevaluation, SAR and *in silico* studies, (*Journal of Molecular structure*, february **2023**) 1288, 135707 <https://doi.org/10.1016/j.molstruc.2023.135707> IF= 3.84
- 16) Ya-Jia Xie, Wen-Qian Liu, Dan Li, Jin-Cai Hou, **Paolo Saul Coghi***, Xing-Xing Fan . Overcoming suppressive tumor microenvironment by vaccines in solid tumor, **2023** Feb 9;11(2):394. <https://doi.org/10.3390/vaccines11020394> IF= 7.8.
- 17) P. **Coghi**#, Ivan A. Yaremenko#, P. Prommana, Li Jun Yang, Jerome Pak Lam Ng, Yulia. Yu. Belyakova, Peter S. Radulov , Chairat Uthaibull*, Vincent Kam Wai Wong*, and Alexander O. Terent'ev*. Anticancer and antimalarial evaluation of novel bridged 1,2,3 trioxanes and bridged Azaperoxides (*Chemmedchem* 3 **2022** <https://doi.org/10.1002/cmdc.202200328> IF= 3.86
- 18) Giovanni Ribaudo#, Alberto Ongaro, Erika Oselladore, Li Jun Yang, Jerome P. L. Ng, Richard K. Haynes, Maurizio Memo, Vincent Kam Wai Wong*, **Paolo Coghi*** and Alessandra Gianoncelli* Combining Computational and Experimental Evidences on the Activity of Antimalarial Drugs on Papain-Like Protease of SARS-Cov-2: A Repurposing Study. (November **2022**) *Chem Biol Drug Des.* 2022; <https://doi.org/10.1111/cbdd.14187.7> IF= 2.87
- 19) **Coghi P**#, Yun XY, Ng JPL, Law BYK, Memo M, Gianoncelli A, Wong VKW, Ribaudo G*. Exploring SARS-CoV-2 Delta variant spike protein receptor-binding domain (RBD) as a target for tanshinones and antimalarials. *Nat Prod Res.* **2022** Mar 25:1-6 IF= 2.48.
- 20) Jerome P.L. Ng, Li Jun Yang, Lyn-Marie Birkholtz, Dina Coertzen, Ho Ning Wong, *Richard K. Haynes,* **Paolo Coghi** ,*and Vincent Kam Wai Wong. Antimalarial and antitumour activities of the steroidal quinone-methide celastrol alone and in combination with artemisone, artemisone and methylene blue (*Frontiers of Pharmacology*, 13, **2022**) IF= 5.98
- 21) Zhu Yunghai*, Prommana , Parichat; Hosmane, Narayan; **Coghi, Paolo**; Uthaipibull, Chairat* ; Zhang, Yingjun. Functionalized Boron Nanoparticles as Potential Promising Antimalarial Agents. (*ACS Omega*, January **2022**) <https://doi.org/10.1021/acsomega.1c05888> IF= 4.13
- 22) Ng, J.P.L.#.; Tiwari, M.K.; Nasim, A.A.; Zhang, R.L.; Qu, Y.; Sharma, R.; Law, B.Y.K.; Yadav*, D.K.; Chaudhary*, S.; **Coghi, P.** *; Wong, V.K.W*. Biological Evaluation in Resistant Cancer Cells and Study of Mechanism of Action of Arylvinyl-1,2,4-Trioxanes. *Pharmaceuticals* **2022**, 15, 360. <https://doi.org/10.3390/ph15030360> IF= 5.21
- 23) Yoke Mooi Ng#, **Paolo Coghi**#, Jerome L. Ng#, Fayaz Ali, Vincent Kam Wai Wong, Carmine Coluccini*. Synthesis and Coordination Properties of a Water-Soluble Material by Cross-Linking Low Molecular Weight Polyethyleneimine with Armed Cyclotrimertrilene. *Polymers*. 13(23), 4133. IF= 4.96
- 24) **Coghi Paolo**#, Li Jun Yang, Jerome Pak Lam Ng, Alessandra Gianoncelli, Vincent Kam Wai Wong* and Giovanni Ribaudo* A Drug Repurposing Approach for Antimalarials Interfering with SARS-CoV-2 Spike Protein Receptor Binding Domain (RBD) and Human Angiotensin-Converting Enzyme 2 (ACE2) (*Pharmaceuticals* **2021**, 14(10), 954) IF= 5.21
- 25) **Coghi, Paolo**#; Ng, Jerome#; Kadioglu, Onat; Law, Betty; Qiu, Alena; Saeed, Mohamed; Chen, Xi; Ip, Chio; Efferth, Thomas*; Liu, Liang*; Wong, Vincent Kam Wai*. Synthesis, computational docking and biological evaluation of celastrol derivatives as

dual inhibitors of SERCA and P-glycoprotein in cancer therapy (*European Journal of Medicinal Chemistry* **2021**, 224, 113676) **IF= 7.08**

- 26) Pyronaridine induces apoptosis in Non-small cell lung cancer cells by upregulating DR5 expression and inhibiting EGFR Zheng-Hong Zhong# Ze-Lin Yi Yi-Dan Zhao Jue Wang Ze-Bo Jiang Cong Xu Ya-Jia Xie Qi-Da He Zi-Yan Tong Xiao-Jun Yao Elaine Lai-Han Leung **Paolo Coghi** Xing-Xing Fan* Min Chen, Chem Biol & Drug Des., 00, 1– 9, **2021**). **IF= 2.87**.
- 27) Tiwari, Mohit#; **Coghi, Paolo**#; Agrawal, Prakhar#; Yadav, Dharmendra Kumar; Yang, Li; Congling, Qiu; Sahal, Dinkar*; Wong, Vincent Kam Wai*; Chaudhary, Sandeep*. Novel Halogenated Arylviny-1,2,4 Trioxanes as Potent Antiplasmodial as well as Anticancer Agents: Synthesis, Bioevaluation, Structure-Activity Relationship and In-silico Studies (*European Journal of Medicinal Chemistry* **2021**, 113675) **IF= 7.08**
- 28) **Coghi Paolo Saul**#, Yinghui Zhu, Hongming Xie, Narayan S Hosmane*, Yingjun Zhang* Boron Embowed Small Molecules as Antiviral, Antibacterial and Antiparasitic Agents (*Molecules* **2021**, 26, 3309). **IF= 4.92**
- 29) Douglas O. Ochora#, Esezah Kakudidi, Jane Namukobe, Matthias Heydenreich, **Paolo Coghi**, Li Jun Yang, Edwin W. Mwakio, Ben Andagalu, Amanda Roth, Hoseah M. Akala, Vincent K. W. Wong, Abiy Yenesew*. A new benzophenone and the Antiplasmodial activities of the constituents of *Securidaca longipedunculata* Fresen (Polygalaceae) (Natural Product Research, <https://doi.org/10.1080/14786419.2021.1925272> **IF= 2.48**
- 30) Giovanni Ribaudo*#, **Paolo Coghi**#, Li Jun Yang, Jerome Ng, Andrea Mastinu, Maurizio Memo, Vincent Kam Wai Wong. Computational and Experimental Insights on the Interaction of Artemisinin, Dihydroartemisinin and Chloroquine with SARS-CoV-2 Spike Protein Receptor-Binding Domain (RBD) (*Natural Product Research*, **2021** May 12;1-6) for project (0096/2020/A). <https://doi.org/10.1080/14786419.2021.1925894> (corresponding author). **IF= 2.48**
- 31) Ruihong Chen#; Lijun Yang; Sami Hamdoun; **Paolo Coghi**; Jerome P. L. Ng; David Wei Zhang; Xiaoling Guo; Chenglai Xia; Betty Yuen Kwan Law, Dr. Vincent Kam Wai Wong*. Corilagin, a novel anti-SARS-CoV-2 agent targets RBD-ACE2 binding to prevent viral infection (*Phytomedicine*, **2021** May 5;87:153591) for project (0096/2020/A). doi:10.1016/j.phymed.2021.153591 **IF= 6.65**
- 32) Chepkirui C#, Ochieng PJ, Sarkar B, Hussain A, Pal C, Yang LJ, **Coghi P**, Akala HM, Derese S, Ndakala A, Heydenreich M, Wong VKW, Erdélyi M*, Yenesew*, Antiplasmodial and antileishmanial flavonoids from *Mundulea sericea*, Fitoterapia. **2020** Nov 30:104796. Doi: 10.1016/j.fitote.2020.104796 **IF=3.02**
- 33) JPL Ng#, **P Coghi**, BYK Law, L Liu*, VKW Wong*. The present and future synthetic strategies of structural modifications of sinomenine. *Org. Chem. Front.*, **2020**,7, 4089-4107. **IF=5.45**
- 34) Mohit K. Tiwari#, **Paolo Coghi**#, Prakhar Agarwal#, Bharti Rajesh K. Shyamlal, Lalit Yadav, Richa Sharma, Dharmendra K. Yadav, Dinkar Sahal*, Vincent Kam Wai Wong*, Sandeep Chaudhary*. Novel functionalized 1,2,4- Trioxanes as Potent Antimalarial and Anticancer Agents: Design, Synthesis, Structure Activity Relationship and *in silico* docking studies. *ChemMedChem* **2020**, 15, 1216 doi: 10.1002/cmcd.202000045 (co-First author) **IF= 3.86**
- 35) Ivan A. Yaremenko#, **Paolo Coghi**#, Parichat Prommana#, Congling Qiu, Peter S. Radulov, Yuanqing Qu, Yulia Yu Belyakova, Enrico Zanforlin, Vladimir A. Kokorekin, Yuki Yu Jun Wu, Fabrice Fleury, Chairat Uthaiyibull*, Vincent Kam Wai Wong*, and Alexander O. Terent'ev*. Synthetic peroxides with unusual antimalarial activity selectively promotes apoptosis in cancer cells by inhibitory effect on ABCB5. *ChemMedChem* **2020**, 15, 1118. (co-First author, Front Cover may 2020, hot topic 2020 in section Neglected and Tropical Disease). Doi: 10.1002/cmcd.202000042 **IF= 3.86**



- 36) Luca Vaghi#, Mattia Coletta, **Paolo Coghi**, Ivan Andreosso, Luca Beverina, Riccardo Ruffo and Antonio Papagni*. Fluorine substituted non symmetric phenazines: a new synthetic protocol from polyfluorinated azobenzenes. *Arkivoc* July **2019**, 1970. Doi:10.24820/ark.5550190.p010.940. **IF= 0.9**
- 37) Moses Andima#, **Paolo Coghi**, Li jun Yang, Vincent Kam Wai Wong, Crispus M. Ngule, Li Jun Albert J Ndakala, Abiy Yenesew and Solomon Derese*. Antiproliferative Activity of Secondary Metabolites from *Zanthoxylum zanthoxyloides*: In vitro and in silico Studies. *Pharmacognosy communications* (9,3, **2019**) **IF= 1.4**
- 38) Daniel Buyinza#, Li Jun Yang, Solomon Derese, Albert Ndakala, **Paolo Coghi**, Matthias Heydenreich, Vincent Kam Wai Wong, Heiko M. Möller, Abiy Yenesew*. Cytotoxicity of Isoflavones from *Milletia dura*, *Natural Product research*, (sept **2019**). Doi:10.1080/14786419.2019.1660335 **IF= 2.48**
- 39) Giovanni Ribaudo#, **Paolo Coghi**#, Enrico Zanforlin#, Yuki Yu Jun Wu, Yu Han, Alena Congling Qiu, Betty Yuen Kwan Law, Giuseppe Zagotto Vincent K. W. Wong*. Semi-synthetic isoflavones as BACE-1 inhibitors and P-glycoprotein ATPase stimulator against Alzheimer's disease., *Bioorg Chem.* **2019** Jun;87:474-483. (Co- First author). Doi:10.1016/j.bioorg.2019.03.034 **IF= 5.30**
- 40) CIFAL: A Method for Rapid Screening of Anilide-containing AMPK Modulators Based on Computational Docking and Biological Validation Simon Wing Fai Mok#, Wu Zeng, Yuzhen Niu, **Paolo Coghi**, Yujun Wu, Wai Man Sin, Sio Ian Ng, Flora Gordillo-Martinez, Jia Ying Gao, Betty Yuen Kwan Law, Liang Liu, Xiao Jun Yao, Vincent Kam Wai Wong#, Journal: *Frontiers in Pharmacology*, section Experimental Pharmacology and Drug Discovery, **2018**, 9, 710 doi:10.3389/fphar.2018.00710 **IF= 5.98**
- 41) Souaibou Yaouba#, Arto Valkonen, **P.Coghi**, Jiaying Gao, Eric M. Guantai, Solomon Derese, Vincent Kam Wai Wong*, Máté Erdélyi*, Abiy Yenesew*. Crystal Structures and Cytotoxicity of ent-Kaurane-Type Diterpenoids from two *Aspidia* species, *Molecules*, Dec 4;23(12). Pii: E3199 **2018**. **IF= 2.48**

- 42) Novel peroxides as promising anticancer agents with unexpected depressed antimalarial activities. **P.Coghi**#, Ivan A. Yaremenko#, Parichat Prommana#, Peter S. Radulov, Mikhail A. Syroeshkin, Yu Jun Wu, Jia Ying Gao, Flavia M. Gordillo, Simon Mok, Vincent Kam Wai Wong*, Chairat Uthaipibull*, and Alexander O. Terent'ev*. *ChemMedChem*. **2018** (Front Cover may **2018**, VIP paper, first author, hot topic 2020 in section Neglected and Tropical Disease) doi: 10.1002/cmdc.201700804 **IF= 3.86**



- 43) Law BYK#, Mok SWF#, Chen J, Michelangeli F, Jiang ZH, Han Y, Qu YQ, Qiu ACL, Xu SW, Xue WW, Yao XJ, Gao JY, Javed MU, **Coghi P**, Liu L#, Wong VKW*. N-desmethyldauricine induces autophagic cell death in apoptosis-defective cells via Ca²⁺-mobilization. *Frontiers in Pharmacology* **2017**, 16;8:388. <https://doi.org/10.3389/fphar.2017.00388> **IF= 5.98**
- 44) Yoseph Atilaw#, Lois Muiva-Mutisya, Albert Ndakala, Hoseah M. Akala, Matthew L. Brown, Agnes C. Cheruiyot, **P.Coghi**, Vincent Kam Wai Wong, Abiy Yenesew*, Máté Erdély*. Four flavones with modified prenyl groups from the stem of *Tephrosia purpurea* subsp. *leptostachya*. *Molecules* **2017**, Sep 10;22(9). doi: 10.3390/molecules22091514 **IF= 4.92**
- 45) Thalidezine, A Novel AMPK Activator, Eliminates Apoptosis-resistant Cancer Cells Through Energy-mediated Autophagic Cell Death, *Oncotarget* **2017** 2;8(18):30077-30091, doi: 10.18632/oncotarget.15616 **IF= 0.96**
- 46) Xu, S. W., Law, B. Y., Mok, S. W., Leung, E. L., Fan, X. X., Coghi, P. S., Zeng, W., Leung, C. H., Ma, D. L., Liu, L., & Wong, V. K. Autophagic degradation of epidermal growth factor receptor in gefitinib-resistant lung cancer by celastrol. *International journal of oncology*, **2016** Oct;49(4):1576-88 doi: 10.3892/ijo.2016.3644 **IF= 5.88**
- 47) **P. Coghi** #, Antonio Papagni, Riccardo Po, Anna Calabrese, Alessandra Tacca, Alberto Savoini*. Reactivity of Decafluorobenzophenone and decafluoroazobenzene towards aromatic diamines: a potential entry to Donor-Acceptor systems *New Journal of Chemistry*, **2015**, *New J. Chem*, 39, 3615-3623. 10.1039/C4NJ02359E **IF= 3.92**
- 48) Richard K. Haynes#, Kwan-Wing Cheu, David N'Da, Paolo **Coghi** DD.Monti. Some Current Considerations on the Mechanism of action of Artemisinin Antimalarials : Part 1 – The 'Carbon Radical' and 'Heme' Hypotheses, *Infectious Disorders – Drug Targets*, **2013**, 13, 217-277 **IF= 0.319**
- 49) D. P. Ilboudo#, N. Basilico , S. Parapini, Y. Corbett, S. D' Alessandro , M. Dell' Agli , **P. Coghi** , S. D. Karou , R. Sawadogo , C. Gnoula , J. Simporé , J. Baptiste Nikiema , D. Monti , E. Bosisio , D. Taramelli *. Antiplasmodial and anti-inflammatory activities of *Canthium henriquesianum* (K. Schum), a plant used in traditional medicine in Burkina Faso . *Journal of Ethnopharmacology* **2013**. 148, 3, 763-769. <https://doi.org/10.1016/j.jep.2013.04.049> **IF= 4.36**
- 50) Haynes RK#, Cheu KW, Chan HW, Wong HN, Li KY, Tang MM, Chen MJ, Guo ZF, Guo ZH, Sinniah K, Witte AB, Coghi P, Monti D*. Interactions between Artemisinins and other Antimalarial Drugs in Relation to the Co-Factor Model – A Unifying Proposal for Drug Action". *ChemMedChem* **2012**, 7, 12, 2204-2226. **IF= 3.86**
- 51) R.K. Haynes#, K. Cheu, K. Li, M. Tang, H. Wong, M. Chen, Z. Guo, Z. Guo, **P. Coghi**, D. Monti* A Parallel in Action of Methylene Blue and Artemisinins - Antagonism with Chloroquine, a Reversal with Verapamil, and an Aspect of Antimalarial Activity of Chloroquine.. *ChemMedChem* **2011**, 6, 9, 1603-1615. **IF= 3.86**
- 52) Haynes RK#, Cheu KW, Tang MM, Chen MJ, Guo ZF, Guo ZH, **Coghi P**, Monti D* Reactions of Antimalarial Peroxides with Each of Leucomethylene Blue and Dihydroflavins: Flavin Reductase and the Cofactor Model Exemplified *ChemMedChem* **2011**, 6, 2, 279-291. **IF= 3.86**
- 53) R.K. Haynes#, W. Chan, H. Wong, K. Li, W. Wu, K. Fan, H. Sung, I. D. Williams, D. Prosperi, S. Melato, **P. Coghi**, D. Monti *Facile Oxidation of Leucomethylene Blue and Dihydroflavins by Artemisinins: Relationship with Flavoenzyme Function and Antimalarial Mechanism of Action.. *ChemMedChem* **2010**, 5, 8, 1282-1299. **IF= 3.86**
- 54) N. Basilico#, S. Parapini, F. Sisto, F. Omodeo-Salè, **P. Coghi**, F. Ravagnani, P. Oliaro, D. Taramelli *The lipid moiety of haemozoin (malaria pigment) and *P. falciparum* parasitised red blood cells bind synthetic and native endothelin-1. *Journal of Biomedicine and Biotechnology*. **2010**, 1-9. **IF= 3.10**
- 55) **P. Coghi**#, N. Basilico, D. Taramelli, W. Chan, R.K. Haynes*, D. Monti*. Interaction of Artemisinins with Oxyhemoglobin Hb-Fell, Hb-Fell, CarboxyHb-Fell, Heme-Fell, and Carboxyheme Fell: Significance for Mode of Action and Implications for Therapy of Cerebral Malaria. *ChemMedChem* (cover picture) **2009**, 4, 12, 2045-2053. **IF= 3.86**



- 56) N. Basilico#, E Bosisio , F Buelli , G Campiani , M Casagrande , F Castelli , **P Coghi** et al. Old and new targets for innovative antimalarial compounds: the different strategies of the Italian Malaria Network". *Parassitologia*. **2008**
- 57) **P. Coghi**#, N. Vaiana, M.G. Pezzano, L. Rizzi, M. Kaiser, R. Brun, S. Romeo* Parallel synthesis and antileishmanial activity of ether-linked phospholipids. *Bioorganic and Medicinal Chemistry Letters* **2008**, 18, 16, 4658-4660. **IF= 2.94**

- 58) S. Melato#, D. Prosperi, **P. Coghi**, N. Basilico, D. Monti *. A Combinatorial Approach to 2,4,6-Trisubstituted Triazines with Potent Antimalarial Activity: Combining Conventional Synthesis and Microwave-Assistance.. *ChemMedChem* **2008**, 3, 6, 873-876. **IF= 3.86**
- 59) S. Melato#, D. Prosperi, **P. Coghi**, N. Basilico, D. Monti *. Novel 4-Aminoquinolines through Microwave-Assisted SNAr Reactions: a Practical Route to Antimalarial Agents. *Eur. J. Org. Chem* **2007**, 36, 6618-6623. **IF= 3.26**

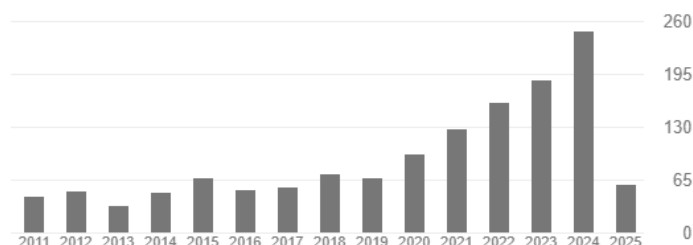
Paper published (with undergraduates Bachelor students)

- 60) **Paolo Coghi**#, Jerome Ng, Ali Adnan Nasim, Dr. Vincent Kam Wai Wong# N-[7-Chloro-4-[4-(phenoxy-methyl)-1H-1,2,3-triazol-1-yl]quinoline]-acetamide (*Molbank* **2021**, 2021(2), M1213) for Special Issue "Synthesis of Flavonoids or Other Nature-Inspired Small Molecules" for project (0096/2020/A) (corresponding author). **IF= 0.6**
- 61) 4-(4-(((1H-benzo[d][1,2,3]triazol-1-yl)oxy)methyl)-1H-1,2,3-triazol-1-yl)-7-chloroquinoline. Leong Ka Fai#, Margrate Anyanwu, Jiang Ai, Yuhuan Xie, Alessandra Gianoncelli, Giovanni Ribaudo * and **Paolo Coghi** * (*Molbank* **2022**, 2022(3), M1404) <https://doi.org/10.3390/M1404> **IF= 0.6**
- 62) 3-[(1H-Benzo[d][1,2,3] triazol-1-yl)oxy]propyl 9-hydroxy-5a,5b,8,8,11a-pentamethyl-1-(prop-1-en-2-yl)icosahydro-3aH-cyclopenta[a]chrysene-3a-carboxylate. Jiang, A. #; Anyanwu, M.; Leong, K.; Li, J.; Gianoncelli, A.; **Coghi, P.**; Ribaudo, G. * *Molbank* **2022**, 2022, M1419. <https://doi.org/10.3390/M1419> **IF= 0.6**
- 63) XiaoYun Yun#, Yuhuan Xie, Jerome P. L. Ng , Betty Yuen Kwan Law , Vincent Kam Wai Wong and **Paolo Coghi***. 2-Bromo-3-((1-(7-chloroquinolin-4-yl)-1H-1,2,3-triazol-4-yl)-methoxy)-benzaldehyde (*Molbank* **2022**, 2022(1), M1351; <https://doi.org/10.3390/M1351>) **IF= 0.6**
- 64) 1-(4-(4-(((7-chloroquinolin-4-yl)amino)methyl)-1H-1,2,3-triazol-1-yl)-5-(hydroxymethyl)tetrahydrofuran-2-yl)-5-methylpyrimidine-2,4(1H,3H)-dione .Hou In Kuan ,Yuhan Xie , Yuzhu Guo, Gianoncelli, A.; Ribaudo, G. * **Coghi, P.**; *Molbank* **2023**, M1681 (<https://doi.org/10.3390/M1681> **IF= 0.6**
- 65) Xie, Y.; Kuan, H.; Wei, Q.; Gianoncelli, A.; Ribaudo, G.; **Coghi, P.** (2R,4aS,6aS,12bR,14aS,14bR)10-Hydroxy-N-(4-((6-methoxyquinolin-8-yl)amino)pentyl)-2,4a,6a,9,12b,14a-hexamethyl-11-oxo-1,2,3,4,4a,5,6,6a,11,12b,13,14,14a,14b-tetradecahydronicene-2-carboxamide. *Molbank* **2023**, 2023, M1716. <https://doi.org/10.3390/M1716> **IF= 0.6**
- 66) Yuzhu, G.; Anyanwu, M.; Yang, X.; Zimo, R.; Gianoncelli, A.; Ribaudo, G.; **Coghi, P.** (2R,4aS,6aS,12bR,14aS,14bR)-N-(2-(2-(2-Azidoethoxy)ethoxy)ethyl)-10-hydroxy-2,4a,6a,9,12b,14a-hexamethyl-11-oxo-1,2,3,4,4a,5,6,6a,11,12b,13,14,14a,14b-tetradecahydronicene-2-carboxamide. *Molbank* **2024**, 2024, M1800. <https://doi.org/10.3390/M1800>
- 67) Xiaoman Yu , Zimo Ren , **Paolo Coghi** and Jerome P. L. Ng Structural Modification of Epigallocatechin-3-gallate to (2R,3R)-5,7-dimethoxy-2-(3,4,5-trimethoxyphenyl)chroman-3-yl L-valinate in 4 Steps (submitted to *Molbank*) **IF= 0.6**
- 68) Ren, Z.; **Coghi, P.** Exploring Medicinal Potential and Drug Delivery Solutions of Celastrol from the Chinese "Thunder of God Vine". *Eur. J. Chem.* **2024**, 15, 194-204. <https://doi.org/10.5155/eurjchem.15.2.194-204.2534>
- 69) Yuhuan Xie, **Paolo Coghi**. The multifaceted health benefits of honey: A natural antimicrobial, antioxidant, and complementary therapeutic agent. *Microbes & Immunity* 6592. <https://doi.org/10.36922/mi.6592>
- 70) Guo, Y.; Xiao, Y.; Coluccini, C.; **Coghi, P.** ((1R,3aS,5aR,5bR,7aR,9S,11aR,11bR,13aR,13bR)-9-Acetoxy-5a,5b,8,8,11a-pentamethyl-1-(prop-1-en-2-yl)icosahydro-3aH-cyclopenta[a]chrysen-3a-yl)methyl 2-Bromo-3-methylbenzoate. *Molbank* **2025**, 2025, M1971. <https://doi.org/10.3390/M1971> **IF= 0.6**
- 71) Ren, Z.; Coghi, P. Click chemistry in tuberculosis research: From drug design to therapeutic delivery - A systematic review. *Eur. J. Chem.* **2025**, <https://doi.org/10.5155/eurjchem.16.1.83-96.2615>.

Other papers recently submitted:

- 72) Ka Fai Leong , Zihan Chen , **Paolo Coghi** *Unveiling Rosmarinic Acid: Understanding Its Broad Spectrum of Bioactivities, *Planta Medica* **2025**
- 73) Triterpenoid Compounds and their Derivatives: Emerging Pharmacological Agents for Arthritis Treatment
Zihan Chen, Ka Fai Leong, Yuhuan Xie, Alessandra Gianoncelli, Giovanni Ribaudo* and **Paolo Coghi***, Minireview in medicinal chemistry, **2025**
- 74) Ren, Z.; **Coghi, P.** Click Chemistry-Enabled Targeted Drug Delivery Systems in Cancer Therapy: Progress and Prospects , *Cancer Plus*, **2025**
- 75) Zihan Chen^a, Ka-Fai Leong^c, **Paolo Coghi**^{a, b*}, Yinghui Zhu^{d*} Metal coordination-based nanomaterials: Novel drug delivery system for treatment of rheumatoid arthritis. *Coordination chemistry review* **2025**
- 76) Yuhuan Xie, **Paolo Coghi**. Podophyllotoxin . *Oncology research* **2025**

Citations per Year (google scholar)



	All	Since 2020
Citations	1404	879
h-index	21	18
i10-index	39	32

Patent

- 1) Patent prop. WO2014188376 A1 - Stabilized photoactive composition and use thereof. V.Malatesta, **P.Coghi** A.Papagni, G.Giannotta. Uv light stabilization additive package for solar cell, **2014**.
- 2) Patent prop. CN 111848722 B –Tripterine derivative and preparation method and application thereof Huang Jinwei, Liu Liang, **Paolo Coghi**, Luo Wanjun, Wu Bolin **2021** november

Book

Chapter 3- March **2022: Fundamentals and Applications of Boron Chemistry** (prof.Narayan Hosmane, Prof Zhu Yunghai) Boron containing small molecules as antiparasitic agents, 2022, Pages 155-201, Volume 2 in Developments in Inorganic Chemistry ELSEVIER <https://doi.org/10.1016/B978-0-12-822127-3.00001-6>

Conference Presentations

1. Jerome Pak Lam Ng, **Paolo Coghi**, Betty Yuen Kwan Law, Liang Liu, Vincent Kam Wai Wong. "Semi-synthetic Approaches Toward the Diversification of Sinomenine Derivatives". The 7th Annual Meeting of the Specialty Committee on Immunology of Traditional Chinese Medicine of the World Federation of Chinese Medicine Societies cum the Cross-Strait-Hong Kong-Macao Summit on Treatment and Research of Rheumatism and Nephropathy with Chinese Medicine, Changsha, China, December 12-14, 2020. (Abstract)
2. Jerome Pak Lam Ng, **Paolo Coghi**, Betty Yuen Kwan Law, Liang Liu, Vincent Kam Wai Wong. "Structural Modification of Sinomenine for Treatment of Drug-resistant Rheumatoid Arthritis". The 6th Annual Meeting of the Specialty Committee on Immunology of Traditional Chinese Medicine of the World Federation of Chinese Medicine Societies cum the Cross-Strait-Hong Kong-Macao Forum on Advanced Research in Treating Rheumatism with Chinese Medicine, Tianjin, China, November 15-17, 2019. (Abstract)
3. Arianna Gelain *, Matteo Mori, Giulia Cazzaniga, Fiorella Meneghetti, Vincent Wong, Li Jun Yang, **Paolo Saul Coghi**, Stefania VillaDiscovery of novel SIRT5 activators as potential anti-inflammatory agents9th International Electronic Conference on Medicinal Chemistry , november 2023

4.

Guest editor

- 1) International Journal of Molecular Sciences: Anticancer Drug Development and Cancer Immunotherapy" (1december 2021-30 december 2022) International Journal in collaboration with Dr Xing Xing Fan (Neher's Biophysics Laboratory for Innovative Drug Discovery) and Dr Dharmenendra K Yadav (university of Gacheon , korea) IJMS | Special Issue : [www.mdpi.com/journal/ijms/special_issues/anticancer_drug_development_\(6_papers\)](http://www.mdpi.com/journal/ijms/special_issues/anticancer_drug_development_(6_papers))
- 2) ConjugatedPolymers: Preparation, Properties and Applications (March 2022-decembre 2023) Topic for Molecules https://www.mdpi.com/topics/conjugated_polymers (13 papers) in collaboration with Carmine Coluccini (Institute of Translational Medicine and New Drug Development, Taiwan)
- 3) "Artificial intelligence in vaccine design" Vaccines (MDPI) (August 2022-decembre 2023) in collaboration with Dr Xing Xing Fan and Dr. Alex Leung (University Hong Kong) www.mdpi.com/journal/vaccines/special_issues/B264W1GCHB
- 4) International Journal of Molecular Sciences: Immunotherapy: New Developments and Challenges

- 5) “Innovative Strategies in Cancer Therapy” International Journal of Molecular Sciences: (MDPI) (May 2025-decembre 2025) in collaboration with Carmine Coluccini (Institute of Translational Medicine and New Drug Development, Taiwan) [IJMS | Special Issue : Innovative Strategies in Cancer Therapy](#)
- 6) IOP [Focus issue on advanced nanomaterials for drug coordination and release: preparation, characterization, and potential applications in drug delivery - IOPscience](#) (1 paper) deadline 31 dicembre 2025 in collaboration with Carmine Coluccini (Institute of Translational Medicine and New Drug Development, Taiwan)
- 7) Overcoming Drug Resistance in Cancer: Strategies and Natural Compound-Based Therapeutics 31 December 2025 www.techscience.com/or/special_detail/cancer_drug_resistance

Other

Membership to World Federation of Chinese medicine Societies (2015-now).

Reviewer for Phytochemistry Letters (from 2017), Certificate reviewer

Reviewer for Journal of Ethnopharmacology (2019), Certificate reviewer

Reviewer for Molecular medicine Reports (2019), Certificate reviewer

Reviewer for Biomedical Reports (2019), Certificate reviewer

Reviewer for ChemMedChem (2018)

Reviewer for Molecules (18 papers, 2021)

Reviewer for Pharmaceuticals (2 papers, 2022)

Reviewer for Pharmaceutics (1 papers, 2021)

Reviewer for Applied Sciences (1 papers, 2021)

Reviewer for International journal of molecular medicine (2019)

Reviewer for International journal of oncology (2019)

Reviewer for bentham sciences (5 papers , section Medicinal chemistry)

Reviewer for Molecular Diversity (2021, 2022) 2 papers

Reviewer for RCS Medicinal chemistry (1 paper)

=====

Editorial Board of Oncology letters (2019)

Review editor for Frontiers in Parasitology (2022)

FDCT Projects (ongoing, PI):

- 1) **FDCT PROPOSAL** “Synthesis, biological evaluation and computer studies of triterpenoid analogues for arthritis treatment and study of their mechanisms of action” (0005/2023/RIA1, 150000 euro) november **2023**-november **2026**) Principal Investigator

FDCT Projects (ongoing, team member):

Projects completed

- 1) FP6 EU Integrated Project **ANTIMAL** "Development of New Drugs for the Treatment of Malaria" (ANTIMAL) (role: Phd, Post-Doc) **2005-2011**
- 2) Study and analysis of new photosensible polymers" Prof. Antonio Papagni, Dr. Vincenzo Malatesta (University of Milan Bicocca) in collaboration with Research Center "Donegani Institute" of ENI (Novara, Italy), **2011-14** (role: Post-Doc) **2005-2011**
- 3) Rational Development of Combinations of Known and Novel Drugs for Chemotherapy of Cancer, South African University Flagship Projects, **2014-17** in collaboration with Centre of Excellence for Pharmaceutical Sciences, North West University, Potchefstroom Campus, South Africa, Prof Richard Haynes role: Co-PI
- 4) Lead optimization of triterpenoids as sarcoplasmic/endoplasmic reticulum Ca²⁺-ATPase (SERCA) pro-inhibitor for therapeutic intervention of prostate cancer, **2015-17**, Prof Vincent Wong Neher's Biophysics Laboratory for Innovative Drug Discovery, State Key Laboratory of Quality Research in Chinese Medicine (role: Post-Doc) **2005-2011**
- 5) **FDCT PROPOSAL** "investigation of ozonide analogs for overcoming drug resistance and study of mechanism of action" (0087/2020/A, 45000euro,) august **2020**-august **2021**) Principal Investigator
Collaboration with National Institute of Pharmaceutical education and research (Lucknow, India), Prof. Sandeep Chaudary, Prof Vincent Wong Neher's Biophysics Laboratory for Innovative Drug Discovery, State Key Laboratory of Quality Research in Chinese Medicine, Macau and Gacheon University, Korea, Dr. Yadav Dharmendra.
(3 paper accepted)
- 6) **FDCT PROPOSAL** "Synthesis of novel 1,2,3-triazole based antimalarial derivatives for their potential activity against Novel Coronavirus Pneumonia (NCP, Covid-19)" (0096/2020/A, 40000euro) september **2020**- January **2022**) Principal Investigator
Collaboration with University Tor Vergata- Rome, Italy, Prof Santoro- / Faculty of Chemistry and Chemical Technology, Slovenia · Ljubljana- Prof Crtomir Podlipnik, /Centre of Excellence for Pharmaceutical Sciences, North West University, Potchefstroom Campus, South Africa, Prof Richard Haynes/ Prof Vincent Wong Neher's Biophysics Laboratory for Innovative Drug Discovery, State Key Laboratory of Quality Research in Chinese Medicine (4 paper accepted, 1 paper submitted, 2 paper in progress)
- 7) **FRG** (Faculty research grant) "Synthesis, computational studies and bioevaluation of celastrol derivatives as potential agents against Rheumatoid arthritis (FRG/2022/A, 10000 euro) may 2022- november 2023) Principal Investigator
Collaboration with Prof Vincent Wong Neher's Biophysics Laboratory for Innovative Drug Discovery, State Key Laboratory of Quality Research in Chinese Medicine (1 paper accepted +1 paper in progress)

Skills

Research Skills :

Organic Synthesis, Enzyme and Biochemical essays, Analytical Chemistry, Results publications and Journal articles writing

Teaching Skills:

Laboratory teacher for Fundamental of Chemistry, Analytical Chemistry, Organic Chemistry, Medicinal Chemistry and Phytochemistry for Chinese Medicines

Instruments:

NMR, HPLC -Mass 6230 Agilent, Fluorescence and UV Spectroscopy, Raman Spectroscopy, FT-IR, Spin Coating, MW Reactor, Profilometer

Management skills:

Student and Postdoctoral supervision, data analysis and experiment planning, laboratory materials purchasing for over 60 attendants

Computer skills:

XWinPlot, TopSpin, MestReNova. Chemical databanks (Scifinder Scholar

