

A: Publications in scientific journals, book chapters, and preprints

1. Serafim, R. A. M.*; Haarer, L.; Pedreira, J. G. B.; **Gehring, M.***
Covalent chemical probes for protein kinases. *Curr. Res. Chem. Biol.* **2023**, *3*, 100040.
IF: not available yet.
2. Diamanti, E.; Méndez, M.; Ross, T.; Kuttruff, C.A.; Lefranc, J.; Klingler, F.-M.; von Nussbaum, F.; Jung, M.; **Gehring, M.***
Frontiers in Medicinal Chemistry 2022 Goes Virtual. *ChemMedChem* **2022**, *17*, e202200419.
IF: 3.540.
3. Laufer, S.; Bajorath, J.; **Gehring, M.**; Gray, N.; Frye, S. Lindsley, C.W.
Publication Criteria and Requirements for Studies on Protein Kinase Inhibitors—What Is Expected? *J. Med. Chem.* **2022**, *65*, 6973–6974. IF: 8.039.
4. Hillebrand, L.; **Gehring, M.***
Never Gonna Give You Up - Current Developments in Covalent Protein Kinase Inhibitors. *Chimia* **2022**, *76*, 435–447. IF: 1.656
5. Abdelmalek, C. M.; Hu, Z.; Kronenberger, T.; Küblbeck, J.; Kinnen, F. J. M.; Hesse, S.S.; Malik, A.; Kudolo, M.; Niess, R.; **Gehring, M.**; Zender, L.; Witt-Enderby, P. A.; Zlotos, D. P.; Laufer, S. A. Gefitinib-Tamoxifen Hybrid Ligands as Potent Agents against Triple-Negative Breast Cancer. *J. Med. Chem.* **2022**, *65*, 4616–4632. IF: 8.039.
6. Serafim, R.A.M.; da Silva Santiago, A.; Schwalm, M. P.; Hu, Zexi; Dos Reis, C. V.; Takarada, J. E.; Mezzomo, P.; Massirer, K. B.; Kudolo, M.; Gerstenecker, S.; Chaikuad, A.; Zender, L.; Knapp, S.; Laufer, S.; Couñago, R. M.*; **Gehring, M.***
Development of the First Covalent Monopolar Spindle Kinase 1 (MPS1/TTK) Inhibitor. *J. Med. Chem.* **2022**, *65*, 3173–3192. IF: 8.039.
Previous version as preprint on *ChemRxiv*: <https://doi.org/10.26434/chemrxiv.14601264.v1>
7. Serafim, R.A.M.; Elkins, J. M.; Zuercher, W. J.; Laufer, S.*; **Gehring, M.***
Chemical Probes for Understudied Kinases: Challenges and Opportunities. *J. Med. Chem.* **2022**, *65*, 1132–1170. IF: 8.039.
8. Gerstenecker, S.; Haarer, L.; Schröder, M.; Kudolo, M.; Schwalm, M.P.; Wydra, V.; Serafim, R.A.M.; Chaikuad, A.; Knapp, S.; Laufer, S.; **Gehring, M.***
Discovery of a Potent and Highly Isoform-Selective Inhibitor of the Neglected Ribosomal Protein S6 Kinase Beta 2 (S6K2). *Cancers* **2021**, *13*, 5133. IF: 6.575.
Previous version as preprint on *ChemRxiv*: <https://doi.org/10.33774/chemrxiv-2021-pl2s1>
9. Saad, H.; Aziz, S.; **Gehring, M.**; Kramer, M.; Straetener, J.; Berscheid, A.; Brötz-Oesterhelt, H.; Gross, H.
Nocathioamides, uncovered by a Tunable Metabologenic Approach, define a Novel Class of Chimeric Lanthipeptides. *Angew. Chem. Int. Ed.* **2021**, *60*, 16472–16479. IF: 16.823.
10. Rocha C. M.; Alves A. M.; Bettanin B.F.; Majolo G.; **Gehring, M.**; Laufer, S.; Goettert, M.
Current Jakinibs for the Treatment of Rheumatoid Arthritis: A Systematic Review. *Inflammopharmacol.* **2021**, *29*, 595–615. IF: 5.093.

11. Warryn, L.; Dangy, J.-P. Gersbach, P.; **Gehring**, M.; Altmann, K.-H.; Pluschke, G. An Antigen Capture Assay for the Detection of Mycolactone, the Polyketide Toxin of *Mycobacterium ulcerans*. *J. Immunol.* **2021**, *206*, 2753–2762. IF: 5.426.
12. **Gehring**, M.*
Januskinase-Inhibitoren: Medizinische Chemie und strukturbasiertes Design. *Pharmakon*, **2021**, *2*, 109–117.
13. Wydra, V.; Gerstenecker, S.; Schollmeyer, D.; Andreev, S.; Dimitrov, T.; Serafim, R.A.M.; Laufer, S.; **Gehring**, M.*
N-(6-Chloro-3-nitropyridin-2-yl)-5-(1-methyl-1H-pyrazol-4-yl)isoquinolin-3-amine. *Molbank* **2021**, M1181.
14. Forster, M.; Liang, X. J.; Schröder, M.; Gerstenecker, S.; Chaikuad, A.; Knapp, S.; Laufer, S.; **Gehring**, M.*
Discovery of a Novel Class of Covalent Dual Inhibitors Targeting the Protein Kinases BMX and BTK. *Int. J. Mol. Sci.* **2020**, *21*, 9269. IF: 6.208
15. **Gehring**, M.*
Covalent Inhibitors: Back on Track? *Future Med. Chem.* **2020**, *12*, 1363–1368. IF: 4.767.
16. Dangy, J.-P.; Warryn, L.; Schäfer, A.; Ruggli, N.; Gersbach, P.; **Gehring**, M.; Altmann, K.-H.; Pluschke, G.
Development of an ELISA for the Quantification of Mycolactone, the Cytotoxic Macrolide Toxin of *Mycobacterium Ulcerans*. *PLOS Negl. Trop. Dis.* **2020**, *14*, e0008357. IF: 4.781
17. **Gehring**, M.*
Covalent Protein Kinase Inhibitors: An Overview. *Topics in Medicinal Chemistry* **2020**, Springer, Berlin, Heidelberg (ISSN: 1862-2461). https://dx.doi.org/10.1007/7355_2020_103
18. **Gehring**, M.*; Forster, M.
Covalent Janus Kinase 3 Inhibitors. *Topics in Medicinal Chemistry* **2020**, Springer, Berlin, Heidelberg (ISSN: 1862-2461). https://dx.doi.org/10.1007/7355_2020_96
19. **Gehring**, M.; Mäder, P.; Gersbach, P.; Pfeiffer, B.; Scherr, N.; Dangy, J.-P.; Pluschke; Altmann, K.-H.
Configurationaly Stabilized Analogs of *M. ulcerans* Exotoxins Mycolactones A and B Reveal the Importance of Side Chain Geometry for Mycolactone Virulence. *Org. Lett.* **2019**, *21*, 5853–5857. IF: 6.072.
20. **Gehring**, M.*; Laufer, S.
Emerging and Re-Emerging Warheads for Targeted Covalent Inhibitors: Applications in Medicinal Chemistry and Chemical Biology. *J. Med. Chem.* **2019**, *62*, 5673–5724. IF: 8.039.
21. Chen, D; **Gehring**, M.; Lorenz, S.
Developing Small-Molecule Inhibitors of HECT-Type Ubiquitin Ligases for Therapeutic Applications: Challenges and Opportunities. *ChemBioChem* **2018**, *19*, 2123–2135. IF: 3.461.

22. Forster, M.; Chaikuad, A.; Dimitrov, T.; Döring, E.; Holstein, J.; Berger, B.-T.; **Gehring**, M.; Ghoreschi, K.; Müller, S.; Knapp, S., Laufer, S. A.
Development, Optimization and Structure–Activity Relationships of Covalent-Reversible JAK3 Inhibitors Based on a Tricyclic Imidazo[5,4-*d*]pyrrolo[2,3-*b*]pyridine Scaffold. *J. Med. Chem.* **2018**, *61*, 5350–5366. IF: 8.039.
23. a) **Gehring**, M.; Laufer, S. A.
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b) **Gehring**, M.; Laufer, S. A.
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24. Forster, M.[#]; **Gehring**, M.^{##}; Laufer, S. A.* Recent Advances in JAK3 Inhibition: Isoform Selectivity by Covalent Cysteine Targeting. *Bioorg. Med. Chem. Lett.* **2017**, *27*, 4229–4237. IF: 2.940.
25. **Gehring**, M.; Altmann, K.-H.
The Chemistry and Biology of Mycolactones. *Beilstein J. Org. Chem.* **2017**, *13*, 1596–1660. IF: 2.544.
26. Bieri, R.; Scherr, N.; Ruf, M.-T.; Dangy, J.-P.; Gersbach, P.; **Gehring**, M.; Altmann, K.-H.; Pluschke, G.
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27. Forster, M.; Chaikuad, A.; Bauer, S. M.; Holstein, J.; Robers, M. B.; Corona, C. R.; **Gehring**, M.; Pfaffenrot, E.; Ghoreschi, K.; Knapp, S., Laufer, S. A.
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28. Ostrovskiy, D.; Rumpf, T.; Eib, J.; Lumbroso, A.; Slynko, I.; Klaeger, S.; Heinzlmeir, S.; Forster, M.; **Gehring**, M.; Pfaffenrot, E.; Bauer, S. M.; Schmidtkunz, K.; Wenzler, S.; Metzger, E.; Kuster, B.; Laufer, S. A.; Schüle, R.; Sippl, W.; Breit, B.; Jung, M.
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c-Jun N-terminal Kinase Inhibitors: A Patent Review (2010 - 2014). *Expert Opin. Ther. Pat.* **2015**, *25*, 849–872. IF: 6.714.
30. Koschitzky, I.; Gerhardt, H.; Laemmerhofer, M.; Kohout, M.; **Gehring**, M.; Laufer, S. A.; Pink, M.; Schmitz-Spanke, S.; Strube, C.; Kaiser, A.
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 32. **Gehring**, M.; Forster, M.; Laufer, S. A.
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Novel Hinge-Binding Motifs for Janus Kinase 3 Inhibitors: A Comprehensive Structure–Activity Relationship Study on Tofacitinib Bioisosteres. *ChemMedChem* **2014**, *9*, 2516–2527. IF: 3.540.
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 37. **Gehring**, M.; Pfaffenrot, E.; Keck, P. R. W. E. F.; Schollmeyer, D.; Laufer, S. A.
2-(3-((3*R*,4*R*)-4-Methyl-3-[methyl(7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl)amino]piperidin-1-yl)oxetan-3-yl)acetonitrile Monohydrate. *Acta Crystallogr. Sect. E Struct. Rep. Online* **2014**, *70*, o382–o383. IF: 0.347 (2011).
 38. **Gehring**, M.; Forster, M.; Schollmeyer, D.; Laufer, S. A.
tert-Butyl-*N*-[(3*R*,4*R*)-1-(2-cyanoacetyl)-4-methylpiperidin-3-yl]-*N*-methylcarbamate. *Acta Crystallogr. Sect. E Struct. Rep. Online* **2013**, *69*, o935–o935. IF: 0.347 (2011).
 39. Zamboulis, A.; Rahier, N. J.; **Gehring**, M.; Cattoën, X.; Niel, G.; Bied, C.; Moreau, J. J. E.; Man, M. W. C.
Silica-Supported L-Proline Organocatalysts for Asymmetric Aldolisation. *Tetrahedron Asymmetry* **2009**, *20*, 2880–2885. IF: 2.126 (2016).
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B: Cover artworks in scientific journals

1. Wydra, V.; Gerstenecker, S.; Schollmeyer, D.; Andreev, S.; Dimitrov, T.; Serafim, R.A.M.; Laufer, S.; **Gehring**, M.*
Issue Cover: N-(6-Chloro-3-nitropyridin-2-yl)-5-(1-methyl-1*H*-pyrazol-4-yl)isoquinolin-3-amine. *Molbank* **2021**, *1* (<https://www.mdpi.com/1422-8599/2021/1>).

2. **Gehring, M.**; Pfaffenrot, E.; Bauer, S.; Laufer, S. A.
Back Cover: Design and Synthesis of Tricyclic JAK3 Inhibitors with Picomolar Affinities as Novel Molecular Probes. *ChemMedChem* **2014**, *9*, 412. IF: 3.540.
3. Bauer, S. M.; **Gehring, M.**; Laufer, S. A.
Front Cover: A Direct Enzyme-Linked Immunosorbent Assay (ELISA) for the Quantitative Evaluation of Janus Kinase 3 (JAK3) Inhibitors. *Anal. Methods* **2014**, *6*, 8437.
IF: 3.532.