

2014

- Agullo-Pascual E, Lin X, Leo-Macias A, Zhang M, Liang FX, Li Z, Pfenniger A, **Lübke** I, Keegan S, Fenyö D, **Willecke K**, Rothenberg E, Delmar M. Super-resolution imaging reveals that loss of the C-terminus of connexin43 limits microtubule plus-end capture and Nav1.5 localization at the intercalated disc. *Cardiovasc Res*. 2014 Nov 1;104(2):371-81.
- Alekseyenko OV, Chan YB, Fernandez Mde L, **Bülow T**, **Pankratz MJ**, Kravitz EA. Single serotonergic neurons that modulate aggression in *Drosophila*. *Curr Biol*. 2014 Nov 17;24(22):2700-7.
- Anighoro A, **Bajorath J**, Rastelli G. Polypharmacology: challenges and opportunities in drug discovery. *J Med Chem*. 2014 Oct 9;57(19):7874-87.
- Aslam S, Zaib S, Ahmad M, Gardiner JM, Ahmad A, Hameed A, **Furtmann N**, Gütschow M, **Bajorath J**, Iqbal J. Novel structural hybrids of pyrazolobenzothiazines with benzimidazoles as cholinesterase inhibitors. *Eur J Med Chem*. 2014 May 6;78:106-117.
- Austermann J, Friesenhagen J, Fassl SK, Ortkras T, Burgmann J, Barczyk-Kahlert K, Faist E, Zedler S, Pirr S, Rohde C, Müller-Tidow C, von Köckritz-Blickwede M, von Kaisenberg CS, Flohé SB, **Ulas T**, **Schultze JL**, Roth J, Vogl T, Viemann D. Alarmins MRP8 and MRP14 Induce Stress Tolerance in Phagocytes under Sterile Inflammatory Conditions. *Cell Rep*. 2014 Dec 24;9(6):2112-23.
- Bajorath J**. Evolution of the activity cliff concept for structure-activity relationship analysis and drug discovery. *Future Med Chem*. 2014 Sep;6(14):1545-9.
- Bajorath J**. Improving data mining strategies for drug design. *Future Med Chem*. 2014 Mar;6(3):255-7.
- Bajorath J**. On data sharing in computational drug discovery and the need for data notes. *F1000Res*. 2014 Nov 14;3:280.
- Bajorath J**. Activity artifacts in drug discovery and different facets of compound promiscuity. *F1000Res*. 2014 Oct 3;3:233.
- Bald T, **Quast T**, Landsberg J, Rogava M, Glodde N, Lopez-Ramos D, Kohlmeyer J, Riesenberger S, van den Boorn-Konijnenberg D, Hömig-Hölzel C, Reuten R, **Schadow B**, **Weighardt H**, Wenzel D, Helfrich I, Schadendorf D, Bloch W, Bianchi ME, Lugassy C, Barnhill RL, Koch M, Fleischmann BK, **Förster I**, Kastenmüller W, **Kolanus W**, Hölzel M, Gaffal E, Tüting T. Ultraviolet-radiation-induced inflammation promotes angiogenesis and metastasis in melanoma. *Nature*. 2014 Mar 6;507(7490):109-113.
- Balfer J**, **Bajorath J**. Introduction of a methodology for visualization and graphical interpretation of Bayesian classification models. *J Chem Inf Model*. 2014 Sep 22;54(9):2451-68.
- Balfer J**, **Heikamp K**, Laufer S, **Bajorath J**. Modeling of compound profiling experiments using support vector machines. *Chem Biol Drug Des*. 2014 Jul;84(1):75-85.
- Bosen F**, Schütz M, Beinhauer A, Strenzke N, Franz T, **Willecke K**. The Clouston syndrome mutation connexin30 A88V leads to hyperproliferation of sebaceous glands and hearing impairments in mice. *FEBS Lett*. 2014 May 2;588(9):1795-801.
- Breiden B**, **Sandhoff K**. The role of sphingolipid metabolism in cutaneous permeability barrier formation. *Biochim Biophys Acta*. 2014 Mar;1841(3):441-52.
- Böttcher JP, Schanz O, Garbers C, Zaremba A, Hegenbarth S, Kurts C, **Beyer M**, **Schultze JL**, Kastenmüller W, Rose-John S, Knolle PA. IL-6 trans-signaling-dependent rapid development of cytotoxic CD8+ T cell function. *Cell Rep*. 2014 Sep 11;8(5):1318-27.

- Bülow MH, Bülow TR, Hoch M, Pankratz MJ, Jünger MA.** Src tyrosine kinase signaling antagonizes nuclear localization of FOXO and inhibits its transcription factor activity. *Sci Rep.* 2014 Feb 11;4:4048.
- de la Vega de León A, Bajorath J.** Prediction of compound potency changes in matched molecular pairs using support vector regression. *J Chem Inf Model.* 2014 Oct 27;54(10):2654-63.
- de la Vega de León A, Bajorath J.** Formation of activity cliffs is accompanied by systematic increases in ligand efficiency from lowly to highly potent compounds. *AAPS J.* 2014 Mar;16(2):335-41.
- De Nardo D, Labzin LI, Kono H, Seki R, Schmidt SV, **Beyer M**, Xu D, Zimmer S, Lahrmann C, Schildberg FA, Vogelhuber J, Kraut M, **Ulas T**, Kerksiek A, Krebs W, Bode N, Grebe A, Fitzgerald ML, Hernandez NJ, Williams BR, Knolle P, Kneilling M, Röcken M, Lütjohann D, Wright SD, **Schultze JL**, Latz E. High-density lipoprotein mediates anti-inflammatory reprogramming of macrophages via the transcriptional regulator ATF3. *Nat Immunol.* 2014 Feb;15(2):152-60.
- Dimova D, Bajorath J.** Extraction of SAR information from activity cliff clusters via matching molecular series. *Eur J Med Chem.* 2014 Nov 24;87:454-60.
- Dimova D, Stumpfe D, Bajorath J.** Systematic assessment of coordinated activity cliffs formed by kinase inhibitors and detailed characterization of activity cliff clusters and associated SAR information. *Eur J Med Chem.* 2015 Jan 27;90:414-27.
- Dimova D, Stumpfe D, Bajorath J.** Method for the evaluation of structure-activity relationship information associated with coordinated activity cliffs. *J Med Chem.* 2014 Aug 14;57(15):6553-63.
- Ebel P, Imgrund S, Vom Dorp K, Hofmann K, Maier H, Drake H, Degen J, Dörmann P, Eckhardt M, Franz T, Willecke K.** Ceramide synthase 4 deficiency in mice causes lipid alterations in sebum and results in alopecia. *Biochem J.* 2014 Jul 1;461(1):147-58.
- Eberle M, **Ebel P**, Wegner MS, Männich J, Tafferner N, Ferreiros N, Birod K, Schreiber Y, Krishnamoorthy G, **Willecke K**, Geisslinger G, Grösch S, Schiffmann S. Regulation of ceramide synthase 6 in a spontaneous experimental autoimmune encephalomyelitis model is sex dependent. *Biochem Pharmacol.* 2014 Nov 15;92(2):326-35.
- Ernst D, Murphy SM, Sathiyandan K, Wei Y, Othman A, Laur. M, Liu YT, **Penno A**, Blake J, Donaghy M, Houlden H, Reilly MM, Hornemann T. Novel HSAN1 Mutation in Serine Palmitoyltransferase Resides at a Putative Phosphorylation Site That Is Involved in Regulating Substrate Specificity. *Neuromolecular Med.* 2015 Jan 8.
- Famulok M, Mayer G.** Aptamers and SELEX in Chemistry & Biology. *Chem Biol.* 2014 Sep 18;21(9):1055-8.
- Fassl SK, Austermann J, **Papantonopoulou O**, Riemenschneider M, **Xue J**, Bertheloot D, Freise N, Spiekermann C, Witten A, Viemann D, Kirschnek S, Stoll M, Latz E, **Schultze JL**, Roth J, Vogl T. Transcriptome Assessment Reveals a Dominant Role for TLR4 in the Activation of Human Monocytes by the Alarmin MRP8. *J Immunol.* 2015 Jan 15;194(2):575-83.
- Fischer N, Raunest M, Schmidt TH, Koch DC, Kandt C. Efflux pump-mediated antibiotics resistance: insights from computational structural biology. *Interdiscip Sci.* 2014 Mar;6(1):1-12.
- Furtmann N, Hu Y, Bajorath J.** Comprehensive analysis of three-dimensional activity cliffs formed by kinase inhibitors with different binding modes and cliff mapping of structural analogues. *J Med Chem.* 2015 Jan 8;58(1):252-64.
- Gantner M, Schwarzmann G, Sandhoff K, Kolter T.** Partial synthesis of ganglioside and lysoganglioside lipofoms as internal standards for MS quantification. *J Lipid Res.* 2014 Dec;55(12):2692-704.
- Globisch T, Steiner N, Fülle L, Lukacs-Kornek V, Degrandi D, Dresing P, Alferink J, Lang R, Pfeffer K, Beyer M, Weighardt H, Kurts C, Ulas T, Schultze JL, Förster I.** Cytokine-dependent regulation of dendritic cell differentiation in the splenic microenvironment. *Eur J Immunol.* 2014 Feb;44(2):500-10.
- Griemsmann S, Höft SP, Bedner P, Zhang J, von Staden E, Beinhauer A, Degen J, Dublin P, Cope DW, Richter N, Crunelli V, Jabs R, **Willecke K**, Theis M, Seifert G, Kettenmann H, Steinhilber C, user C. Characterization of Pan-glial Gap Junction Networks in the Thalamus, Neocortex, and Hippocampus Reveals a Unique Population of Glial Cells. *Cereb Cortex.* 2014 Jul 17. pii: bhu157.
- Gupta-Ostermann D, Shanmugasundaram V, Bajorath J.** Neighborhood-based prediction of novel active compounds from SAR matrices. *J Chem Inf Model.* 2014 Mar 24;54(3):801-9.

- Gupta-Ostermann D, Bajorath J.** The 'SAR Matrix' method and its extensions for applications in medicinal chemistry and chemogenomics. Version 2. *F1000Res*. 2014 May 16 [revised 2014 Jun 23];3:113.
- Gündner AL, Hahn I, Sendscheid O, Aberle H, Hoch M.** The PIKE homolog Centaurin gamma regulates developmental timing in *Drosophila*. *PLoS One*. 2014 May 20;9(5):e97332.
- Hamedani NS, Blümke F, **Tolle F**, Rohrbach F, Rühl H, Oldenburg J, **Mayer G**, Pöttsch B, Müller J. Capture and Release (CaR): a simplified procedure for onetube isolation and concentration of single-stranded DNA during SELEX. *Chem Commun (Camb)*. 2015 Jan 21;51(6):1135-8.
- Heikamp K, Bajorath J.** Support vector machines for drug discovery. *Expert Opin Drug Discov*. 2014 Jan;9(1):93-104.
- Hofmann K, Thiele C, Schött HF, Gaebler A, Schoene M, Kiver Y, Friedrichs S, Lütjohann D, Kuerschner L. A novel alkyne cholesterol to trace cellular cholesterol metabolism and localization. *J Lipid Res*. 2014 Mar;55(3):583-91.
- Homsy Y, Schloetel JG, Scheffer KD, Schmidt TH, Destainville N, Florin L, Lang T.** The extracellular delta-domain is essential for the formation of CD81 tetraspanin webs. *Biophys J*. 2014 Jul 1;107(1):100-13.
- Hu Y, Bajorath J.** Exploring the scaffold universe of kinase inhibitors. *J Med Chem*. 2015 Jan 8;58(1):315-32. doi: 10.1021/jm501237k. Epub 2014 Sep 16.
- Hu Y, Furtmann N, Bajorath J.** Current compound coverage of the kinome. *J Med Chem*. 2015 Jan 8;58(1):30-40. doi: 10.1021/jm5008159. Epub 2014 Jul 30.
- Hu Y, Bajorath J.** Influence of search parameters and criteria on compound selection, promiscuity, and pan assay interference characteristics. *J Chem Inf Model*. 2014 Nov 24;54(11):3056-66.
- Hu Y, Lounkine E, Bajorath J.** Many approved drugs have bioactive analogs with different target annotations. *AAPS J*. 2014 Jul;16(4):847-59.
- Hu Y, Bajorath J.** Many drugs contain unique scaffolds with varying structural relationships to scaffolds of currently available bioactive compounds. *Eur J Med Chem*. 2014 Apr 9;76:427-34.
- Hu Y, Bajorath J.** Learning from 'big data': compounds and targets. *Drug Discov Today*. 2014 Apr;19(4):357-60.
- Hu Y, Bajorath J.** Follow up: Compound data sets and software tools for chemoinformatics and medicinal chemistry applications: update and data transfer. *F1000Res*. 2014 Mar 11;3:69.
- Hu Y, Bajorath J.** Monitoring drug promiscuity over time. Version 2. *F1000Res*. 2014 Sep 11 [revised 2014 Nov 4];3:218.
- Hu Y, Gupta-Ostermann D, Bajorath J.** Exploring compound promiscuity patterns and multi-target activity spaces. *Comput Struct Biotechnol J*. 2014 Jan 29;9:e201401003.
- Hu Y, de la Vega de León A, Zhang B, Bajorath J.** Matched molecular pair-based data sets for computer-aided medicinal chemistry. Version 2. *F1000Res*. 2014 Feb 4 [revised 2014 Feb 21];3:36.
- Itoe MA, Sampaio JL, Cabal GG, Real E, Zuzarte-Luis V, March S, Bhatia SN, Frischknecht F, **Thiele C**, Shevchenko A, Mota MM. Host cell phosphatidylcholine is a key mediator of malaria parasite survival during liver stage infection. *Cell Host Microbe*. 2014 Dec 10;16(6):778-86.
- Kaczmarek J, **Homsy Y, van Üüm J, Metzger C, Knolle PA, Kolanus W, Lang T, Diehl L.** Liver sinusoidal endothelial cell-mediated CD8 T cell priming depends on co-inhibitory signal integration over time. *PLoS One*. 2014 Jun 12;9(6):e99574.
- Kadaba Srinivasan P, Fet N, Bleilevens C, Afify M, Doorschodt B, Yagi S, **van Echten-Deckert G**, Tolba RH. Hydroxyectoine ameliorates preservation injury in deceased after cardiac death donors in experimental liver grafts. *Ann Transplant*. 2014 Apr 14;19:165-73.
- Karaca I, Tamboli IY, Glebov K, Richter J, Fell LH, Grimm MO, Haupenthal VJ, Hartmann T, Graler MH, **van Echten-Deckert G**, Walter J. (2014). Deficiency of sphingosine-1-phosphate lyase impairs lysosomal metabolism of the amyloid precursor protein. *J Biol Chem*.
- Kayastha S, Dimova D, Iyer P, Vogt M, Bajorath J.** Large-scale assessment of activity landscape feature probabilities of bioactive compounds. *J Chem Inf Model*. 2014 Feb 24;54(2):442-50.
- Khan I, Ibrar A, Zaib S, Ahmad S, Furtmann N, Hameed S, Simpson J, **Bajorath J**, Iqbal J. Active compounds from a diverse library of triazolothiadiazole and triazolothiadiazine scaffolds: synthesis, crystal structure determination, cytotoxicity, cholinesterase inhibitory activity, and binding mode analysis. *Bioorg Med Chem*. 2014 Nov 1;22(21):6163-73.

- Koch DC, **Schmidt TH**, Sahl HG, Kubitscheck U, Kandt C. Structural dynamics of the cell wall precursor lipid II in the presence and absence of the lantibiotic nisin. *Biochim Biophys Acta*. 2014 Dec;1838(12):3061-8.
- Krebs W, Schmidt SV**, Goren A, De Nardo D, Labzin L, Bovier A, **Ulas T, Theis H, Kraut M, Latz E, Beyer M, Schultze JL**. Optimization of transcription factor binding map accuracy utilizing knockout-mouse models. *Nucleic Acids Res*. 2014 Dec 1;42(21):13051-60.
- Kuerschner L, Thiele C**. Multiple bonds for the lipid interest. *Biochim Biophys Acta*. 2014 Aug;1841(8):1031-7.
- Kummer MP, Hammerschmidt T, Martinez A, Terwel D, Eichele G, Witten A, Figura S, Stoll M, Schwartz S, Pape HC, **Schultze JL**, Weinshenker D, Heneka MT. Ear2 deletion causes early memory and learning deficits in APP/PS1 mice. *J Neurosci*. 2014 Jun 25;34(26):8845-54.
- Laufer S, **Bajorath J**. Advancing the kinase field: new targets and second generation inhibitors. *J Med Chem*. 2015 Jan 8;58(1):1.
- Lennarz S**, Heider E, Blind M, **Mayer G**. An Aptamer to the MAP Kinase Insert Region. *ACS Chem Biol*. 2015 Jan 16;10(1):320-7.
- Lentz CS, Sattler JM, Fendler M, Gottwalt S, **Halls VS**, Strassel S, Arriens S, **Hannam JS**, Specht S, **Famulok M**, Mueller AK, Hoerauf A, Pfarr KM. In Vitro Activity of wALADin Benzimidazoles against Different Life Cycle Stages of Plasmodium Parasites. *Antimicrob Agents Chemother*. 2015 Jan;59(1):654-8.
- Li T, Lohmann F, Famulok M**. Interlocked DNA nanostructures controlled by a reversible logic circuit. *Nat Commun*. 2014 Sep 17;5:4940.
- Lohmann F, Weigandt J, Valero J, Famulok M**. Logic gating by macrocycle displacement using a double-stranded DNA [3]rotaxane shuttle. *Angew Chem Int Ed Engl*. 2014 Sep 22;53(39):10372-6.
- Lohmann F, Valero J, Famulok M**. A novel family of structurally stable double stranded DNA catenanes. *Chem Commun (Camb)*. 2014 Jun 11;50(46):6091-3.
- Lohmann D, Spandl J, Stevanovic A, Schoene M**, Philippou-Massier J, **Thiele C**. Monoubiquitination of ancient ubiquitous protein 1 promotes lipid droplet clustering. *PLoS One*. 2013 Sep 5;8(9):e72453.
- Lübke-meierl, Bosen F, Kim JS, Sasse P, Malan D, Fleischmann BK, Willecke K**. The Human Connexin43E42K Mutation from a Sudden Infant Death Victim Leads to Impaired Ventricular Activation and Neonatal Death in Mice. *Circ Cardiovasc Genet*. 2014 Dec 10. pii: CIRCGENETICS.114.000793.
- Lünse CE**, Schüller A, **Mayer G**. The promise of riboswitches as potential antibacterial drug targets. *Int J Med Microbiol*. 2014 Jan;304(1):79-92.
- Lünse CE**, Scott FJ, Suckling CJ, **Mayer G**. Novel TPP-riboswitch activators bypass metabolic enzyme dependency. *Front Chem*. 2014 Jul 28;2:53.
- Lünse CE, Mayer G**. Screening assays to identify artificial glmS ribozyme activators. *Methods Mol Biol*. 2014;1103:199-209.
- Ma Y, Mattarollo SR, Adjemian S, Yang H, Aymeric L, Hannani D, Portela Catani JP, Duret H, Teng MW, Kepp O, Wang Y, Sistigu A, **Schultze JL**, Stoll G, Galluzzi L, Zitvogel L, Smyth MJ, Kroemer G. CCL2/CCR2-dependent recruitment of functional antigen-presenting cells into tumors upon chemotherapy. *Cancer Res*. 2014 Jan 15;74(2):436-45.
- MacPherson L, Ahmed S, Tamblyn L, Krutmann J, **Förster I, Weighardt H**, Matthews J. Aryl hydrocarbon receptor repressor and TiPARP (ARTD14) use similar, but also distinct mechanisms to repress aryl hydrocarbon receptor signaling. *Int J Mol Sci*. 2014 May 6;15(5):7939-57.
- Marsching C, Rabionet M, Mathow D, Jennemann R, **Kremser C**, Porubsky S, Bolenz C, **Willecke K**, Gröne HJ, Hopf C, Sandhoff R. Renal sulfatides: sphingoid base-dependent localization and region-specific compensation of CerS2-dysfunction. *J Lipid Res*. 2014 Nov;55(11):2354-69.
- Mass E**, Wachten D, **Aschenbrenner AC, Voelzmann A, Hoch M**. Murine Creld1 controls cardiac development through activation of calcineurin/NFATc1 signaling. *Dev Cell*. 2014 Mar 31;28(6):711-26.
- Moessinger C, Klizaitė K, Steinhagen A, Philippou-Massier J**, Shevchenko A, **Hoch M**, Ejsing CS, **Thiele C**. Two different pathways of phosphatidylcholine synthesis, the Kennedy Pathway and the Lands Cycle, differentially regulate cellular triacylglycerol storage. *BMC Cell Biol*. 2014 Dec 10;15(1):43.

- Murray PJ, Allen JE, Biswas SK, Fisher EA, Gilroy DW, Goerdts S, Gordon S, Hamilton JA, Ivashkiv LB, Lawrence T, Locati M, Mantovani A, Martinez FO, Mege JL, Mosser DM, Natoli G, Saeij JP, **Schultze JL**, Shirey KA, Sica A, Suttles J, Udalova I, van Ginderachter JA, Vogel SN, Wynn TA. Macrophage activation and polarization: nomenclature and experimental guidelines. *Immunity*. 2014 Jul 17;41(1):14-20.
- Niño-Castro A**, Abdullah Z, Popov A, **Thabet Y**, **Beyer M**, Knolle P, Domann E, Chakraborty T, **Schmidt SV**, **Schultze JL**. The IDO1-induced kynurenines play a major role in the antimicrobial effect of human myeloid cells against *Listeria monocytogenes*. *Innate Immun*. 2014 May;20(4):401-11.
- Oninla VO, **Breiden B**, Babalola JO, **Sandhoff K**. Acid sphingomyelinase activity is regulated by membrane lipids and facilitates cholesterol transfer by NPC2. *J Lipid Res*. 2014 Dec;55(12):2606-19. doi: 10.1194/jlr.M054528. Epub 2014 Oct 22. PubMed PMID: 25339683; PubMed Central PMCID: PMC4242453.
- Papan C, Penkov S, Herzog R, **Thiele C**, Kurzchalia T, Shevchenko A: Systematic screening for novel lipids by shotgun lipidomics, *Anal Chem* 2014, 86:2703-2710
- Pyka AM**, **Domnick C**, **Braun F**, **Kath-Schorr S**. Diels-Alder cycloadditions on synthetic RNA in mammalian cells. *Bioconjug Chem*. 2014 Aug 20;25(8):1438-43.
- Rauen J, Kreer C, Paillard A, van Duikeren S, Benckhuijsen WE, Camps MG, Valentijn AR, Ossendorp F, Drijfhout JW, Arens R, Burgdorf S. Enhanced cross-presentation and improved CD8+ T cell responses after mannosylation of synthetic long peptides in mice. *PLoS One*. 2014 Aug 19;9(8):e103755.
- Saka SK, Honigsmann A, Eggeling C, Hell SW, **Lang T**, Rizzoli SO. Multi-protein assemblies underlie the mesoscale organization of the plasma membrane. *Nat Commun*. 2014 Jul 25;5:4509.
- Schiwon M, Weisheit C, Franken L, Gutweiler S, Dixit A, Meyer-Schwesinger C, Pohl JM, Maurice NJ, Thiebes S, Lorenz K, Quast T, Fuhrmann M, Baumgarten G, Lohse MJ, Opdenakker G, Bernhagen J, Bucala R, Panzer U, **Kolanus W**, Gröne HJ, Garbi N, Kastenmüller W, Knolle PA, Kurts C, Engel DR. Crosstalk between sentinel and helper macrophages permits neutrophil migration into infected uroepithelium. *Cell*. 2014 Jan 30;156(3):456-68.
- Schmidt SV**, **Schultze JL**. New Insights into IDO Biology in Bacterial and Viral Infections. *Front Immunol*. 2014 Aug 11;5:384.
- Schmöle AC, Lundt R, Ternes S, Albayram Ö, **Ulas T**, **Schultze JL**, Bano D, Nicotera P, Alferink J, Zimmer A. Cannabinoid receptor 2 deficiency results in reduced neuroinflammation in an Alzheimer's disease mouse model. *Neurobiol Aging*. 2015 Feb;36(2):710-9.
- Schneider C, Nobs SP, Kurrer M, Rehrauer H, **Thiele C**, Kopf M. Induction of the nuclear receptor PPAR- α by the cytokine GM-CSF is critical for the differentiation of fetal monocytes into alveolar macrophages. *Nat Immunol*. 2014 Nov;15(11):1026-37.
- Schoofs A**, **Hückesfeld S**, **Surendran S**, **Pankratz MJ**. Serotonergic pathways in the *Drosophila* larval enteric nervous system. *J Insect Physiol*. 2014 Oct;69:118-25.
- Schoofs A**, **Hückesfeld S**, **Schlegel P**, **Miroschnikow A**, Peters M, Zeymer M, Spieß R, Chiang AS, **Pankratz MJ**. Selection of motor programs for suppressing food intake and inducing locomotion in the *Drosophila* brain. *PLoS Biol*. 2014 Jun 24;12(6):e1001893.
- Schuette V**, **Burgdorf S**. The ins-and-outs of endosomal antigens for cross-presentation. *Curr Opin Immunol*. 2014 Feb;26:63-8.
- Schultze JL**. Precision attack on calcineurin in macrophages: a new anti-inflammatory weapon. *EMBO J*. 2014 May 16;33(10):1087-8.
- Schulze H**, **Sandhoff K**. Sphingolipids and lysosomal pathologies. *Biochim Biophys Acta*. 2014 May;1841(5):799-810.
- Schwarzmann G**, Arenz C, **Sandhoff K**. Labeled chemical biology tools for investigating sphingolipid metabolism, trafficking and interaction with lipids and proteins. *Biochim Biophys Acta*. 2014 Aug;1841(8):1161-73.
- Sistigu A, Yamazaki T, Vacchelli E, Chaba K, Enot DP, Adam J, Vitale I, Goubar A, Baracco EE, Remédios C, Fend L, Hannani D, Aymeric L, Ma Y, Niso-Santano M, Kepp O, **Schultze JL**, Tüting T, Belardelli F, Bracci L, La Sorsa V, Ziccheddu G, Sestili P, Urbani F, Delorenzi M, Lacroix-Triki M, Quidville V, Conforti R, Spano JP, Pusztai L, Poirier-Colame V, Delalogue S, Penault-Llorca F, Ladoire S, Arnould L, Cyrta J, Dessoliers MC, Eggermont A, Bianchi ME, Pittet M, Engblom C, Pfirschke C,

- Prévile X, Uzè G, Schreiber RD, Chow MT, Smyth MJ, Proietti E, André F, Kroemer G, Zitvogel L. Cancer cell-autonomous contribution of type I interferon signaling to the efficacy of chemotherapy. *Nat Med*. 2014 Nov;20(11):1301-9.
- Sommer D, Peters AE, Baumgart AK, **Beyer M**. TALEN-mediated genome engineering to generate targeted mice. *Chromosome Res*. 2015 Jan 18
- Sommer D, Peters A, Wirtz T, **Mai M, Ackermann J, Thabet Y, Schmidt J, Weighardt H**, Wunderlich FT, **Degen J, Schultze JL, Beyer M**. Efficient genome engineering by targeted homologous recombination in mouse embryos using transcription activator-like effector nucleases. *Nat Commun*. 2014;5:3045.
- Stumpfe D, Hu Y, Dimova D, Bajorath J**. Recent progress in understanding activity cliffs and their utility in medicinal chemistry. *J Med Chem*. 2014 Jan 9;57(1):18-28.
- Stumpfe D, Dimova D, Bajorath J**. Composition and topology of activity cliff clusters formed by bioactive compounds. *J Chem Inf Model*. 2014 Feb 24;54(2):451-61.
- Stumpfe D, Bajorath J**. Activity cliff networks for medicinal chemistry. *Drug Dev Res*. 2014 Aug;75(5):291-8.
- Stumpfe D, de la Vega de León A, Dimova D, Bajorath J**. Advancing the activity cliff concept, part II. *F1000Res*. 2014 Mar 18;3:75.
- Tolle F**, Wilke J, Wengel J, **Mayer G**. By-product formation in repetitive PCR amplification of DNA libraries during SELEX. *PLoS One*. 2014 Dec 9;9(12):e114693.
- van Echten-Deckert G, Hagen-Euteneuer N**, Karaca I, Walter J. Sphingosine-1-phosphate: boon and bane for the brain. *Cell Physiol Biochem*. 2014;34(1):148-57.
- Varma D, Bülow MH, Pesch YY, Loch G, Hoch M**. Forkhead, a new cross regulator of metabolism and innate immunity downstream of TOR in *Drosophila*. *J Insect Physiol*. 2014 Oct;69:80-8.
- Wedeking A, Hagen-Euteneuer N, Gurgui M, Broere R**, Lentzen G, Tolba RH, Galinski E, **van Echten-Deckert G** (2014). A lipid anchor improves the protective effect of ectoine in inflammation, *Curr Med Chem*, 21:2565-2572
- Wolf MJ, Adili A, **Piotrowitz K**, Abdullah Z, Boege Y, Stemmer K, Ringelhan M, Simonavicius N, Egger M, Wohlleber D, Lorentzen A, Einer C, Schulz S, Clavel T, Protzer U, **Thiele C**, Zischka H, Moch H, Tschöp M, Tumanov AV, Haller D, Unger K, Karin M, Kopf M, Knolle P, Weber A, Heikenwalder M. Metabolic activation of intrahepatic CD8+ T cells and NKT cells causes nonalcoholic steatohepatitis and liver cancer via cross-talk with hepatocytes. *Cancer Cell*. 2014 Oct 13;26(4):549-64.
- Wysocka M, Gruba N, Miecznikowska A, Popow-Stellmaszyk J, Gütschow M, Stirnberg M, Furtmann N, **Bajorath J**, Lesner A, Rolka K. Substrate specificity of human matriptase-2. *Biochimie*. 2014 Feb;97:121-7.
- Xue J, Schmidt SV, Sander J, Draffehn A, Krebs W, Quester I**, De Nardo D, **Gohel TD**, Emde M, **Schmidleithner L**, Ganesan H, **Nino-Castro A, Mallmann MR**, Labzin L, **Theis H, Kraut M, Beyer M**, Latz E, Freeman TC, **Ulas T, Schultze JL**. Transcriptome-based network analysis reveals a spectrum model of human macrophage activation. *Immunity*. 2014 Feb 20;40(2):274-88.
- Yassin AA, Elwaseef AM, Elnashar MM, Oldenburg J, **Mayer G**, Pöttsch B, Müller J. Protamine-adsorbed magnetic nanoparticles for efficient isolation and concentration of hepatitis-C virus from human plasma samples. *Chem Commun (Camb)*. 2014 Jan 18;50(5):590-2
- Zhang B, Vogt M, Bajorath J**. Design of an activity landscape view taking compound-based feature probabilities into account. *J Comput Aided Mol Des*. 2014 Sep;28(9):919-26.
- Zhang B, Hu Y, Bajorath J**. AnalogExplorer: a new method for graphical analysis of analog series and associated structure-activity relationship information. *J Med Chem*. 2014 Nov 13;57(21):9184-94.
- Zwierzyna M, Vogt M, Maggiora GM, Bajorath J**. Design and characterization of chemical space networks for different compound data sets. *J Comput Aided Mol Des*. 2015 Feb;29(2):113-25.