Comparison between 2D and 3D-QSAR approaches to correlate inhibitor activity for a series of indole amide hydroxamic acid
Katritzky, Alan R.; Slavov, Svetoslav; **Dobchev, Dimitar**; **Karelson, Mati** QSAR & combinatorial science 2007 / 3, p. 333-345 https://onlinelibrary.wiley.com/doi/abs/10.1002/qsar.200630021

Correlation of blood-brain penetration and human serum albumin binding with theoretical descriptiors
Karelson, Mati; **Dobchev, Dimitar**; Tamm, Tarmo; Tulp, Indrek; Jänes, Jaak; Tämm, Kaido; **Lomaka, Andre**; **Savchenko, Deniss**; **Karelson, Gunnar** Arkivoc 2008 / XVI, p. 38-60 : ill https://www.arkat-usa.org/get-file/26925/

Fragment-based development of HCV protease inhibitors for the treatment of hepatitis C
Karelson, Mati; **Dobchev, Dimitar**; **Karelson, Gunnar**; Tamm, Tarmo; Tämm, Kaido; Nikonov, Andrei; Mutso, Margit; Merits, Andres Current computer-aided drug design 2012 / p. 55-61 https://www.researchgate.net/publication/221745366_Fragment-Based_Development_of_HCV_Protease_Inhibitors_for_the_Treatment_of_Hepatitis_C

Have artificial neural networks met expectations in drug discovery as implemented in QSAR framework?
Dobchev, Dimitar; Karelson, Mati Expert Opinion on Drug Discovery 2016 / p. 627 - 639
https://doi.org/10.1080/17460441.2016.1186876 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Legitimate utilization of large descriptor pools for QSPR/QSAR models
Katritzky, Alan R.; **Dobchev, Dimitar**; Slavov, Svetoslav; **Karelson, Mati** Journal of chemical information and modeling 2008 / 11, p. 2207-2213 : ill https://pubs.acs.org/doi/10.1021/ci8002073

Novel computational models for predicting dopamine interactions
Katritzky, Alan R.; **Dobchev, Dimitar**; Stoyanova-Slavova, Iva B.; Kuanar, Minati; Bespalov, Maxim M.; **Karelson, Mati**; **Saarma, Mart** Experimental neurology 2008 / 1, p. 150-171 https://www.sciencedirect.com/science/article/pii/S0014488608000368

QSAR modeling of the antifungal activity against Candida albicans for a diverse set of organic compounds
Katritzky, Alan R.; Slavov, Svetoslav; **Dobchev, Dimitar**; **Karelson, Mati** Bioorganic & medicinal chemistry 2008 / 14, p. 7055-7069 : ill https://www.sciencedirect.com/science/article/pii/S0968089608004446

QSAR study of pharmacological permeabilities
Karelson, Mati; **Karelson, Gunnar**; Tamm, Tarmo; Tulp, Indrek; Jänes, Jaak; Tämm, Kaido; **Lomaka, Andre**; **Savtšenko, Deniss**; **Dobchev, Dimitar** Arkivoc 2009 / 2, p. 218-238 : ill https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=04010557f978e40f8e33b61f9570340690f7940e

QSPR modeling of flash points : an update
Katritzky, Alan R.; Stoyanova-Slavova, Iva B.; **Dobchev, Dimitar**; **Karelson, Mati** Journal of molecular graphics and modelling 2007 / 2, p. 529-536 : ill https://www.sciencedirect.com/science/article/pii/S1093326307000617

QSPR modeling of hyperpolarizabilities
Katritzky, Alan R.; Pacureanu, Liliana; **Dobchev, Dimitar**; **Karelson, Mati** Journal of molecular modeling 2007 / 9, p. 951-963 : ill https://www.researchgate.net/publication/6267202_QSPR_modeling_of_hyperpolarizabilities

QSPR modeling of UV absorption intensities
Katritzky, Alan R.; Slavov, Svetoslav; **Dobchev, Dimitar**; **Karelson, Mati** Journal of computer-aided molecular design 2007 / 7, p. 371-377 https://www.researchgate.net/publication/6272883_QSPR_modeling_of_UV_absorption_intensities

QSPR study of critical micelle concentration of anionic surfactants using computational molecular descriptors
Karitzky, Alan R.; Pacureanu, Liliana; Dobchev, Dimitar; **Karelson, Mati** Journal of chemical information and modeling 2007 / 3, p. 782-793 https://pubs.acs.org/doi/10.1021/ci600462d

Quantitative structure-property relationship studies on Ostwald solubility and partition coefficients of organic solutes in ionic liquids
Katritzky, Alan R.; Kuanar, Minati; Stoyanova-Slavova, Iva B.; Slavov, Svetoslav H.; **Dobchev, Dimitar**; **Karelson, Mati**; Acree, William jr Journal of chemical and engineering data 2008 / 5, p. 1085-1092 https://pubs.acs.org/doi/full/10.1021/je700607b

Rapid QSPR model development technique for prediction of vapor pressure of organic compounds
Katritzky, Alan R.; Slavov, Svetoslav; **Dobchev, Dimitar**; **Karelson, Mati** Computers & chemical engineering 2007 / 9, p. 1123-1130 https://www.sciencedirect.com/science/article/pii/S0098135406002511

Synthesis and bioassay of improved mosquito repellents predicted from chemical structure
Katritzky, Alan R.; Wang, Zuoquan; Slavov, Svetoslav; Tsikolia, Maia; **Dobchev, Dimitar** Proceedings of the National Academy of Sciences of the United States of America 2008 / 21, p. 7359-7364

Using artificial neural networks to predict cell-penetrating compounds
Karelson, Mati; Dobchev, Dimitar Expert opinion drug discovery 2011 / p. 783-796 : ill