

### Publications 2019

1.	<p>S. Bielskutè, J. Plavec and P. Podbevsek Impact of Oxidative Lesions on the Human Telomeric G-quadruplex <i>J. Amer. Chem. Soc.</i> 2019, 141 (6), 2594-2603.</p>
2.	<p>S. Hadzi, V. Kocman, D. Oblak, J. Plavec and J. Lah Energetic basis of AGCGA-rich DNA folding into a tetrahelical structure <i>Angew. Chem. Int. Ed.</i> 2019, 58 (8), 2387-2391. <i>Angew. Chem.</i> 2019, 131 (8), 2409-2413.</p>
3.	<p>A. Kotar, R. Rigo, C. Sissi and J. Plavec Two-quartet kit* G-quadruplex is formed via double-stranded pre-folded structure <i>Nucleic Acids Res.</i> 2019, 47 (5), 2641-2653.</p>
4.	<p>E. Ruggiero, S. Lago, P. Sket, M. Nadai, I. Frasson, J. Plavec and S. Richter A dynamic i-motif with a duplex stem-loop in the long terminal repeat promoter of the HIV-1 proviral genome modulates viral transcription <i>Nucleic Acids Res.</i> 2019, 47 (21), 11057-11068.</p>
5.	<p>S. Smolders, T. Willhammar, A. Krajnc, K. Sentosun, M. T. Wharmby, K. A. Lomachenko, S. Bals, G. Mali, M. B. Roeffaers, D. E. De Vos, B. Bueken A Titanium (IV)-Based Metal–Organic Framework Featuring Defect-Rich Ti-O Sheets as an Oxidative Desulfurization Catalyst <i>Angew. Chem. Int. Ed.</i>, 2019, 131(27), 9258-9263.</p>
6.	<p>C. Marquez, A. Simonov, M. T. Wharmby, C. Van Goethem, I. Vankelecom, B. Bueken, A. Krajnc, G. Mali, D. De Vos, T. De Baerdemaeker Layered Zn<sub>2</sub>[Co(CN)<sub>6</sub>](CH<sub>3</sub>COO) double metal cyanide: a two-dimensional DMC phase with excellent catalytic performance <i>Chem. Sci.</i>, 2019, 10(18), 4868-4875.</p>
7.	<p>R. G. Brinson, J. P. Marino, F. Delaglio, L. W. Arbogast, R. M. Evans, A. Kearsley, G. Gingras, H. Ghasriani, Y. Aubin, G. K. Pierens, X. Jia, M. Mobli, H. G. Grant, D. W. Keizer, K. Schweimer, J. Stähle, G. Widmalm, E. R. Zartler, C. W. Lawrence, P. N. Reardon, J. R. Cort, P. Xu, F. Ni, S. Yanaka, K. Kato, S. R. Parnham, D. Tsao, A. Blomgren, T. Rundlöf, N. Trieloff, P. Schmieder, A. Ross, K. Skidmore, K. Chen, D. Keire, D. I. Freedberg, T. Suter-Stahel, G. Wider, G. Ilc, J. Plavec, S. A. Bradley, D. M. Baldisseri, M. Luis Sforça, A. Carolina de Mattos Zeri, J. Yu Wei, C. M. Szabo, C. A. Amezcua, J. B. Jordan and M. Wikström Enabling adoption of 2D-NMR for the higher order structure assessment of monoclonal antibody therapeutics <i>mABS</i> 2019, 11(1), 94-105.</p>

8.	<p>D. Ntountaniotis, I. Andreadelis, T. Kellici, V. Karageorgos, G. Leonis, E. Christodoulou, S. Kiriakidi, J. Becker-Baldus, E. K. Stylos, M. V. Chatziathanasiadou, C. M. Chatzigiannis, D. E. Damalas, B. Aksoydan, U. Javornik, G. Valsami, C. Glaubitz, S. Durdagi, N. S. Thomaidis, A. Kolocouris, J. Plavec, A. G. Tzakos, G. Liapakis, and T. Mavromoustakos</p> <p>Host-guest interactions between Candesartan and its prodrug Candesartan cilexetil in complex with 2-hydroxypropyl-<math>\beta</math>-cyclodextrin: on the biological potency for Angiotensin II antagonism</p> <p><i>Mol. Pharmaceutics</i> 2019, 16 (3), 1255–1271.</p>
9.	<p>M. Marusic and J. Plavec</p> <p>Understanding polymorphism of G-rich region of human papillomavirus type 52 by NMR</p> <p><i>Molecules</i> 2019, 24 (7): 1294.</p>
10.	<p>B. Ughy, V. Karlicky, O. Dlouhy, U. Javornik, Z. Materova, O. Zsiros, P. Sket, J. Plavec, V. Spunda, G. Garab</p> <p>Lipid-polymorphism of plant thylakoid membranes. Enhanced non-bilayer lipid phases associated with increased membrane permeability</p> <p><i>Physiol. Plantarum</i> 2019, 166 (1), 278-287.</p>
11.	<p>M. K. Yates, P. Chatterjee, M. Flint, Y. Arefeayne, D. Makuc, J. Plavec, C. F. Spiropoulou and K. L. Seley-Radtke</p> <p>Probing the Effects of Pyrimidine Functional Group Switches on Acyclic Fleximer Analogues for Antiviral Activity</p> <p><i>Molecules</i> 2019, 24 (17): 3184.</p>
12.	<p>U. Slapsak, G. Salzano, G. Ilc, G. Giachin, J. Bian, G. Telling, G. Legname and J. Plavec</p> <p>Unique structural features of mule deer prion protein provide insights into chronic wasting disease</p> <p><i>ACS Omega</i> 2019, 4 (22), 19913-19924.</p>
13.	<p>D. Urbancic, A. Kotar, A. Smid, M. Jukic, S. Gobec, L.-G. Martensson, J. Plavec and I. Mlinaric-Rascan</p> <p>Methylation of selenocysteine catalysed by thiopurine S-methyltransferase</p> <p><i>Biochim. Biophys. Acta - Gen. Subj.</i> 2019, 1863, 182-190.</p>
14.	<p>M. M. Naeem, R. Maheshan, S. R. Costford, A. Wahedi, M. Trajkovski, J. Plavec, L. A. Yatsunyk, G. L. Ciesielski, B. A. Kaufman and N. Sondheimer</p> <p>G-Quadruplex Mediated Reduction of a Pathogenic Mitochondrial Heteroplasmy</p> <p><i>Hum. Mol. Genet.</i> 2019, 28(19), 3163-3174.</p>
15.	<p>M. Preskar, T. Vrbanec, F. Vrecer, P. Sket, J. Plavec and M. Gasperlin</p> <p>Solubilization of ibuprofen for freeze dried parenteral dosage forms</p> <p><i>Acta Pharm.</i> 2019, 69, 17-32.</p>

16.	J. Marreiros, C. Caratelli, J. Hajek, A. Krajnc, G. Fleury, B. Bueken, D. E. De Vos, G. Mali, M. B. Roeffaers, V. Van Speybroeck, R. Ameloot Active role of methanol in post-synthetic linker exchange in the metal–organic framework UiO-66 <i>Chem. Mater.</i> , 2019, 31(4), 1359-1369.
17.	S. Kurajica, T. G. Kraljevic, G. Mali, I. Simcic, V. Mandic, I. Minga Multinuclear Magnetic Resonance Study on Aluminium Sec-butoxide Chelated with Ethyl Acetoacetate in Various Amounts <i>Croat. Chem. Acta</i> , 2019, 92(1), 17-29.
18.	A. Pezzella, V. Gargiulo, M. Alfè, G. M. De Luca, R. Di Capua, G. Mali, T. Skala Eumelanin graphene-like integration: the impact on physical properties and electrical conductivity <i>Front. Chem.</i> , 2019, 7, 121.
19.	G. Mali, M. Mazaj, I. Arčon, D. Hanžel, D. Arčon, Z. Jagličić Unraveling the Arrangement of Al and Fe within the Framework Explains the Magnetism of Mixed-Metal MIL-100 (Al, Fe) <i>J. Phys. Chem. Lett.</i> , 2019, 10(7), 1464-1470.
20.	J. Pavlovic, M. Popova, R. M. Mihalyi, M. Mazaj, G. Mali, J. Kovač, H. Lazarova, N. Rajic Catalytic activity of SnO <sub>2</sub> -and SO <sub>4</sub> /SnO <sub>2</sub> -containing clinoptilolite in the esterification of levulinic acid <i>Micropor. Mesopor. Mat.</i> , 2019, 279, 10-18.
21.	N. Hoeven, G. Mali, M. Mertens, P. Cool Design of Ti-Beta zeolites with high Ti loading and tuning of their hydrophobic/hydrophilic character <i>Micropor. Mesopor. Mat.</i> , 2019, 288, 109588.
22.	J. Hou, C. W. Ashling, S. M. Collins, A. Krajnc, C. Zhou, L. Longley, D. N. Johnstone, P. A. Chater, S. Li, M. V. Coulet, P. L. Llewellyn Metal-organic framework crystal-glass composites <i>Nat. Commun.</i> , 2019, 10(1), 1-10.
23.	O. V. Larina, K. V. Valihura, P. I. Kyriienko, N. V. Vlasenko, D. Y. Balakin, I. Khalakhan, T. Čendak, S. O. Soloviev, S. M. Orlyk. Successive vapour phase Guerbet condensation of ethanol and 1-butanol over Mg-Al oxide catalysts in a flow reactor <i>Appl. Catal., A</i> , 2019, 588, 117265.

24.	<p>A. Viani, P. Mácová, D. Machová, T. Čendak  Spectroscopy in a Multidisciplinary Context: The Case of the UNESCO World Heritage Site of Sedlec  <i>Czechia. Archaeometry</i>, 2019, 61(5), 1144-1159.</p>
25.	<p>A. Palčić, B. M. Szyja, M. Mičetić, T. Čendak, M. Akouche, K. Juraić, M. Čargonja, D. Mekterović, V. Vušak, V. Valtchev  Impact of the Zn source on the RSN-type zeolite formation  <i>Inorg. Chem. Front.</i>, 2019, 6(9), 2279-2290.</p>
26.	<p>M. Hrast, K. Rožman, I. Ogris, V. Škedelj, D. Patin, M. Sova, H. Barreteau, S. Gobec, S. G. Grdadolnik, A. Zega  Evaluation of the published kinase inhibitor set to identify multiple inhibitors of bacterial ATP-dependent mur ligases  <i>J. Enzyme Inhib. Med. Chem.</i>, 2019, 34(1), 1010-1017.</p>