

# Publications

Begley AI, Shuman NS, Long BA, Kämpf R, Gyr L, Viggiano AA, Zenobi R (2022) Excited-state N atoms transform aromatic hydrocarbons into *N*-heterocycles in low-temperature plasmas. *J Phys Chem A* 126(10), 1743-1754.

Bitar L, Uphaus T, Thalman C, Muthuraman M, Gyr L, Ji H, Domingues M, Endle H, Groppa S, Steffen F, Koirala N, Fan W, Ibanez L, Heitsch L, Cruchaga C, Lee JM, Kloss F, Bittner S, Nitsch R, Zipp F, Vogt J (2022) Inhibition of the enzyme autotaxin reduces cortical excitability and ameliorates the outcome in stroke. *Sci Transl Med* 14(641), eabk0135.

Gyr L, Klute FD, Franzke J, Zenobi R (2019) Characterization of a nitrogen-based dielectric barrier discharge ionization source for mass spectrometry reveals factors important for soft ionization. *Anal Chem* 91(10), 6865-6871.

Zheng LQ, Yang S, Lan J, Gyr L, Goubert G, Qian H, Aprahamian I, Zenobi R (2019) Solution phase and surface photoisomerization of a hydrazone switch with a long thermal half-life. *J Am Chem Soc* 141(44), 17637-17645.

Gyr L, Wolf JC, Franzke J, Zenobi R (2018) Mechanistic understanding leads to increased ionization efficiency and selectivity in dielectric barrier discharge ionization mass spectrometry: A case study with perfluorinated compounds. *Anal Chem* 90(4), 2725-2731.

Szczerbiński J, Gyr L, Kaeslin J, Zenobi R (2018) Plasmon-driven photocatalysis leads to products known from E-beam and X-ray-induced surface chemistry. *Nano Lett* 18(11), 6740-6749.

Wolf JC, Gyr L, Mirabelli MF, Schaer M, Siegenthaler P, Zenobi R (2016) A radical-mediated pathway for the formation of [M + H](+) in dielectric barrier discharge ionization. *J Am Soc Mass Spectrom* 27(9), 1468-1475.

Burger M, Gundlach-Graham A, Allner S, Schwarz G, Wang HA, Gyr L, Burgener S, Hattendorf B, Grolimund D, Günther D (2015) High-speed, high-resolution, multielemental LA-ICP-TOFMS imaging: part II. Critical evaluation of quantitative three-dimensional imaging of major, minor, and trace elements in geological samples. *Anal Chem* 87(16), 8259-8267.

Gundlach-Graham A, Burger M, Allner S, Schwarz G, Wang HA, Gyr L, Grolimund D, Hattendorf B, Günther D (2015) High-speed, high-resolution, multielemental laser ablation-inductively coupled plasma-time-of-flight mass spectrometry imaging: part I. Instrumentation and two-dimensional imaging of geological samples. *Anal Chem* 87(16), 8250-8258.

\*equal contribution #corresponding author