

Publications and other outputs

Sampathkumar, Krishna, Valentin Diez-Cabanes, Petr Kovaricek, Elena Del Corro, Milan Bouša, Jan Hošek, Martin Kalbac, and Otakar Frank. "On the suitability of Raman spectroscopy to monitor the degree of graphene functionalization by diazonium salts." *The Journal of Physical Chemistry C* 123, no. 36 (2019): 22397-22402.

Sampathkumar, Krishna, Charalampos Androulidakis, Emmanuel N. Koukaras, Jaroslava Rahova, Karolina Drogowska, Martin Kalbac, Aliaksei Vetushka, Antonin Fejfar, Costas Galiotis, and Otakar Frank. "Sculpturing graphene wrinkle patterns into compliant substrates." *Carbon* 146 (2019): 772-778.

Androulidakis, Charalampos, Emmanuel N. Koukaras, **Krishna Sampathkumar**, Jaroslava Rahova, Costas Galiotis, and Otakar Frank. "Hierarchy of nanoscale graphene wrinkles on compliant substrate: Theory and experiment." *Extreme Mechanics Letters* 40 (2020): 100948.

Haider, Golam, **Krishna Sampathkumar**, Tim Verhagen, Lukáš Nádvorník, Farjana J. Sonia, Václav Valeš, Jan Sýkora et al. "Superradiant Emission from Coherent Excitons in van Der Waals Heterostructures." *Advanced Functional Materials* (2021): 2102196.

Hummel, Stefan, Kenan Elibol, Dengsong Zhang, **Krishna Sampathkumar**, Otakar Frank, Dominik Eder, Christian Schwalb, Jani Kotakoski, Jannik C. Meyer, and Bernhard C. Bayer. "Direct visualization of local deformations in suspended few-layer graphene membranes by coupled in situ atomic force and scanning electron microscopy." *Applied Physics Letters* 118, no. 10 (2021): 103104.

Khusyainov, Dinar, Timur Gareev, Viktoriia Radovskaia, **Krishna Sampathkumar**, Swagata Acharya, Makars Šiškins, Samuel Mañas-Valero et al. "Ultrafast laser-induced spin–lattice dynamics in the van der Waals antiferromagnet CoPS₃." *APL Materials* 11, no. 7 (2023).

Conference Publication:

SAMPATHKUMAR, KRISHNA.; PEKÁREK, JAN.; FRANK, OTAKAR., 2020: Imposing biaxial strain on 2D layered materials by liquid-induced swelling of supporting polymer. P. 50 - 7, doi: 10.37904/nanocon.2020.3685.

Under submission stage:

Krishna Sampathkumar et al., "Applied Machine Learning for Graphene Thickness on Arbitrary Oxide-Si Using Raman Spectroscopy"