

## Projekta Izp-2018/1-0289 rezultāti

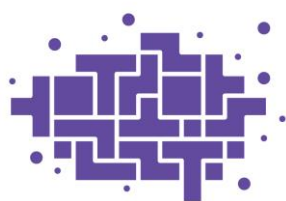
Uzlabotu uz SiO<sub>2</sub> bāzes veidotu materiālu ultravioletajai un lieljaudas fotonikai optiskās īpašības.

*Oriģināli zinātniskie raksti, kas publicēti zinātniskos žurnālos, rakstu krājumos vai konferenču rakstu krājumos, kuri ir indeksēti datu bāzēs Web of Science Core Collection, SCOPUS vai ERIH PLUS*

1. Trukhin, A. N. Luminescence of natural  $\alpha$ -quartz crystal with aluminum, alkali and noble ions impurities. - J Lumin., 2019, 214, <https://doi.org/10.1016/j.jlumin.2019.116602>
2. Skuja, L.; Leimane, M.; Bite, I.; Millers, D.; Zolotarjovs, A.; Vitola, V.; Smits, K. Ultraviolet luminescence of polycyclic aromatic hydrocarbons in partially consolidated sol-gel silica glasses. - J Non Cryst. Solids, 2022, 577, <https://doi.org/10.1016/j.jnoncrysol.2021.121325>
3. Trukhin, A. N. Luminescence of localized states in oxidized and fluorinated silica glass. - J Non Cryst. Solids, 2019, 521, <https://doi.org/10.1016/j.jnoncrysol.2019.119525>
4. Trukhin, A. N. Photoelectric response of localized states in silica glass. - J Non Cryst. Solids, 2019, 511, 161-165, <https://doi.org/10.1016/j.jnoncrysol.2019.02.002>
5. Skuja, L.; Ollier, N.; Kajihara, K.; Bite, I.; Leimane, M.; Smits, K.; Silins, A. Optical Absorption of Excimer Laser-Induced Dichlorine Monoxide in Silica Glass and Excitation of Singlet Oxygen Luminescence by Energy Transfer from Chlorine Molecules. - Phys. Status Solidi A Appl. Mater. Sci., 2021, 218 (15), <https://doi.org/10.1002/pssa.202100009>
6. Skuja, L.; Ollier, N.; Kajihara, K. Luminescence of non-bridging oxygen hole centers as a marker of particle irradiation of  $\alpha$ -quartz. - Radiat. Meas., 2020, 135, <https://doi.org/10.1016/j.radmeas.2020.106373>

### *Recenzētas zinātniskās monogrāfijas*

1. A. Trukhin, Silicon dioxide and the luminescence of related materials: Crystal polymorphism and the glass state. - Cambridge Scholars publishing, ISBN(13):978-1-5275-7131-9, 2021, 515 pages.



**FLPP**

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