



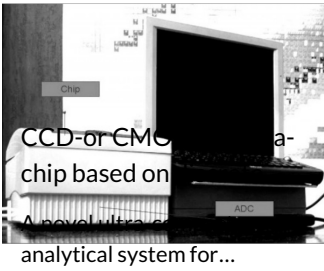
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<https://www.youtube.com/@Neurobiophysics/videos>;  
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Rejoindre 1



Très...  
difficile

🕒 1 month(s)

EN



**Oleg Gradov**

Suivre

L'utilisateur n'a pas rentré d'informations à son sujet



**DIALACTRON TH2 (Configuration: DROPLETRON)**

Device for the morphometric and photometric measurements of the sample droplets supplied from the pipette / micropipette tips and cuvettes/ cells (2017-2020). This setup can be used with the permanent monitoring of temperature and humidity in the cell and in the external medium [1].



**References:** [1].

Orehkov, T. K. and Gradov, O. V. (2021). Digital spectrozonal and multispectral lens-less devices with spectrophotometric temperature calibration guis for dairy farming and qualimetry of diary products. *Lecture Notes in Networks and Systems*, volume 228, pages 300–324. DOI: 10.1007/978-3-030-77448-6\_29



### DIALACTRON \_ POLAR (Configuration P1)

Instruments for polarizing lens-less microscopy and microphotometry of anisotropic dairy or other crystallized media in dehydration / rehydration tests ("facial structures") [1].



#### References:

- [1]. Orekhov, T. K. and Gradov, O. V. (2021). Digital spectrozonal and multispectral lens-less devices with spectrophotometric temperature calibration guis for dairy farming and qualimetry of dairy products. *Lecture Notes in Networks and Systems*, volume 228, pages 300–324. DOI: 10.1007/978-3-030-77448-6\_29



### Lens-Less Microscopes with 206 nm and 254 nm interference filters

Lens-Less Microscopes with 206 nm and 254 nm filters (design: O. Gradov, F. Orehov) [2].



#### References:

- [2]. Orekhov, F. K. and Gradov, O. V. (2023). Towards ultraviolet microbeam scanning and lens-less UV microbeam microscopy with mirror galvanometric scanners: From the history of research instrumentation to engineering of modern mechatronic optical systems. *Journal of Sensor Networks and Data Communications*, 3(1):117–137 (Invited Paper).



### DIALACTRON \_ POLAR (Configuration P94)

Instruments for polarizing lens-less microscopy and microphotometry (see above mentioned review paper) :

- [1]. Orekhov, T. K. and Gradov, O. V. (2021). Digital spectrozonal and multispectral lens-less devices with spectrophotometric temperature calibration guis for dairy farming and qualimetry of dairy products. *Lecture Notes in Networks and Systems*, volume 228, pages 300–324. DOI: 10.1007/978-3-030-77448-6\_29).



## Multiparametric Lens-Less Granulometer and Filter Tester

Basic idea proposed in the paper:

- [3] Gradov, O. V. and Jablov, A. G. (2016). Novel morphometrics-on-a-chip: CCD- or CMOS-lab-on-a-chip based on discrete converters of different physical and chemical parameters of histological samples into the optical signals with positional sensitivity for morphometry of non-optical patterns. *Journal of Biomedical Technologies*, (2):1–29.



## DIALACTRON (Configuration: CY-F3)

DIALACTRON (Configuration: CY-F3). Lens-less instrument for cylinder plastic photometric cells with the flexible extensible cell fixer for transfocator-like functioning in different regimes of photometric illumination for external light source positioning.



170815-1525



170815-1526(001)



170815-1526(002)



170815-1538(004)



170815-1540(001)

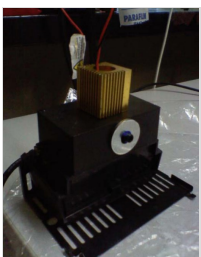


170815-1540(002)

### References:

- [1]. Orekhov, T. K. and Gradov, O. V. (2021). Digital spectrozonal and multispectral lens-less devices with spectrophotometric temperature calibration guis for dairy farming and qualimetry of diary products. *Lecture Notes in Networks and Systems*, volume 228, pages 300–324. DOI: 10.1007/978-3-030-77448-6\_29

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## DIALACTRON-NEPHELOTRON

DIALACTRON-NEPHELOTRON : Laser lens-less microscope-photometer and nephelometer with the compact UV-A diode laser source (2016-2018).

- [1]. Orekhov, T. K. and Gradov, O. V. (2021). Digital spectrozonal and multispectral lens-less devices with spectrophotometric temperature calibration guis for dairy farming and qualimetry of diary products. *Lecture Notes in Networks and Systems*, volume 228, pages 300–324. DOI: 10.1007/978-3-030-77448-6\_29

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## Setup for nanosecond testing of CCD-based optofluidic lens-less microscopes

See video:

Vimeo

Analog angle-sensitive pixel lab-on-a-chip testing using nanosecond stroboscopic oscilloscope

Смотреть (3:04)

Автор: Oleg V. Gradov 5 июн. 2018 г.

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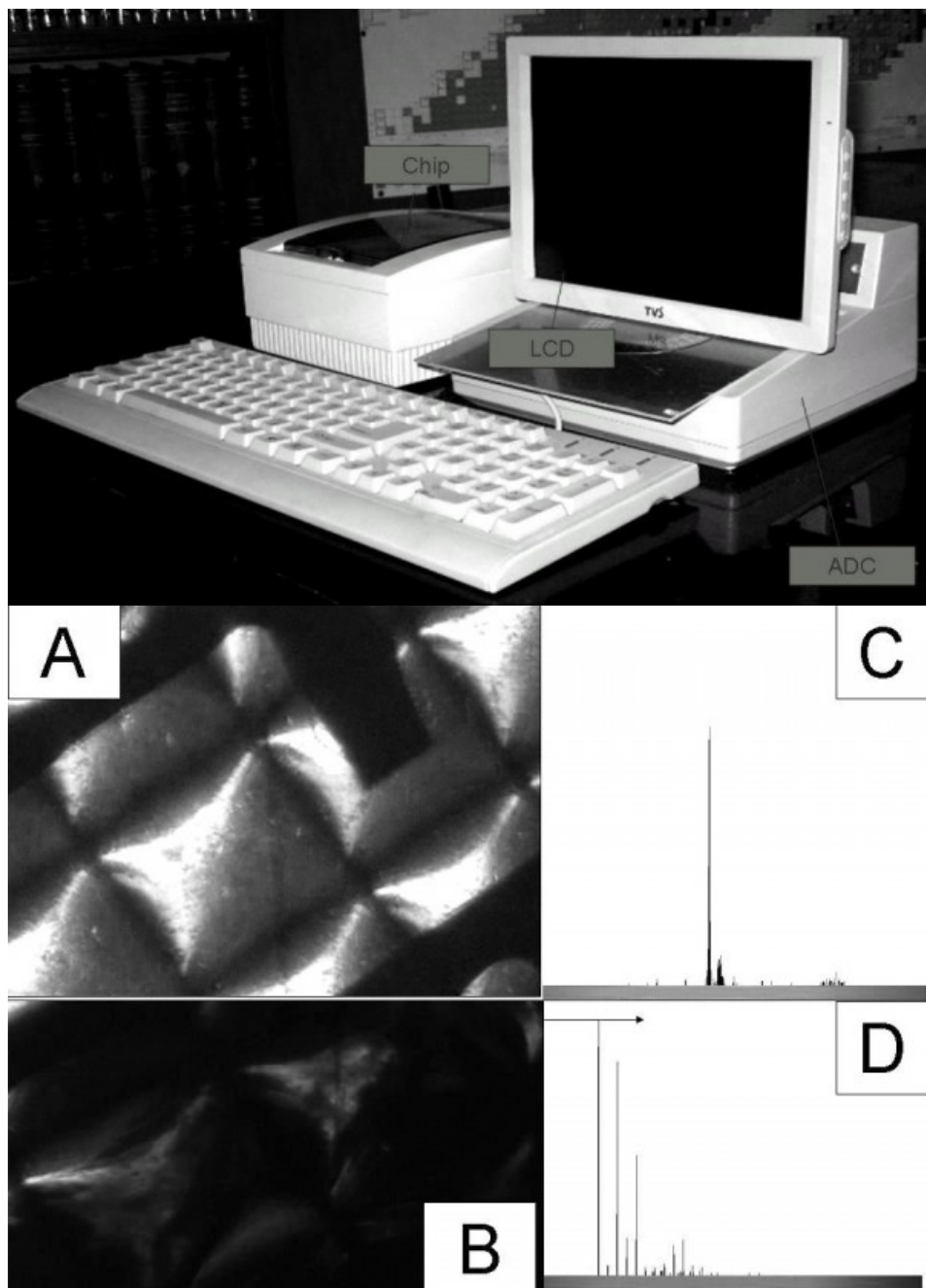
PAS  
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D'IMAGE

## Multiparametric reader system for multidescrptor mapping of biological samples

The first version of the multiparametric reader system for multidescrptor mapping of biological samples.



The second version of the multiparametric reader system for multidescrptor mapping of biological samples.



Redox-signal conversion into the optical signal using colorimetric / spectrophotometric “chemical pixels” (“chemical resells” / “sensors”): A,C – baseline (reactive film without detective dye response); B,D – indicator signal. Equivalent mosaic sensor-converter elements may be assembled using different converters and indicators (not only “pH-pixels” / “pX-pixels”, but also “electric luminescence pixels”, “magnetic field pixels”, “radiation pixels”).

- [4] Gradov, O. V. and Jablov, A. G. (2016). Novel morphometrics-on-a-chip: CCD- or CMOS-lab-on-a-chip based on discrete converters of different physical and chemical parameters of histological samples into the optical signals with positional sensitivity for morphometry of non-optical patterns. *Journal of Biomedical Technologies*, (2):1–29.

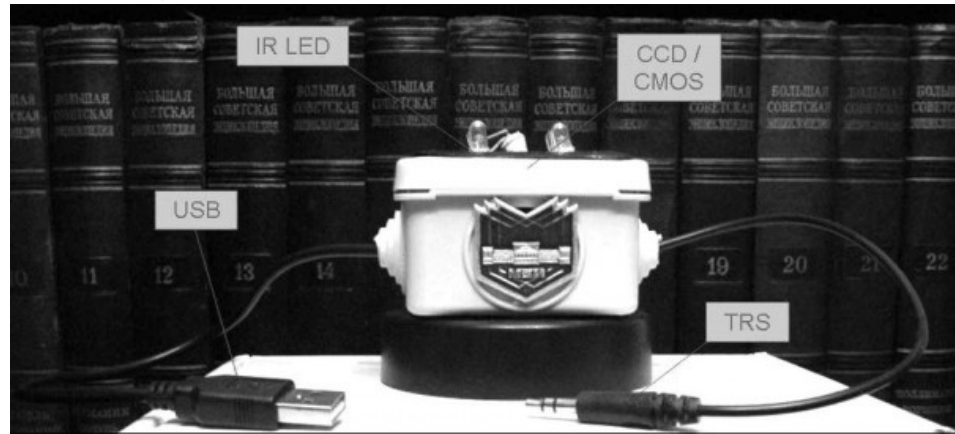
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D'IMAGE

## Ultracompact lab-on-a-chip reader with USB and TRS.

Ultracompact lab-on-a-chip reader with USB and TRS.



- [5] Gradov, O. V. and Jablov, A. G. (2016). Novel morphometrics-on-a-chip: CCD- or CMOS-lab-on-a-chip based on discrete converters of different physical and chemical parameters of histological samples into the optical signals with positional sensitivity for morphometry of non-optical patterns. *Journal of Biomedical Technologies*, (2):1–29.

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CCD-or CMOS-lab-on-a-chip based on discrete converters of different physical and chemical parameters of samples into the optical signals with positional sensitivity for morphometry of non-optical patterns

Description

Téléphone

