

# Fedor Dultsev

## List of Publications by Year in descending order

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32  
papers

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citations

1039406

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h-index

713013

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g-index

32  
all docs

32  
docs citations

32  
times ranked

340  
citing authors

#	ARTICLE	IF	CITATIONS
1	Direct and sensitive detection of a human virus by rupture event scanning. <i>Nature Biotechnology</i> , 2001, 19, 833-837.	9.4	178
2	“Hearing” Bond Breakage. Measurement of Bond Rupture Forces Using a Quartz Crystal Microbalance. <i>Langmuir</i> , 2000, 16, 5036-5040.	1.6	70
3	Direct and Quantitative Detection of Bacteriophage by “Hearing” Surface Detachment Using a Quartz Crystal Microbalance. <i>Analytical Chemistry</i> , 2001, 73, 3935-3939.	3.2	67
4	Identifying a single biological nano-sized particle using a quartz crystal microbalance. A mathematical model. <i>Sensors and Actuators B: Chemical</i> , 2009, 143, 17-24.	4.0	18
5	Quartz crystal microbalance as a sensing active element for rupture scanning within frequency band. <i>Analytica Chimica Acta</i> , 2011, 687, 75-81.	2.6	15
6	QCM-Based Measurement of Bond Rupture Forces in DNA Double Helices for Complementarity Sensing. <i>Langmuir</i> , 2014, 30, 3795-3801.	1.6	14
7	Rapid sensing of hepatitis B virus using QCM in the thickness shear mode. <i>Sensors and Actuators B: Chemical</i> , 2015, 216, 1-5.	4.0	14
8	Irregular Surface and Porous Structure of SiO <sub>2</sub> Films Deposited at Low Temperature and Low Pressure. <i>Journal of the Electrochemical Society</i> , 1998, 145, 2569-2572.	1.3	11
9	New Procedure to Record the Rupture of Bonds between Macromolecules and the Surface of the Quartz Crystal Microbalance (QCM). <i>Langmuir</i> , 2012, 28, 13793-13797.	1.6	11
10	Separation and detection of bacteria using rupture event scanning. <i>Analytica Chimica Acta</i> , 2011, 702, 233-238.	2.6	8
11	Structure of adsorption complex: Modeling and experiment. <i>Journal of Structural Chemistry</i> , 2006, 47, 563-566.	0.3	6
12	Silicon dioxide surface reconstruction stimulated by adsorption interaction. <i>Journal of Structural Chemistry</i> , 2007, 48, 231-235.	0.3	6
13	QCM-based rupture force measurement as a tool to study DNA dehybridization and duplex stability. <i>Analytical and Bioanalytical Chemistry</i> , 2017, 409, 891-901.	1.9	6
14	Optical and electrical properties of silicon nanopillars. <i>Semiconductors</i> , 2015, 49, 939-943.	0.2	5
15	Analysis of the surface functional groups of organic nanoparticles formed in furfural vapour photonucleation using a rupture event scanning technique. <i>Analytical Methods</i> , 2017, 9, 5348-5355.	1.3	4
16	Reaction of hydrogen with chlorine during reactive ionic etching. <i>Russian Journal of Physical Chemistry B</i> , 2007, 1, 232-235.	0.2	3
17	Dependence of the reactivity of alkyl-doped silicon dioxide layers on the character of Si-O-Si bonding. <i>Journal of Structural Chemistry</i> , 2009, 50, 593-598.	0.3	2
18	Identification of the functional groups on the surface of nanoparticles formed in photonucleation of aldehydes generated during forest fire events. <i>Proceedings of SPIE</i> , 2014, , .	0.8	2

#	ARTICLE	IF	CITATIONS
19	Measurement of the unwinding force of a DNA double helix. Journal of Structural Chemistry, 2017, 58, 315-339.	0.3	2
20	Quartz crystal microbalance in the active mode as a tool to modify sensor surface for higher selectivity and sensitivity. Sensors and Actuators B: Chemical, 2017, 239, 494-500.	4.0	2
21	Determination of the Thermodynamic Parameters of DNA Double Helix Unwinding with the Help of Mechanical Methods. ACS Omega, 2018, 3, 2793-2797.	1.6	2
22	Reflection Spectra of Microarrays of Silicon Nanopillars. Optics and Spectroscopy (English) Tj ETQq0 0 0 rgBT /Overlock 10 Tf_50 622 Td	0.2	2
23	Effect of the relief on the measurement of bond rupture force with the help of AFM: the dynamics of interaction and optimization of the procedure. Analytical Methods, 2018, 10, 3498-3505.	1.3	2
24	Determining the structure and shape of nanoclusters obtained by sulfidizing Langmuir- Blodgett layers. Journal of Structural Chemistry, 1997, 38, 673-677.	0.3	1
25	Bond rupture force measurement by means of a quartz resonator. Journal of Structural Chemistry, 2012, 53, 449-459.	0.3	1
26	Silicon Nanopillar Microarrays: Formation and Resonance Reflection of Light. Semiconductors, 2019, 53, 205-209.	0.2	1
27	A QCM-based rupture event scanning technique as a simple and reliable approach to study the kinetics of DNA duplex dissociation. Analytical Methods, 2020, 12, 3771-3777.	1.3	1
28	EPR as a Diagnostic Tool To Verify Semiempirical Simulation of the Reactivity of Nitrones as Spin Traps. Applied Magnetic Resonance, 2008, 33, 95-101.	0.6	0
29	XPS investigation of InAs etching in planar inductively coupled plasma. , 2009, , .		0
30	Temperature dependence of unwinding forces between complementary oligonucleotides. Journal of Microbiological Methods, 2017, 143, 94-97.	0.7	0
31	An Instrument for Highly Specific Detection of Biomarkers on a Quartz Resonator. Instruments and Experimental Techniques, 2019, 62, 78-84.	0.1	0
32	Shape of the Voltageâ€“Frequency Curve Depending on the Type of the Object Detached from the QCM Surface. , 2018, , 609-616.		0