

# Vladimir Chirkov

## List of Publications by Year in descending order

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33  
papers

260  
citations

933447

10  
h-index

996975

15  
g-index

33  
all docs

33  
docs citations

33  
times ranked

86  
citing authors

#	ARTICLE	IF	CITATIONS
1	The interaction between two electrohydrodynamics phenomena when an electric field affects a two-phase immiscible liquid. Physics of Fluids, 2021, 33, .	4.0	6
2	A modification of the phase-field method to simulate electrohydrodynamic processes in two-phase immiscible liquids and its experimental verification. Journal of Electrostatics, 2020, 107, 103483.	1.9	14
3	The Experimental Verification of Electrodeformation and Electrocoalescence Numerical Simulation Based on the Arbitrary Lagrangian–Eulerian Method. , 2020, , .		4
4	The Numerical Simulation of the Effect of Nonequilibrium Charged Layers on the Electrodeformation of Conductive Droplet Suspended in a Liquid Dielectric. , 2020, , .		1
5	Features of Quantitative Verification of Numerical Models for Computing Electrohydrodynamic Processes in Two-phase Immiscible Liquids. , 2020, , .		2
6	Numerical estimation of the performance of a flow-type electrohydrodynamic heat exchanger with the streamlined electrode configuration. Journal of Electrostatics, 2019, 97, 31-36.	1.9	4
7	A Method to Determine the Interfacial Tension for the Conductive Medium/Liquid Dielectric Couple. , 2018, , .		0
8	A Method to Determine the Interfacial Tension for the Conductive Medium/Liquid Dielectric Couple. , 2018, , .		1
9	The role of field-enhanced dissociation in electrohydrodynamic flow formation in a highly non-uniform electric field. Journal of Electrostatics, 2018, 93, 104-109.	1.9	16
10	Study on high-voltage conductivity provided solely by field-enhanced dissociation in liquid dielectrics. Journal of Electrostatics, 2017, 88, 81-87.	1.9	10
11	The Dependence of the Efficiency of Electrohydrodynamic Heat Exchanger on the Electric Conductivity of Liquid. IEEE Transactions on Industry Applications, 2017, 53, 2440-2445.	4.9	6
12	A Method for Estimation of Functional Dependence of Injection Charge Formation on Electric Field Strength. IEEE Transactions on Industry Applications, 2017, 53, 3977-3981.	4.9	12
13	Electrohydrodynamic flow caused by field-enhanced dissociation solely. Physics of Fluids, 2017, 29, .	4.0	28
14	Effect of temperature on electroconvection and high-voltage current passage in entirely heated dielectric liquid. , 2017, , .		3
15	A technique for rapid diagnostics of dielectric liquids basing on their high-voltage conductivity. Journal of Electrostatics, 2016, 81, 48-53.	1.9	7
16	Nonequilibrium mechanisms of weak electrolyte electrification under the action of constant voltage. Technical Physics, 2016, 61, 957-964.	0.7	4
17	Characteristics of electrohydrodynamic pump of the dissociation type: low and high voltage ranges. IEEE Transactions on Dielectrics and Electrical Insulation, 2015, 22, 2709-2717.	2.9	15
18	Comparative analysis of numerical simulation and PIV experimental results for a flow caused by field-enhanced dissociation. Journal of Physics: Conference Series, 2015, 646, 012033.	0.4	5

#	ARTICLE	IF	CITATIONS
19	Current pulses caused by streamers in sphere-sphere electrode system. Journal of Physics: Conference Series, 2015, 646, 012042.	0.4	1
20	Structure of near-electrode dissociation-recombination layers under DC stress. Journal of Physics: Conference Series, 2015, 646, 012032.	0.4	9
21	Simulation of the integral electric current characteristics of unsteady-state current passage through liquid dielectrics. IEEE Transactions on Dielectrics and Electrical Insulation, 2015, 22, 2763-2769.	2.9	13
22	Integral electric current characteristics of unsteady-state processes of current passage through liquid dielectrics. , 2014, , .		0
23	Characteristics of electrohydrodynamic pump of the dissociation type: Low- and high-voltage ranges. , 2014, , .		0
24	Dynamic current-voltage characteristics of weakly conducting liquids in highly non-uniform electric fields. Surface Engineering and Applied Electrochemistry, 2014, 50, 135-140.	0.8	10
25	Current-time characteristic of the transient regime of electrohydrodynamic flow formation. Journal of Electrostatics, 2013, 71, 484-488.	1.9	19
26	Optimization of Designs of Electrodehydrators by Computer Simulation. Chemical and Petroleum Engineering (English Translation of Khimicheskoe i Neftyanoe Mashinostroenie), 2013, 49, 371-374.	0.3	2
27	Breakdown of Water-Oil Emulsions in an Electric Field. Chemical and Petroleum Engineering (English) Tj ETQq1 1 0.784314 rgBT /Ove	0.3	5
28	Structure of the near-electrode dissociation-recombination charged layers at various low-voltage conductivities of a low-conducting liquid. Technical Physics, 2013, 58, 1822-1830.	0.7	11
29	Investigation of electrohydrodynamic flows in superstrong electric fields. Surface Engineering and Applied Electrochemistry, 2012, 48, 312-317.	0.8	3
30	Formation of electrohydrodynamic flows in strongly nonuniform electric fields for two charge-formation modes. Technical Physics, 2012, 57, 1-11.	0.7	28
31	Dependence of the electrohydrodynamic flows structure in very non-uniform electric field on the charge formation mechanism. , 2011, , .		8
32	Computer simulation of EHD flows in a needle-plane electrode system. Technical Physics, 2008, 53, 1407-1413.	0.7	8
33	Features of electrohydrodynamic flows in needle-plane electrode system. , 2008, , .		7