

Stanislav O Yurchenko

List of Publications by Year in descending order

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114
papers

2,267
citations

186209

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all docs

114
docs citations

114
times ranked

1438
citing authors

#	ARTICLE	IF	CITATIONS
1	2D colloids in rotating electric fields: A laboratory of strong tunable three-body interactions. <i>Journal of Colloid and Interface Science</i> , 2022, 608, 564-574.	5.0	12
2	The role of attraction in the phase diagrams and melting scenarios of generalized 2D Lennard-Jones systems. <i>Journal of Chemical Physics</i> , 2022, 156, 114703.	1.2	5
3	Interacting Oscillators with Fluctuating Coupling: Mode Mixing without Cross-Correlations. <i>Physical Review Letters</i> , 2022, 129, .	2.9	1
4	Correlated noise effect on the structure formation in the phase-field crystal model. <i>Mathematical Methods in the Applied Sciences</i> , 2021, 44, 12185-12193.	1.2	10
5	Programmable Soft-Matter Electronics. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 2017-2022.	2.1	16
6	From soft- to hard-sphere fluids: Crossover evidenced by high-frequency elastic moduli. <i>Physical Review E</i> , 2021, 103, 052117.	0.8	10
7	Collective excitations in active fluids: Microflows and breakdown in spectral equipartition of kinetic energy. <i>Journal of Chemical Physics</i> , 2021, 155, 024902.	1.2	7
8	Core-shell particles in rotating electric and magnetic fields: Designing tunable interactions via particle engineering. <i>Journal of Chemical Physics</i> , 2021, 155, 084903.	1.2	5
9	Interpolation method for crystals with many-body interactions. <i>Physical Review B</i> , 2021, 104, .	1.1	1
10	Mean-field model of melting in superheated crystals based on a single experimentally measurable order parameter. <i>Scientific Reports</i> , 2021, 11, 17963.	1.6	5
11	Diagrammatics of tunable interactions in anisotropic colloids in rotating electric or magnetic fields: New kind of dipole-like interactions. <i>Journal of Chemical Physics</i> , 2021, 155, 114107.	1.2	2
12	Entropy of simple fluids with repulsive interactions near freezing. <i>Journal of Chemical Physics</i> , 2021, 155, 134501.	1.2	10
13	Hygroscopic property of biofuel obtained by torrefaction of wood in a quiescent layer of bentonite. <i>Fuel</i> , 2020, 282, 118766.	3.4	13
14	Colloids in rotating electric and magnetic fields: designing tunable interactions with spatial field hodographs. <i>Soft Matter</i> , 2020, 16, 8155-8168.	1.2	13
15	Universal Effect of Excitation Dispersion on the Heat Capacity and Gapped States in Fluids. <i>Physical Review Letters</i> , 2020, 125, 125501.	2.9	23
16	Tick-Borne Encephalitis Electrochemical Detection by Multilayer Perceptron on Liquid-Metal Interface. <i>ACS Applied Bio Materials</i> , 2020, 3, 7352-7356.	2.3	12
17	Strange attractors induced by melting in systems with nonreciprocal effective interactions. <i>Physical Review E</i> , 2020, 101, 063205.	0.8	7
18	Direct Experimental Evidence of Longitudinal and Transverse Mode Hybridization and Anticrossing in Simple Model Fluids. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1370-1376.	2.1	11

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19	Efficient approach to calculating radial distribution function in bcc Fe lattice. Journal of Physics: Conference Series, 2020, 1697, 012074.	0.3	1
20	Anticrossing of Longitudinal and Transverse Modes in Simple Fluids. Journal of Physical Chemistry Letters, 2019, 10, 4470-4475.	2.1	19
21	Excitation spectra in fluids: How to analyze them properly. Scientific Reports, 2019, 9, 10483.	1.6	43
22	Defect-governed double-step activation and directed flame fronts. Physical Review E, 2019, 100, 023203.	0.8	6
23	Experimental validation of interpolation method for pair correlations in model crystals. Journal of Chemical Physics, 2019, 151, 114502.	1.2	12
24	Localization of Ion Concentration Gradients for Logic Operation. Frontiers in Chemistry, 2019, 7, 419.	1.8	7
25	Phase diagram of two-dimensional colloids with Yukawa repulsion and dipolar attraction. Journal of Chemical Physics, 2019, 150, 104903.	1.2	10
26	Onset of transverse (shear) waves in strongly-coupled Yukawa fluids. Journal of Chemical Physics, 2019, 150, 104503.	1.2	34
27	Experimental Approach for Obtaining a Complex (Dusty) Plasma Fluid. Journal of Physics: Conference Series, 2019, 1348, 012094.	0.3	2
28	Diagrammatic method for tunable interactions in colloidal suspensions in rotating electric or magnetic fields. Journal of Chemical Physics, 2019, 151, 244103.	1.2	15
29	Experimental studies of two-dimensional complex plasma crystals: waves and instabilities. Physics-Uspokhi, 2019, 62, 1000-1011.	0.8	24
30	Thermodynamics and dynamics of two-dimensional systems with dipolelike repulsive interactions. Physical Review E, 2018, 97, 022616.	0.8	34
31	Bizarre behavior of heat capacity in crystals due to interplay between two types of anharmonicities. Journal of Chemical Physics, 2018, 148, 134508.	1.2	16
32	Complex crystalline structures in a two-dimensional core-softened system. Soft Matter, 2018, 14, 2152-2162.	1.2	80
33	Tunable interactions between particles in conically rotating electric fields. Soft Matter, 2018, 14, 9657-9674.	1.2	19
34	Dissipative phase transitions in systems with nonreciprocal effective interactions. Soft Matter, 2018, 14, 9720-9729.	1.2	23
35	“Tunable colloids” Experimental complex for studying generic phenomena in classical condensed matter. Journal of Physics: Conference Series, 2018, 1135, 012039.	0.3	1
36	Sapphire shaped crystals for waveguiding, sensing and exposure applications. Progress in Crystal Growth and Characterization of Materials, 2018, 64, 133-151.	1.8	65

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37	Collective modes of two-dimensional classical Coulomb fluids. <i>Journal of Chemical Physics</i> , 2018, 149, 134114.	1.2	22
38	Sapphire Photonic Crystal Waveguides for Terahertz Sensing in Aggressive Environments. <i>Advanced Optical Materials</i> , 2018, 6, 1800573.	3.6	48
39	Thermoacoustic Instability in Two-Dimensional Fluid Complex Plasmas. <i>Physical Review Letters</i> , 2018, 121, 075003.	2.9	39
40	The Role of Scattering in Quasi-Ordered Structures for Terahertz Imaging: Local Order Can Increase an Image Quality. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2018, 8, 403-409.	2.0	21
41	Colloidal suspensions in external rotating electric field: experimental studies and prospective applications in physics, material science, and biomedicine. , 2018, , .		3
42	In vitro terahertz spectroscopy of gelatin-embedded human brain tumors: a pilot study. , 2018, , .		6
43	Wide-aperture aspherical lens for high-resolution terahertz imaging. <i>Review of Scientific Instruments</i> , 2017, 88, 014703.	0.6	63
44	Thermodynamics of two-dimensional Yukawa systems across coupling regimes. <i>Journal of Chemical Physics</i> , 2017, 146, 134702.	1.2	42
45	Solid immersion terahertz imaging with sub-wavelength resolution. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	69
46	Enhanced third-harmonic generation in photonic crystals at band-gap pumping. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 055105.	1.3	25
47	Tunable two-dimensional assembly of colloidal particles in rotating electric fields. <i>Scientific Reports</i> , 2017, 7, 13727.	1.6	51
48	Flame propagation in two-dimensional solids: Particle-resolved studies with complex plasmas. <i>Physical Review E</i> , 2017, 96, 043201.	0.8	32
49	Particle-Resolved Phase Identification in Two-Dimensional Condensable Systems. <i>Journal of Physical Chemistry C</i> , 2017, 121, 26860-26868.	1.5	30
50	Technological aspects of manufacturing terahertz photonic crystal waveguides based on sapphire shaped crystals. , 2017, , .		7
51	Enhanced high-harmonic generation in photonics crystal: theoretical and experimental studies. , 2017, , .		0
52	The active-passive continuous-wave terahertz imaging system. <i>Journal of Physics: Conference Series</i> , 2016, 735, 012075.	0.3	6
53	2nd International Symposium "Optics and its Applications". <i>Journal of Physics: Conference Series</i> , 2016, 672, 011001.	0.3	0
54	<i>In vivo</i> terahertz pulsed spectroscopy of dysplastic and non-dysplastic skin nevi. <i>Journal of Physics: Conference Series</i> , 2016, 735, 012076.	0.3	15

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55	Combined terahertz imaging system for enhanced imaging quality. Optical and Quantum Electronics, 2016, 48, 1.	1.5	8
56	Non-destructive testing of composite materials using terahertz time-domain spectroscopy. , 2016, , .		3
57	Terahertz Photonic Crystal Waveguides Based on Sapphire Shaped Crystals. IEEE Transactions on Terahertz Science and Technology, 2016, 6, 576-582.	2.0	49
58	Principle component analysis and linear discriminant analysis of multi-spectral autofluorescence imaging data for differentiating basal cell carcinoma and healthy skin. , 2016, , .		2
59	Second Harmonic Generation in Microstructured Barium Titanate. Journal of Russian Laser Research, 2016, 37, 254-258.	0.3	2
60	Terahertz waveguides based on multichannel sapphire shaped crystals. , 2016, , .		2
61	Radiation scattering on growing ordered structures. Journal of Physics: Conference Series, 2016, 673, 012011.	0.3	0
62	Interpolation method for pair correlations in classical crystals. Journal of Physics Condensed Matter, 2016, 28, 235401.	0.7	22
63	Ion-Specific and Thermal Effects in the Stabilization of the Gas Nanobubble Phase in Bulk Aqueous Electrolyte Solutions. Langmuir, 2016, 32, 11245-11255.	1.6	78
64	Numerical simulation of terahertz-wave propagation in photonic crystal waveguide based on sapphire shaped crystal. Journal of Physics: Conference Series, 2016, 673, 012001.	0.3	3
65	Terahertz pulsed spectroscopy of medium polymerization. , 2016, , .		0
66	Terahertz spectroscopy of pigimentary skin nevi in vivo. Optics and Spectroscopy (English Translation) Tj ETQqO 0 0,rgBT /Overlock 10 T	0.2	27
67	A hybrid continuous-wave terahertz imaging system. Review of Scientific Instruments, 2015, 86, 113704.	0.6	33
68	Nonlinear conversion in optical waveguide filled with NaNO2. Journal of Physics: Conference Series, 2015, 584, 012009.	0.3	0
69	Scattering in structured two-layered medium. Journal of Physics: Conference Series, 2015, 584, 012019.	0.3	4
70	Hyper-spectral modulation fluorescent imaging using double acousto-optical tunable filter based on TeO2-crystals. Journal of Physics: Conference Series, 2015, 584, 012017.	0.3	0
71	Pseudo-stochastic signal characterization in wavelet-domain. Journal of Physics: Conference Series, 2015, 584, 012021.	0.3	0
72	Practical thermodynamics of Yukawa systems at strong coupling. Journal of Chemical Physics, 2015, 142, 194903.	1.2	46

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73	Problem of light scattering in complex media. Journal of Physics: Conference Series, 2015, 584, 012025.	0.3	1
74	A method of studying spectral optical characteristics of a homogeneous medium by means of terahertz time-domain spectroscopy. Optics and Spectroscopy (English Translation of Optika i Tj ETQq0 0 0 rgBT /0.2verlock 10 Tf 50 69	0.2	10
75	An impact of multiple wave reflections in a flat sample on material parameter reconstruction using THz pulsed spectroscopy. Journal of Physics: Conference Series, 2015, 584, 012005.	0.3	4
76	Wavelet-domain de-noising of optical coherent tomography data for biomedical applications. Journal of Physics: Conference Series, 2015, 584, 012013.	0.3	3
77	Structural light focusing phenomenon and enhanced second harmonic generation in NaNO ₂ -infiltrated opal photonic crystal. Journal of Physics: Conference Series, 2015, 584, 012002.	0.3	1
78	Multilayer-graphene-based amplifier of surface acoustic waves. AIP Advances, 2015, 5, .	0.6	17
79	Nonlinear optical conversion in synthetic opal. Inorganic Materials, 2015, 51, 419-424.	0.2	5
80	Study of electromagnetic field surface states in photonic crystals using the finite-difference method. Bulletin of the Lebedev Physics Institute, 2015, 42, 48-54.	0.1	0
81	<i>In vivo</i> spectroscopy of healthy skin and pathology in terahertz frequency range. Journal of Physics: Conference Series, 2015, 584, 012023.	0.3	12
82	Second optical harmonic near the surface of ferroelectric photonic crystals and photon traps. Physics of the Solid State, 2015, 57, 453-459.	0.2	6
83	<i>In vivo</i> terahertz spectroscopy of pigmentary skin nevi: Pilot study of non-invasive early diagnosis of dysplasia. Applied Physics Letters, 2015, 106, .	1.5	112
84	Peculiarity of Terahertz Waves Scattering. International Journal of High Speed Electronics and Systems, 2015, 24, 1520002.	0.3	5
85	Highly Accurate in Vivo Terahertz Spectroscopy of Healthy Skin: Variation of Refractive Index and Absorption Coefficient Along the Human Body. IEEE Transactions on Terahertz Science and Technology, 2015, 5, 817-827.	2.0	66
86	Non-Destructive Evaluation of Polymer Composite Materials at the Manufacturing Stage Using Terahertz Pulsed Spectroscopy. IEEE Transactions on Terahertz Science and Technology, 2015, 5, 810-816.	2.0	95
87	Pair correlations in classical crystals: The shortest-graph method. Journal of Chemical Physics, 2015, 143, 034506.	1.2	26
88	Enhanced third harmonic generation using the surface states of light in periodic photonic structures. Journal of Physics: Conference Series, 2014, 541, 012072.	0.3	4
89	An approach for automatic construction of the wavelet-domain de-noising procedure for THz pulsed spectroscopy signal processing. Journal of Physics: Conference Series, 2014, 486, 012034.	0.3	7
90	FDTD simulation of the electromagnetic field surface states in 2D photonic crystals. Journal of Physics: Conference Series, 2014, 486, 012003.	0.3	9

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91	Spectroscopy of Nafion in terahertz frequency range. Journal of Applied Physics, 2014, 116, .	1.1	29
92	Enhancement of second harmonic generation in NaNO ₂ -infiltrated opal photonic crystal using structural light focusing. Applied Physics Letters, 2014, 105, 051902.	1.5	31
93	Sensing of phase transition in medium with terahertz pulsed spectroscopy. Journal of Physics: Conference Series, 2014, 486, 012024.	0.3	4
94	Wavelet-domain de-noising technique for THz pulsed spectroscopy. , 2014, , .		6
95	The structure and spectral properties of two-dimensional dipole systems. Journal of Physics: Conference Series, 2014, 486, 012031.	0.3	1
96	Summer school in Kabardino-Balkaria by BMSTU SPIE Student Chapter. Proceedings of SPIE, 2014, , .	0.8	0
97	Accuracy of sample material parameters reconstruction using terahertz pulsed spectroscopy. Journal of Applied Physics, 2014, 115, .	1.1	50
98	The shortest-graph method for calculation of the pair-correlation function in crystalline systems. Journal of Chemical Physics, 2014, 140, 134502.	1.2	25
99	Band-gap nonlinear optical generation: The structure of internal optical field and the structural light focusing. Journal of Applied Physics, 2014, 115, 213505.	1.1	40
100	Novel Algorithm for Sample Material Parameter Determination using THz Time-Domain Spectrometer Signal Processing. Journal of Physics: Conference Series, 2014, 486, 012018.	0.3	11
101	BWO based THz imaging system. Journal of Physics: Conference Series, 2014, 486, 012027.	0.3	12
102	Nondestructive testing of polymer composite materials using THz radiation. Journal of Physics: Conference Series, 2014, 486, 012008.	0.3	19
103	2nd Russiaâ€“Japanâ€“USA Symposium on the Fundamental and Applied Problems of Terahertz Devices and Technologies (RJUS TeraTech â€“ 2013). Journal of Physics: Conference Series, 2014, 486, 011001.	0.3	0
104	Medical diagnostics using terahertz pulsed spectroscopy. Journal of Physics: Conference Series, 2014, 486, 012014.	0.3	24
105	A Comparison of Terahertz Pulsed Spectroscopy and Backward-Wave Oscillator Spectroscopy. Journal of Physics: Conference Series, 2014, 536, 012009.	0.3	3
106	Quantum Tomograms and Their Application in Quantum Information Science. Journal of Physics: Conference Series, 2013, 414, 012040.	0.3	5
107	Graphene terahertz uncooled bolometers. Journal Physics D: Applied Physics, 2013, 46, 065102.	1.3	38
108	Effect of plasma resonances on dynamic characteristics of double graphene-layer optical modulator. Journal of Applied Physics, 2012, 112, .	1.1	50

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109	Hydrodynamic model for electron-hole plasma in graphene. Journal of Applied Physics, 2012, 111, .	1.1	132
110	Structure of the nanobubble clusters of dissolved air in liquid media. Journal of Biological Physics, 2012, 38, 121-152.	0.7	54
111	Evolution of perturbations of a charged interface between immiscible inviscid fluids in the interelectrode gap. Fluid Dynamics, 2010, 45, 817-826.	0.2	3
112	Nonlinear waves propagating over a conducting ideal fluid surface in an electric field. Fluid Dynamics, 2009, 44, 748-758.	0.2	3
113	Features of combined instability of a charged interface between moving media. Journal of Engineering Physics and Thermophysics, 2007, 80, 912-917.	0.2	5
114	On the problem of instability of the boundary of two media of finite thickness. Journal of Engineering Physics and Thermophysics, 2007, 80, 1199-1205.	0.2	3