

Victor Pergamenshchik

List of Publications by Year in descending order

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42
papers

843
citations

471509

17
h-index

477307

29
g-index

42
all docs

42
docs citations

42
times ranked

460
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Stripe Domain Phase of a Thin Nematic Film and the K_{13} Divergence Term. <i>Physical Review Letters</i> , 1994, 73, 979-982. | 7.8 | 116 |
| 2 | Coexistence of Two Colloidal Crystals at the Nematic-Liquid-Crystal-Air Interface. <i>Physical Review Letters</i> , 2007, 98, 057801. | 7.8 | 84 |
| 3 | Phenomenological approach to the problem of the K_{13} surfacelike elastic term in the free energy of a nematic liquid crystal. <i>Physical Review E</i> , 1993, 48, 1254-1264. | 2.1 | 71 |
| 4 | Dipolar colloids in nematostatics: Tensorial structure, symmetry, different types, and their interaction. <i>Physical Review E</i> , 2011, 83, 021701. | 2.1 | 55 |
| 5 | Surfacelike-elasticity-induced spontaneous twist deformations and long-wavelength stripe domains in a hybrid nematic layer. <i>Physical Review E</i> , 1993, 47, 1881-1892. | 2.1 | 54 |
| 6 | Coulomb-like interaction in nematic emulsions induced by external torques exerted on the colloids. <i>Physical Review E</i> , 2007, 76, 011707. | 2.1 | 35 |
| 7 | Non-Debye screening of a surface charge and a bulk-ion-controlled anchoring transition in a nematic liquid crystal. <i>Physical Review E</i> , 1999, 60, 5580-5583. | 2.1 | 32 |
| 8 | Spontaneous deformations of the uniform director ground state induced by the surfacelike elastic terms in a thin planar nematic layer. <i>Physical Review E</i> , 2000, 61, 3936-3941. | 2.1 | 29 |
| 9 | Colloid-wall interaction in a nematic liquid crystal: The mirror-image method of colloidal nematostatics. <i>Physical Review E</i> , 2009, 79, 021704. | 2.1 | 29 |
| 10 | Distortions induced by the K_{13} surfacelike elastic term in a thin nematic liquid-crystal film. <i>Physical Review E</i> , 1993, 48, 1265-1271. | 2.1 | 28 |
| 11 | Elastic charge density representation of the interaction via the nematic director field. <i>European Physical Journal E</i> , 2007, 23, 161-174. | 1.6 | 28 |
| 12 | Nucleation of focal conic domains in smectic A liquid crystals. <i>Journal De Physique II</i> , 1994, 4, 377-404. | 0.9 | 28 |
| 13 | Measurement of polar anchoring coefficient for nematic cell with high pretilt angle. <i>Applied Physics Letters</i> , 1995, 67, 214-216. | 3.3 | 25 |
| 14 | Subsurface deformations in nematic liquid crystals: The hexagonal lattice approach. <i>Physical Review E</i> , 1997, 56, 571-580. | 2.1 | 21 |
| 15 | Macroscopic Properties of the Nematic Phase of Boomerang-Shaped "C7": Evidence of Biaxiality. <i>Journal of the Korean Physical Society</i> , 2008, 52, 342-349. | 0.7 | 21 |
| 16 | Hypothesis of Dye Aggregation in a Nematic Liquid Crystal: From Experiment to a Model of the Enhanced Light-Director Interaction. <i>Molecular Crystals and Liquid Crystals</i> , 2006, 454, 145/[547]-156/[558]. | 0.9 | 18 |
| 17 | K_{13} term and effective boundary condition for the nematic director. <i>Physical Review E</i> , 1998, 58, R16-R19. | 2.1 | 17 |
| 18 | Strong collective attraction in colloidal clusters on a liquid-air interface. <i>Physical Review E</i> , 2009, 79, 011407. | 2.1 | 17 |

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|----|--|-----|-----------|
| 19 | Surface variations of the density and scalar order parameter and the elastic constants of a uniaxial nematic phase. <i>Physical Review E</i> , 1999, 59, R2531-R2534. | 2.1 | 15 |
| 20 | Stripe domains in a nearly homeotropic nematic liquid crystal: A bend escaped state at a nematic-smectic transition. <i>Physical Review E</i> , 2008, 77, 041703. | 2.1 | 14 |
| 21 | Elastic multipoles in the field of the nematic director distortions. <i>European Physical Journal E</i> , 2014, 37, 121. | 1.6 | 12 |
| 22 | Periodic Domain Structures in Thin Hybrid Nematic Layers. <i>Molecular Crystals and Liquid Crystals Incorporating Nonlinear Optics</i> , 1990, 179, 125-132. | 0.3 | 11 |
| 23 | Stability and minimum size of colloidal clusters on a liquid-air interface. <i>Physical Review E</i> , 2012, 85, 021403. | 2.1 | 10 |
| 24 | Kosterlitz-Thouless-type caging-uncaging transition in a quasi-one-dimensional hard disk system. <i>Physical Review Research</i> , 2020, 2, . | 3.6 | 9 |
| 25 | Selective light-induced desorption: The mechanism of photoalignment of liquid crystals at adsorbing solid surfaces. <i>Europhysics Letters</i> , 2006, 75, 448-454. | 2.0 | 8 |
| 26 | Sign inversion of the optical torque on the nematic director enhanced by anthraquinone dye dopants stable to the light action. <i>Laser Physics Letters</i> , 2006, 3, 531-535. | 1.4 | 8 |
| 27 | Analytical canonical partition function of a quasi-one-dimensional system of hard disks. <i>Journal of Chemical Physics</i> , 2020, 153, 144111. | 3.0 | 8 |
| 28 | Full energy expression of a uniaxial nematic phase with spatially dependent density and order parameters: From microscopic to macroscopic theory. <i>Physical Review E</i> , 2002, 66, 051712. | 2.1 | 7 |
| 29 | Effects of Anthraquinone Dye Aggregation on Selective Reflection Spectra of Cholesteric Liquid Crystal. <i>Molecular Crystals and Liquid Crystals</i> , 2008, 496, 202-211. | 0.9 | 6 |
| 30 | Magnetic Field Effects in a Nematic Cell with a High Tilt Angle (First-Order Theory). <i>Molecular Crystals and Liquid Crystals</i> , 1996, 288, 129-141. | 0.3 | 3 |
| 31 | K ₁₃ -Induced Deformations in a Nematic Liquid Crystal: Experimental Test of the First-Order Theory. <i>Molecular Crystals and Liquid Crystals</i> , 1997, 292, 25-37. | 0.3 | 3 |
| 32 | Magnetic field controlled optical phase retardation in a hybrid nematic cell. <i>Liquid Crystals</i> , 1998, 24, 607-612. | 2.2 | 3 |
| 33 | Non-Debye Charge Screening and Adsorbed-Ion-Induced Anchoring Transition in a Nematic Liquid Crystal. <i>Molecular Crystals and Liquid Crystals</i> , 2000, 352, 1-8. | 0.3 | 3 |
| 34 | Statistical mechanics of aggregation in anisotropic solvents: kinetic energy of aggregates and universal power-law behavior far from criticality. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2012, 2012, P05016. | 2.3 | 3 |
| 35 | Aggregation of Anthraquinone Dye Molecules in a Nematic Liquid Crystal. <i>Molecular Crystals and Liquid Crystals</i> , 2014, 589, 96-104. | 0.9 | 3 |
| 36 | Interaction of the Torque-Induced Elastic Charge and Elastic Dipole with a Wall in a Nematic Liquid Crystal. <i>Molecular Crystals and Liquid Crystals</i> , 2009, 508, 115/[477]-126/[488]. | 0.9 | 2 |

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|----|--|-----|-----------|
| 37 | Model of aggregation in anisotropic liquids: Two aggregation regimes with a universal power-law concentration dependence. <i>Journal of the Korean Physical Society</i> , 2012, 60, 333-348. | 0.7 | 2 |
| 38 | Statistical model of a flexible inextensible polymer chain: The effect of kinetic energy. <i>Physical Review E</i> , 2017, 95, 012501. | 2.1 | 2 |
| 39 | Interaction of supramolecular aggregates and the enhanced optical torque on the director in a dye doped nematic liquid crystal. <i>Soft Matter</i> , 2019, 15, 8886-8895. | 2.7 | 2 |
| 40 | Anchoring-induced nonmonotonic velocity versus temperature dependence of motile bacteria in a lyotropic nematic liquid crystal. <i>Physical Review E</i> , 2021, 104, 054603. | 2.1 | 1 |
| 41 | How small can an equilibrium colloidal cluster on a liquid-air interface be?. <i>Journal of the Korean Physical Society</i> , 2012, 60, 488-495. | 0.7 | 0 |
| 42 | Reply to "Comment on "Kosterlitz-Thouless-type caging-uncaging transition in a quasi-one-dimensional hard disk system". <i>Physical Review Research</i> , 2021, 3, . | 3.6 | 0 |