

Yuriy A Kosevich

List of Publications by Year in descending order

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84
papers

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citations

331259

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docs citations

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times ranked

1429
citing authors

#	ARTICLE	IF	CITATIONS
1	Blocking Phonon Transport by Structural Resonances in Alloy-Based Nanophononic Metamaterials Leads to Ultralow Thermal Conductivity. <i>Physical Review Letters</i> , 2016, 117, 025503.	2.9	153
2	Functionalization mediates heat transport in graphene nanoflakes. <i>Nature Communications</i> , 2016, 7, 11281.	5.8	123
3	Acoustic Analogue of Electronic Bloch Oscillations and Resonant Zener Tunneling in Ultrasonic Superlattices. <i>Physical Review Letters</i> , 2007, 98, 134301.	2.9	115
4	Thermal conductivity of molecular chains with asymmetric potentials of pair interactions. <i>Physical Review E</i> , 2014, 89, 032102.	0.8	70
5	Nonlinear sinusoidal waves and their superposition in anharmonic lattices. <i>Physical Review Letters</i> , 1993, 71, 2058-2061.	2.9	67
6	Modulational instability and energy localization in anharmonic lattices at finite energy density. <i>Physical Review B</i> , 2000, 61, 299-307.	1.1	67
7	Ultracompact Interference Phonon Nanocapacitor for Storage and Lasing of Coherent Terahertz Lattice Waves. <i>Physical Review Letters</i> , 2015, 114, 145501.	2.9	51
8	Capillary phenomena and macroscopic dynamics of complex two-dimensional defects in crystals. <i>Progress in Surface Science</i> , 1997, 55, 1-57.	3.8	50
9	Tunable thermal conductivity in silicon twinning superlattice nanowires. <i>Physical Review B</i> , 2014, 90, .	1.1	49
10	Supersonic discrete kink-solitons and sinusoidal patterns with $\omega \propto k$ wave number in anharmonic lattices. <i>Europhysics Letters</i> , 2004, 66, 21-27.	0.7	47
11	Phonon interference and thermal conductance reduction in atomic-scale metamaterials. <i>Physical Review B</i> , 2014, 89, .	1.1	47
12	Nonlinear envelope-function equation and strongly localized vibrational modes in anharmonic lattices. <i>Physical Review B</i> , 1993, 47, 3138-3152.	1.1	46
13	Classical to Quantum Transition of Heat Transfer between Two Silica Clusters. <i>Physical Review Letters</i> , 2014, 112, 114301.	2.9	44
14	Fluctuation subharmonic and multiharmonic phonon transmission and Kapitza conductance between crystals with very different vibrational spectra. <i>Physical Review B</i> , 1995, 52, 1017-1024.	1.1	42
15	Ultradiscrete kinks with supersonic speed in a layered crystal with realistic potentials. <i>Physical Review E</i> , 2015, 91, 022912.	0.8	42
16	Fano-like resonance phenomena by flexural shell modes in sound transmission through two-dimensional periodic arrays of thin-walled hollow cylinders. <i>Physical Review B</i> , 2006, 74, .	1.1	41
17	Semiquantum molecular dynamics simulation of thermal properties and heat transport in low-dimensional nanostructures. <i>Physical Review B</i> , 2012, 86, .	1.1	38
18	Surface Acoustic Bloch Oscillations, the Wannier-Stark Ladder, and Landau-Zener Tunneling in a Solid. <i>Physical Review Letters</i> , 2010, 104, 165502.	2.9	37

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19	Wandering breathers and self-trapping in weakly coupled nonlinear chains: Classical counterpart of macroscopic tunneling quantum dynamics. <i>Physical Review E</i> , 2008, 77, 046603.	0.8	36
20	Fresnel integrals and irreversible energy transfer in an oscillatory system with time-dependent parameters. <i>Physical Review E</i> , 2011, 83, 026602.	0.8	24
21	Phonon-interference resonance effects by nanoparticles embedded in a matrix. <i>Physical Review B</i> , 2017, 96, .	1.1	24
22	Self-Induced Shapiro Effect in Semiconductor Superlattices. <i>Physical Review Letters</i> , 2000, 85, 4763-4766.	2.9	21
23	New soliton equation and exotic localized modes in anharmonic lattices. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1993, 173, 257-262.	0.9	20
24	Temporal Fourier spectra of stationary and slowly moving breathers in Fermiâ€“Pastaâ€“Ulam anharmonic lattice. <i>Physica D: Nonlinear Phenomena</i> , 2002, 170, 1-12.	1.3	20
25	Ultrafast Fiske Effect in Semiconductor Superlattices. <i>Physical Review Letters</i> , 2006, 96, 137403.	2.9	20
26	Towards a new type of energy trap: Classical analog of quantum Landau-Zener tunneling. <i>International Journal of Non-Linear Mechanics</i> , 2011, 46, 247-252.	1.4	20
27	Long wavelength surface oscillations of a crystal with an adsorbed monolayer. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1989, 135, 298-302.	0.9	19
28	Reduction of phonon thermal conductivity in nanowires and nanoribbons with dynamically rough surfaces and edges. <i>Europhysics Letters</i> , 2009, 88, 14002.	0.7	19
29	Effects of quantum statistics of phonons on the thermal conductivity of silicon and germanium nanoribbons. <i>Nanoscale Research Letters</i> , 2013, 8, 7.	3.1	18
30	Resonance absorption, reflection, transmission of phonons and heat transfer through interface between two solids. <i>Low Temperature Physics</i> , 2008, 34, 575-582.	0.2	17
31	Flexural rigidity of layers and its manifestation in the vibrational characteristics of strongly anisotropic layered crystals. Characteristic frequencies and stability conditions in quasi-two-dimensional systems. <i>Low Temperature Physics</i> , 2009, 35, 158-165.	0.2	16
32	Substrate-induced cross-plane thermal propagative modes in few-layer graphene. <i>Physical Review B</i> , 2014, 89, .	1.1	16
33	Nonlinear waves in a model for silicate layers. <i>Chaos</i> , 2018, 28, 083119.	1.0	16
34	Capillary phenomena and elastic waves localized near a plane crystal defect. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1987, 122, 178-182.	0.9	15
35	Vibrations localized near surfaces and interfaces in nontraditional crystals. <i>Progress in Surface Science</i> , 1997, 55, 59-111.	3.8	15
36	Bloch oscillations of an acoustic field in a layered structure. <i>Acoustical Physics</i> , 2013, 59, 137-147.	0.2	15

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37	Magnetoplasma oscillations of a two-dimensional electron layer in a bounded system. Physics Letters, Section A: General, Atomic and Solid State Physics, 1988, 127, 52-56.	0.9	14
38	On the possibility of measuring the tensor of surface stress in thin crystalline plates. Solid State Communications, 1989, 70, 541-543.	0.9	14
39	Dissipative interaction and anomalous surface absorption of bulk phonons at a two-dimensional defect in a solid. Physics Letters, Section A: General, Atomic and Solid State Physics, 1999, 251, 378-386.	0.9	14
40	Nanoplasmonics. Physics-Uspexhi, 2008, 51, .	0.8	14
41	Two-path phonon interference resonance induces a stop band in a silicon crystal matrix with a multilayer array of embedded nanoparticles. Physical Review B, 2020, 102, .	1.1	14
42	Nonlinear shear surface waves at interfaces and planar defects of crystals. Physics Letters, Section A: General, Atomic and Solid State Physics, 1990, 146, 529-534.	0.9	13
43	Wannier-Stark ladder in the linear absorption of a random system with scale-free disorder. Physical Review B, 2006, 73, .	1.1	13
44	Giant double-resonant optical rotation and total polarization conversion in gyrotropic and anisotropic two-dimensional systems. Solid State Communications, 1997, 104, 321-326.	0.9	12
45	Energy transfer in coupled nonlinear phononic waveguides: transition from wandering breather to nonlinear self-trapping. Journal of Physics: Conference Series, 2007, 92, 012093.	0.3	12
46	Energy transfer in weakly coupled nonlinear oscillator chains: Transition from a wandering breather to nonlinear self-trapping. Journal of Sound and Vibration, 2009, 322, 524-531.	2.1	12
47	A Supersonic Crowdion in Mica. Springer Series in Materials Science, 2015, , 69-96.	0.4	12
48	Coexistence of two elastic surface modes enhanced by viscous losses. Europhysics Letters, 2002, 60, 241-247.	0.7	11
49	Charged ultradiscrete supersonic kinks and discrete breathers in nonlinear molecular chains with realistic interatomic potentials and electron-phonon interactions. Journal of Physics: Conference Series, 2017, 833, 012021.	0.3	11
50	Magnon localization and Bloch oscillations in finite Heisenberg spin chains in an inhomogeneous magnetic field. Journal of Physics Condensed Matter, 2013, 25, 246002.	0.7	10
51	Effects of phonon interference through long range interatomic bonds on thermal interface conductance. Low Temperature Physics, 2016, 42, 711-716.	0.2	10
52	Collective oscillations of twin boundaries in high-temperature superconductors as an acoustic analogue of two-dimensional plasmons. Physical Review B, 1991, 43, 326-332.	1.1	9
53	Van der Waals coupled surface waves in nonpiezoelectric crystals and thin films. Physics Letters, Section A: General, Atomic and Solid State Physics, 1991, 155, 295-298.	0.9	8
54	Semiclassical Balance Equations in Semiconductor Superlattices in Strong Crossed Fields. Physical Review Letters, 2002, 88, 229701; author reply 229702.	2.9	7

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55	Electro-optic investigation of the Coherent Hall Effect in semiconductor superlattices. <i>Physica Status Solidi (B): Basic Research</i> , 2005, 242, 1175-1178.	0.7	7
56	Effect of phonon damping on the resonance reflection of a transverse sound wave from a planar defect in a crystal. <i>Journal of Experimental and Theoretical Physics</i> , 2000, 90, 974-978.	0.2	6
57	Bloch oscillations of spin waves in a nonuniform magnetic field. <i>Low Temperature Physics</i> , 2010, 36, 722-727.	0.2	6
58	Tunable coupled surface acoustic cavities. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	6
59	Spontaneous surface polarization at the liquid crystal-substrate interface. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1992, 170, 41-44.	0.9	5
60	Reevaluation of the Crossover from Elastic to Capillary Surface Waves on Soft Gels. <i>Physical Review Letters</i> , 2003, 90, 059601; author reply 059602.	2.9	5
61	Long-range interatomic forces can minimize heat transfer: From slowdown of longitudinal optical phonons to thermal conductivity minimum. <i>Physical Review B</i> , 2016, 94, .	1.1	5
62	Application of surface acoustic waves to direct measurement of the parameters of superfluid helium thin films. <i>Journal of Physics Condensed Matter</i> , 1990, 2, 5047-5052.	0.7	4
63	Nonlinear shear surface waves at the interfaces and planar defects of crystals. <i>International Journal of Engineering Science</i> , 1991, 29, 327-330.	2.7	4
64	Kinetics and aging in atomic layer epitaxy ZnS:Mn ac thin-film electroluminescent devices. <i>Journal of Applied Physics</i> , 1997, 82, 5241-5246.	1.1	4
65	Surface acoustic waves and magnetotransport in an embedded modulated two-dimensional electron gas. <i>Physical Review B</i> , 2000, 61, 16708-16719.	1.1	4
66	Phonon Interference and Energy Transport in Nonlinear Lattices with Resonance Defects. <i>Springer Series in Materials Science</i> , 2015, , 247-263.	0.4	4
67	Confining interparticle potential makes both heat transport and energy diffusion anomalous in one-dimensional phononic systems. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2016, 380, 3480-3484.	0.9	4
68	Kinks in a Lattice of Repelling Particles. <i>Understanding Complex Systems</i> , 2018, , 261-282.	0.3	4
69	Kosevich Replies:. <i>Physical Review Letters</i> , 1997, 79, 4716-4716.	2.9	2
70	Generation of a DC Fiske current by coupling of Bloch and in-plane cyclotron oscillations in a semiconductor superlattice. <i>Physica Status Solidi (B): Basic Research</i> , 2006, 243, 2405-2409.	0.7	2
71	Non-linear mechanical analogue of quantum Rabi oscillations in coherent output coupler for atoms in Bose-Einstein condensate. <i>Journal of Micromechanics and Molecular Physics</i> , 2016, 01, 1650007.	0.7	2
72	Magnetoplasma oscillations of the wave-guided type in semiconductor superlattices. <i>Journal of Physics Condensed Matter</i> , 1990, 2, 6279-6286.	0.7	1

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73	Low frequency acoustic oscillations of twin superstructures in ferroelastics near the phase transition. <i>Ferroelectrics</i> , 1990, 112, 155-164.	0.3	1
74	Propagation of acoustic waves in bounded ferroelastics near phase transitions. <i>Ferroelectrics</i> , 1990, 110, 3-8.	0.3	1
75	Localized superconductivity induced by an array of steps at a non-coherent twin boundary. <i>Journal of Physics Condensed Matter</i> , 1992, 4, 1555-1558.	0.7	1
76	Enhanced heat spreader based on few-layer graphene intercalated with silane-functionalization molecules. , 2014, , .		1
77	Transmission of quasiparticle excitations through interfaces between two media (Review Article). <i>Low Temperature Physics</i> , 2016, 42, 609-616.	0.2	1
78	Modeling of One-Side Surface Modifications of Graphene. <i>Materials</i> , 2019, 12, 4179.	1.3	1
79	Soft flexural waves and self-localization of wrinkling modes of single- and few-layer graphene under compression in a compliant matrix. <i>Physical Review B</i> , 2022, 105, .	1.1	1
80	On the dispersion relation of crystallization-melting waves on the quantum crystal surface. <i>Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics</i> , 1981, 108, 1195-1196.	0.9	0
81	Fluctuation subharmonic and multiharmonic phonon transmission and Kapitza conductance between solids with very different vibrational spectra. <i>European Physical Journal D</i> , 1996, 46, 2721-2722.	0.4	0
82	Ultrafast Fiske effect in semiconductor superlattices induced by the coupling of electron Bloch oscillations to longitudinal optical phonons and coherent plasmons. <i>Journal of Physics: Conference Series</i> , 2007, 92, 012053.	0.3	0
83	On the 75th anniversary of the discovery of the Kapitza thermal resistance. <i>Low Temperature Physics</i> , 2016, 42, 607-608.	0.2	0
84	Phase dynamics of discrete breathers periodically tunneling in weakly coupled nonlinear chains. <i>Low Temperature Physics</i> , 2018, 44, 671-677.	0.2	0