

Arkadii Krokhin

List of Publications by Year in descending order

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46
papers

1,626
citations

430874

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289244

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46
all docs

46
docs citations

46
times ranked

957
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultrasonic elastography for nondestructive evaluation of dissimilar material joints. Journal of Materials Processing Technology, 2022, 299, 117301.	6.3	8
2	Simultaneous negative reflection and refraction and reverse-incident right-angle collimation of sound in a solid-fluid phononic crystal. Journal of the Acoustical Society of America, 2022, 151, 2723-2731.	1.1	7
3	Crystallographic texture dependent bulk anisotropic elastic response of additively manufactured Ti6Al4V. Scientific Reports, 2021, 11, 633.	3.3	16
4	Localization of ultrasound in 2D phononic crystal with randomly oriented asymmetric scatterers. Journal of Applied Physics, 2021, 129, .	2.5	10
5	Thermomechanically influenced dynamic elastic constants of laser powder bed fusion additively manufactured Ti6Al4V. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 811, 140990.	5.6	16
6	Surface plasmon at a metal-dielectric interface with an epsilon-near-zero transition layer. Physical Review B, 2021, 103, .	3.2	0
7	Sub-Diffraction-Limit Imaging System with two Interfacing Hyperbolic Metamaterials. Physical Review Applied, 2021, 16, .	3.8	2
8	Spatial Decomposition of a Broadband Pulse Caused by Strong Frequency Dispersion of Sound in Acoustic Metamaterial Superlattice. Materials, 2021, 14, 125.	2.9	5
9	The effects of temperature and frequency dispersion on sound speed in bulk poly (vinyl alcohol) poly (N-isopropylacrylamide) hydrogels caused by the phase transition. Ultrasonics, 2020, 104, 105931.	3.9	16
10	Enhanced Instantaneous Elastography in Tissues and Hard Materials Using Bulk Modulus and Density Determined Without Externally Applied Material Deformation. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 624-634.	3.0	18
11	Long-range nonspreading propagation of sound beam through periodic layered structure. Communications Physics, 2020, 3, .	5.3	13
12	Novel 2D Dynamic Elasticity Maps for Inspection of Anisotropic Properties in Fused Deposition Modeling Objects. Polymers, 2020, 12, 1966.	4.5	14
13	Non-reciprocal acoustics in a viscous environment. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20200657.	2.1	8
14	Nondestructive ultrasonic evaluation of fused deposition modeling based additively manufactured 3D-printed structures. Smart Materials and Structures, 2020, 29, 045020.	3.5	33
15	Phononic crystal as a homogeneous viscous metamaterial. Physical Review Research, 2020, 2, .	3.6	15
16	Dynamical effective parameters of elastic superlattice with strong acoustic contrast between the constituents. Low Temperature Physics, 2018, 44, 1280-1284.	0.6	2
17	Nonreciprocal Linear Transmission of Sound in a Viscous Environment with Broken P Symmetry. Physical Review Letters, 2018, 120, 204501.	7.8	18
18	Transport properties and enhanced figure of merit of quantum dot-based spintronic thermoelectric device. Journal of Physics Condensed Matter, 2018, 30, 315303.	1.8	2

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19	Redirection and Splitting of Sound Waves by a Periodic Chain of Thin Perforated Cylindrical Shells. <i>Physical Review Applied</i> , 2017, 7, .	3.8	4
20	High-frequency homogenization for layered hyperbolic metamaterials. <i>Physical Review B</i> , 2016, 93, .	3.2	21
21	Metallic Nanodroplet Induced Coulomb Catalysis for Off-Resonant Plasmonic Enhancement of Photoemission in Semiconductors. <i>ACS Omega</i> , 2016, 1, 19-28.	3.5	3
22	Electrostatic mechanism of strong enhancement of light emitted by semiconductor quantum wells due to the incorporation of metallic nanocrystals. , 2016, , .		0
23	Redirection of sound in straight fluid channel with elastic boundaries. <i>Physical Review B</i> , 2015, 91, .	3.2	6
24	Comparison of electrostatic and localized plasmon induced light enhancement in hybrid InGaN/GaN quantum wells. <i>Applied Physics Letters</i> , 2014, 104, 242106.	3.3	7
25	Anomalous temperature dependence of speed of sound of bulk poly(N-isopropylacrylamide) hydrogels near the phase transition. <i>Ultrasonics</i> , 2014, 54, 1337-1340.	3.9	9
26	Electrostatic mechanism of strong enhancement of light emitted by semiconductor quantum wells. <i>Physical Review B</i> , 2013, 87, .	3.2	12
27	Resonant coupling of Rayleigh waves through a narrow fluid channel causing extraordinary low acoustic transmission. <i>Journal of the Acoustical Society of America</i> , 2012, 132, 2807-2815.	1.1	4
28	Resonant excitation of coupled Rayleigh waves in a short and narrow fluid channel clad between two identical metal plates. <i>AIP Advances</i> , 2011, 1, .	1.3	4
29	Metafluid with anisotropic dynamic mass. <i>Low Temperature Physics</i> , 2011, 37, 975-978.	0.6	9
30	Inhomogeneous DNA: Conducting exons and insulating introns. <i>Physical Review B</i> , 2009, 80, .	3.2	23
31	Swelling Kinetics of a Microgel Shell. <i>Macromolecules</i> , 2009, 42, 9357-9365.	4.8	32
32	Tunable Photonic Crystals Incorporating Variable Refractive Index Organic Polymers. , 2008, , .		0
33	Enhancement of Localization in One-Dimensional Random Potentials with Long-Range Correlations. <i>Physical Review Letters</i> , 2008, 100, 126402.	7.8	82
34	Controlled terahertz frequency response and transparency of Josephson chains and superconducting multilayers. <i>Physical Review B</i> , 2007, 75, .	3.2	31
35	Electron localization in a two-channel tight-binding model with correlated disorder. <i>Physical Review B</i> , 2007, 76, .	3.2	23
36	From the trajectory to the density memory. <i>Chaos, Solitons and Fractals</i> , 2007, 34, 19-32.	5.1	13

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37	Low-frequency index of refraction for a two-dimensional metallodielectric photonic crystal. Physical Review B, 2007, 75, .	3.2	27
38	Dynamical origin of memory and renewal. Physical Review E, 2006, 74, 021108.	2.1	32
39	Homogenization of Magnetodielectric Photonic Crystals. Physical Review Letters, 2004, 93, 023904.	7.8	32
40	Speed of Sound in Periodic Elastic Composites. Physical Review Letters, 2003, 91, 264302.	7.8	108
41	Long-wavelength limit (homogenization) for two-dimensional photonic crystals. Physical Review B, 2002, 65, .	3.2	95
42	Mobility edge in aperiodic Kronig-Penney potentials with correlated disorder: Perturbative approach. Physical Review B, 2001, 63, .	3.2	107
43	Experimental observation of the mobility edge in a waveguide with correlated disorder. Applied Physics Letters, 2000, 77, 633-635.	3.3	198
44	Photonic Crystal Optics and Homogenization of 2D Periodic Composites. Physical Review Letters, 1999, 82, 719-722.	7.8	142
45	Localization and the Mobility Edge in One-Dimensional Potentials with Correlated Disorder. Physical Review Letters, 1999, 82, 4062-4065.	7.8	360
46	Influence of weak dissipation on the photonic band structure of periodic composites. Physical Review B, 1996, 53, 1205-1214.	3.2	39