Pavel Zelenovskiy

List of Publications by Year
in descending order

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89 papers	1,506 citations	304368 22 h-index	377514 34 g-index
89 all docs	89 docs citations	89 times ranked	1635 citing authors

#	Article	IF	Citations
1	Strong piezoelectricity in single-layer graphene deposited on SiO2 grating substrates. Nature Communications, 2015, 6, 7572.	5.8	141
2	Piezoelectric properties of diphenylalanine microtubes prepared from the solution. Journal of Physics and Chemistry of Solids, 2016, 93, 68-72.	1.9	81
3	Investigation of the nanodomain structure formation by piezoelectric force microscopy and Raman confocal microscopy in LiNbO3 and LiTaO3 crystals. Journal of Applied Physics, 2011, 110, 052013.	1.1	65
4	Raman visualization of micro- and nanoscale domain structures inÂlithium niobate. Applied Physics A: Materials Science and Processing, 2010, 99, 741-744.	1.1	61
5	Micro- and nanodomain imaging in uniaxial ferroelectrics: Joint application of optical, confocal Raman, and piezoelectric force microscopy. Journal of Applied Physics, 2014, 116, .	1.1	61
6	On the origin of the great rigidity of self-assembled diphenylalanine nanotubes. Physical Chemistry Chemical Physics, 2016, 18, 29681-29685.	1.3	46
7	Growth and Nonlinear Optical Properties of Î²-Glycine Crystals Grown on Pt Substrates. Crystal Growth and Design, 2014, 14, 2831-2837.	1.4	42
8	Chirality-Dependent Growth of Self-Assembled Diphenylalanine Microtubes. Crystal Growth and Design, 2019, 19, 6414-6421.	1.4	38
9	Immobilization of PMIDA on Fe3O4 magnetic nanoparticles surface: Mechanism of bonding. Applied Surface Science, 2018, 440, 1196-1203.	3.1	35
10	Diphenylalanine-Based Microribbons for Piezoelectric Applications via Inkjet Printing. ACS Applied Materials & Interfaces, 2018, 10, 10543-10551.	4.0	34
11	Evaporation-Driven Crystallization of Diphenylalanine Microtubes for Microelectronic Applications. Crystal Growth and Design, 2016, 16, 1472-1479.	1.4	33
12	Local manifestations of a static magnetoelectric effect in nanostructured BaTiO₃â€“BaFe₁₂O₉composite multiferroics. Nanoscale, 2015, 7, 4489-4496.	2.8	32
13	In Situ Observation of the Humidity Controlled Polymorphic Phase Transformation in Glycine Microcrystals. Crystal Growth and Design, 2014, 14, 4138-4142.	1.4	31
14	Symmetry changes during relaxation process and pulse discharge performance of the BaTiO3-Bi(Mg1/2Ti1/2)O3 ceramic. Journal of Applied Physics, 2018, 124, .	1.1	31
15	Nanodomain structures formation during polarization reversal in uniform electric field in strontium barium niobate single crystals. Journal of Applied Physics, 2012, 112, .	1.1	30
16	Raman study of structural transformations in selfâ€assembled diphenylalanine nanotubes at elevated temperatures. Journal of Raman Spectroscopy, 2017, 48, 1401-1405.	1.2	30
17	Thermal destruction of giant polyoxometalate nanoclusters: A vibrational spectroscopy study. Inorganica Chimica Acta, 2019, 489, 287-300.	1.2	30
18	Raman Study of Neutral and Charged Domain Walls in Lithium Niobate. Ferroelectrics, 2010, 398, 34-41.	0.3	29

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19	Molecular modeling and computational study of the chiral-dependent structures and properties of self-assembling diphenylalanine peptide nanotubes. Journal of Molecular Modeling, 2019, 25, 199.	0.8	27
20	Formation of Nano-Scale Domain Structures in Lithium Niobate Using High-Intensity Laser Irradiation. Ferroelectrics, 2008, 373, 133-138.	0.3	26
21	Discrete Switching by Growth of Nano-Scale Domain Rays Under Highly-Nonequilibrium Conditions in Lithium Niobate Single Crystals. Ferroelectrics, 2008, 373, 99-108.	0.3	26
22	Raman spectroscopy, â€œbig dataâ€, and local heterogeneity of solid state synthesized lithium titanate. Journal of Power Sources, 2017, 346, 143-150.	4.0	24
23	Self-Assembly of Organic Ferroelectrics by Evaporative Dewetting: A Case of Î²-Glycine. ACS Applied Materials & Interfaces, 2017, 9, 20029-20037.	4.0	23
24	Energy harvesting from nanofibers of hybrid organic ferroelectric dabcoHReO4. Applied Physics Letters, 2014, 104, .	1.5	22
25	Structures and Properties of the Self-Assembling Diphenylalanine Peptide Nanotubes Containing Water Molecules: Modeling and Data Analysis. Nanomaterials, 2020, 10, 1999.	1.9	21
26	2D Layered Dipeptide Crystals for Piezoelectric Applications. Advanced Functional Materials, 2021, 31, 2102524.	7.8	21
27	Study of Nanoscale Domain Structure Formation Using Raman Confocal Microscopy. Ferroelectrics, 2010, 398, 91-97.	0.3	20
28	Nanoscale Domain Effects in Ferroelectrics. Formation and Evolution of Self-Assembled Structures in LiNbO₃and LiTaO₃. Ferroelectrics, 2007, 354, 145-157.	0.3	19
29	Efficient Water Self-Diffusion in Diphenylalanine Peptide Nanotubes. ACS Applied Materials & Interfaces, 2020, 12, 27485-27492.	4.0	17
30	Raman spectroscopy and theoretic study of hyperpolarizability effect in diiodobutenylâ€bisâ€thioquinolinium triiodide at low temperature. Journal of Raman Spectroscopy, 2017, 48, 1411-1413.	1.2	16
31	Morphology and Piezoelectric Properties of Diphenylalanine Microcrystals Grown from Methanol-Water Solution. Ferroelectrics, 2015, 475, 127-134.	0.3	15
32	Formation of self-organized domain structures with charged domain walls in lithium niobate with surface layer modified by proton exchange. Journal of Applied Physics, 2017, 121, 104101.	1.1	15
33	Graphite-diamond relations in mantle rocks: Evidence from an eclogitic xenolith from the Udachnaya kimberlite (Siberian Craton). American Mineralogist, 2016, 101, 2155-2167.	0.9	14
34	Internal diamond morphology: Raman imaging of metamorphic diamonds. Journal of Raman Spectroscopy, 2015, 46, 880-888.	1.2	13
35	Piezoelectric and ferroelectric properties of organic single crystals and films derived from chiral 2-methoxy and 2-amino acids. Ferroelectrics, 2016, 496, 1-9.	0.3	13
36	Raman Spectra of Diphenylalanine Microtubes: Polarisation and Temperature Effects. Crystals, 2020, 10, 224.	1.0	13

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37	Micro-Raman Visualization of Domain Structure in Strontium Barium Niobate Single Crystals. Ferroelectrics, 2012, 439, 33-39.	0.3	12
38	Graphiteâ€bearing mineral assemblages in the mantle beneath Central Aldan superterrane of North Asian craton: combined confocal microâ€Raman and electron microprobe characterization. Journal of Raman Spectroscopy, 2017, 48, 1597-1605.	1.2	12
39	Forbidden mineral assemblage coesiteâ€disordered graphite in diamondâ€bearing kyanite gneisses (Kokchetav Massif). Journal of Raman Spectroscopy, 2017, 48, 1606-1612.	1.2	12
40	Highly luminescent Znâ€“Cuâ€“Inâ€“S/ZnS core/gradient shell quantum dots prepared from indium sulfide by cation exchange for cell labeling and polymer composites. Nanotechnology, 2019, 30, 395603.	1.3	12
41	Domain Kinetics in Lithium Niobate Single Crystals with Photoresist Dielectric Layer. Ferroelectrics, 2012, 439, 3-12.	0.3	11
42	Formation of snowflake domains during fast cooling of lithium tantalate crystals. Journal of Applied Physics, 2016, 119, .	1.1	11
43	Relaxation behavior and electrical inhomogeneity in 0.9BaTiO3-0.1Bi(Mg1/2Ti1/2)O3 ceramic. Ceramics International, 2017, 43, 12828-12834.	2.3	11
44	Investigation of physical properties of diphenylalanine peptide nanotubes having different chiralities and embedded water molecules. Ferroelectrics, 2018, 525, 168-177.	0.3	11
45	Modeling and physical properties of diphenylalanine peptide nanotubes containing water molecules. Ferroelectrics, 2021, 574, 78-91.	0.3	11
46	Modeling of Self-Assembled Peptide Nanotubes and Determination of Their Chirality Sign Based on Dipole Moment Calculations. Nanomaterials, 2021, 11, 2415.	1.9	11
47	Chiral Peculiar Properties of Self-Organization of Diphenylalanine Peptide Nanotubes: Modeling Of Structure and Properties. Mathematical Biology and Bioinformatics, 2019, 14, 94-125.	0.1	11
48	Morphology and piezoelectric characterization of thin films and microcrystals of ortho-carboranyl derivatives of (S)-glutamine and (S)-asparagine. Ferroelectrics, 2017, 509, 113-123.	0.3	10
49	Micro-Raman Imaging of Ferroelectric Domain Structures in the Bulk of PMN-PT Single Crystals. Crystals, 2019, 9, 65.	1.0	10
50	Phase distribution and corresponding piezoelectric responses in a morphotropic phase boundary Pb(Mg Nb)O3-PbTiO3 single crystal revealed by confocal Raman spectroscopy and piezo-response force microscopy. Journal of the European Ceramic Society, 2019, 39, 4131-4138.	2.8	10
51	Precise control of the size and gap between gold nanocubes by surface-based synthesis for high SERS performance. Soft Matter, 2020, 16, 1857-1865.	1.2	10
52	Visualization of nanodomains in lithium niobate single crystals by scanning laser confocal Raman microscopy. Physics of the Solid State, 2011, 53, 109-113.	0.2	9
53	Glycine nanostructures and domains in beta-glycine: computational modeling and PFM observations. Ferroelectrics, 2016, 496, 28-45.	0.3	9
54	Single particle structure characterization of solid-state synthesized Li₄Ti₅O₁₂. Journal of Raman Spectroscopy, 2017, 48, 278-283.	1.2	9

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55	Piezoactive amino acid derivatives containing fragments of planar-chiral ortho-carboranes. Journal of Materials Chemistry C, 2018, 6, 8638-8645.	2.7	9
56	Controlled Growth of Stable Î²-Glycine via Inkjet Printing. Crystal Growth and Design, 2019, 19, 3869-3875.	1.4	9
57	Formation of Broad Domain Boundary in Congruent Lithium Niobate Modified by Proton Exchange. Ferroelectrics, 2015, 476, 146-155.	0.3	7
58	Microâ€Raman study of crichtonite group minerals enclosed into mantle garnet. Journal of Raman Spectroscopy, 2020, 51, 1493-1512.	1.2	7
59	Molecular modeling and computational study of the chiral-dependent structures and properties of the self-assembling diphenylalanine peptide nanotubes, containing water molecules. Journal of Molecular Modeling, 2020, 26, 326.	0.8	7
60	Domain Switching by Electron Beam Irradiation in SBN61:Ce Single Crystals Covered by Dielectric Layer. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 191-196.	1.7	6
61	New insights on Raman spectrum of Kâ€bearing tourmaline. Journal of Raman Spectroscopy, 2020, 51, 1415-1424.	1.2	6
62	Micro-Raman domain imaging in calcium orthovanadate single crystals. Ferroelectrics, 2021, 576, 85-93.	0.3	6
63	Spin coating formation of self-assembled ferroelectric Î²-glycine films. Ferroelectrics, 2016, 496, 10-19.	0.3	5
64	A combined Raman spectroscopy, cathodoluminescence, and electron backscatter diffraction study of kyanite porphyroblasts from diamondiferous and diamondâ€free metamorphic rocks (Kokchetav massif). Journal of Raman Spectroscopy, 2020, 51, 1425-1437.	1.2	5
65	Patterning and nanoscale characterization of ferroelectric amino acid beta-glycine. , 2015, , .		4
66	Investigation of domain kinetics in congruent lithium niobate modified by proton exchange. Ferroelectrics, 2016, 496, 110-119.	0.3	4
67	Piezoelectric properties and Young's moduli of diphenylalanine microtubesâ€”oxide nanoparticles composites. Ferroelectrics, 2018, 525, 146-155.	0.3	4
68	An Investigative Study on the Effect of Pre-Coating Polymer Solutions on the Fabrication of Low Cost Anti-Adhesive Release Paper. Nanomaterials, 2020, 10, 1436.	1.9	4
69	The effect of water molecules on elastic and piezoelectric properties of diphenylalanine microtubes. IEEE Transactions on Dielectrics and Electrical Insulation, 2020, 27, 1474-1477.	1.8	4
70	Piezoactive dense diphenylalanine thin films via solid-phase crystallization. Applied Materials Today, 2022, 26, 101261.	2.3	4
71	Formation of self-assembled nanodomain structures in single crystals of uniaxial ferroelectrics lithium niobate, lithium tantalate and strontiumâ€“barium niobate. Journal of Advanced Dielectrics, 2014, 04, 1450006.	1.5	3
72	Structural transformations in single-wall carbon nanotubes under high pressure. Bulletin of the Russian Academy of Sciences: Physics, 2014, 78, 285-287.	0.1	3

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73	Correspondence: Reply to â€˜On the nature of strong piezoelectricity in graphene on SiO2â€™. Nature Communications, 2016, 7, 11571.	5.8	3
74	Colloidal branched CdSe/CdS â€˜nanospidersâ€™ with 2D/1D heterostructure. Nanotechnology, 2018, 29, 395604.	1.3	3
75	Effects of non-hydrostatic pressure on electrical resistance of bundled single-wall carbon nanotubes. IOP Conference Series: Materials Science and Engineering, 2013, 48, 012013.	0.3	2
76	The first finding of graphite inclusion in diamond from mantle rocks: The result of the study of eclogite xenolith from Udachnaya pipe (Siberian craton). Doklady Earth Sciences, 2016, 469, 870-873.	0.2	2
77	Local Youngâ€™s moduli of as-grown and annealed diphenylalanine nanotubes. IOP Conference Series: Materials Science and Engineering, 2017, 256, 012012.	0.3	2
78	Effect of ferroelectric domains on electric properties of single layer graphene. Ferroelectrics, 2019, 542, 93-101.	0.3	2
79	2D Layered Dipeptide Crystals for Piezoelectric Applications (Adv. Funct. Mater. 43/2021). Advanced Functional Materials, 2021, 31, 2170320.	7.8	2
80	Structural transitions in double-walled carbon nanotubes at high pressure. Journal of Physics: Conference Series, 2015, 653, 012097.	0.3	1
81	Investigation of domain walls in PPLN by confocal raman microscopy and PCA analysis. Journal of Physics: Conference Series, 2017, 879, 012001.	0.3	1
82	Effect of High Pressures on the Electrical and Structural Properties of Fullerene Đ¡70. Bulletin of the Russian Academy of Sciences: Physics, 2019, 83, 730-732.	0.1	1
83	The Mechanism of Disordered Graphite Formation in UHP Diamond-Bearing Complexes. Doklady Earth Sciences, 2019, 484, 84-88.	0.2	1
84	Glassy chalcogenide composites under high pressure. Journal of Physics and Chemistry of Solids, 2021, 152, 109954.	1.9	1
85	Physical ferroelectric and chiral properties of various dipeptide nanotubes and nanostructures. , 0, , .		1
86	High Resolution Piezoresponse Force Microscopy Study of Self-Assembled Peptide Nanotubes. MRS Advances, 2017, 2, 63-69.	0.5	0
87	Dispersion relations and lattice dynamics of diphenylalanine nanotubes. Journal of Physics: Conference Series, 2018, 1092, 012172.	0.3	0
88	Raman study of pyroelectric and injected charge induced fields in PLZT 8/65/35 ceramics. Ferroelectrics, 2019, 542, 102-111.	0.3	0
89	The mechanism of disordered graphite formation in uph diamond-bearing complexes. Proceedings of the Academy of Sciences, 2019, 484, 215-219.	0.1	0