Gil Rosenman

List of Publications by Year
in descending order

127 papers	4,487 citations	109264 35 h-index	114418 63 g-index
130 all docs	130 docs citations	130 times ranked	3709 citing authors

#	Article	IF	Citations
1	Self-assembled arrays of peptide nanotubes by vapour deposition. Nature Nanotechnology, 2009, 4, 849-854.	15.6	372
2	Strong Piezoelectricity in Bioinspired Peptide Nanotubes. ACS Nano, 2010, 4, 610-614.	7.3	370
3	Blue Luminescence Based on Quantum Confinement at Peptide Nanotubes. Nano Letters, 2009, 9, 3111-3115.	4.5	187
4	Piezoelectric Effect in Human Bones Studied in Nanometer Scale. Nano Letters, 2004, 4, 1253-1256.	4.5	184
5	Elementary Building Blocks of Self-Assembled Peptide Nanotubes. Journal of the American Chemical Society, 2010, 132, 15632-15636.	6.6	174
6	Tunable midinfrared source by difference frequency generation in bulk periodically poled KTiOPO4. Applied Physics Letters, 1999, 74, 914-916.	1.5	172
7	Submicron ferroelectric domain structures tailored by high-voltage scanning probe microscopy. Applied Physics Letters, 2003, 82, 103-105.	1.5	151
8	Ferroelectric Domain Breakdown. Physical Review Letters, 2003, 90, 107601.	2.9	140
9	Bioinspired peptide nanotubes: deposition technology, basic physics and nanotechnology applications. Journal of Peptide Science, 2011, 17, 75-87.	0.8	97
10	Tunable hydroxyapatite wettability: Effect on adhesion of biological molecules. Process Biochemistry, 2006, 41, 2367-2372.	1.8	95
11	Structural Transition in Peptide Nanotubes. Biomacromolecules, 2011, 12, 1349-1354.	2.6	90
12	Electron emission from ferroelectric materials. Journal of Applied Physics, 1993, 73, 1904-1908.	1.1	87
13	Dynamics of ferroelectric domain growth in the field of atomic force microscope. Journal of Applied Physics, 2006, 99, 104102.	1.1	87
14	Quantum Confinement in Selfâ€Assembled Bioinspired Peptide Hydrogels. Advanced Materials, 2010, 22, 2311-2315.	11.1	86
15	Nonlinear Optical Bioinspired Peptide Nanostructures. Advanced Optical Materials, 2013, 1, 875-884.	3.6	74
16	Reconstructive Phase Transition in Ultrashort Peptide Nanostructures and Induced Visible Photoluminescence. Langmuir, 2016, 32, 2847-2862.	1.6	74
17	Self-assembled bioinspired quantum dots: Optical properties. Applied Physics Letters, 2009, 94, .	1.5	72
18	Ferroelectric domain inversion: The role of humidity. Applied Physics Letters, 2006, 89, 152902.	1.5	71

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19	Physics and engineering of peptide supramolecular nanostructures. Physical Chemistry Chemical Physics, 2012, 14, 6391.	1.3	67
20	Hydroxyapatite nanoceramics: Basic physical properties and biointerface modification. Journal of the European Ceramic Society, 2007, 27, 4181-4186.	2.8	66
21	Domain inversion in heatâ€treated LiNbO3crystals. Applied Physics Letters, 1993, 62, 2902-2904.	1.5	62
22	Bioinspired peptide nanotubes as supercapacitor electrodes. Journal of Materials Science, 2010, 45, 6374-6378.	1.7	58
23	Electron-beam-induced domain poling in LiNbO3 for two-dimensional nonlinear frequency conversion. Applied Physics Letters, 2006, 88, 011103.	1.5	53
24	Ferroelectric domain reversal in LiNbO3 crystals using high-voltage atomic force microscopy. Applied Physics Letters, 2004, 85, 452-454.	1.5	44
25	Photoluminescence and surface photovoltage spectroscopy studies of hydroxyapatite nano-Bio-ceramics. Journal of Luminescence, 2007, 122-123, 936-938.	1.5	44
26	Wettability patterning of hydroxyapatite nanobioceramics induced by surface potential modification. Applied Physics Letters, 2006, 88, 163902.	1.5	43
27	Structural and optical properties of short peptides: nanotubesâ€toâ€nanofibers phase transformation. Journal of Peptide Science, 2014, 20, 487-493.	0.8	41
28	Direct observation of pinning centers in ferroelectrics. Applied Physics Letters, 2006, 88, 072911.	1.5	39
29	Charge-induced wettability modification. Applied Physics Letters, 2007, 90, 104104.	1.5	39
30	Wettability study of modified silicon dioxide surface using environmental scanning electron microscopy. Journal of Applied Physics, 2007, 101, 084901.	1.1	38
31	Electron-induced wettability modification. Physical Review B, 2007, 76, .	1.1	37
32	Ferroelectric and Related Phenomena in Biological and Bioinspired Nanostructures. Ferroelectrics, 2010, 399, 107-117.	0.3	36
33	Diffusion-induced domain inversion in ferroelectrics. Ferroelectrics, 1995, 172, 7-18.	0.3	35
34	Ferroelectric Domain Breakdown. Annual Review of Materials Research, 2007, 37, 271-296.	4.3	35
35	Electron-induced surface modification of hydroxyapatite-coated implant. Surface and Coatings Technology, 2008, 202, 2093-2102.	2.2	35
36	Peptide Integrated Optics. Advanced Materials, 2018, 30, 1705776.	11.1	35

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37	Peptide Nanophotonics: From Optical Waveguiding to Precise Medicine and Multifunctional Biochips. Small, 2018, 14, e1801147.	5.2	34
38	Wettability Modification of Nanomaterials by Low-Energy Electron Flux. Nanoscale Research Letters, 2009, 4, 1209-1217.	3.1	32
39	Bioinspired nanostructural peptide materials for supercapacitor electrodes. Journal of Materials Research, 2010, 25, 1661-1666.	1.2	32
40	Fluctuon effects in ferroelectric polarization switching. Journal of Applied Physics, 2000, 88, 5318-5327.	1.1	30
41	Surface energy modification by electron beam. Surface Science, 2007, 601, 5042-5049.	0.8	29
42	Ferroelectric domain engineering using atomic force microscopy tip arrays in the domain breakdown regime. Applied Physics Letters, 2005, 86, 012909.	1.5	27
43	Electronic states spectroscopy of Hydroxyapatite ceramics. Journal of Materials Science: Materials in Medicine, 2007, 18, 865-870.	1.7	27
44	Bioinspired peptide nanotubes: Deposition technology and physical properties. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 169, 62-66.	1.7	27
45	Linear and nonlinear optical waveguiding in bio-inspired peptide nanotubes. Acta Biomaterialia, 2016, 30, 72-77.	4.1	27
46	Bioinspired Amyloid Nanodots with Visible Fluorescence. Advanced Optical Materials, 2019, 7, 1801400.	3.6	26
47	Trap state spectroscopy studies and wettability modification of hydroxyapatite nanobioceramics. Journal of Applied Physics, 2007, 101, 034701.	1.1	24
48	Physical vapor deposition of peptide nanostructures. Polymer Journal, 2013, 45, 494-503.	1.3	24
49	Ferroelectric electron emission flat panel display. Journal of Applied Physics, 1996, 79, 7401-7403.	1.1	23
50	Formation of low-dimensional crystalline nucleus region during insulin amyloidogenesis process. Biochemical and Biophysical Research Communications, 2012, 419, 232-237.	1.0	23
51	Lifetime of ferroelectric Pb(Zr,â€ŠTi)O3 ceramic cathodes with high current density. Journal of Applied Physics, 2001, 89, 548-552.	1.1	22
52	Scanning probe microscopy of well-defined periodically poled ferroelectric domain structure. Applied Physics Letters, 2002, 80, 1806-1808.	1.5	22
53	Depolarization screening by electron emission from a ferroelectric. Ferroelectrics, 1991, 118, 451-454.	0.3	21
54	Exoelectron emission spectroscopy of silicon nitride thin films. Applied Physics Letters, 2002, 80, 2743-2745.	1.5	21

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55	Nanodomain engineering in RbTiOPO4 ferroelectric crystals. Applied Physics Letters, 2003, 82, 3934-3936.	1.5	21
56	Profiling of deep traps in silicon oxideâ€“nitrideâ€“oxide structures. Thin Solid Films, 2005, 471, 166-169.	0.8	21
57	Strong Thermoâ€Induced Single And Twoâ€Photon Green Luminescence In Selfâ€Organized Peptide Microtubes. Small, 2015, 11, 1156-1160.	5.2	21
58	Figures of merit for ferroelectric electron emission cathodes. Journal of Applied Physics, 1996, 80, 3445-3450.	1.1	19
59	Hertz model for contact of water droplet with superhydrophobic surface. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 804-806.	0.9	19
60	Strong Electroâ€Optic Effect and Spontaneous Domain Formation in Selfâ€Assembled Peptide Structures. Advanced Science, 2017, 4, 1700052.	5.6	19
61	Longâ€Range Fluorescence Propagation in Amyloidogenic Î²â€Sheet Films and Fibers. Advanced Optical Materials, 2020, 8, 2000056.	3.6	19
62	Auger mechanism of exoelectron emission in dielectrics with high electron affinity. Journal of Applied Physics, 2003, 94, 4652-4658.	1.1	18
63	Exoelectron emission studies of trap spectrum in ultrathin amorphous Si3N4 films. Solid-State Electronics, 2004, 48, 477-482.	0.8	18
64	High energy electron emission phenomenon from ferroelectric crystals. Ferroelectrics, 1992, 126, 305-309.	0.3	17
65	Fluorescence Phenomena in Amyloid and Amyloidogenic Bionanostructures. Crystals, 2020, 10, 668.	1.0	17
66	High-repetition-rate ferroelectric-cathode gyrotron. Applied Physics Letters, 2001, 79, 4097-4099.	1.5	16
67	Symmetry of Bioinspired Short Peptide Nanostructures and Their Basic Physical Properties. Israel Journal of Chemistry, 2015, 55, 637-644.	1.0	16
68	Ferroelectric domain switching in heat-treated LiNbO3crystals. Ferroelectrics, Letters Section, 1993, 15, 55-60.	0.4	15
69	Characterization of optical and nonlinear properties of periodically-poled RbTiOAsO4 in the mid-infrared range via difference-frequency generation. Applied Physics B: Lasers and Optics, 2000, 71, 251-255.	1.1	15
70	Polarization reversal and domain anisotropy in flux-grown KTiOPO₄ and isomorphic crystals. Journal of Materials Research, 2001, 16, 1493-1499.	1.2	15
71	Direct observation of domain inversion in heat-treated LiNbO3using surface laser intensity modulation method (SLIMM). Ferroelectrics, 1994, 157, 69-74.	0.3	14
72	Induced superhydrophobicity in ZnO nanomaterial. Journal of Nanoparticle Research, 2010, 12, 2427-2433.	0.8	14

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73	Asymmetric polarization switching in triglycine sulfate crystals with free surface. Journal of Applied Physics, 1995, 78, 1165-1170.	1.1	13
74	Piezoelectric properties of bidomain LiNbO3crystals. Journal of Applied Physics, 1995, 78, 5592-5596.	1.1	13
75	Patterned Arrays of Ordered Peptide Nanostructures. Journal of Nanoscience and Nanotechnology, 2009, 9, 1701-1708.	0.9	13
76	Adjustable Photoluminescence of Peptide Nanotubes Coatings. Journal of Nanoscience and Nanotechnology, 2011, 11, 9282-9286.	0.9	13
77	Proton-Transfer-Induced Fluorescence in Self-Assembled Short Peptides. Journal of Physical Chemistry A, 2019, 123, 1758-1765.	1.1	13
78	TrP142: Electron emission and spontaneous polarization distribution of proton-exchanged LiNbO₃. Ferroelectrics, 1992, 133, 253-258.	0.3	12
79	Bioorganic nanodots for non-volatile memory devices. APL Materials, 2013, 1, .	2.2	12
80	TrC1O: Electron emission from ferroelectrics and its applications. Ferroelectrics, 1992, 133, 235-240.	0.3	11
81	Bulk ferroelectric domain nucleation in KTiOPO4 crystals. Applied Physics Letters, 2001, 79, 2964-2966.	1.5	11
82	Tailored polymer microlenses on treated glass surfaces. Applied Physics Letters, 2007, 90, 203106.	1.5	11
83	Optical transition induced by molecular transformation in peptide nanostructures. Applied Physics Letters, 2012, 100, .	1.5	11
84	Single Fluorescent Peptide Nanodots. ACS Photonics, 2019, 6, 1626-1631.	3.2	11
85	Domain switching phenomenon in a ferroelectric with free surface. Ferroelectrics, 1994, 157, 105-110.	0.3	10
86	Suppression of polarization switching in triglycine sulfate crystals. Journal of Applied Physics, 1996, 80, 5256-5259.	1.1	10
87	Spectral measurements of gyrotron oscillator with ferroelectric electron gun. Applied Physics Letters, 2002, 81, 1347-1349.	1.5	10
88	Foldâ€Sensitive Visible Fluorescence in Î²â€Sheet Peptide Structures. Advanced Optical Materials, 2021, 9, 2002247.	3.6	10
89	Polarization reversal in LiNbO3crystals under asymmetric diffusion conditions. Applied Physics Letters, 1994, 65, 2398-2400.	1.5	9
90	A microwave gyro amplifier with a ferroelectric cathode. IEEE Transactions on Microwave Theory and Techniques, 2002, 50, 1227-1230.	2.9	9

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91	Ferroelectric Properties and Phase Transition in Dipeptide Nanotubes. Ferroelectrics, 2012, 430, 84-91.	0.3	9
92	Peptide Optical waveguides. Journal of Peptide Science, 2017, 23, 95-103.	0.8	9
93	Electron-induced adhesion and patterning of gold nanoparticles. Applied Physics Letters, 2010, 96, 093106.	1.5	7
94	Domain inversion in LiNbO3optical waveguides. Ferroelectrics, 1994, 157, 111-116.	0.3	6
95	Sem studies of domains in KTiOPO4crystals. Ferroelectrics, 1997, 191, 187-192.	0.3	6
96	Light waveguiding in bioinspired peptide nanostructures. Journal of Peptide Science, 2019, 25, e3164.	0.8	6
97	Amplified spontaneous emission and gain in highly concentrated Rhodamine-doped peptide derivative. Scientific Reports, 2021, 11, 17609.	1.6	6
98	Electron emission imaging of the ferroelectric domains. Ferroelectrics, 1993, 141, 95-101.	0.3	5
99	Free-electron maser driven by a two-stage ferroelectric electron gun. Journal of Applied Physics, 2003, 93, 2304-2306.	1.1	5
100	Nanodomain Engineering in Ferroelectric Crystals Using High Voltage Atomic Force Microscopy. Nanoscience and Technology, 2004, , 221-265.	1.5	5
101	Interface modification and bonding of lithium tantalate crystals. Applied Physics Letters, 2008, 92, 052903.	1.5	5
102	Electron-induced surface reactivity modification in Zinc oxide-based thin films. Applied Physics Letters, 2008, 93, .	1.5	5
103	Bioinspired Peptide Nanotubes: Ferroelectricity at Nanoscale. Integrated Ferroelectrics, 2012, 134, 48-49.	0.3	5
104	Exoelectron emission from silicon nanocrystals. Journal of Applied Physics, 2006, 99, 056101.	1.1	4
105	Bioinspired materials: Physical properties governed by biological refolding. Applied Physics Reviews, 2022, 9, .	5.5	4
106	Anomalous electron emission from LiNbO3 crystals. Applied Physics Letters, 1996, 68, 2813-2815.	1.5	3
107	Thermally stimulated electron emission from charged dielectric surfaces. Ferroelectrics, 1992, 135, 469-473.	0.3	2
108	Domain engineering for nonlinear optical devices. Ferroelectrics, 1999, 221, 129-136.	0.3	2

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109	Deep traps in oxide-nitride-oxide stacks fabricated from hydrogen and deuterium containing precursors. Journal of Applied Physics, 2006, 99, 023702.	1.1	2
110	Interface Engineering and Direct Bonding of Lithium Tantalate Crystals. Journal of Electronic Materials, 2008, 37, 1547-1551.	1.0	2
111	Bioferroelectricity and biopiezelectricity. Physics of the Solid State, 2012, 54, 1263-1268.	0.2	2
112	Photon Recycling Effect and Lossless Fluorescence Propagation in Î²â€Sheet Peptide Fibers. Advanced Optical Materials, 2022, 10, 2102342.	3.6	2
113	Dielectric spectroscopy and polarization switching of KTiOPO4and isomorphic crystals. Ferroelectrics, 1999, 222, 333-338.	0.3	1
114	Fine Mechanisms of Polarization Switching in KTiOPO 4 Ferroelectric Crystals. Ferroelectrics, 2002, 268, 77-82.	0.3	1
115	Ferroelectric Domain Breakdown: Application to Nanodomain Technology. , 2005, , 189-220.		1
116	Direct low-energy electron beam nanolithography. Surface Science, 2009, 603, 2430-2433.	0.8	1
117	Optical properties of bio-inspired peptide nanotubes. , 2016, , .		1
118	Bioinspired Peptide-Based Photonic Integrated Devices. , 2018, , .		1
119	Ferroelectric electron emission cathodes. , 0, , .		0
120	Peculiarities of polarization switching in patterned ferroelectrics for nonlinear optical converters. Ferroelectrics, 1999, 221, 187-192.	0.3	0
121	Experimental realization of generalized quasi-periodic structures for multiple nonlinear interactions. , 0, , .		0
122	Sensitive gas detectors by nonlinear mixing in periodically-poled crystals of the KTiOPO/sub 4/ family. , 0, , .		0
123	Trap Spectroscopy in Si3N4 Ultrathin Films Using Exoelectron Emission Method. Materials Research Society Symposia Proceedings, 2002, 745, 5211.	0.1	0
124	Nonlinear frequency conversion in periodic two-dimensional LiNbO/sub 3/ poled by electron-beam lithography. , 2005, , .		0
125	Direct Bonding of Ferroelectrics. Ferroelectrics, 2008, 373, 51-68.	0.3	0
126	Light propagation in peptide-based optical waveguides. , 2017, , .		0

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127	Strong electro-optic effect in self assembled peptide nanofibers. , 2017, , .		0