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	Photon Recycling Effect and Lossless Fluorescence Propagation in Î²â€Sheet Peptide Fibers. Advanced Optical Materials, 2022, 10, 2102342.	3.6	2
2	Bioinspired materials: Physical properties governed by biological refolding. Applied Physics Reviews, 2022, 9, .	5.5	4
3	Foldâ€Sensitive Visible Fluorescence in Î²â€Sheet Peptide Structures. Advanced Optical Materials, 2021, 9, 2002247.	3.6	10
4	Amplified spontaneous emission and gain in highly concentrated Rhodamine-doped peptide derivative. Scientific Reports, 2021, 11, 17609.	1.6	6
5	Fluorescence Phenomena in Amyloid and Amyloidogenic Bionanostructures. Crystals, 2020, 10, 668.	1.0	17
6	Longâ€Range Fluorescence Propagation in Amyloidogenic Î²â€Sheet Films and Fibers. Advanced Optical Materials, 2020, 8, 2000056.	3.6	19
7	Single Fluorescent Peptide Nanodots. ACS Photonics, 2019, 6, 1626-1631.	3.2	11
8	Light waveguiding in bioinspired peptide nanostructures. Journal of Peptide Science, 2019, 25, e3164.	0.8	6
9	Proton-Transfer-Induced Fluorescence in Self-Assembled Short Peptides. Journal of Physical Chemistry A, 2019, 123, 1758-1765.	1.1	13
10	Bioinspired Amyloid Nanodots with Visible Fluorescence. Advanced Optical Materials, 2019, 7, 1801400.	3.6	26
11	Peptide Integrated Optics. Advanced Materials, 2018, 30, 1705776.	11.1	35
12	Peptide Nanophotonics: From Optical Waveguiding to Precise Medicine and Multifunctional Biochips. Small, 2018, 14, e1801147.	5.2	34
13	Bioinspired Peptide-Based Photonic Integrated Devices. , 2018, , .		1
14	Peptide Optical waveguides. Journal of Peptide Science, 2017, 23, 95-103.	0.8	9
15	Strong Electroâ€Optic Effect and Spontaneous Domain Formation in Selfâ€Assembled Peptide Structures. Advanced Science, 2017, 4, 1700052.	5.6	19
16	Light propagation in peptide-based optical waveguides. , 2017, , .		0
17	Strong electro-optic effect in self assembled peptide nanofibers. , 2017, , .		0
18	Optical properties of bio-inspired peptide nanotubes. , 2016, , .		1

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19	Linear and nonlinear optical waveguiding in bio-inspired peptide nanotubes. Acta Biomaterialia, 2016, 30, 72-77.	4.1	27
20	Reconstructive Phase Transition in Ultrashort Peptide Nanostructures and Induced Visible Photoluminescence. Langmuir, 2016, 32, 2847-2862.	1.6	74
21	Symmetry of Bioinspired Short Peptide Nanostructures and Their Basic Physical Properties. Israel Journal of Chemistry, 2015, 55, 637-644.	1.0	16
22	Strong Thermoâ€Induced Single And Twoâ€Photon Green Luminescence In Selfâ€Organized Peptide Microtubes. Small, 2015, 11, 1156-1160.	5.2	21
23	Structural and optical properties of short peptides: nanotubesâ€toâ€nanofibers phase transformation. Journal of Peptide Science, 2014, 20, 487-493.	0.8	41
24	Nonlinear Optical Bioinspired Peptide Nanostructures. Advanced Optical Materials, 2013, 1, 875-884.	3.6	74
25	Physical vapor deposition of peptide nanostructures. Polymer Journal, 2013, 45, 494-503.	1.3	24
26	Bioorganic nanodots for non-volatile memory devices. APL Materials, 2013, 1, .	2.2	12
27	Optical transition induced by molecular transformation in peptide nanostructures. Applied Physics Letters, 2012, 100, .	1.5	11
28	Formation of low-dimensional crystalline nucleus region during insulin amyloidogenesis process. Biochemical and Biophysical Research Communications, 2012, 419, 232-237.	1.0	23
29	Ferroelectric Properties and Phase Transition in Dipeptide Nanotubes. Ferroelectrics, 2012, 430, 84-91.	0.3	9
30	Bioinspired Peptide Nanotubes: Ferroelectricity at Nanoscale. Integrated Ferroelectrics, 2012, 134, 48-49.	0.3	5
31	Physics and engineering of peptide supramolecular nanostructures. Physical Chemistry Chemical Physics, 2012, 14, 6391.	1.3	67
32	Bioferroelectricity and biopiezelectricity. Physics of the Solid State, 2012, 54, 1263-1268.	0.2	2
33	Structural Transition in Peptide Nanotubes. Biomacromolecules, 2011, 12, 1349-1354.	2.6	90
34	Adjustable Photoluminescence of Peptide Nanotubes Coatings. Journal of Nanoscience and Nanotechnology, 2011, 11, 9282-9286.	0.9	13
35	Bioinspired peptide nanotubes: deposition technology, basic physics and nanotechnology applications. Journal of Peptide Science, 2011, 17, 75-87.	0.8	97
36	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

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37	Bioinspired peptide nanotubes as supercapacitor electrodes. Journal of Materials Science, 2010, 45, 6374-6378.	1.7	58
38	Induced superhydrophobicity in ZnO nanomaterial. Journal of Nanoparticle Research, 2010, 12, 2427-2433.	0.8	14
39	Quantum Confinement in Selfâ€Assembled Bioinspired Peptide Hydrogels. Advanced Materials, 2010, 22, 2311-2315.	11.1	86
40	Electron-induced adhesion and patterning of gold nanoparticles. Applied Physics Letters, 2010, 96, 093106.	1.5	7
41	Ferroelectric and Related Phenomena in Biological and Bioinspired Nanostructures. Ferroelectrics, 2010, 399, 107-117.	0.3	36
42	Bioinspired nanostructural peptide materials for supercapacitor electrodes. Journal of Materials Research, 2010, 25, 1661-1666.	1.2	32
43	Strong Piezoelectricity in Bioinspired Peptide Nanotubes. ACS Nano, 2010, 4, 610-614.	7.3	370
44	Elementary Building Blocks of Self-Assembled Peptide Nanotubes. Journal of the American Chemical Society, 2010, 132, 15632-15636.	6.6	174
45	Patterned Arrays of Ordered Peptide Nanostructures. Journal of Nanoscience and Nanotechnology, 2009, 9, 1701-1708.	0.9	13
46	Direct low-energy electron beam nanolithography. Surface Science, 2009, 603, 2430-2433.	0.8	1
47	Wettability Modification of Nanomaterials by Low-Energy Electron Flux. Nanoscale Research Letters, 2009, 4, 1209-1217.	3.1	32
48	Self-assembled arrays of peptide nanotubes by vapour deposition. Nature Nanotechnology, 2009, 4, 849-854.	15.6	372
49	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
50	Blue Luminescence Based on Quantum Confinement at Peptide Nanotubes. Nano Letters, 2009, 9, 3111-3115.	4.5	187
51	Self-assembled bioinspired quantum dots: Optical properties. Applied Physics Letters, 2009, 94, .	1.5	72
52	Interface Engineering and Direct Bonding of Lithium Tantalate Crystals. Journal of Electronic Materials, 2008, 37, 1547-1551.	1.0	2
53	Electron-induced surface modification of hydroxyapatite-coated implant. Surface and Coatings Technology, 2008, 202, 2093-2102.	2.2	35
54	Direct Bonding of Ferroelectrics. Ferroelectrics, 2008, 373, 51-68.	0.3	0

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55	Interface modification and bonding of lithium tantalate crystals. Applied Physics Letters, 2008, 92, 052903.	1.5	5
56	Electron-induced surface reactivity modification in Zinc oxide-based thin films. Applied Physics Letters, 2008, 93, .	1.5	5
57	Wettability study of modified silicon dioxide surface using environmental scanning electron microscopy. Journal of Applied Physics, 2007, 101, 084901.	1.1	38
58	Ferroelectric Domain Breakdown. Annual Review of Materials Research, 2007, 37, 271-296.	4.3	35
59	Electron-induced wettability modification. Physical Review B, 2007, 76, .	1.1	37
60	Trap state spectroscopy studies and wettability modification of hydroxyapatite nanobioceramics. Journal of Applied Physics, 2007, 101, 034701.	1.1	24
61	Charge-induced wettability modification. Applied Physics Letters, 2007, 90, 104104.	1.5	39
62	Tailored polymer microlenses on treated glass surfaces. Applied Physics Letters, 2007, 90, 203106.	1.5	11
63	Surface energy modification by electron beam. Surface Science, 2007, 601, 5042-5049.	0.8	29
64	Hydroxyapatite nanoceramics: Basic physical properties and biointerface modification. Journal of the European Ceramic Society, 2007, 27, 4181-4186.	2.8	66
65	Photoluminescence and surface photovoltage spectroscopy studies of hydroxyapatite nano-Bio-ceramics. Journal of Luminescence, 2007, 122-123, 936-938.	1.5	44
66	Electronic states spectroscopy of Hydroxyapatite ceramics. Journal of Materials Science: Materials in Medicine, 2007, 18, 865-870.	1.7	27
67	Dynamics of ferroelectric domain growth in the field of atomic force microscope. Journal of Applied Physics, 2006, 99, 104102.	1.1	87
68	Ferroelectric domain inversion: The role of humidity. Applied Physics Letters, 2006, 89, 152902.	1.5	71
69	Electron-beam-induced domain poling in LiNbO3 for two-dimensional nonlinear frequency conversion. Applied Physics Letters, 2006, 88, 011103.	1.5	53
70	Wettability patterning of hydroxyapatite nanobioceramics induced by surface potential modification. Applied Physics Letters, 2006, 88, 163902.	1.5	43
71	Tunable hydroxyapatite wettability: Effect on adhesion of biological molecules. Process Biochemistry, 2006, 41, 2367-2372.	1.8	95
72	Direct observation of pinning centers in ferroelectrics. Applied Physics Letters, 2006, 88, 072911.	1.5	39

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73	Exoelectron emission from silicon nanocrystals. Journal of Applied Physics, 2006, 99, 056101.	1.1	4
74	Deep traps in oxide-nitride-oxide stacks fabricated from hydrogen and deuterium containing precursors. Journal of Applied Physics, 2006, 99, 023702.	1.1	2
75	Ferroelectric Domain Breakdown: Application to Nanodomain Technology. , 2005, , 189-220.		1
76	Profiling of deep traps in silicon oxideâ€“nitrideâ€“oxide structures. Thin Solid Films, 2005, 471, 166-169.	0.8	21
77	Nonlinear frequency conversion in periodic two-dimensional LiNbO/sub 3/ poled by electron-beam lithography. , 2005, , .		0
78	Ferroelectric domain engineering using atomic force microscopy tip arrays in the domain breakdown regime. Applied Physics Letters, 2005, 86, 012909.	1.5	27
79	Exoelectron emission studies of trap spectrum in ultrathin amorphous Si3N4 films. Solid-State Electronics, 2004, 48, 477-482.	0.8	18
80	Ferroelectric domain reversal in LiNbO3 crystals using high-voltage atomic force microscopy. Applied Physics Letters, 2004, 85, 452-454.	1.5	44
81	Nanodomain Engineering in Ferroelectric Crystals Using High Voltage Atomic Force Microscopy. Nanoscience and Technology, 2004, , 221-265.	1.5	5
82	Piezoelectric Effect in Human Bones Studied in Nanometer Scale. Nano Letters, 2004, 4, 1253-1256.	4.5	184
83	Submicron ferroelectric domain structures tailored by high-voltage scanning probe microscopy. Applied Physics Letters, 2003, 82, 103-105.	1.5	151
84	Ferroelectric Domain Breakdown. Physical Review Letters, 2003, 90, 107601.	2.9	140
85	Auger mechanism of exoelectron emission in dielectrics with high electron affinity. Journal of Applied Physics, 2003, 94, 4652-4658.	1.1	18
86	Free-electron maser driven by a two-stage ferroelectric electron gun. Journal of Applied Physics, 2003, 93, 2304-2306.	1.1	5
87	Nanodomain engineering in RbTiOPO4 ferroelectric crystals. Applied Physics Letters, 2003, 82, 3934-3936.	1.5	21
88	Scanning probe microscopy of well-defined periodically poled ferroelectric domain structure. Applied Physics Letters, 2002, 80, 1806-1808.	1.5	22
89	Exoelectron emission spectroscopy of silicon nitride thin films. Applied Physics Letters, 2002, 80, 2743-2745.	1.5	21
90	Fine Mechanisms of Polarization Switching in KTiOPO 4 Ferroelectric Crystals. Ferroelectrics, 2002, 268, 77-82.	0.3	1

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91	Trap Spectroscopy in Si3N4 Ultrathin Films Using Exoelectron Emission Method. Materials Research Society Symposia Proceedings, 2002, 745, 5211.	0.1	0
92	Spectral measurements of gyrotron oscillator with ferroelectric electron gun. Applied Physics Letters, 2002, 81, 1347-1349.	1.5	10
93	A microwave gyro amplifier with a ferroelectric cathode. IEEE Transactions on Microwave Theory and Techniques, 2002, 50, 1227-1230.	2.9	9
94	Polarization reversal and domain anisotropy in flux-grown KTiOPO₄ and isomorphic crystals. Journal of Materials Research, 2001, 16, 1493-1499.	1.2	15
95	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
96	High-repetition-rate ferroelectric-cathode gyrotron. Applied Physics Letters, 2001, 79, 4097-4099.	1.5	16
97	Bulk ferroelectric domain nucleation in KTiOPO4 crystals. Applied Physics Letters, 2001, 79, 2964-2966.	1.5	11
98	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
99	Fluctuon effects in ferroelectric polarization switching. Journal of Applied Physics, 2000, 88, 5318-5327.	1.1	30
100	Domain engineering for nonlinear optical devices. Ferroelectrics, 1999, 221, 129-136.	0.3	2
101	Dielectric spectroscopy and polarization switching of KTiOPO4and isomorphic crystals. Ferroelectrics, 1999, 222, 333-338.	0.3	1
102	Tunable midinfrared source by difference frequency generation in bulk periodically poled KTiOPO4. Applied Physics Letters, 1999, 74, 914-916.	1.5	172
103	Peculiarities of polarization switching in patterned ferroelectrics for nonlinear optical converters. Ferroelectrics, 1999, 221, 187-192.	0.3	0
104	Sem studies of domains in KTiOPO4crystals. Ferroelectrics, 1997, 191, 187-192.	0.3	6
105	Suppression of polarization switching in triglycine sulfate crystals. Journal of Applied Physics, 1996, 80, 5256-5259.	1.1	10
106	Anomalous electron emission from LiNbO3 crystals. Applied Physics Letters, 1996, 68, 2813-2815.	1.5	3
107	Figures of merit for ferroelectric electron emission cathodes. Journal of Applied Physics, 1996, 80, 3445-3450.	1.1	19
108	Ferroelectric electron emission flat panel display. Journal of Applied Physics, 1996, 79, 7401-7403.	1.1	23

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109	Asymmetric polarization switching in triglycine sulfate crystals with free surface. Journal of Applied Physics, 1995, 78, 1165-1170.	1.1	13
110	Diffusion-induced domain inversion in ferroelectrics. Ferroelectrics, 1995, 172, 7-18.	0.3	35
111	Piezoelectric properties of bidomain LiNbO3crystals. Journal of Applied Physics, 1995, 78, 5592-5596.	1.1	13
112	Domain inversion in LiNbO3optical waveguides. Ferroelectrics, 1994, 157, 111-116.	0.3	6
113	Polarization reversal in LiNbO3crystals under asymmetric diffusion conditions. Applied Physics Letters, 1994, 65, 2398-2400.	1.5	9
114	Domain switching phenomenon in a ferroelectric with free surface. Ferroelectrics, 1994, 157, 105-110.	0.3	10
115	Direct observation of domain inversion in heat-treated LiNbO3using surface laser intensity modulation method (SLIMM). Ferroelectrics, 1994, 157, 69-74.	0.3	14
116	Domain inversion in heatâ€treated LiNbO3crystals. Applied Physics Letters, 1993, 62, 2902-2904.	1.5	62
117	Ferroelectric domain switching in heat-treated LiNbO3crystals. Ferroelectrics, Letters Section, 1993, 15, 55-60.	0.4	15
118	Electron emission from ferroelectric materials. Journal of Applied Physics, 1993, 73, 1904-1908.	1.1	87
119	Electron emission imaging of the ferroelectric domains. Ferroelectrics, 1993, 141, 95-101.	0.3	5
120	TrC1O: Electron emission from ferroelectrics and its applications. Ferroelectrics, 1992, 133, 235-240.	0.3	11
121	TrP142: Electron emission and spontaneous polarization distribution of proton-exchanged LiNbO₃. Ferroelectrics, 1992, 133, 253-258.	0.3	12
122	Thermally stimulated electron emission from charged dielectric surfaces. Ferroelectrics, 1992, 135, 469-473.	0.3	2
123	High energy electron emission phenomenon from ferroelectric crystals. Ferroelectrics, 1992, 126, 305-309.	0.3	17
124	Depolarization screening by electron emission from a ferroelectric. Ferroelectrics, 1991, 118, 451-454.	0.3	21
125	Ferroelectric electron emission cathodes. , 0, , .		0
126	Experimental realization of generalized quasi-periodic structures for multiple nonlinear interactions. , 0, , .		0

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127	Sensitive gas detectors by nonlinear mixing in periodically-poled crystals of the KTiOPO/sub 4/ family. , 0, , .		0