Elefterios Lidorikis

List of Publications by Citations

82 papers	6,273 citations	33 h-index	79 g-index
104 ext. papers	7,106 ext. citations	6.8 avg, IF	5.22 L-index

#	Paper	IF	Citations
82	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. *Nanoscale*, **2015**, 7, 4598-810	7.7	2015
81	Rayleigh imaging of graphene and graphene layers. *Nano Letters*, **2007**, 7, 2711-7	11.5	513
80	A three-dimensional optical photonic crystal with designed point defects. *Nature*, **2004**, 429, 538-42	50.4	387
79	Surface-enhanced Raman spectroscopy of graphene. *ACS Nano*, **2010**, 4, 5617-26	16.7	384
78	Tight-Binding Parametrization for Photonic Band Gap Materials. *Physical Review Letters*, **1998**, 81, 1405-1408	7.4	184
77	Adiabatic theorem and continuous coupled-mode theory for efficient taper transitions in photonic crystals. *Physical Review E*, **2002**, 66, 066608	2.4	159
76	Surface-plasmon-assisted guiding of broadband slow and subwavelength light in air. *Physical Review Letters*, **2005**, 95, 063901	7.4	152
75	Atomistic Aspects of Crack Propagation in Brittle Materials: Multimillion Atom Molecular Dynamics Simulations. *Annual Review of Materials Research*, **2002**, 32, 377-400	12.8	148
74	Conductive nitrides: Growth principles, optical and electronic properties, and their perspectives in photonics and plasmonics. *Materials Science and Engineering Reports*, **2018**, 123, 1-55	30.9	128
73	Photothermoelectric and photoelectric contributions to light detection in metal-graphene-metal photodetectors. *Nano Letters*, **2014**, 14, 3733-42	11.5	124
72	Hybrid finite-element/molecular-dynamics/electronic-density-functional approach to materials simulations on parallel computers. *Computer Physics Communications*, **2001**, 138, 143-154	4.2	123
71	Surface Plasmon Polariton Graphene Photodetectors. *Nano Letters*, **2016**, 16, 8-20	11.5	119
70	Graphene-based mid-infrared room-temperature pyroelectric bolometers with ultrahigh temperature coefficient of resistance. *Nature Communications*, **2017**, 8, 14311	17.4	101
69	1.5 GHz picosecond pulse generation from a monolithic waveguide laser with a graphene-film saturable output coupler. *Optics Express*, **2013**, 21, 7943-50	3.3	98
68	Fast and Sensitive Terahertz Detection Using an Antenna-Integrated Graphene pn Junction. *Nano Letters*, **2019**, 19, 2765-2773	11.5	82
67	. *Computing in Science and Engineering*, **2001**, 3, 56-66	1.5	81
66	Gap deformation and classical wave localization in disordered two-dimensional photonic-band-gap materials. *Physical Review B*, **2000**, 61, 13458-13464	3.3	76

65	Raman scattering efficiency of graphene. *Physical Review B*, **2013**, 87,	3.3	71
64	Vertically Illuminated, Resonant Cavity Enhanced, Graphene-Silicon Schottky Photodetectors. *ACS Nano*, **2017**, 11, 10955-10963	16.7	70
63	Optical nonlinear response of a single nonlinear dielectric layer sandwiched between two linear dielectric structures. *Physical Review B*, **1997**, 56, 15090-15099	3.3	67
62	Coupling length scales for multiscale atomistics-continuum simulations: atomistically induced stress distributions in Si/Si3N4 nanopixels. *Physical Review Letters*, **2001**, 87, 086104	7.4	66
61	Nature of lossy Bloch states in polaritonic photonic crystals. *Physical Review B*, **2004**, 69,	3.3	65
60	Photonics with multiwall carbon nanotube arrays. *ACS Nano*, **2009**, 3, 1238-48	16.7	64
59	Effect of a photonic band gap on scattering from waveguide disorder. *Applied Physics Letters*, **2004**, 84, 3639-3641	3.4	56
58	Ultralow-power all-optical switching. *Applied Physics Letters*, **2005**, 86, 171101	3.4	51
57	Active materials embedded in photonic crystals and coupled to electromagnetic radiation. *Physical Review B*, **2006**, 73,	3.3	45
56	Optical encoding by plasmon-based patterning: hard and inorganic materials become photosensitive. *Nano Letters*, **2012**, 12, 259-63	11.5	41
55	Theory of plasmonic near-field enhanced absorption in solar cells. *Applied Physics Letters*, **2011**, 99, 063304	3.4	41
54	Effective medium properties and photonic crystal superstructures of metallic nanoparticle arrays. *Journal of Applied Physics*, **2007**, 101, 054304	2.5	40
53	Plasmonic Backscattering Effect in High-Efficient Organic Photovoltaic Devices. *Advanced Energy Materials*, **2016**, 6, 1501640	21.8	37
52	Selective modification of nanoparticle arrays by laser-induced self assembly (MONA-LISA): putting control into bottom-up plasmonic nanostructuring. *Nanoscale*, **2016**, 8, 8236-44	7.7	36
51	Few-cycle pulses from a graphene mode-locked all-fiber laser. *Applied Physics Letters*, **2015**, 106, 253101	3.4	34
50	Wave propagation in nonlinear multilayer structures. *Physical Review B*, **1996**, 54, 10249-10252	3.3	34
49	Enhancement of microcavity lifetimes using highly dispersive materials. *Physical Review E*, **2005**, 71, 026602	2.4	33
48	Broadband optical absorption of amorphous carbon/Ag nanocomposite films and its potential for solar harvesting applications. *Solar Energy Materials and Solar Cells*, **2013**, 117, 350-356	6.4	31

47	Stable, Surfactant-Free Graphene–Styrene Methylmethacrylate Composite for Ultrafast Lasers. *Advanced Optical Materials*, **2016**, 4, 1088-1097	8.1	29
46	Plasmonic spectral tunability of conductive ternary nitrides. *Applied Physics Letters*, **2016**, 108, 263110	3.4	29
45	Polarization-independent linear waveguides in 3D photonic crystals. *Physical Review Letters*, **2003**, 91, 023902	7.4	26
44	Optical bistability in colloidal crystals. *Physical Review E*, **1997**, 55, 3613-3618	2.4	23
43	Hot Electrons Modulation of Third-Harmonic Generation in Graphene. *ACS Photonics*, **2019**, 6, 2841-2849	6.3	22
42	Design of high-temperature solar-selective coatings for application in solar collectors. *Solar Energy Materials and Solar Cells*, **2017**, 170, 102-113	6.4	21
41	Electronic Structure-Dependent Surface Plasmon Resonance in Single Au-Fe Nanoalloys. *Nano Letters*, **2019**, 19, 5754-5761	11.5	20
40	Plasmonic Organic Photovoltaics: Unraveling Plasmonic Enhancement for Realistic Cell Geometries. *ACS Photonics*, **2018**, 5, 1440-1452	6.3	19
39	Plasmonic antenna coupling to hyperbolic phonon-polaritons for sensitive and fast mid-infrared photodetection with graphene. *Nature Communications*, **2020**, 11, 4872	17.4	19
38	3D-to-2D Morphology Manipulation of Sputter-Deposited Nanoscale Silver Films on Weakly Interacting Substrates via Selective Nitrogen Deployment for Multifunctional Metal Contacts. *ACS Applied Nano Materials*, **2020**, 3, 4728-4738	5.6	17
37	Theoretical study of phenyl-substituted indacenodithiophene copolymers for high performance organic photovoltaics. *Journal of Chemical Physics*, **2013**, 138, 064901	3.9	16
36	Three-Dimensional Colloidal Crystal Arrays Exhibiting Stop Band in Near-Infrared Region. *Journal of Physical Chemistry C*, **2010**, 114, 16389-16394	3.8	16
35	Cutoff solitons in axially uniform systems. *Optics Letters*, **2004**, 29, 851-3	3	15
34	The interplay between surface charging and microscale roughness during plasma etching of polymeric substrates. *Journal of Applied Physics*, **2018**, 123, 073303	2.5	14
33	Roughness Evolution and Charging in Plasma-Based Surface Engineering of Polymeric Substrates: The Effects of Ion Reflection and Secondary Electron Emission. *Micromachines*, **2018**, 9,	3.3	14
32	Surface-Enhanced Raman Spectroscopy of Graphene Integrated in Plasmonic Silicon Platforms with Three-Dimensional Nanotopography. *Journal of Physical Chemistry C*, **2019**, 123, 3076-3087	3.8	13
31	Pulse-driven switching in one-dimensional nonlinear photonic band gap materials: a numerical study. *Physical Review E*, **2000**, 61, 5825-9	2.4	13
30	Modeling of enhanced absorption and Raman scattering caused by plasmonic nanoparticle near fields. *Journal of Quantitative Spectroscopy and Radiative Transfer*, **2012**, 113, 2573-2584	2.1	12

29	Optical bistability and cutoff solitons in photonic bandgap fibers. *Optics Express*, **2004**, 12, 1518-27	3.3	12
28	Flat-band localization and self-collimation of light in photonic crystals. *Scientific Reports*, **2019**, 9, 2862	4.9	11
27	Formation of plasmonic colloidal silver for flexible and printed electronics using laser ablation. *Applied Surface Science*, **2015**, 336, 262-266	6.7	11
26	Impurity modes in a two-dimensional photonic crystal: coupling efficiency and Q factor. *Journal of the Optical Society of America B: Optical Physics*, **2000**, 17, 2037	1.7	11
25	Point defect geometries in inverted opal photonic crystals. *Physical Review E*, **2005**, 71, 056602	2.4	10
24	Rapid Photonic Processing of High-Electron-Mobility PbS Colloidal Quantum Dot Transistors. *ACS Applied Materials & Interfaces*, **2020**, 12, 31591-31600	9.5	9
23	Wave propagation in linear and nonlinear structures. *Physica D: Nonlinear Phenomena*, **1998**, 113, 346-365	3.3	9
22	Sub-surface laser nanostructuring in stratified metal/dielectric media: a versatile platform towards flexible, durable and large-scale plasmonic writing. *Nanotechnology*, **2015**, 26, 155301	3.4	8
21	Deep and fast free-space electro-absorption modulation in a mobility-independent graphene-loaded Bragg resonator. *Applied Physics Letters*, **2018**, 113, 011102	3.4	8
20	Influence of laser annealing on the structural properties of sputtered AlN:Ag plasmonic nanocomposites. *Journal of Materials Science*, **2014**, 49, 3996-4006	4.3	7
19	Composite Nanoparticles. *Journal of Chemistry*, **2013**, 2013, 1-2	2.3	7
18	Mid- to far-infrared sensing: SrTiO3, a novel optical material. *Journal of Materials Chemistry C*, **2019**, 7, 7851-7857	7.1	6
17	Laser-matter interactions, phase changes and diffusion phenomena during laser annealing of plasmonic AlN:Ag templates and their applications in optical encoding. *Journal Physics D: Applied Physics*, **2015**, 48, 285306	3	6
16	Coupling atomistic and continuum length scales in heteroepitaxial systems: Multiscale molecular-dynamics/finite-element simulations of strain relaxation in Si□i3N4 nanopixels. *Physical Review B*, **2005**, 72,	3.3	6
15	A stable, power scaling, graphene-mode-locked all-fiber oscillator. *Applied Physics Letters*, **2017**, 110, 243102	3.4	5
14	Photosensitivity and optical performance of hydrogenated amorphous carbon films processed by picosecond laser beams. *Surface and Coatings Technology*, **2011**, 206, 734-741	4.4	5
13	Design of a nanoelectromechanical high-index-contrast guided-wave optical switch for single-mode operation at 1.55 □m. *IEEE Photonics Technology Letters*, **2003**, 15, 1207-1209	2.2	5
12	Functionally graded poly(dimethylsiloxane)/silver nanocomposites with tailored broadband optical absorption. *Thin Solid Films*, **2015**, 581, 14-19	2.2	4

11	Coupling of Length Scales: Hybrid Molecular Dynamics and Finite Element Approach for Multiscale Nanodevice Simulations. *Materials Research Society Symposia Proceedings*, **2000**, 653,		4
10	Tailored Aggregate-Free Au Nanoparticle Decorations with Sharp Plasmonic Peaks on a U-Type Optical Fiber Sensor by Nanosecond Laser Irradiation. *Plasmonics*, **2017**, 12, 535-543	2.4	3
9	Simulating the opto-thermal processes involved in laser induced self-assembly of surface and sub-surface plasmonic nano-structuring. *Thin Solid Films*, **2017**, 630, 7-24	2.2	3
8	Bare-eye view at the nanoscale: new visual interferometric multi-indicator (VIMI). *ACS Applied Materials & Interfaces*, **2010**, 2, 3052-8	9.5	3
7	Coupling, scattering, and perturbation theory: Semi-analytical analyses of photonic-crystal waveguides		3
6	Lumped-element model of plasmonic solar cells. *Solid-State Electronics*, **2018**, 147, 39-43	1.7	2
5	Finite-temperature effects on conductance modulation by local doping in graphene with multiple magnetic barriers. *2D Materials*, **2015**, 2, 045007	5.9	2
4	Electromagnetically induced transparency in microcavities **2004**, 5554, 174		2
3	A hybrid modeling framework for the investigation of surface roughening of polymers during oxygen plasma etching. *Journal Physics D: Applied Physics*, **2021**, 54, 175205	3	2
2	Lithographically tuned one dimensional polymeric photonic crystal arrays. *Optics and Laser Technology*, **2015**, 68, 105-112	4.2	1
1	Structural and energetic properties of P3HT and PCBM layers on the Ag(1 1 1) surface. *Computational and Theoretical Chemistry*, **2020**, 1190, 112997	2	0