

# Emmanuel Stratakis

## List of Publications by Year in descending order

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267  
papers

12,382  
citations

23567

58  
h-index

32842

100  
g-index

274  
all docs

274  
docs citations

274  
times ranked

14690  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dispersion behaviour of graphene oxide and reduced graphene oxide. <i>Journal of Colloid and Interface Science</i> , 2014, 430, 108-112.	9.4	752
2	The Role of Ligands in the Chemical Synthesis and Applications of Inorganic Nanoparticles. <i>Chemical Reviews</i> , 2019, 119, 4819-4880.	47.7	709
3	Biomimetic Artificial Surfaces Quantitatively Reproduce the Water Repellency of a Lotus Leaf. <i>Advanced Materials</i> , 2008, 20, 4049-4054.	21.0	461
4	Tuning cell adhesion by controlling the roughness and wettability of 3D micro/nano silicon structures. <i>Acta Biomaterialia</i> , 2010, 6, 2711-2720.	8.3	395
5	Nanoparticle-based plasmonic organic photovoltaic devices. <i>Materials Today</i> , 2013, 16, 133-146.	14.2	369
6	Making silicon hydrophobic: wettability control by two-lengthscale simultaneous patterning with femtosecond laser irradiation. <i>Nanotechnology</i> , 2006, 17, 3234-3238.	2.6	242
7	Dynamics of ripple formation on silicon surfaces by ultrashort laser pulses in subablation conditions. <i>Physical Review B</i> , 2012, 86, .	3.2	231
8	From ripples to spikes: A hydrodynamical mechanism to interpret femtosecond laser-induced self-assembled structures. <i>Physical Review B</i> , 2015, 92, .	3.2	208
9	Efficient and Highly Air Stable Planar Inverted Perovskite Solar Cells with Reduced Graphene Oxide Doped PCBM Electron Transporting Layer. <i>Advanced Energy Materials</i> , 2017, 7, 1602120.	19.5	188
10	Laser engineering of biomimetic surfaces. <i>Materials Science and Engineering Reports</i> , 2020, 141, 100562.	31.8	180
11	Controlling the morphology and outgrowth of nerve and neuroglial cells: The effect of surface topography. <i>Acta Biomaterialia</i> , 2017, 51, 21-52.	8.3	171
12	Biomimetic micro/nanostructured functional surfaces for microfluidic and tissue engineering applications. <i>Biomicrofluidics</i> , 2011, 5, 13411.	2.4	168
13	Flexible Organic Photovoltaic Cells with In Situ Nonthermal Photoreduction of Spin-Coated Graphene Oxide Electrodes. <i>Advanced Functional Materials</i> , 2013, 23, 2742-2749.	14.9	167
14	Generation of Al nanoparticles via ablation of bulk Al in liquids with short laser pulses. <i>Optics Express</i> , 2009, 17, 12650.	3.4	157
15	Biomimetic surface structuring using cylindrical vector femtosecond laser beams. <i>Scientific Reports</i> , 2017, 7, 45114.	3.3	137
16	High Electron Mobility Thin-Film Transistors Based on Solution-Processed Semiconducting Metal Oxide Heterojunctions and Quasi-Superlattices. <i>Advanced Science</i> , 2015, 2, 1500058.	11.2	134
17	Improving the efficiency of organic photovoltaics by tuning the work function of graphene oxide hole transporting layers. <i>Nanoscale</i> , 2014, 6, 6925-6931.	5.6	133
18	Bio-inspired water repellent surfaces produced by ultrafast laser structuring of silicon. <i>Applied Surface Science</i> , 2009, 255, 5425-5429.	6.1	126

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19	Reversible Photoinduced Wettability Transition of Hierarchical ZnO Structures. <i>Journal of Physical Chemistry C</i> , 2009, 113, 2891-2895.	3.1	124
20	From superhydrophobicity and water repellency to superhydrophilicity: smart polymer-functionalized surfaces. <i>Chemical Communications</i> , 2010, 46, 4136.	4.1	123
21	Extending the Continuous Operating Lifetime of Perovskite Solar Cells with a Molybdenum Disulfide Hole Extraction Interlayer. <i>Advanced Energy Materials</i> , 2018, 8, 1702287.	19.5	121
22	Reduced Graphene Oxide Micromesh Electrodes for Large Area, Flexible, Organic Photovoltaic Devices. <i>Advanced Functional Materials</i> , 2015, 25, 2213-2221.	14.9	118
23	Enhanced Structural Stability and Performance Durability of Bulk Heterojunction Photovoltaic Devices Incorporating Metallic Nanoparticles. <i>Advanced Functional Materials</i> , 2011, 21, 3573-3582.	14.9	105
24	Biomimetic Omnidirectional Antireflective Glass via Direct Ultrafast Laser Nanostructuring. <i>Advanced Materials</i> , 2019, 31, e1901123.	21.0	103
25	Organic bulk heterojunction photovoltaic devices with surfactant-free Au nanoparticles embedded in the active layer. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	94
26	Tailoring the wetting response of silicon surfaces via fs laser structuring. <i>Applied Physics A: Materials Science and Processing</i> , 2008, 93, 819.	2.3	93
27	Laser-based micro/nanoengineering for biological applications. <i>Progress in Quantum Electronics</i> , 2009, 33, 127-163.	7.0	92
28	Size-Tuning of WSe <sub>2</sub> Flakes for High Efficiency Inverted Organic Solar Cells. <i>ACS Nano</i> , 2017, 11, 3517-3531.	14.6	90
29	Improved Carrier Transport in Perovskite Solar Cells Probed by Femtosecond Transient Absorption Spectroscopy. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 43910-43919.	8.0	90
30	Perovskite nanostructures for photovoltaic and energy storage devices. <i>Journal of Materials Chemistry A</i> , 2018, 6, 9765-9798.	10.3	90
31	Convection roll-driven generation of supra-wavelength periodic surface structures on dielectrics upon irradiation with femtosecond pulsed lasers. <i>Physical Review B</i> , 2016, 94, .	3.2	88
32	Biofabrication for neural tissue engineering applications. <i>Materials Today Bio</i> , 2020, 6, 100043.	5.5	82
33	Electrowetting Properties of Micro/Nanostructured Black Silicon. <i>Langmuir</i> , 2010, 26, 13007-13014.	3.5	80
34	Laser fabricated discontinuous anisotropic microconical substrates as a new model scaffold to control the directionality of neuronal network outgrowth. <i>Biomaterials</i> , 2015, 67, 115-128.	11.4	80
35	Spin coated graphene films as the transparent electrode in organic photovoltaic devices. <i>Thin Solid Films</i> , 2011, 520, 1238-1241.	1.8	79
36	Graphene and transition metal dichalcogenide nanosheets as charge transport layers for solution processed solar cells. <i>Materials Today</i> , 2016, 19, 580-594.	14.2	79

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37	Laser writing of nanostructures on bulk Al via its ablation in liquids. <i>Nanotechnology</i> , 2009, 20, 105303.	2.6	78
38	Perovskite nanocrystals for energy conversion and storage. <i>Nanophotonics</i> , 2019, 8, 1607-1640.	6.0	78
39	Fast and selective reduction of nitroarenes under visible light with an earth-abundant plasmonic photocatalyst. <i>Nature Nanotechnology</i> , 2022, 17, 485-492.	31.5	78
40	Post-fabrication, <i>in situ</i> laser reduction of graphene oxide devices. <i>Applied Physics Letters</i> , 2013, 102, .	3.3	76
41	Controlling the Wettability of Steel Surfaces Processed with Femtosecond Laser Pulses. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 36564-36571.	8.0	75
42	Highly efficient organic photovoltaic devices utilizing work-function tuned graphene oxide derivatives as the anode and cathode charge extraction layers. <i>Journal of Materials Chemistry A</i> , 2016, 4, 1612-1623.	10.3	74
43	Femtosecond laser writing of nanostructures on bulk Al via its ablation in air and liquids. <i>Applied Surface Science</i> , 2009, 255, 5346-5350.	6.1	73
44	Enhancement of the Efficiency and Stability of Organic Photovoltaic Devices via the Addition of a Lithium-Neutralized Graphene Oxide Electron-Transporting Layer. <i>Chemistry of Materials</i> , 2014, 26, 5988-5993.	6.7	71
45	Enhancement of photo/thermal stability of organic bulk heterojunction photovoltaic devices via gold nanoparticles doping of the active layer. <i>Nanoscale</i> , 2012, 4, 7452.	5.6	70
46	Silicon electron emitters fabricated by ultraviolet laser pulses. <i>Applied Physics Letters</i> , 2006, 88, 081103.	3.3	67
47	Light-induced reversible hydrophilicity of ZnO structures grown by aqueous chemical growth. <i>Applied Surface Science</i> , 2008, 254, 5695-5699.	6.1	67
48	Ripple formation on nickel irradiated with radially polarized femtosecond beams. <i>Optics Letters</i> , 2015, 40, 5172.	3.3	67
49	Functionalized Graphene as an Electron-Cascade Acceptor for Air-Processed Organic Ternary Solar Cells. <i>Advanced Functional Materials</i> , 2015, 25, 3870-3880.	14.9	67
50	Three-dimensional carbon nanowall field emission arrays. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	66
51	Low-temperature benchtop-synthesis of all-inorganic perovskite nanowires. <i>Nanoscale</i> , 2017, 9, 18202-18207.	5.6	65
52	All-inorganic lead halide perovskite nanohexagons for high performance air-stable lithium batteries. <i>Nanoscale</i> , 2019, 11, 882-889.	5.6	63
53	Nanomaterials by Ultrafast Laser Processing of Surfaces. <i>Science of Advanced Materials</i> , 2012, 4, 407-431.	0.7	63
54	Reversible wettability of ZnO nanostructured thin films prepared by pulsed laser deposition. <i>Thin Solid Films</i> , 2009, 518, 1267-1270.	1.8	62

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55	Mimicking bug-like surface structures and their fluid transport produced by ultrashort laser pulse irradiation of steel. <i>Applied Physics A: Materials Science and Processing</i> , 2017, 123, 1.	2.3	62
56	Advanced Photonic Processes for Photovoltaic and Energy Storage Systems. <i>Advanced Materials</i> , 2017, 29, 1700335.	21.0	61
57	Tailoring the wetting properties of polymers from highly hydrophilic to superhydrophobic using UV laser pulses. <i>Journal of Micromechanics and Microengineering</i> , 2012, 22, 035001.	2.6	60
58	Neural stem cell delivery via porous collagen scaffolds promotes neuronal differentiation and locomotion recovery in spinal cord injury. <i>Npj Regenerative Medicine</i> , 2020, 5, 12.	5.2	60
59	Spin coated carbon nanotubes as the hole transport layer in organic photovoltaics. <i>Solar Energy Materials and Solar Cells</i> , 2012, 96, 298-301.	6.2	59
60	Laser-Assisted Reduction of Graphene Oxide for Flexible, Large-Area Optoelectronics. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2014, 20, 106-115.	2.9	59
61	Elastic constants, viscosity and response time in nematic liquid crystals doped with ferroelectric nanoparticles. <i>RSC Advances</i> , 2014, 4, 46068-46074.	3.6	59
62	Free-standing graphene on microstructured silicon vertices for enhanced field emission properties. <i>Nanoscale</i> , 2012, 4, 3069.	5.6	58
63	Recent Advances in 2D Metal Monochalcogenides. <i>Advanced Science</i> , 2020, 7, 2001655.	11.2	58
64	Integration of carbon nanotubes as hole transport electrode in polymer/fullerene bulk heterojunction solar cells. <i>Thin Solid Films</i> , 2007, 515, 8598-8600.	1.8	57
65	Generation of nanostructures on metals by laser ablation in liquids: new results. <i>Quantum Electronics</i> , 2010, 40, 1012-1020.	1.0	57
66	Plasmonic organic photovoltaic devices with graphene based buffer layers for stability and efficiency enhancement. <i>Nanoscale</i> , 2013, 5, 4144.	5.6	57
67	Carbon nanotube/PEDOT:PSS electrodes for organic photovoltaics. <i>EPJ Applied Physics</i> , 2006, 36, 257-259.	0.7	56
68	High electron mobility thin-film transistors based on Ga <sub>2</sub> O <sub>3</sub> grown by atmospheric ultrasonic spray pyrolysis at low temperatures. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	56
69	Cell patterning via laser micro/nano structured silicon surfaces. <i>Biofabrication</i> , 2017, 9, 025024.	7.1	56
70	Mimicking lizard-like surface structures upon ultrashort laser pulse irradiation of inorganic materials. <i>Applied Surface Science</i> , 2017, 418, 499-507.	6.1	56
71	Omnidirectional iridescence via cylindrically- polarized femtosecond laser processing. <i>Opto-Electronic Advances</i> , 2020, 3, 190035-190035.	13.3	56
72	Room temperature observation of biexcitons in exfoliated WS <sub>2</sub> monolayers. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	54

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73	Ultra-high-resolution nonlinear optical imaging of the armchair orientation in 2D transition metal dichalcogenides. <i>Light: Science and Applications</i> , 2018, 7, 18005-18005.	16.6	53
74	Organic Bulk Heterojunction Photovoltaic Devices Based on Polythiophene-Graphene Composites. <i>ACS Applied Materials &amp; Interfaces</i> , 2012, 4, 4864-4870.	8.0	52
75	Intense femtosecond photoexcitation of bulk and monolayer MoS <sub>2</sub> . <i>Applied Physics Letters</i> , 2014, 105, .	3.3	52
76	Modelling periodic structure formation on 100Cr6 steel after irradiation with femtosecond-pulsed laser beams. <i>Applied Physics A: Materials Science and Processing</i> , 2018, 124, 1.	2.3	52
77	Plasmonic Bulk Heterojunction Solar Cells: The Role of Nanoparticle Ligand Coating. <i>ACS Photonics</i> , 2015, 2, 714-723.	6.6	51
78	Surface nanotexturing of tantalum by laser ablation in water. <i>Quantum Electronics</i> , 2009, 39, 89-93.	1.0	50
79	Controlling cell adhesion via replication of laser micro/nano-textured surfaces on polymers. <i>Biofabrication</i> , 2011, 3, 045004.	7.1	50
80	Controlling ripples' periodicity using temporally delayed femtosecond laser double pulses. <i>Optics Express</i> , 2013, 21, 18501.	3.4	49
81	Silicon Scaffolds Promoting Three-Dimensional Neuronal Web of Cytoplasmic Processes. <i>Tissue Engineering - Part C: Methods</i> , 2010, 16, 497-502.	2.1	47
82	Laser induced nucleation of plasmonic nanoparticles on two-dimensional nanosheets for organic photovoltaics. <i>Journal of Materials Chemistry A</i> , 2016, 4, 1020-1027.	10.3	47
83	Enhanced Field Emission of WS <sub>2</sub> Nanotubes. <i>Small</i> , 2014, 10, 2398-2403.	10.0	45
84	Thermoplastic deformation of silicon surfaces induced by ultrashort pulsed lasers in submelting conditions. <i>Journal of Applied Physics</i> , 2012, 111, 053502.	2.5	44
85	The influence of ultra-fast temporal energy regulation on the morphology of Si surfaces through femtosecond double pulse laser irradiation. <i>Applied Physics A: Materials Science and Processing</i> , 2013, 113, 273-283.	2.3	44
86	Enhanced Field Emission from Reduced Graphene Oxide Polymer Composites. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 388-393.	8.0	44
87	Ligand-free all-inorganic metal halide nanocubes for fast, ultra-sensitive and self-powered ozone sensors. <i>Nanoscale Advances</i> , 2019, 1, 2699-2706.	4.6	44
88	Synergetic plasmonic effect of Al and Au nanoparticles for efficiency enhancement of air processed organic photovoltaic devices. <i>Chemical Communications</i> , 2014, 50, 5285-5287.	4.1	43
89	Gradient induced liquid motion on laser structured black Si surfaces. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	43
90	Plasmonic Backscattering Effect in High-Efficient Organic Photovoltaic Devices. <i>Advanced Energy Materials</i> , 2016, 6, 1501640.	19.5	43

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91	Solution processed reduced graphene oxide electrodes for organic photovoltaics. <i>Nanoscale Horizons</i> , 2016, 1, 375-382.	8.0	43
92	Organic solar cells with plasmonic layers formed by laser nanofabrication. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 8237.	2.8	42
93	Efficient ternary organic photovoltaics incorporating a graphene-based porphyrin molecule as a universal electron cascade material. <i>Nanoscale</i> , 2015, 7, 17827-17835.	5.6	42
94	Enhanced Stability of Aluminum Nanoparticle-Doped Organic Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 17756-17764.	8.0	41
95	Photochemical Synthesis of Solution-Processable Graphene Derivatives with Tunable Bandgaps for Organic Solar Cells. <i>Advanced Optical Materials</i> , 2015, 3, 658-666.	7.3	41
96	Laser generated nanoparticles based photovoltaics. <i>Journal of Colloid and Interface Science</i> , 2017, 489, 28-37.	9.4	41
97	Recent Advances in Femtosecond Laser-Induced Surface Structuring for Oil-Water Separation. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 1554.	2.5	41
98	Plasmonic organic photovoltaics doped with metal nanoparticles. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , 2011, 9, 184-189.	2.0	40
99	Porous nanoparticles of Al and Ti generated by laser ablation in liquids. <i>Applied Surface Science</i> , 2012, 258, 9283-9287.	6.1	40
100	Controlled ultrashort-pulse laser-induced ripple formation on semiconductors. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 114, 57-68.	2.3	40
101	Aluminum nanoparticles for efficient and stable organic photovoltaics. <i>RSC Advances</i> , 2013, 3, 16288.	3.6	38
102	Direct laser writing of flexible graphene field emitters. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	38
103	Efficiency and stability enhancement of inverted perovskite solar cells via the addition of metal nanoparticles in the hole transport layer. <i>RSC Advances</i> , 2017, 7, 12998-13002.	3.6	37
104	Controlling the wettability of stainless steel from highly-hydrophilic to super-hydrophobic by femtosecond laser-induced ripples and nanospikes. <i>RSC Advances</i> , 2020, 10, 37956-37961.	3.6	37
105	Signatures of Quantized Energy States in Solution-Processed Ultrathin Layers of Metal-Oxide Semiconductors and Their Devices. <i>Advanced Functional Materials</i> , 2015, 25, 1727-1736.	14.9	36
106	Ternary solution-processed organic solar cells incorporating 2D materials. <i>2D Materials</i> , 2017, 4, 042005.	4.4	36
107	Controlling the Outgrowth and Functions of Neural Stem Cells: The Effect of Surface Topography. <i>ChemPhysChem</i> , 2018, 19, 1143-1163.	2.1	36
108	Microconical silicon structures influence NGF-induced PC12 cell morphology. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2015, 9, 424-434.	2.7	35

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109	Ripple formation on silver after irradiation with radially polarised ultrashort-pulsed lasers. Journal of Applied Physics, 2017, 121, .	2.5	35
110	Limitations of a polymer-based hole transporting layer for application in planar inverted perovskite solar cells. Nanoscale Advances, 2019, 1, 3107-3118.	4.6	35
111	Tailoring submicrometer periodic surface structures via ultrashort pulsed direct laser interference patterning. Physical Review B, 2021, 103, .	3.2	35
112	Effect of a liquid environment on single-pulse generation of laser induced periodic surface structures and nanoparticles. Nanoscale, 2020, 12, 7674-7687.	5.6	34
113	Investigation of femtosecond laser induced ripple formation on copper for varying incident angle. AIP Advances, 2018, 8, 015212.	1.3	33
114	How the Physicochemical Properties of Manufactured Nanomaterials Affect Their Performance in Dispersion and Their Applications in Biomedicine: A Review. Nanomaterials, 2022, 12, 552.	4.1	33
115	Solution-processable graphene linked to 3,5-dinitrobenzoyl as an electron acceptor in organic bulk heterojunction photovoltaic devices. Carbon, 2012, 50, 5554-5561.	10.3	32
116	Nano-textured W shows improvement of thermionic emission properties. Applied Physics A: Materials Science and Processing, 2012, 106, 1-4.	2.3	32
117	Spatially Resolved In Situ Structural Study of Organic Electronic Devices with Nanoscale Resolution: The Plasmonic Photovoltaic Case Study. Advanced Materials, 2013, 25, 4760-4765.	21.0	31
118	Control of periodic surface structures on silicon by combined temporal and polarization shaping of femtosecond laser pulses. Applied Surface Science, 2018, 444, 154-160.	6.1	31
119	Improved Charge Carrier Dynamics of CH <sub>3</sub> NH <sub>3</sub> Pb <sub>3</sub> Perovskite Films Synthesized by Means of Laser-Assisted Crystallization. ACS Applied Energy Materials, 2018, 1, 5101-5111.	5.1	31
120	Twist Angle mapping in layered WS <sub>2</sub> by Polarization-Resolved Second Harmonic Generation. Scientific Reports, 2019, 9, 14285.	3.3	31
121	Femtosecond laser-induced periodic surface structure on the Ti-based nanolayered thin films. Journal of Applied Physics, 2013, 114, .	2.5	30
122	Elastic properties, intrinsic and photoinduced stress in hydrogenated amorphous-silicon thin films with different hydrogen content. Journal of Applied Physics, 2001, 89, 4294-4300.	2.5	29
123	Electron field emission from graphene oxide wrinkles. RSC Advances, 2016, 6, 2768-2773.	3.6	29
124	Biomimetic surface structures in steel fabricated with femtosecond laser pulses: influence of laser rescanning on morphology and wettability. Beilstein Journal of Nanotechnology, 2018, 9, 2802-2812.	2.8	29
125	On the formation and features of the supra-wavelength grooves generated during femtosecond laser surface structuring of silicon. Applied Surface Science, 2020, 528, 146607.	6.1	29
126	Influence of solution chemistry on the properties of hydrothermally grown TiO <sub>2</sub> for advanced applications. Catalysis Today, 2009, 144, 172-176.	4.4	28



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127	Plasmonic Organic Photovoltaic Devices on Transparent Carbon Nanotube Films. IEEE Transactions on Electron Devices, 2011, 58, 860-864.	3.0	28
128	Ternary Organic Solar Cells with Reduced Graphene Oxide/Sb <sub>2</sub> S <sub>3</sub> Hybrid Nanosheets as the Cascade Material. ChemNanoMat, 2015, 1, 346-352.	2.8	28
129	Efficient and environmental-friendly perovskite solar cells via embedding plasmonic nanoparticles: an optical simulation study on realistic device architectures. Optics Express, 2019, 27, 31144.	3.4	28
130	One pot direct hydrothermal growth of photoactive TiO <sub>2</sub> films on glass. Journal of Photochemistry and Photobiology A: Chemistry, 2009, 202, 81-85.	3.9	27
131	Laser-assisted nanostructuring of Tungsten in liquid environment. Applied Surface Science, 2012, 258, 5898-5902.	6.1	27
132	Formation of periodic surface structures on dielectrics after irradiation with laser beams of spatially variant polarisation: a comparative study. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	27
133	Advanced composite glasses with metallic, perovskite, and two-dimensional nanocrystals for optoelectronic and photonic applications. Nanoscale, 2022, 14, 2966-2989.	5.6	27
134	In situ photo-induced chemical doping of solution-processed graphene oxide for electronic applications. Journal of Materials Chemistry C, 2014, 2, 5931-5937.	5.5	26
135	Generation of nanoparticles of bronze and brass by laser ablation in liquid. Applied Surface Science, 2014, 302, 79-82.	6.1	26
136	Highly luminescent and ultrastable cesium lead bromide perovskite patterns generated in phosphate glass matrices. Nanoscale, 2020, 12, 13697-13707.	5.6	26
137	Ultrashort pulsed laser induced complex surface structures generated by tailoring the melt hydrodynamics. Opto-Electronic Advances, 2022, 5, 210052-210052.	13.3	26
138	Partial ablation of Ti/Al nano-layer thin film by single femtosecond laser pulse. Journal of Applied Physics, 2017, 122, .	2.5	25
139	Engineering Cell Adhesion and Orientation via Ultrafast Laser Fabricated Microstructured Substrates. International Journal of Molecular Sciences, 2018, 19, 2053.	4.1	25
140	Modelling of the ultrafast dynamics and surface plasmon properties of silicon upon irradiation with mid-IR femtosecond laser pulses. Physical Review B, 2019, 99, .	3.2	25
141	Prominent room temperature valley polarization in WS <sub>2</sub> /graphene heterostructures grown by chemical vapor deposition. Applied Physics Letters, 2020, 116, .	3.3	25
142	Photoinduced stress in hydrogenated amorphous silicon films. Applied Physics Letters, 2002, 80, 1734-1736.	3.3	24
143	The role of chemical structure in indacenodithienothiophene-benzothiadiazole copolymers for high performance organic solar cells with improved photo-stability through minimization of burn-in loss. Journal of Materials Chemistry A, 2017, 5, 25064-25076.	10.3	24
144	Anion exchange in inorganic perovskite nanocrystal polymer composites. Chemical Science, 2018, 9, 8121-8126.	7.4	24

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145	Laser induced periodic surface structures as polarizing optical elements. <i>Applied Surface Science</i> , 2021, 541, 148470.	6.1	24
146	Ternary organic solar cells incorporating zinc phthalocyanine with improved performance exceeding 8.5%. <i>Dyes and Pigments</i> , 2017, 146, 408-413.	3.7	23
147	Spatial non-uniformity in exfoliated WS <sub>2</sub> single layers. <i>Nanoscale</i> , 2016, 8, 16197-16203.	5.6	22
148	1,2-Unsubstituted meso-positioning thienyl BODIPY: a promising electron deficient building block for the development of near infrared (NIR) p-type donor-acceptor (D-A) conjugated polymers. <i>Journal of Materials Chemistry C</i> , 2018, 6, 4030-4040.	5.5	22
149	Nitrogen-Doped Carbon Nanotube/Polypropylene Composites with Negative Seebeck Coefficient. <i>Journal of Composites Science</i> , 2020, 4, 14.	3.0	22
150	Ionisation processes and laser induced periodic surface structures in dielectrics with mid-infrared femtosecond laser pulses. <i>Scientific Reports</i> , 2020, 10, 8675.	3.3	21
151	Improving stability of organic devices: a time/space resolved structural monitoring approach applied to plasmonic photovoltaics. <i>Solar Energy Materials and Solar Cells</i> , 2017, 159, 617-624.	6.2	20
152	Novel Biomaterials for Tissue Engineering 2018. <i>International Journal of Molecular Sciences</i> , 2018, 19, 3960.	4.1	20
153	Stress and internal friction associated with light-induced structural changes of a-Si:H deposited on crystalline silicon microcantilevers. <i>Journal of Non-Crystalline Solids</i> , 2000, 266-269, 506-510.	3.1	18
154	Highly stable metal halide perovskite microcube anodes for lithium-air batteries. <i>Journal of Power Sources Advances</i> , 2020, 3, 100015.	5.1	18
155	KrF laser ablation of a polyethersulfone film: Effect of pulse duration on structure formation. <i>Applied Surface Science</i> , 2011, 258, 169-175.	6.1	17
156	Efficiency enhancement of organic photovoltaic devices by embedding uncapped Al nanoparticles in the hole transport layer. <i>RSC Advances</i> , 2015, 5, 71704-71708.	3.6	17
157	Neurotaxis: Neuronal movement in gradients of chemical and physical environments. <i>Developmental Neurobiology</i> , 2020, 80, 361-377.	3.0	17
158	Programming the assembly of gold nanoparticles on graphene oxide sheets using DNA. <i>Journal of Materials Chemistry C</i> , 2015, 3, 9379-9384.	5.5	16
159	Femtosecond Laser Fabrication of Stable Hydrophilic and Anti-Corrosive Steel Surfaces. <i>Materials</i> , 2019, 12, 3428.	2.9	16
160	Biocompatible polymeric electrospun matrices: Micro-nanotopography effect on cell behavior. <i>Journal of Applied Polymer Science</i> , 2020, 137, 49223.	2.6	16
161	Stability enhancement of organic photovoltaic devices utilizing partially reduced graphene oxide as the hole transport layer: nanoscale insight into structural/interfacial properties and aging effects. <i>RSC Advances</i> , 2015, 5, 106930-106940.	3.6	15
162	Electrowetting Properties of ZnO and TiO <sub>2</sub> Nanostructured Thin Films. <i>Journal of Physical Chemistry C</i> , 2010, 114, 10249-10253.	3.1	14

#	ARTICLE	IF	CITATIONS
163	Spatially selective reversible charge carrier density tuning in WS <sub>2</sub> monolayers via photochlorination. 2D Materials, 2019, 6, 015003.	4.4	13
164	Modeling ultrafast out-of-equilibrium carrier dynamics and relaxation processes upon irradiation of hexagonal silicon carbide with femtosecond laser pulses. Physical Review B, 2020, 101, .	3.2	13
165	Imaging Dielectric Properties of Si Nanowire Oxide with Conductive Atomic Force Microscopy Complemented with Femtosecond Laser Illumination. Nano Letters, 2008, 8, 1949-1953.	9.1	12
166	Polymer-nanotube composite mats with improved field emission performance and stability. Physical Chemistry Chemical Physics, 2009, 11, 703-709.	2.8	12
167	Leaf surface characteristics and wetting in Ceratonia siliqua L.. Flora: Morphology, Distribution, Functional Ecology of Plants, 2012, 207, 551-556.	1.2	12
168	Probing valley population imbalance in transition metal dichalcogenides via temperature-dependent second harmonic generation imaging. Npj 2D Materials and Applications, 2021, 5, .	7.9	12
169	Highly sensitive ozone and hydrogen sensors based on perovskite microcrystals directly grown on electrodes. Journal of Materiomics, 2022, 8, 446-453.	5.7	12
170	Imaging the crystal orientation of 2D transition metal dichalcogenides using polarization-resolved second-harmonic generation. Opto-Electronic Advances, 2019, 2, 19002601-19002608.	13.3	12
171	Effect of the reduction process on the field emission performance of reduced graphene oxide cathodes. RSC Advances, 2015, 5, 53604-53610.	3.6	11
172	Short Pulse Laser Synthesis of Transition-Metal Dichalcogenide Nanostructures under Ambient Conditions. ACS Omega, 2017, 2, 2649-2656.	3.5	11
173	Enhancement of the Power-Conversion Efficiency of Organic Solar Cells via Unveiling an Appropriate Rational Design Strategy in Indacenodithiophene-alt-quinoxaline $\pi$ -Conjugated Polymers. ACS Applied Materials & Interfaces, 2018, 10, 10236-10245.	8.0	11
174	Three-dimensional characterization of collagen remodeling in cell-seeded collagen scaffolds via polarization second harmonic generation. Biomedical Optics Express, 2021, 12, 1136.	2.9	11
175	Light induced stress in a-Si <sub>1-x</sub> Gex:H alloys and its correlation with the Staebler-Wronski effect. Journal of Non-Crystalline Solids, 2002, 299-302, 521-524.	3.1	10
176	Unveiling the Structure of MoS <sub>2</sub> Nanocrystals Produced upon Laser Fragmentation of MoS <sub>2</sub> Platelets. ACS Omega, 2018, 3, 16728-16734.	3.5	10
177	<i>In situ</i> monitoring of the charge carrier dynamics of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> perovskite crystallization process. Journal of Materials Chemistry C, 2019, 7, 12170-12179.	5.5	10
178	Predictive modeling approaches in laser-based material processing. Journal of Applied Physics, 2020, 128, 183102.	2.5	10
179	Advanced Photonic Processes for Photovoltaic, Energy Storage, and Environmental Systems. Advanced Sustainable Systems, 2021, 5, 2000237.	5.3	10
180	Effect of composition and temperature on the second harmonic generation in silver phosphate glasses. Optical Materials, 2018, 75, 796-801.	3.6	9

#	ARTICLE	IF	CITATIONS
181	Robust B-exciton emission at room temperature in few-layers of MoS <sub>2</sub> :Ag nanoheterojunctions embedded into a glass matrix. <i>Scientific Reports</i> , 2020, 10, 15697.	3.3	9
182	Laser-induced topographies enable the spatial patterning of co-cultured peripheral nervous system cells. <i>Materials Science and Engineering C</i> , 2020, 115, 111144.	7.3	9
183	Laser Nanostructuring for Diffraction Grating Based Surface Plasmon-Resonance Sensors. <i>Nanomaterials</i> , 2021, 11, 591.	4.1	9
184	Tuning the valley polarization in WS <sub>2</sub> monolayers via control of active defect sites induced by photochemical doping. <i>Applied Physics Letters</i> , 2021, 118, .	3.3	9
185	Properties of Silicon and Metal Oxide Electrowetting Systems. <i>Journal of Adhesion Science and Technology</i> , 2012, 26, 2143-2163.	2.6	8
186	Effect of pulse duration on KrF laser treatment of a polyethersulfone film: cell culture study. <i>Applied Physics A: Materials Science and Processing</i> , 2013, 110, 633-637.	2.3	8
187	Implantable vaccine development using in vitro antigen-pulsed macrophages absorbed on laser micro-structured Si scaffolds. <i>Vaccine</i> , 2015, 33, 3142-3149.	3.8	8
188	Structures for biomimetic, fluidic, and biological applications. <i>MRS Bulletin</i> , 2016, 41, 993-1001.	3.5	8
189	Atomic force microscopy based, multiphoton, photoelectron emission imaging. <i>Applied Physics Letters</i> , 2006, 89, 013110.	3.3	7
190	Ultrafast electron dynamics in ZnO/Si micro-cones. <i>Applied Physics A: Materials Science and Processing</i> , 2010, 98, 701-705.	2.3	7
191	Erasable and rewritable laser-induced gratings on silver phosphate glass. <i>Applied Physics A: Materials Science and Processing</i> , 2018, 124, 1.	2.3	7
192	Structure and spectroscopy characterization of La <sub>1-x</sub> Sm <sub>x</sub> VO <sub>4</sub> luminescent nanoparticles synthesized co-precipitation and sol-gel methods. <i>Optical Materials</i> , 2019, 95, 109248.	3.6	7
193	Combined effect of shear stress and laser-patterned topography on Schwann cell outgrowth: synergistic or antagonistic?. <i>Biomaterials Science</i> , 2021, 9, 1334-1344.	5.4	7
194	Real-time spatially resolved determination of twist angle in transition metal dichalcogenide heterobilayers. <i>2D Materials</i> , 2021, 8, 015015.	4.4	7
195	Nonlinear Optical Imaging of In-Plane Anisotropy in Two-Dimensional SnS. <i>Advanced Optical Materials</i> , 2022, 10, .	7.3	7
196	Stainless steel surface wettability control via laser ablation in external electric field. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	2.3	6
197	Multiscale in modelling and validation for solar photovoltaics. <i>EPJ Photovoltaics</i> , 2018, 9, 10.	1.6	6
198	Broad-band high-gain room temperature photodetectors using semiconductor-metal nanofloret hybrids with wide plasmonic response. <i>Nanoscale</i> , 2019, 11, 6368-6376.	5.6	6

#	ARTICLE	IF	CITATIONS
199	Laser-Assisted Surface Texturing of Ti/Zr Multilayers for Mesenchymal Stem Cell Response. <i>Coatings</i> , 2019, 9, 854.	2.6	6
200	Laser-Assisted Fabrication for Metal Halide Perovskite-2D Nanoconjugates: Control on the Nanocrystal Density and Morphology. <i>Nanomaterials</i> , 2020, 10, 747.	4.1	6
201	Optical versus electron diffraction imaging of Twist-angle in 2D transition metal dichalcogenide bilayers. <i>Npj 2D Materials and Applications</i> , 2021, 5, .	7.9	6
202	Strong Eu <sup>3+</sup> luminescence in $\text{La}^{0.999-x-y}\text{Er}_x/2\text{Eu}_y/2\text{Ca}_y\text{VO}_4$ nanocrystals: The result of co-doping optimization. <i>Journal of Luminescence</i> , 2022, 242, 118587.	3.1	6
203	Impact of Pre-Patterned Structures on Features of Laser-Induced Periodic Surface Structures. <i>Molecules</i> , 2021, 26, 7330.	3.8	6
204	Charge carrier dynamics in different crystal phases of $\text{CH}_3\text{NH}_3\text{PbI}_3$ perovskite. , 2022, 1, 210005-210005.		6
205	Novel Aspects of Materials Processing by Ultrafast Lasers: From Electronic to Biological and Cultural Heritage Applications. <i>Journal of Physics: Conference Series</i> , 2007, 59, 266-272.	0.4	5
206	Ultraviolet laser structuring of silicon carbide for cold cathode applications. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 3309-3313.	0.8	5
207	Laser-assisted nanostructuring of Silicon in liquid environment. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 117, 359-364.	2.3	5
208	Laser micro-structured Si scaffold-implantable vaccines against Salmonella Typhimurium. <i>Vaccine</i> , 2019, 37, 2249-2257.	3.8	5
209	Response of NIH 3T3 Fibroblast Cells on Laser-Induced Periodic Surface Structures on a 15Å-(Ti/Zr)/Si Multilayer System. <i>Nanomaterials</i> , 2020, 10, 2531.	4.1	5
210	Neuronal Migration on Silicon Microcone Arrays with Different Pitches. <i>Advanced Healthcare Materials</i> , 2021, 10, e2000583.	7.6	5
211	Incident angle influence on ripples and grooves produced by femtosecond laser irradiation of silicon. <i>Applied Surface Science</i> , 2021, 570, 151150.	6.1	5
212	Photovoltaics: Reduced Graphene Oxide Micromesh Electrodes for Large Area, Flexible, Organic Photovoltaic Devices ( <i>Adv. Funct. Mater.</i> 15/2015). <i>Advanced Functional Materials</i> , 2015, 25, 2206-2206.	14.9	4
213	Laser ablation and injection moulding as techniques for producing micro channels compatible with Small Angle X-Ray Scattering. <i>Microelectronic Engineering</i> , 2018, 195, 7-12.	2.4	4
214	Cells on hierarchically-structured platforms hosting functionalized nanoparticles. <i>Biomaterials Science</i> , 2018, 6, 1469-1479.	5.4	4
215	Molding Wetting by Laser-Induced Nanostructures. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 6008.	2.5	4
216	Nanomedicines and Nanosimilars: Looking for a New and Dynamic Regulatory Inspired System. <i>AAPS PharmSciTech</i> , 2020, 21, 65.	3.3	4

#	ARTICLE	IF	CITATIONS
217	Dispersion behaviour of two dimensional monochalcogenides. Journal of Colloid and Interface Science, 2021, 594, 334-341.	9.4	4
218	Probing the effect of a glass network on the synthesis and luminescence properties of composite perovskite glasses [Invited]. Optical Materials Express, 2022, 12, 823.	3.0	4
219	Effects of static and dynamic femtosecond laser modifications of Ti/Zr multilayer thin films. European Physical Journal D, 2021, 75, 1.	1.3	4
220	The role of the ethynylene bond on the optical and electronic properties of diketopyrrolopyrrole copolymers. RSC Advances, 2014, 4, 58404-58411.	3.6	3
221	Use of Cotton Textiles Coated by Ir(III) Tetrazole Complexes within Ceramic Silica Nanophases for Photo-Induced Self-Marker and Antibacterial Application. Nanomaterials, 2020, 10, 1020.	4.1	3
222	Self-Assembled Dichroic Plasmonic Nitride Nanostructures with Broken Centrosymmetry for Second-Harmonic Generation. ACS Applied Nano Materials, 2021, 4, 8789-8800.	5.0	3
223	Laser-Based Biomimetic Tissue Engineering. Biological and Medical Physics Series, 2013, , 211-236.	0.4	3
224	Physiological Characteristics of Expanding and Expanded Leaves of Vitis vinifera L. cv. Assyrtiko in Climate Change Conditions. Biology and Life Sciences Forum, 2021, 4, 55.	0.6	3
225	Fabrication of Biomimetic 2D Nanostructures through Irradiation of Stainless Steel Surfaces with Double Femtosecond Pulses. Nanomaterials, 2022, 12, 623.	4.1	3
226	Laser-Induced Morphological and Structural Changes of Cesium Lead Bromide Nanocrystals. Nanomaterials, 2022, 12, 703.	4.1	3
227	Excitation dependent photoluminescence from quantum confined ultrasmall SnS sheets. Applied Physics Letters, 2021, 119, 241902.	3.3	3
228	Nanostructuring of single-crystal silicon carbide by femtosecond laser irradiation in a liquid. Physics of Wave Phenomena, 2014, 22, 15-18.	1.1	2
229	Data in support on the shape of Schwann cells and sympathetic neurons onto microconically structured silicon surfaces. Data in Brief, 2015, 4, 636-640.	1.0	2
230	Porous collagen scaffold micro-fabrication: feature-based process planning for computer numerically controlled laser systems. International Journal of Advanced Manufacturing Technology, 2020, 111, 749-763.	3.0	2
231	Laser-Assisted Synthesis of Composite Nanoparticles of Perovskite BaTiO <sub>3</sub> in Aqueous Solutions and Their Optical Properties. Materials, 2020, 13, 4086.	2.9	2
232	Graphene-Enabled Electrophoretic Ion Pump Delivery Devices. Advanced Materials Interfaces, 2022, 9, .	3.7	2
233	Space charges resulting from photocurrents exceeding the thermionic emission currents in a-Si:H. Journal of Non-Crystalline Solids, 2000, 266-269, 247-252.	3.1	1
234	Ultrafast laser micro/nano processing for microfluidic and tissue engineering applications. , 2011, , .		1

#	ARTICLE	IF	CITATIONS
235	3-Dimensional Laser Structured Scaffolds Improve Macrophage Adherence and Antigen-specific Response. <i>Procedia Engineering</i> , 2013, 59, 211-218.	1.2	1
236	Synthesis of ultra-thin oxide layer in laser-treated 3Å–Å(Al/Fe)/Si multilayer structure. <i>Journal of Materials Science</i> , 2014, 49, 7900-7907.	3.7	1
237	Organic Solar Cells: Photochemical Synthesis of Solutionâ€Processable Graphene Derivatives with Tunable Bandgaps for Organic Solar Cells ( <i>Advanced Optical Materials</i> 5/2015). <i>Advanced Optical Materials</i> , 2015, 3, 596-596.	7.3	1
238	High steady-state column density of I(2P <sub>3/2</sub> ) atoms from I <sub>2</sub> photodissociation at 532â€nm: Towards parity non-conservation measurements. <i>Scientific Reports</i> , 2016, 6, 33261.	3.3	1
239	Pulsed laser deposition of the LaVO <sub>4</sub> :Eu, Ca nanoparticles on glass and silicon substrates. <i>Applied Nanoscience (Switzerland)</i> , 2020, 10, 5053-5061.	3.1	1
240	Laser Nano-Structuring of Pre-Structured Substrates. <i>Journal of Laser Micro Nanoengineering</i> , 2018, 13, 6-9.	0.1	1
241	Deposition of Luminescent Vanadate Nanoparticles on Silicon Solar Cells. , 2020, , .		1
242	Biomonitoring Air Pollution in Carob Leaves. <i>Biology and Life Sciences Forum</i> , 2021, 4, 50.	0.6	1
243	Laser-Induced Erasable and Re-Writable Waveguides within Silver Phosphate Glasses. <i>Materials</i> , 2022, 15, 2983.	2.9	1
244	Metastable photoexpansion of hydrogenated amorphous silicon produced by exposure to short laser pulses. <i>Journal of Non-Crystalline Solids</i> , 2006, 352, 429-433.	3.1	0
245	Field-emission properties of arrays and extended areas of laser-fabricated silicon microstructures. <i>Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanoengineering and Nanosystems</i> , 2006, 220, 143-150.	0.1	0
246	Applications of ultrafast lasers in materials processing: fabrication on self-cleaning surfaces and scaffolds for tissue engineering. , 2008, , .		0
247	Part A: Bio-inspired water repellent surfaces produced by ultrafast laser structuring of silicon. , 2008, , .		0
248	Laser structured biomimetic artificial surfaces that quantitatively reproduce the water repellency of a Lotus leaf. , 2009, , .		0
249	Photoinduced wettability transition and electrowetting in hierarchical ZnO and TiO <sub>2</sub> structures. , 2009, , .		0
250	Multifunctional and responsive surfaces based on fs laser micro/nano structuring of silicon. , 2009, , .		0
251	Pulsed laser generation of novel nanomaterials for organic electronics. , 2013, , .		0
252	Direct laser texturing of biomimetic surfaces for neural tissue engineering. , 2013, , .		0



#	ARTICLE	IF	CITATIONS
253	Low and high repetition frequency femtosecond lasers processing of tungsten-based thin film. Laser and Particle Beams, 2014, 32, 613-619.	1.0	0
254	Photovoltaic Devices: Plasmonic Backscattering Effect in High-Efficient Organic Photovoltaic Devices (Adv. Energy Mater. 2/2016). Advanced Energy Materials, 2016, 6, .	19.5	0
255	Biomimetic structures on steel via self-organization processes in multiple-scan, fs-laser irradiated surfaces. , 2017, , .		0
256	Ultrafast laser fabrication of biomimetic micro and nano structured surfaces with circular and vectorial polarization states. , 2017, , .		0
257	Spatial nonuniformity of excitonic properties in exfoliated WS <sub>2</sub> monolayers. , 2017, , .		0
258	Nanoscale Optical Diagnostics of 2D TMDs. , 2019, , .		0
259	Laser-Induced Multi-Functional Biomimetic Surfaces. , 2019, , .		0
260	Study of Structure of Defect Centers in Europium Vanadate Nanoparticles with Heterovalent Dopants. , 2021, , .		0
261	Fabrication of Novel Biomimetic Structures on Steel Via Femtosecond Laser Over-Scans. , 2017, , .		0
262	Borate-Vanadate Glass-Ceramic Composites Doped with Crystalline Luminescent Oxide Nanoparticles. , 2020, , .		0
263	Polarization-Resolved Second Harmonic Generation for deep 3D characterization of collagen-based scaffold remodeling. , 2021, , .		0
264	Thin Films of La <sub>1-x</sub> Sm <sub>x</sub> VO <sub>4</sub> :Ca Luminescent Vanadate Nanoparticles Deposited with Various Methods on Glass Substrates. Springer Proceedings in Physics, 2021, , 363-383.	0.2	0
265	Culturing Human Pluripotent Stem Cells on Micropatterned Silicon Surfaces. Methods in Molecular Biology, 2021, , 1.	0.9	0
266	Optical Simulation Study of Perovskite/CIGS Tandem Solar Cells With Reduced Graphene Oxide Layers. Frontiers in Photonics, 2022, 3, .	2.4	0
267	Nonlinear Optical Imaging of In-Plane Anisotropy in Two-Dimensional SnS (Advanced Optical Materials) Tj ETQq <sub>1,1</sub> 0.784314 rgBT	7.3	0