Myeongkyu Lee

List of Publications by Year
in descending order

77 papers	1,259 citations	331670 21 h-index	454955 30 g-index
77 all docs	77 docs citations	77 times ranked	1474 citing authors

#	Article	IF	Citations
1	Comparative studies on thermal and laser sintering for highly conductive Cu films printable on plastic substrate. Thin Solid Films, 2012, 520, 2878-2883.	1.8	64
2	Fabrication of Ag-Au bimetallic nanoparticles by laser-induced dewetting of bilayer films. Applied Surface Science, 2018, 434, 1293-1299.	6.1	64
3	Generation of Reflection Colors from Metalâ€“Insulatorâ€“Metal Cavity Structure Enabled by Thickness-Dependent Refractive Indices of Metal Thin Film. ACS Photonics, 2019, 6, 2342-2349.	6.6	46
4	Single-pulse transformation of Ag thin film into nanoparticles via laser-induced dewetting. Applied Surface Science, 2017, 399, 555-564.	6.1	39
5	Laser welding of nanoparticulate TiO2and transparent conducting oxide electrodes for highly efficient dye-sensitized solar cell. Nanotechnology, 2010, 21, 345203.	2.6	38
6	Laser sintering of Cu paste film printed on polyimide substrate. Applied Surface Science, 2011, 258, 521-524.	6.1	36
7	Laserâ€Induced Control of TiO₂ Porosity for Enhanced Photovoltaic Behavior. Advanced Materials, 2011, 23, 3974-3978.	21.0	36
8	Microstructure and electrical property of laser-sintered Cu complex ink. Applied Surface Science, 2014, 307, 42-45.	6.1	36
9	Quasinondestructive Holographic Recording in PhotochromicLiNbO3. Physical Review Letters, 2000, 84, 875-878.	7.8	34
10	Fabrication of 10 Âµm-scale conductive Cu patterns by selective laser sintering of Cu complex ink. Optics and Laser Technology, 2017, 88, 128-133.	4.6	34
11	Transformation of silver nanowires into nanoparticles by Rayleigh instability: Comparison between laser irradiation and heat treatment. Applied Surface Science, 2018, 427, 65-73.	6.1	34
12	Laser micromachining of permalloy for fine metal mask. International Journal of Precision Engineering and Manufacturing - Green Technology, 2015, 2, 225-230.	4.9	32
13	Grating-coupled surface plasmon resonance on bulk stainless steel. Optics Express, 2017, 25, 26939.	3.4	31
14	Photoresistâ€Free Lithographic Patterning of Solutionâ€Processed Nanostructured Metal Thin Films. Advanced Materials, 2008, 20, 3457-3461.	21.0	27
15	Multilayered optical bit memory with a high signal-to-noise ratio in fluorescent polymethylmethacrylate. Applied Physics Letters, 2009, 94, .	3.3	25
16	Laser-Induced Dewetting of Metal Thin Films for Template-Free Plasmonic Color Printing. ACS Applied Materials & Interfaces, 2018, 10, 38368-38375.	8.0	25
17	Laser dewetting behaviors of Ag and Au thin films on glass and Si substrates: Experiments and theoretical considerations. Applied Surface Science, 2019, 475, 740-747.	6.1	25
18	Broadband Visible and Near-Infrared Absorbers Implemented with Planar Nanolayered Stacks. ACS Applied Nano Materials, 2020, 3, 2978-2986.	5.0	25

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19	Laser-driven high-resolution patterning of indium tin oxide thin film for electronic device. Optics and Lasers in Engineering, 2010, 48, 816-820.	3.8	24
20	Parallelized laser-direct patterning of nanocrystalline metal thin films by use of a pulsed laser-induced thermo-elastic force. Nanotechnology, 2009, 20, 245301.	2.6	22
21	Performance enhancement of dye-sensitized solar cell with a TiCl4-treated TiO2 compact layer. Electronic Materials Letters, 2015, 11, 271-275.	2.2	22
22	Laser-direct process of Cu nano-ink to coat highly conductive and adhesive metallization patterns on plastic substrate. Optics and Lasers in Engineering, 2016, 80, 12-16.	3.8	22
23	Observation and thermal fixing of holographic gratings in lead barium niobate crystal. Optics Letters, 1997, 22, 187.	3.3	21
24	Parallel laser printing of nanoparticulate silver thin film patterns for electronics. Applied Physics Letters, 2008, 92, 233107.	3.3	20
25	High-purity reflective color filters based on thin film cavities embedded with an ultrathin Ge₂Sb₂Te₅ absorption layer. Nanoscale Advances, 2020, 2, 4930-4937.	4.6	20
26	Photorefractive properties of tungsten bronze ferroelectric lead barium niobate (Pb1â^'xBaxNb2O6) crystals. Journal of Applied Physics, 1998, 83, 5967-5972.	2.5	19
27	Optical patterning of silver nanoparticle Langmuir-Blodgett films. Journal of Applied Physics, 2007, 102, .	2.5	19
28	Fabrication of honeycomb texture on poly-Si by laser interference and chemical etching. Applied Surface Science, 2013, 284, 565-568.	6.1	19
29	Mask-free fabrication of inverted-pyramid texture on single-crystalline Si wafer. Optics and Laser Technology, 2014, 63, 120-124.	4.6	19
30	Fabrication of Invisible Ag Nanowire Electrode Patterns Based on Laser-Induced Rayleigh Instability. Journal of Physical Chemistry C, 2016, 120, 20471-20477.	3.1	19
31	A hybrid dewetting approach to generate highly sensitive plasmonic silver nanoparticles with a narrow size distribution. Applied Surface Science, 2021, 542, 148613.	6.1	19
32	Diffractionâ€Gratingâ€Embedded Dyeâ€Sensitized Solar Cells with Good Light Harvesting. Advanced Energy Materials, 2014, 4, 1300978.	19.5	17
33	Printing of Highly Vivid Structural Colors on Metal Substrates with a Metalâ€Dielectric Double Layer. Advanced Optical Materials, 2019, 7, 1900196.	7.3	17
34	Parallel Laser Printing of a Thermal Emission Pattern in a Phaseâ€Change Thin Film Cavity for Infrared Camouflage and Security. Laser and Photonics Reviews, 2022, 16, .	8.7	17
35	Flexible dye-sensitized solar cell fabricated on plastic substrate by laser-detachment and press method. Applied Surface Science, 2013, 270, 462-466.	6.1	16
36	Laser-direct photoetching of metal thin film for the electrode of transistor. Applied Physics Letters, 2009, 95, 071104.	3.3	15

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37	Nanostructure and microripple formation on the surface of sapphire with femtosecond laser pulses. Journal of Applied Physics, 2012, 111, 093518.	2.5	15
38	Enhanced surface coverage and conductivity of Cu complex ink-coated films by laser sintering. Thin Solid Films, 2014, 564, 264-268.	1.8	14
39	Vivid structural colors produced on stainless steel. Acta Materialia, 2018, 159, 1-7.	7.9	14
40	Laser-induced enhancement of the surface hardness of nanoparticulate TiO2 self-cleaning layer. Surface and Coatings Technology, 2010, 205, 372-376.	4.8	13
41	Optical properties of lead barium niobate (Pb1â^'xBaxNb2O6) crystals. Journal of Applied Physics, 1997, 81, 917-923.	2.5	12
42	Nanostructured TiO₂diffraction grating fabricated via imprinting and TiCl₄treatment. Journal of Materials Chemistry C, 2014, 2, 981-985.	5.5	12
43	Laserâ€Induced Tuning and Spatial Control of the Emissivity of Phaseâ€Changing Ge₂Sb₂Te₅ Emitter for Thermal Camouflage. Advanced Materials Technologies, 2022, 7, .	5.8	12
44	Measurements ofOHâ^'absorption and proton activation inPb1â^'xBaxNb2O6crystals with applications to holographic storage. Physical Review B, 1997, 56, 7898-7904.	3.2	11
45	Fabrication of Au thin film gratings by pulsed laser interference. Applied Surface Science, 2010, 256, 2944-2947.	6.1	11
46	Laser-assisted patterning of solution-processed oxide semiconductor thin film using a metal absorption layer. Microelectronic Engineering, 2011, 88, 6-10.	2.4	10
47	Micro-scale patterning of indium tin oxide film by spatially modulated pulsed Nd:YAG laser beam. Applied Surface Science, 2012, 258, 9107-9111.	6.1	10
48	Angleâ€Insensitive Fabryâ€“Perot Mechanochromic Sensor for Realâ€Time Structural Health Monitoring. Advanced Materials Technologies, 2021, 6, 2100118.	5.8	10
49	Laser-Induced Conversion of Au Powders to Highly Stable Nanoparticles with a Narrow Size Distribution. Journal of Physical Chemistry C, 2016, 120, 13256-13262.	3.1	9
50	Highly sensitive moisture sensor with a hydrogel film coated on surface-textured stainless steel. Applied Surface Science, 2019, 484, 1149-1153.	6.1	8
51	Growth of lead barium niobate (Pb1â^'xBaxNb2O6) crystals by the vertical Bridgman method. Journal of Crystal Growth, 1998, 193, 355-363.	1.5	7
52	Laser treatment of solution-deposited carbon nanotube thin films for improved conductivity and transparency. Nanotechnology, 2011, 22, 265709.	2.6	7
53	Enhanced photorefractive effects of cerium-doped lead barium niobate crystals. Journal of the Optical Society of America B: Optical Physics, 2000, 17, 542.	2.1	6
54	Laser interference-driven fabrication of regular inverted-pyramid texture on mono-crystalline Si. Microelectronic Engineering, 2014, 130, 52-56.	2.4	6

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55	Laserâ€Printed Emissive Metasurface as an Anticounterfeiting Platform. Laser and Photonics Reviews, 2022, 16, .	8.7	6
56	Crystalline patterning in Sm-doped sodium borate glass by CW Nd:YAG laser irradiation. Applied Surface Science, 2007, 254, 908-910.	6.1	5
57	High-quality parallel patterning of carbon nanotube thin films by a pulsed laser beam. Thin Solid Films, 2012, 520, 3971-3974.	1.8	5
58	Effect of TiCl4 treatment on the refractive index of nanoporous TiO2 films. Applied Surface Science, 2015, 357, 659-665.	6.1	5
59	Improved light harvest in diffraction grating-embedded TiO2 nanoparticle film. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	2.3	5
60	Color Printing on Metals: Printing of Highly Vivid Structural Colors on Metal Substrates with a Metal-Dielectric Double Layer (Advanced Optical Materials 13/2019). Advanced Optical Materials, 2019, 7, 1970050.	7.3	5
61	Structural color printing with a dielectric layer coated on a nanotextured metal substrate: simulation and experiment. Nanoscale Advances, 2019, 1, 4090-4098.	4.6	5
62	Colorimetric Detection of Mechanical Deformation in Metals using Thinâ€Film Mechanochromic Sensor. Advanced Materials Technologies, 2021, 6, 2100479.	5.8	5
63	Electro-optic and photorefractive two-beam coupling properties of lead barium niobate crystals. Journal of Applied Physics, 1998, 83, 2826-2830.	2.5	4
64	Photochromic lens mirror-coated with Cr. Optical Materials, 2007, 30, 438-441.	3.6	4
65	Langmuirâ€“Blodgett Ag nanoparticle monolayer patterned by pulsed laser-induced selective desorption. Superlattices and Microstructures, 2008, 44, 657-663.	3.1	4
66	Comparative analysis of serial and parallel laser patterning of Ag nanowire thin films. Applied Surface Science, 2017, 399, 617-623.	6.1	4
67	Structural coloration of stainless steel with planar thin-film surface cavity structure. Optical Materials, 2020, 100, 109547.	3.6	4
68	Large-area laser printing of Ag thick film pattern with stepwise edge morphology. Optics and Lasers in Engineering, 2010, 48, 380-384.	3.8	3
69	Mass printing of colored natural patterns on Al plate by roll imprinting and thin film deposition. Journal of Materials Processing Technology, 2020, 278, 116502.	6.3	3
70	Effects of reduction treatment on the photorefractive properties of Pb0.5Ba0.5Nb2O6. Optical Materials, 2003, 21, 759-764.	3.6	2
71	Multi-layered Ag film pattern printed by spatially modulated pulsed laser beam. Applied Surface Science, 2011, 257, 8013-8016.	6.1	2
72	Surface plasmon resonance and coloration in stainless steel with a 2D periodic texture. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	2

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73	Synthesis and characterization of Sm(DBM)3Phen-and Nd(DBM)3Phen-doped polymethylmethacrylate for potential solar spectrum converter. Electronic Materials Letters, 2014, 10, 783-786.	2.2	1
74	Photorefractive properties of Pb/sub 0.5/Ba/sub 0.5/Nb/sub 2/O/sub 6/ crystal. , 0, , .		0
75	Diffusion of Zn in stoichiometric LiTaO3. Journal of Crystal Growth, 2004, 270, 568-572.	1.5	0
76	Angleâ€Insensitive Fabryâ€“Perot Mechanochromic Sensor for Realâ€Time Structural Health Monitoring (Adv. Mater. Technol. 8/2021). Advanced Materials Technologies, 2021, 6, 2170048.	5.8	0
77	Colorimetric Detection of Mechanical Deformation in Metals using Thinâ€Film Mechanochromic Sensor (Adv. Mater. Technol. 10/2021). Advanced Materials Technologies, 2021, 6, 2170061.	5.8	0