Sang-In Bae

List of Publications by Year
in descending order

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84 papers	1,804 citations	257357 24 h-index	276775 41 g-index
87 all docs	87 docs citations	87 times ranked	2295 citing authors

#	Article	IF	Citations
1	Tunable microdoublet lens array. Optics Express, 2004, 12, 2494.	1.7	178
2	Biologically inspired LED lens from cuticular nanostructures of firefly lantern. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 18674-18678.	3.3	105
3	Repeated Solid-state Dewetting of Thin Gold Films for Nanogap-rich Plasmonic Nanoislands. Scientific Reports, 2015, 5, 14790.	1.6	104
4	Plasmonic Schirmer Strip for Human Tear-Based Gouty Arthritis Diagnosis Using Surface-Enhanced Raman Scattering. ACS Nano, 2017, 11, 438-443.	7.3	103
5	Biologically Inspired Organic Light-Emitting Diodes. Nano Letters, 2016, 16, 2994-3000.	4.5	78
6	Monolithic Polymer Microlens Arrays with High Numerical Aperture and High Packing Density. ACS Applied Materials & Interfaces, 2015, 7, 2160-2165.	4.0	71
7	Multifocal microlens arrays using multilayer photolithography. Optics Express, 2020, 28, 9082.	1.7	63
8	Silver nanoislands on cellulose fibers for chromatographic separation and ultrasensitive detection of small molecules. Light: Science and Applications, 2016, 5, e16009-e16009.	7.7	60
9	Frequency selection rule for high definition and high frame rate Lissajous scanning. Scientific Reports, 2017, 7, 14075.	1.6	59
10	Nanoplasmonic On-Chip PCR for Rapid Precision Molecular Diagnostics. ACS Applied Materials & Interfaces, 2020, 12, 12533-12540.	4.0	57
11	Ultrafast and Real-Time Nanoplasmonic On-Chip Polymerase Chain Reaction for Rapid and Quantitative Molecular Diagnostics. ACS Nano, 2021, 15, 10194-10202.	7.3	55
12	Xenos peckii vision inspires an ultrathin digital camera. Light: Science and Applications, 2018, 7, 80.	7.7	54
13	Biologically inspired ultrathin arrayed camera for high-contrast and high-resolution imaging. Light: Science and Applications, 2020, 9, 28.	7.7	53
14	Nanoplasmonic Alloy of Au/Ag Nanocomposites on Paper Substrate for Biosensing Applications. ACS Applied Materials & Interfaces, 2018, 10, 290-295.	4.0	51
15	Spread spectrum SERS allows label-free detection of attomolar neurotransmitters. Nature Communications, 2021, 12, 159.	5.8	50
16	Paper-Based Biochip Assays and Recent Developments: A Review. Biochip Journal, 2018, 12, 1-10.	2.5	49
17	Engineering hot spots on plasmonic nanopillar arrays for SERS: A review. Biochip Journal, 2016, 10, 297-309.	2.5	44
18	Electrothermal MEMS fiber scanner for optical endomicroscopy. Optics Express, 2016, 24, 3903.	1.7	44

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19	Bioplasmonic Alloyed Nanoislands Using Dewetting of Bilayer Thin Films. ACS Applied Materials & Interfaces, 2017, 9, 37154-37159.	4.0	44
20	Mining the Smartness of Insect Ultrastructures for Advanced Imaging and Illumination. Advanced Functional Materials, 2018, 28, 1705912.	7.8	44
21	Lissajous Scanning Two-photon Endomicroscope for In vivo Tissue Imaging. Scientific Reports, 2019, 9, 3560.	1.6	35
22	High Contrast Ultrathin Lightâ€Field Camera Using Inverted Microlens Arrays with Metalâ€“Insulatorâ€“Metal Optical Absorber. Advanced Optical Materials, 2021, 9, 2001657.	3.6	33
23	Biologically Inspired Biophotonic Surfaces with Selfâ€Antireflection. Small, 2014, 10, 2558-2563.	5.2	30
24	Scanning MEMS Mirror for High Definition and High Frame Rate Lissajous Patterns. Micromachines, 2019, 10, 67.	1.4	26
25	Electrokinetic Preconcentration of Small Molecules Within Volumetric Electromagnetic Hotspots in Surface Enhanced Raman Scattering. Small, 2015, 11, 2487-2492.	5.2	23
26	Antireflective glass nanoholes on optical lenses. Optics Express, 2018, 26, 14786.	1.7	23
27	Compact stereo endoscopic camera using microprism arrays. Optics Letters, 2016, 41, 1285.	1.7	22
28	Ag/Au Alloyed Nanoislands for Wafer-Level Plasmonic Color Filter Arrays. Scientific Reports, 2019, 9, 9082.	1.6	21
29	Antireflective structures on highly flexible and large area elastomer membrane for tunable liquid-filled endoscopic lens. Nanoscale, 2019, 11, 856-861.	2.8	20
30	Ultrathin arrayed camera for high-contrast near-infrared imaging. Optics Express, 2021, 29, 1333.	1.7	19
31	Fiber-optic plasmonic probe with nanogap-rich Au nanoislands for on-site surface-enhanced Raman spectroscopy using repeated solid-state dewetting. Journal of Biomedical Optics, 2019, 24, 1.	1.4	19
32	Colorimetric Schirmer strip for tear glucose detection. Biochip Journal, 2017, 11, 294-299.	2.5	17
33	Au/Ag Bimetallic Nanocomposites as a Highly Sensitive Plasmonic Material. Plasmonics, 2019, 14, 407-413.	1.8	15
34	Rotational Offset Microlens Arrays for Highly Efficient Structured Pattern Projection. Advanced Optical Materials, 2020, 8, 2000395.	3.6	15
35	On-chip Paper Electrophoresis for Ultrafast Screening of Infectious Diseases. Biochip Journal, 2021, 15, 305-311.	2.5	12
36	Nanoplasmonic biopatch for in vivo surface enhanced raman spectroscopy. Biochip Journal, 2014, 8, 289-294.	2.5	10

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37	Extraordinary sensitivity enhancement of Ag-Au alloy nanohole arrays for label-free detection of Escherichia Coli. Biomedical Optics Express, 2021, 12, 2734.	1.5	9
38	Plasmon enhanced photoacoustic generation from volumetric electromagnetic hotspots. Nanoscale, 2016, 8, 757-761.	2.8	8
39	Biologically Inspired Ultrathin Contact Imager for Highâ€Resolution Imaging of Epidermal Ridges on Human Finger. Advanced Materials Technologies, 2021, 6, 2100090.	3.0	8
40	Handheld Laser Scanning Microscope Catheter for Real-Time and In vivo Confocal Microscopy using High Definition High Fame Rate Lissajous MEMS Mirror. Biomedical Optics Express, 2022, 13, 1497-1505.	1.5	6
41	High resolution and high frame rate Lissajous scanning using MEMS fiber scanner. , 2016, , .		5
42	Pattern projector using superposition of double microlens arrays for hybrid 3D endoscope. , 2018, , .		5
43	Tailoring Single Plasmonic Resonance for RGBâ€NIR Imaging Using Nanoimprinted Complementary Plasmonic Structures of Nanohole and Nanodisk Arrays. Advanced Optical Materials, 2021, 9, 2002036.	3.6	5
44	Large-Area and Ultrathin MEMS Mirror Using Silicon Micro Rim. Micromachines, 2021, 12, 754.	1.4	5
45	Lissajous scanning structured illumination microscopy. Biomedical Optics Express, 2020, 11, 5575.	1.5	5
46	Millimeter scale electrostatic mirror with sub-wavelength holes for terahertz wave scanning. Applied Physics Letters, 2013, 102, 031111.	1.5	4
47	Extraordinary Figureâ€ofâ€Merit of Magnetic Resonance from Ultrathin Silicon Nanohole Membrane as Allâ€Dielectric Metamaterial. Advanced Optical Materials, 2017, 5, 1600628.	3.6	4
48	Angle-selective optical filter for highly sensitive reflection photoplethysmogram. Biomedical Optics Express, 2017, 8, 4361.	1.5	4
49	Machineâ€Learned Lightâ€Field Camera that Reads Facial Expression from Highâ€Contrast and Illumination Invariant 3D Facial Images. Advanced Intelligent Systems, 0, , 2100182.	3.3	4
50	Nanoplasmonics: A Deformable Nanoplasmonic Membrane Reveals Universal Correlations Between Plasmon Resonance and Surface Enhanced Raman Scattering (Adv. Mater. 26/2014). Advanced Materials, 2014, 26, 4509-4509.	11.1	3
51	Electrothermal MEMS fiber scanner with lissajous patterns for endomicroscopic applications. , 2016, , .		3
52	Fully packaged video-rate confocal laser scanning endomicroscope using Lissajous fiber scanner. , 2017, , .		3
53	Micropatterned complex optical surface for wide angle illumination. , 2008, , .		2
54	Compact OCT endomicroscopic catheter using flip-chip bonded Lissajous scanned electrothermal MEMS fiber scanner. , 2017, , .		2

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55	Variable Structured Illumination Using Lissajous Scanning MEMS Mirror. , 2018, , .		2
56	High Resolution 3D Surface Imaging Using Variable Structured Illumination via Lissajous Scanning MEMS Mirror Module. , 2019, , .		2
57	Fully Integrated Ultrathin Camera for Contact Fingerprint Imaging. , 2019, , .		2
58	Concave micropatterned complex optical surfaces for wide angular illumination. , 2009, , .		1
59	Monolithic polymer microlens arrays with anti-reflective structures using a metal annealed mask. , 2011, , .		1
60	High performance label-free biosensing by all dielectric metamaterial. , 2014, , .		1
61	Ultrathin camera inspired by visual system of Xenos peckii. , 2016, , .		1
62	Antireflective structures for tunable liquid-filled lens. , 2017, , .		1
63	Ultrathin Contact-Imaging Camera for Fingerprint Imaging Using Microlens Array and Multiple Block Layers. , 2018, , .		1
64	Ultrathin Compound Eye Camera for Super-Resolution Far-Field Imaging Using Light Absorbing Multiple Layers. , 2019, , .		1
65	Biologically inspired optical structures for wide field-of-view imaging and wide angle illumination. , 2009, , .		0
66	Direct visualization of light propagation inside a planar artificial compound eye using a Rhodamine 6G doped photosensitive polymer resin. , 2009, , .		0
67	Laser induced self-aligned microlens and waveguide arrays using a self-writing process in a photosensitive polymer resin. , 2009, , .		0
68	A plastic lens with anti-reflective structures using a nanoporous alumina template with lens curvature. , 2011, , .		0
69	Subwavelength silicon honeycomb structure for tailored index in terahertz broadband region. , 2012, , .		0
70	Hierarchically structured LED lens for wide angle and high efficiency illumination. , 2012, , .		0
71	Planar Microâ€Optics: Planar Emulation of Natural Compound Eyes (Small 14/2012). Small, 2012, 8, 2130-2130.	5.2	0
72	Sensors: Electrokinetic Preconcentration of Small Molecules Within Volumetric Electromagnetic Hotspots in Surface Enhanced Raman Scattering (Small 21/2015). Small, 2015, 11, 2466-2466.	5.2	0

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73	Microprism arrays based stereoscopic endoscope. , 2015, , .		0
74	Maskless fabrication of micro-optical elements on the optical fiber tips. , 2015, , .		0
75	Nanoplasmonic color filter on large area at visible region. , 2016, , .		0
76	Complementary plasmonic structures of nanohole and nanodisk arrays with high angular sensitivity. , 2016, , .		0
77	Optical low angle pass filter for high resolution robust photoplethysmography monitor. , 2017, , .		0
78	Label-Free Sensing: Extraordinary Figure-of-Merit of Magnetic Resonance from Ultrathin Silicon Nanohole Membrane as All-Dielectric Metamaterial (Advanced Optical Materials 3/2017). Advanced Optical Materials, 2017, 5, .	3.6	0
79	AG/AU nanocomposites on cellulose fiber matrices as plasmonic substrate for biosensing. , 2017, , .		0
80	Endoscope camera using tunable liquid-filled lens with antireflective structures. , 2018, , .		0
81	Silicon Nitride Metalens for Optical Imaging. , 2018, , .		0
82	Switchable Dot Projection Module for 3D Flexible Endoscopes. , 2019, , .		0
83	Ultrathin digital camera for high-contrast NIR imaging. , 2019, , .		0
84	Biologically Inspired Ultrathin Array Cameras. , 2021, , .		0