Mehmet Bayindir

List of Publications by Citations

106 papers	4,752 citations	39 h-index	67 g-index
122 ext. papers	5,249 ext. citations	7.4 avg, IF	5.52 L-index

#	Paper	IF	Citations
106	Towards multimaterial multifunctional fibres that see, hear, sense and communicate. *Nature Materials*, **2007**, 6, 336-47	27	346
105	Tight-binding description of the coupled defect modes in three-dimensional photonic crystals. *Physical Review Letters*, **2000**, 84, 2140-3	7.4	316
104	Highly transparent, flexible, and thermally stable superhydrophobic ORMOSIL aerogel thin films. *ACS Applied Materials & Interfaces*, **2011**, 3, 539-45	9.5	179
103	Turn-on fluorescent dopamine sensing based on in situ formation of visible light emitting polydopamine nanoparticles. *Analytical Chemistry*, **2014**, 86, 5508-12	7.8	175
102	Solid-state emissive BODIPY dyes with bulky substituents as spacers. *Organic Letters*, **2009**, 11, 2105-7	6.2	175
101	Transmission properties of composite metamaterials in free space. *Applied Physics Letters*, **2002**, 81, 120-122	3.4	168
100	Metal-insulator-semiconductor optoelectronic fibres. *Nature*, **2004**, 431, 826-9	50.4	165
99	Photonic-crystal-based beam splitters. *Applied Physics Letters*, **2000**, 77, 3902-3904	3.4	165
98	Photonic crystal-based resonant antenna with a very high directivity. *Journal of Applied Physics*, **2000**, 87, 603-605	2.5	146
97	Propagation of photons by hopping: A waveguiding mechanism through localized coupled cavities in three-dimensional photonic crystals. *Physical Review B*, **2000**, 61, R11855-R11858	3.3	135
96	Impact of mesoporous silica nanoparticle surface functionality on hemolytic activity, thrombogenicity and non-specific protein adsorption. *Journal of Materials Chemistry B*, **2013**, 1, 1909-1920	7.3	126
95	Arrays of indefinitely long uniform nanowires and nanotubes. *Nature Materials*, **2011**, 10, 494-501	27	122
94	Spontaneous high piezoelectricity in poly(vinylidene fluoride) nanoribbons produced by iterative thermal size reduction technique. *ACS Nano*, **2014**, 8, 9311-23	16.7	87
93	Guiding, bending, and splitting of electromagnetic waves in highly confined photonic crystal waveguides. *Physical Review B*, **2001**, 63,	3.3	84
92	Hollow multilayer photonic bandgap fibers for NIR applications. *Optics Express*, **2004**, 12, 1510-7	3.3	83
91	Robust Cassie state of wetting in transparent superhydrophobic coatings. *ACS Applied Materials & Interfaces*, **2014**, 6, 9680-8	9.5	77
90	Extremely fast and highly selective detection of nitroaromatic explosive vapours using fluorescent polymer thin films. *Chemical Communications*, **2013**, 49, 6140-2	5.8	77

89	Transmission and reflection properties of composite double negative metamaterials in free space. *IEEE Transactions on Antennas and Propagation*, **2003**, 51, 2592-2595	4.9	77
88	A motion- and sound-activated, 3D-printed, chalcogenide-based triboelectric nanogenerator. *Advanced Materials*, **2015**, 27, 2367-76	24	72
87	Large-scale optical-field measurements with geometric fibre constructs. *Nature Materials*, **2006**, 5, 532-6	27	70
86	Thermal-Sensing Fiber Devices by Multimaterial Codrawing. *Advanced Materials*, **2006**, 18, 845-849	24	69
85	Exceptionally directional sources with photonic-bandgap crystals. *Journal of the Optical Society of America B: Optical Physics*, **2001**, 18, 1684	1.7	67
84	Photonic band gaps, defect characteristics, and waveguiding in two-dimensional disordered dielectric and metallic photonic crystals. *Physical Review B*, **2001**, 64,	3.3	65
83	Formation of pyrene excimers in mesoporous ormosil thin films for visual detection of nitro-explosives. *ACS Applied Materials & Interfaces*, **2014**, 6, 4997-5004	9.5	63
82	Superhydrophobic and omnidirectional antireflective surfaces from nanostructured ormosil colloids. *ACS Applied Materials & Interfaces*, **2013**, 5, 853-60	9.5	63
81	Photonic band-gap effect, localization, and waveguiding in the two-dimensional Penrose lattice. *Physical Review B*, **2001**, 63,	3.3	60
80	Integrated fibres for self-monitored optical transport. *Nature Materials*, **2005**, 4, 820-825	27	58
79	Heavy photons at coupled-cavity waveguide band edges in a three-dimensional photonic crystal. *Physical Review B*, **2000**, 62, R2247-R2250	3.3	58
78	Plasmonically enhanced hot electron based photovoltaic device. *Optics Express*, **2013**, 21, 7196-201	3.3	55
77	Detectors. *Optics and Photonics News*, **2004**, 15, 24	1.9	55
76	Investigation of localized coupled-cavity modes in two-dimensional photonic bandgap structures. *IEEE Journal of Quantum Electronics*, **2002**, 38, 837-843	2	53
75	One-pot preparation of fluorinated mesoporous silica nanoparticles for liquid marble formation and superhydrophobic surfaces. *ACS Applied Materials & Interfaces*, **2011**, 3, 1804-8	9.5	52
74	Microfluidics for reconfigurable electromagnetic metamaterials. *Applied Physics Letters*, **2009**, 95, 214102	3.4	51
73	Coupled optical microcavities in one-dimensional photonic bandgap structures. *Journal of Optics*, **2001**, 3, S184-S189		51
72	Pluronic polymer capped biocompatible mesoporous silica nanocarriers. *Chemical Communications*, **2013**, 49, 9782-4	5.8	45

71	Flexible and mechanically stable antireflective coatings from nanoporous organically modified silica colloids. *Journal of Materials Chemistry*, **2012**, 22, 9671		41
70	Propagation of light through localized coupled-cavity modes in one-dimensional photonic band-gap structures. *Applied Physics A: Materials Science and Processing*, **2001**, 72, 117-119	2.6	40
69	Surface Textured Polymer Fibers for Microfluidics. *Advanced Functional Materials*, **2014**, 24, 4569-4576	15.6	39
68	Soft biomimetic tapered nanostructures for large-area antireflective surfaces and SERS sensing. *Journal of Materials Chemistry C*, **2013**, 1, 7842	7.1	39
67	Dropping of electromagnetic waves through localized modes in three-dimensional photonic band gap structures. *Applied Physics Letters*, **2002**, 81, 4514-4516	3.4	35
66	A porosity difference based selective dissolution strategy to prepare shape-tailored hollow mesoporous silica nanoparticles. *Journal of Materials Chemistry A*, **2015**, 3, 3839-3846	13	34
65	Tuning Optical Discs for Plasmonic Applications. *Plasmonics*, **2009**, 4, 237-243	2.4	34
64	Template-directed synthesis of silica nanotubes for explosive detection. *ACS Applied Materials & Interfaces*, **2011**, 3, 4159-64	9.5	33
63	Room temperature large-area nanoimprinting for broadband biomimetic antireflection surfaces. *Applied Physics Letters*, **2011**, 99, 183107	3.4	32
62	Template-Free Synthesis of Organically Modified Silica Mesoporous Thin Films for TNT Sensing. *ACS Applied Materials & Interfaces*, **2010**, 2, 2892-2897	9.5	31
61	Band-dropping via coupled photonic crystal waveguides. *Optics Express*, **2002**, 10, 1279-84	3.3	31
60	Kilometer-Long Ordered Nanophotonic Devices by Preform-to-Fiber Fabrication. *IEEE Journal of Selected Topics in Quantum Electronics*, **2006**, 12, 1202-1213	3.8	30
59	Structural coloring in large scale core-shell nanowires. *Nano Letters*, **2011**, 11, 4661-5	11.5	29
58	Template free preparation of nanoporous organically modified silica thin films on flexible substrates. *Journal of Materials Chemistry*, **2011**, 21, 14830		29
57	Bioinspired optoelectronic nose with nanostructured wavelength-scalable hollow-core infrared fibers. *Advanced Materials*, **2011**, 23, 1263-7	24	29
56	A New Route for Fabricating On-Chip Chalcogenide Microcavity Resonator Arrays. *Advanced Optical Materials*, **2014**, 2, 618-625	8.1	27
55	Bose-Einstein condensation in a two-dimensional, trapped, interacting gas. *Physical Review A*, **1998**, 58, 3134-3137	2.6	27
54	Ultralow threshold laser action from toroidal polymer microcavity. *Applied Physics Letters*, **2009**, 94, 203302	3.4	25

53	Continuous Triboelectric Power Harvesting and Biochemical Sensing Inside Poly(vinylidene fluoride) Hollow Fibers Using Microfluidic Droplet Generation. *Advanced Materials Technologies*, **2016**, 1, 1600190	6.8	24
52	Resonant transmission of light through surface plasmon structures. *Applied Physics Letters*, **2009**, 94, 233102	3.4	24
51	Quasimetallic silicon micromachined photonic crystals. *Applied Physics Letters*, **2001**, 78, 264-266	3.4	23
50	Biomimicry of multifunctional nanostructures in the neck feathers of mallard (Anas platyrhynchos L.) drakes. *Scientific Reports*, **2014**, 4, 4718	4.9	22
49	Photonic band gaps and localization in two-dimensional metallic quasicrystals. *Europhysics Letters*, **2001**, 56, 41-46	1.6	21
48	Smelling in chemically complex environments: an optofluidic Bragg fiber array for differentiation of methanol adulterated beverages. *Analytical Chemistry*, **2013**, 85, 6384-91	7.8	20
47	Nanoconfinement of pyrene in mesostructured silica nanoparticles for trace detection of TNT in the aqueous phase. *Nanoscale*, **2014**, 6, 15203-9	7.7	19
46	Real-Time and Selective Detection of Single Nucleotide DNA Mutations Using Surface Engineered Microtoroids. *Analytical Chemistry*, **2015**, 87, 10920-6	7.8	18
45	Label-Free Biosensing with High Selectivity in Complex Media using Microtoroidal Optical Resonators. *Scientific Reports*, **2015**, 5, 13173	4.9	18
44	Strong enhancement of spontaneous emission in amorphous-silicon-nitride photonic crystal based coupled-microcavity structures. *Applied Physics A: Materials Science and Processing*, **2001**, 73, 125-127	2.6	17
43	Bio-inspired hierarchically structured polymer fibers for anisotropic non-wetting surfaces. *RSC Advances*, **2017**, 7, 15553-15560	3.7	15
42	Non-resonant Mie scattering: emergent optical properties of core-shell polymer nanowires. *Scientific Reports*, **2014**, 4, 4607	4.9	15
41	Anemone-like nanostructures for non-lithographic, reproducible, large-area, and ultra-sensitive SERS substrates. *Nanoscale*, **2014**, 6, 12710-7	7.7	15
40	Macroscopic assembly of indefinitely long and parallel nanowires into large area photodetection circuitry. *Nano Letters*, **2012**, 12, 2483-7	11.5	15
39	All-chalcogenide glass omnidirectional photonic band gap variable infrared filters. *Applied Physics Letters*, **2009**, 94, 111110	3.4	15
38	Bose-Einstein condensation in a one-dimensional interacting system due to power-law trapping potentials. *Physical Review A*, **1999**, 59, 1468-1472	2.6	14
37	Oligonucleotide-based label-free detection with optical microresonators: strategies and challenges. *Lab on A Chip*, **2016**, 16, 2572-95	7.2	13
36	Superenhancers: novel opportunities for nanowire optoelectronics. *Scientific Reports*, **2014**, 4, 7505	4.9	13

35	High selectivity Boolean olfaction using hollow-core wavelength-scalable Bragg fibers. *Analytical Chemistry*, **2012**, 84, 83-90	7.8	13
34	Physics and applications of photonic nanocrystals. *International Journal of Nanotechnology*, **2004**, 1, 379	1.5	12
33	Cytotoxicity of multifunctional surfactant containing capped mesoporous silica nanoparticles. *RSC Advances*, **2016**, 6, 32060-32069	3.7	11
32	Robust superhydrophilic patterning of superhydrophobic ormosil surfaces for high-throughput on-chip screening applications. *RSC Advances*, **2016**, 6, 80049-80054	3.7	9
31	Phosphonate based organosilane modification of a simultaneously protein resistant and bioconjugable silica surface. *Journal of Materials Chemistry B*, **2014**, 2, 7118-7122	7.3	9
30	Large and dynamical tuning of a chalcogenide Fabry-Perot cavity mode by temperature modulation. *Optics Express*, **2010**, 18, 3168-73	3.3	9
29	Nanosprings harvest light more efficiently. *Applied Optics*, **2015**, 54, 8018-23	0.2	8
28	Tailoring self-organized nanostructured morphologies in kilometer-long polymer fiber. *Scientific Reports*, **2014**, 4, 4864	4.9	8
27	Label-Free Optical Biodetection of Pathogen Virulence Factors in Complex Media Using Microtoroids with Multifunctional Surface Functionality. *ACS Sensors*, **2018**, 3, 352-359	9.2	6
26	Fluorescent Paper Strips for Highly Sensitive and Selective Detection of Nitroaromatic Analytes in Water Samples. *ChemistrySelect*, **2017**, 2, 7735-7740	1.8	6
25	Tapered nanoscale chalcogenide fibers directly drawn from bulk glasses as optical couplers for high-index resonators. *Applied Optics*, **2017**, 56, 385-390	0.2	5
24	Photonic bandgap narrowing in conical hollow core Bragg fibers. *Applied Physics Letters*, **2014**, 105, 071102	3.4	5
23	Energy spectrum for two-dimensional potentials in very high magnetic fields. *Physical Review B*, **1997**, 56, 12088-12091	3.3	5
22	Binary coded identification of industrial chemical vapors with an optofluidic nose. *Applied Optics*, **2016**, 55, 10247-10254	0.2	5
21	Synergic Viral-Bacterial Co-Infection in Catalase-Deficient COVID-19 Patients Causes Suppressed Innate Immunity and Lung Damages Due to Detrimental Elevation of Hydrogen Peroxide Concentration. *SSRN Electronic Journal*,	1	5
20	Bose-Einstein condensation of noninteracting charged Bose gas in the presence of external potentials. *Physica B: Condensed Matter*, **2001**, 293, 283-288	2.8	4
19	Evaporation-Induced Biomolecule Detection on Versatile Superhydrophilic Patterned Surfaces: Glucose and DNA Assay. *ACS Omega*, **2018**, 3, 13503-13509	3.9	4
18	Enhanced performance of dye-sensitized solar cells by omnidirectional antireflective coatings. *Journal of Photonics for Energy*, **2015**, 5, 053090	1.2	2

17	Photonic bandgap infrared spectrometer. *Applied Optics*, **2010**, 49, 3596-600	0.2	2
16	Physics and Applications of Photonic Crystals **2001**, 279-303		2
15	Generation of new frequencies in toroid microcavities **2008**,		1
14	Coupled-Cavity Structures in Photonic Crystals. *Materials Research Society Symposia Proceedings*, **2002**, 722, 241		1
13	Coupled cavities in photonic crystals **2002**,		1
12	Suppression of superconductivity in high-T c cuprates due to nonmagnetic impurities: Implications for the order parameter symmetry. *European Physical Journal B*, **1999**, 10, 287-291	1.2	1
11	A New Route for Fabricating On-Chip Chalcogenide Microcavity Resonators **2015**,		1
10	Sensors: Bioinspired Optoelectronic Nose with Nanostructured Wavelength-Scalable Hollow-Core Infrared Fibers (Adv. Mater. 10/2011). *Advanced Materials*, **2011**, 23, 1262-1262	24	0
9	Physics and applications of defect structures in photonic crystals **2003**, 5000, 237		0
8	Microfluidics: Surface Textured Polymer Fibers for Microfluidics (Adv. Funct. Mater. 29/2014). *Advanced Functional Materials*, **2014**, 24, 4568-4568	15.6	
7	Plasmonically enhanced hot electron based photovoltaic device: erratum. *Optics Express*, **2013**, 21, 23324	3.3	
6	A novel fabrication technique by composite material processing: Integrated metal-insulator-semiconductor fibers and fiber devices. *Materials Research Society Symposia Proceedings*, **2005**, 888, 1		
5	Propagation of Photons by Hopping. *Optics and Photonics News*, **2000**, 11, 31_1	1.9	
4	Disorder and localization in the lowest Landau level in the presence of dilute point scatterers. *Solid State Communications*, **1999**, 112, 157-160	1.6	
3	Physics and Applications of Photonic Crystals **2000**, 467-478		
2	Applications of Photonic Crystals to Directional Antennas **2001**, 321-328		
1	Physics and Applications of Defect Structures in Photonic Crystals **2003**, 273-297		