# Mehmet Bayindir

List of Publications by Year
in descending order



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|---|---|---|---|
| 121 papers | 5,611 citations | 81839 39 h-index | 76872 74 g-index |
| 122 all docs | 122 docs citations | 122 times ranked | 6523 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Towards multimaterial multifunctional fibres that see, hear, sense and communicate. Nature Materials, 2007, 6, 336-347. | 13.3 | 435 |
| 2 | Tight-Binding Description of the Coupled Defect Modes in Three-Dimensional Photonic Crystals. Physical Review Letters, 2000, 84, 2140-2143. | 2.9 | 370 |
| 3 | Turn-on Fluorescent Dopamine Sensing Based on in Situ Formation of Visible Light Emitting Polydopamine Nanoparticles. Analytical Chemistry, 2014, 86, 5508-5512. | 3.2 | 211 |
| 4 | Metalâ€“insulatorâ€“semiconductor optoelectronic fibres. Nature, 2004, 431, 826-829. | 13.7 | 209 |
| 5 | Transmission properties of composite metamaterials in free space. Applied Physics Letters, 2002, 81, 120-122. | 1.5 | 200 |
| 6 | Photonic-crystal-based beam splitters. Applied Physics Letters, 2000, 77, 3902-3904. | 1.5 | 195 |
| 7 | Highly Transparent, Flexible, and Thermally Stable Superhydrophobic ORMOSIL Aerogel Thin Films. ACS Applied Materials & Interfaces, 2011, 3, 539-545. | 4.0 | 191 |
| 8 | Solid-State Emissive BODIPY Dyes with Bulky Substituents As Spacers. Organic Letters, 2009, 11, 2105-2107. | 2.4 | 186 |
| 9 | Photonic crystal-based resonant antenna with a very high directivity. Journal of Applied Physics, 2000, 87, 603-605. | 1.1 | 168 |
| 10 | Impact of mesoporous silica nanoparticle surface functionality on hemolytic activity, thrombogenicity and non-specific protein adsorption. Journal of Materials Chemistry B, 2013, 1, 1909. | 2.9 | 157 |
| 11 | Propagation of photons by hopping: A waveguiding mechanism through localized coupled cavities in three-dimensional photonic crystals. Physical Review B, 2000, 61, R11855-R11858. | 1.1 | 154 |
| 12 | Arrays of indefinitely long uniform nanowires and nanotubes. Nature Materials, 2011, 10, 494-501. | 13.3 | 143 |
| 13 | Spontaneous High Piezoelectricity in Poly(vinylidene fluoride) Nanoribbons Produced by Iterative Thermal Size Reduction Technique. ACS Nano, 2014, 8, 9311-9323. | 7.3 | 110 |
| 14 | Hollow multilayer photonic bandgap fibers for NIR applications. Optics Express, 2004, 12, 1510. | 1.7 | 105 |
| 15 | Transmission and reflection properties of composite double negative metamaterials in free space. IEEE Transactions on Antennas and Propagation, 2003, 51, 2592-2595. | 3.1 | 104 |
| 16 | Guiding, bending, and splitting of electromagnetic waves in highly confined photonic crystal waveguides. Physical Review B, 2001, 63, . | 1.1 | 96 |
| 17 | Large-scale optical-field measurements with geometric fibre constructs. Nature Materials, 2006, 5, 532-536. | 13.3 | 94 |
| 18 | Thermal-Sensing Fiber Devices by Multimaterial Codrawing. Advanced Materials, 2006, 18, 845-849. | 11.1 | 93 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Robust Cassie State of Wetting in Transparent Superhydrophobic Coatings. ACS Applied Materials & Interfaces, 2014, 6, 9680-9688. | 4.0 | 91 |
| 20 | Extremely fast and highly selective detection of nitroaromatic explosive vapours using fluorescent polymer thin films. Chemical Communications, 2013, 49, 6140. | 2.2 | 87 |
| 21 | A Motionâ€•and Soundâ€Activated, 3Dâ€Printed, Chalcogenideâ€Based Triboelectric Nanogenerator. Advanced Materials, 2015, 27, 2367-2376. | 11.1 | 83 |
| 22 | Exceptionally directional sources with photonic-bandgap crystals. Journal of the Optical Society of America B: Optical Physics, 2001, 18, 1684. | 0.9 | 75 |
| 23 | Photonic band gaps, defect characteristics, and waveguiding in two-dimensional disordered dielectric and metallic photonic crystals. Physical Review B, 2001, 64, . | 1.1 | 73 |
| 24 | Formation of Pyrene Excimers in Mesoporous Ormosil Thin Films for Visual Detection of Nitro-explosives. ACS Applied Materials & Interfaces, 2014, 6, 4997-5004. | 4.0 | 73 |
| 25 | Superhydrophobic and Omnidirectional Antireflective Surfaces from Nanostructured Ormosil Colloids. ACS Applied Materials & Interfaces, 2013, 5, 853-860. | 4.0 | 70 |
| 26 | Photonic band-gap effect, localization, and waveguiding in the two-dimensional Penrose lattice. Physical Review B, 2001, 63, . | 1.1 | 69 |
| 27 | Heavy photons at coupled-cavity waveguide band edges in a three-dimensional photonic crystal. Physical Review B, 2000, 62, R2247-R2250. | 1.1 | 68 |
| 28 | Integrated fibres for self-monitored opticalÂtransport. Nature Materials, 2005, 4, 820-825. | 13.3 | 68 |
| 29 | Investigation of localized coupled-cavity modes in two-dimensional photonic bandgap structures. IEEE Journal of Quantum Electronics, 2002, 38, 837-843. | 1.0 | 65 |
| 30 | Detectors. Optics and Photonics News, 2004, 15, 24. | 0.4 | 65 |
| 31 | Microfluidics for reconfigurable electromagnetic metamaterials. Applied Physics Letters, 2009, 95, . | 1.5 | 63 |
| 32 | Coupled optical microcavities in one-dimensional photonic bandgap structures. Journal of Optics, 2001, 3, S184-S189. | 1.5 | 61 |
| 33 | Plasmonically enhanced hot electron based photovoltaic device. Optics Express, 2013, 21, 7196. | 1.7 | 61 |
| 34 | One-Pot Preparation of Fluorinated Mesoporous Silica Nanoparticles for Liquid Marble Formation and Superhydrophobic Surfaces. ACS Applied Materials & Interfaces, 2011, 3, 1804-1808. | 4.0 | 56 |
| 35 | 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. | 1.1 | 51 |
| 36 | Pluronic polymer capped biocompatible mesoporous silica nanocarriers. Chemical Communications, 2013, 49, 9782. | 2.2 | 50 |

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| 37 | Flexible and mechanically stable antireflective coatings from nanoporous organically modified silica colloids. Journal of Materials Chemistry, 2012, 22, 9671. | 6.7 | 46 |
| 38 | Surface Textured Polymer Fibers for Microfluidics. Advanced Functional Materials, 2014, 24, 4569-4576. | 7.8 | 45 |
| 39 | Soft biomimetic tapered nanostructures for large-area antireflective surfaces and SERS sensing. Journal of Materials Chemistry C, 2013, 1, 7842. | 2.7 | 44 |
| 40 | Dropping of electromagnetic waves through localized modes in three-dimensional photonic band gap structures. Applied Physics Letters, 2002, 81, 4514-4516. | 1.5 | 39 |
| 41 | Tuning Optical Discs for Plasmonic Applications. Plasmonics, 2009, 4, 237-243. | 1.8 | 38 |
| 42 | Band-dropping via coupled photonic crystal waveguides. Optics Express, 2002, 10, 1279. | 1.7 | 37 |
| 43 | Kilometer-Long Ordered Nanophotonic Devices by Preform-to-Fiber Fabrication. IEEE Journal of Selected Topics in Quantum Electronics, 2006, 12, 1202-1213. | 1.9 | 36 |
| 44 | Template-Directed Synthesis of Silica Nanotubes for Explosive Detection. ACS Applied Materials & Interfaces, 2011, 3, 4159-4164. | 4.0 | 36 |
| 45 | Room temperature large-area nanoimprinting for broadband biomimetic antireflection surfaces. Applied Physics Letters, 2011, 99, . | 1.5 | 36 |
| 46 | A porosity difference based selective dissolution strategy to prepare shape-tailored hollow mesoporous silica nanoparticles. Journal of Materials Chemistry A, 2015, 3, 3839-3846. | 5.2 | 36 |
| 47 | Structural Coloring in Large Scale Coreâ€“Shell Nanowires. Nano Letters, 2011, 11, 4661-4665. | 4.5 | 35 |
| 48 | A New Route for Fabricating Onâ€Chip Chalcogenide Microcavity Resonator Arrays. Advanced Optical Materials, 2014, 2, 618-625. | 3.6 | 35 |
| 49 | Ultralow threshold laser action from toroidal polymer microcavity. Applied Physics Letters, 2009, 94, 203302. | 1.5 | 34 |
| 50 | Template-Free Synthesis of Organically Modified Silica Mesoporous Thin Films for TNT Sensing. ACS Applied Materials & Interfaces, 2010, 2, 2892-2897. | 4.0 | 33 |
| 51 | Bioinspired Optoelectronic Nose with Nanostructured Wavelengthâ€Scalable Hollowâ€Core Infrared Fibers. Advanced Materials, 2011, 23, 1263-1267. | 11.1 | 32 |
| 52 | Bose-Einstein condensation in a two-dimensional, trapped, interacting gas. Physical Review A, 1998, 58, 3134-3137. | 1.0 | 31 |
| 53 | Template free preparation of nanoporous organically modified silica thin films on flexible substrates. Journal of Materials Chemistry, 2011, 21, 14830. | 6.7 | 31 |
| 54 | Continuous Triboelectric Power Harvesting and Biochemical Sensing Inside Poly(vinylidene fluoride) Hollow Fibers Using Microfluidic Droplet Generation. Advanced Materials Technologies, 2016, 1, 1600190. | 3.0 | 29 |

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| 55 | Biomimicry of multifunctional nanostructures in the neck feathers of mallard (Anas platyrhynchos) Tj ETQq1 1 0.784314 rgBT /Overlo | 1.6 | 27 |
| 56 | Quasimetallic silicon micromachined photonic crystals. Applied Physics Letters, 2001, 78, 264-266. | 1.5 | 25 |
| 57 | Resonant transmission of light through surface plasmon structures. Applied Physics Letters, 2009, 94, 233102. | 1.5 | 25 |
| 58 | Photonic band gaps and localization in two-dimensional metallic quasicrystals. Europhysics Letters, 2001, 56, 41-46. | 0.7 | 23 |
| 59 | Smelling in Chemically Complex Environments: An Optofluidic Bragg Fiber Array for Differentiation of Methanol Adulterated Beverages. Analytical Chemistry, 2013, 85, 6384-6391. | 3.2 | 23 |
| 60 | All-chalcogenide glass omnidirectional photonic band gap variable infrared filters. Applied Physics Letters, 2009, 94, 111110. | 1.5 | 21 |
| 61 | Nanoconfinement of pyrene in mesostructured silica nanoparticles for trace detection of TNT in the aqueous phase. Nanoscale, 2014, 6, 15203-15209. | 2.8 | 21 |
| 62 | Label-Free Biosensing with High Selectivity in Complex Media using Microtoroidal Optical Resonators. Scientific Reports, 2015, 5, 13173. | 1.6 | 21 |
| 63 | Real-Time and Selective Detection of Single Nucleotide DNA Mutations Using Surface Engineered Microtoroids. Analytical Chemistry, 2015, 87, 10920-10926. | 3.2 | 21 |
| 64 | Bio-inspired hierarchically structured polymer fibers for anisotropic non-wetting surfaces. RSC Advances, 2017, 7, 15553-15560. | 1.7 | 21 |
| 65 | 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. | 1.1 | 19 |
| 66 | Non-resonant Mie scattering: Emergent optical properties of core-shell polymer nanowires. Scientific Reports, 2014, 4, 4607. | 1.6 | 19 |
| 67 | Macroscopic Assembly of Indefinitely Long and Parallel Nanowires into Large Area Photodetection Circuitry. Nano Letters, 2012, 12, 2483-2487. | 4.5 | 17 |
| 68 | Anemone-like nanostructures for non-lithographic, reproducible, large-area, and ultra-sensitive SERS substrates. Nanoscale, 2014, 6, 12710-12717. | 2.8 | 17 |
| 69 | Bose-Einstein condensation in a one-dimensional interacting system due to power-law trapping potentials. Physical Review A, 1999, 59, 1468-1472. | 1.0 | 15 |
| 70 | Oligonucleotide-based label-free detection with optical microresonators: strategies and challenges. Lab on A Chip, 2016, 16, 2572-2595. | 3.1 | 15 |
| 71 | Physics and applications of photonic nanocrystals. International Journal of Nanotechnology, 2004, 1, 379. | 0.1 | 14 |
| 72 | High Selectivity Boolean Olfaction Using Hollow-Core Wavelength-Scalable Bragg Fibers. Analytical Chemistry, 2012, 84, 83-90. | 3.2 | 13 |

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| 73 | Superenhancers: Novel opportunities for nanowire optoelectronics. Scientific Reports, 2014, 4, 7505. | 1.6 | 13 |
| 74 | Cytotoxicity of multifunctional surfactant containing capped mesoporous silica nanoparticles. RSC Advances, 2016, 6, 32060-32069. | 1.7 | 13 |
| 75 | Robust superhydrophilic patterning of superhydrophobic ormosil surfaces for high-throughput on-chip screening applications. RSC Advances, 2016, 6, 80049-80054. | 1.7 | 12 |
| 76 | Large and dynamical tuning of a chalcogenide Fabry-Perot cavity mode by temperature modulation. Optics Express, 2010, 18, 3168. | 1.7 | 11 |
| 77 | Phosphonate based organosilane modification of a simultaneously protein resistant and bioconjugable silica surface. Journal of Materials Chemistry B, 2014, 2, 7118-7122. | 2.9 | 9 |
| 78 | Nanosprings harvest light more efficiently. Applied Optics, 2015, 54, 8018. | 2.1 | 9 |
| 79 | Tailoring self-organized nanostructured morphologies in kilometer-long polymer fiber. Scientific Reports, 2014, 4, 4864. | 1.6 | 9 |
| 80 | Fluorescent Paper Strips for Highly Sensitive and Selective Detection of Nitroaromatic Analytes in Water Samples. ChemistrySelect, 2017, 2, 7735-7740. | 0.7 | 9 |
| 81 | Tapered nanoscale chalcogenide fibers directly drawn from bulk glasses as optical couplers for high-index resonators. Applied Optics, 2017, 56, 385. | 2.1 | 7 |
| 82 | Evaporation-Induced Biomolecule Detection on Versatile Superhydrophilic Patterned Surfaces: Glucose and DNA Assay. ACS Omega, 2018, 3, 13503-13509. | 1.6 | 7 |
| 83 | Label-Free Optical Biodetection of Pathogen Virulence Factors in Complex Media Using Microtoroids with Multifunctional Surface Functionality. ACS Sensors, 2018, 3, 352-359. | 4.0 | 6 |
| 84 | Energy spectrum for two-dimensional potentials in very high magnetic fields. Physical Review B, 1997, 56, 12088-12091. | 1.1 | 5 |
| 85 | Photonic bandgap narrowing in conical hollow core Bragg fibers. Applied Physics Letters, 2014, 105, 071102. | 1.5 | 5 |
| 86 | Binary coded identification of industrial chemical vapors with an optofluidic nose. Applied Optics, 2016, 55, 10247. | 2.1 | 5 |
| 87 | 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, 0, , . | 0.4 | 5 |
| 88 | Boseâ€“Einstein condensation of noninteracting charged Bose gas in the presence of external potentials. Physica B: Condensed Matter, 2001, 293, 283-288. | 1.3 | 4 |
| 89 | Enhanced performance of dye-sensitized solar cells by omnidirectional antireflective coatings. Journal of Photonics for Energy, 2015, 5, 053090. | 0.8 | 4 |
| 90 | Photonic bandgap infrared spectrometer. Applied Optics, 2010, 49, 3596. | 2.1 | 3 |

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| 91 | Physics and Applications of Photonic Crystals. , 2001, , 279-303. | | 2 |
| 92 | Physics and Applications of Defect Structures in Photonic Crystals. , 2003, , 273-297. | | 2 |
| 93 | Suppression of superconductivity in high- cuprates due to nonmagnetic impurities: Implications for the order parameter symmetry. European Physical Journal B, 1999, 10, 287-291. | 0.6 | 1 |
| 94 | <title>Coupled cavities in photonic crystals</title>. , 2002, , . | | 1 |
| 95 | Coupled-Cavity Structures in Photonic Crystals. Materials Research Society Symposia Proceedings, 2002, 722, 241. | 0.1 | 1 |
| 96 | Physics and applications of defect structures in photonic crystals. , 2003, 5000, 237. | | 1 |
| 97 | Generation of new frequencies in toroid microcavities. , 2008, , . | | 1 |
| 98 | Sensors: Bioinspired Optoelectronic Nose with Nanostructured Wavelength-Scalable Hollow-Core Infrared Fibers (Adv. Mater. 10/2011). Advanced Materials, 2011, 23, 1262-1262. | 11.1 | 1 |
| 99 | Energy Harvesting: A Motionâ€•and Soundâ€Activated, 3Dâ€Printed, Chalcogenideâ€Based Triboelectric Nanogenerator (Adv. Mater. 14/2015). Advanced Materials, 2015, 27, 2408-2408. | 11.1 | 1 |
| 100 | A New Route for Fabricating On-Chip Chalcogenide Microcavity Resonators. , 2015, , . | | 1 |
| 101 | Highly directional resonant antennas built around photonic crystals. , 0, , . | | 0 |
| 102 | Disorder and localization in the lowest Landau level in the presence of dilute point scatterers. Solid State Communications, 1999, 112, 157-160. | 0.9 | 0 |
| 103 | Propagation of Photons by Hopping. Optics and Photonics News, 2000, 11, 31_1. | 0.4 | 0 |
| 104 | Experimental demonstration of highly confined photonic crystal based waveguides. , 2001, , . | | 0 |
| 105 | Experimental demonstration of highly confined photonic crystal based waveguides. , 0, , . | | 0 |
| 106 | Strong enhancement of spontaneous emission in hydrogenated amorphous silicon nitride coupled-microcavity structures. , 2001, , . | | 0 |
| 107 | Photonic band gap effect and localization in two-dimensional Penrose lattice. , 0, , . | | 0 |
| 108 | Photonic band gap effect and localization in two-dimensional Penrose lattice. , 2001, , . | | 0 |

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| 109 | A novel fabrication technique by composite material processing: Integrated metal-insulator-semiconductor fibers and fiber devices. Materials Research Society Symposia Proceedings, 2005, 888, 1. | 0.1 | 0 |
| 110 | Novel optoelectronic fibers codrawn from conducting, semiconducting and insulating materials. , 2005, , . | | 0 |
| 111 | Detaecting large-area optical fields using geometric fiber constructs. , 2006, , . | | 0 |
| 112 | All-chalcogenide variable infrared filter. , 2009, , . | | 0 |
| 113 | Ultrasensitive label-free microcavity biosensors with high selectivity. , 2011, , . | | 0 |
| 114 | Artificial olfaction inside nanostructured infrared fiber arrays. , 2011, , . | | 0 |
| 115 | Plasmonically enhanced hot electron based photovoltaic device: erratum. Optics Express, 2013, 21, 23324. | 1.7 | 0 |
| 116 | Microfluidics: Surface Textured Polymer Fibers for Microfluidics (Adv. Funct. Mater. 29/2014). Advanced Functional Materials, 2014, 24, 4568-4568. | 7.8 | 0 |
| 117 | Microresonators: A New Route for Fabricating Onâ€Chip Chalcogenide Microcavity Resonator Arrays (Advanced Optical Materials 7/2014). Advanced Optical Materials, 2014, 2, 696-696. | 3.6 | 0 |
| 118 | Physics and Applications of Photonic Crystals. , 2000, , 467-478. | | 0 |
| 119 | Applications of Photonic Crystals to Directional Antennas. , 2001, , 321-328. | | 0 |
| 120 | Iterative Size Reduction Technique for Optical Nanostructures. , 2012, , . | | 0 |
| 121 | Macroscopic Assembly of Indefinitely Long and Parallel Nanowires into Large Area Photodetection Circuitry. , 2012, , . | | 0 |