

# Tsvetanka Babeva

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

60  
papers

575  
citations

13  
h-index

22  
g-index

69  
ext. papers

664  
ext. citations

2.4  
avg, IF

3.8  
L-index

| #  | Paper   | IF  | Citations |
|----|---|-----|-----------|
| 60 | Analysis of errors in thin-film optical parameters derived from spectrophotometric measurements at normal light incidence. <i>Applied Optics</i> , <b>1998</b> , 37, 4260-7   | 1.7 | 71        |
| 59 | Two-way diffusion model for short-exposure holographic grating formation in acrylamide-based photopolymer. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2010</b> , 27, 197  | 1.7 | 51        |
| 58 | Optical characterization of sol-gel derived Nb <sub>2</sub> O <sub>5</sub> thin films. <i>Optics and Laser Technology</i> , <b>2014</b> , 58, 114-118   | 1.8 | 49        |
| 57 | Vapor responsive one-dimensional photonic crystals from zeolite nanoparticles and metal oxide films for optical sensing. <i>Sensors</i> , <b>2014</b> , 14, 12207-18  | 3.8 | 33        |
| 56 | Optical Properties of Photopolymer Layers Doped with Aluminophosphate Nanocrystals. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 16767-16775   | 3.8 | 31        |
| 55 | Method for characterization of diffusion properties of photopolymerisable systems. <i>Optics Express</i> , <b>2008</b> , 16, 8487-97  | 3.3 | 23        |
| 54 | Zeolite films as building blocks for antireflective coatings and vapor responsive Bragg stacks. <i>Dalton Transactions</i> , <b>2014</b> , 43, 8868-76  | 4.3 | 18        |
| 53 | Multilayer As <sub>2</sub> Se <sub>3</sub> /GeS <sub>2</sub> quarter wave structures for photonic applications. <i>Journal Physics D: Applied Physics</i> , <b>2010</b> , 43, 505103  | 3   | 17        |
| 52 | Atomic layer deposition prepared Al-doped ZnO for liquid crystal displays applications. <i>Optical and Quantum Electronics</i> , <b>2018</b> , 50, 1  | 2.4 | 16        |
| 51 | Investigation of the light induced redistribution of zeolite Beta nanoparticles in an acrylamide-based photopolymer. <i>Journal of Optics</i> , <b>2009</b> , 11, 024016  |     | 16        |
| 50 | Optical properties of (Al <sub>2</sub> O <sub>3</sub> ) <sub>x</sub> (TiO <sub>2</sub> ) <sub>1-x</sub> films deposited by the sol-gel method. <i>Vacuum</i> , <b>2004</b> , 76, 219-223  | 3.7 | 16        |
| 49 | Optical Properties of Sol-Gel Nb <sub>2</sub> O <sub>5</sub> Films with Tunable Porosity for Sensing Applications. <i>Advances in Condensed Matter Physics</i> , <b>2015</b> , 2015, 1-8  | 1   | 15        |
| 48 | Optical properties of phase-change optical disks with Sb <sub>x</sub> Se <sub>100-x</sub> films. <i>Vacuum</i> , <b>2000</b> , 58, 496-501  | 3.7 | 14        |
| 47 | Progress in the Utilization of Coal Fly Ash by Conversion to Zeolites with Green Energy Applications. <i>Materials</i> , <b>2020</b> , 13,  | 3.5 | 12        |
| 46 | Photometric methods for determining the optical constants and the thicknesses of thin absorbing films: criteria for precise and unambiguous determination of n, k, and d in a wide spectral range. <i>Applied Optics</i> , <b>2001</b> , 40, 2682-6 | 1.7 | 12        |
| 45 | Effect of zeolite nanoparticles on the optical properties of diacetone acrylamide-based photopolymer. <i>Optical Materials</i> , <b>2014</b> , 37, 181-187  | 3.3 | 11        |
| 44 | Optical properties of silica MFI doped acrylamide-based photopolymer. <i>Journal of Optics</i> , <b>2009</b> , 11, 024015   |     | 11        |

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|----|---|-----|---|
| 43 | Reflectance spectra and refractive index of a Nd:YAG laser-oxidized Si surface. <i>Materials Chemistry and Physics</i> , <b>2005</b> , 89, 316-320  | 4.4 | 9 |
| 42 | Photometric methods for determining the optical constants and the thicknesses of thin absorbing films: selection of a combination of photometric quantities on the basis of error analysis. <i>Applied Optics</i> , <b>2001</b> , 40, 2675-81 | 1.7 | 9 |
| 41 | Nanosized MEL zeolite and GeSe <sub>2</sub> chalcogenide layers as functional building blocks of tunable Bragg stacks. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 18136  |     | 8 |
| 40 | Aluminum-doped zinc oxide thin films deposited by electrospray method. <i>Optical Materials</i> , <b>2019</b> , 89, 390-395   | 3.3 | 7 |
| 39 | Amphiphilic Poly(vinyl Alcohol) Copolymers Designed for Optical Sensor Applications Synthesis and Properties. <i>Coatings</i> , <b>2020</b> , 10, 460   | 2.9 | 7 |
| 38 | Preparation and characterization of mesoporous Nb <sub>2</sub> O <sub>5</sub> films for sensing applications. <i>Journal of Physics: Conference Series</i> , <b>2014</b> , 558, 012042  | 0.3 | 7 |
| 37 | Study of the photoinduced surface relief modulation in photopolymers caused by illumination with a Gaussian beam of light. <i>Journal of Optics (United Kingdom)</i> , <b>2010</b> , 12, 124011   | 1.7 | 7 |
| 36 | Photoinduced changes in the optical properties of obliquely deposited $\alpha$ -As <sub>2</sub> S <sub>3</sub> thin films. <i>Vacuum</i> , <b>2002</b> , 69, 395-398  | 3.7 | 7 |
| 35 | One-dimensional PMMA/TiO <sub>2</sub> photonic crystals used as color indicators of chloroform vapors. <i>Optical and Quantum Electronics</i> , <b>2016</b> , 48, 1   | 2.4 | 7 |
| 34 | Optical fiber/TiO <sub>2</sub> waveguide coupler covered with hydrophobic zeolite film for vapor sensing. <i>Sensors and Actuators B: Chemical</i> , <b>2017</b> , 248, 359-366   | 8.5 | 6 |
| 33 | Effect of Substrate Temperature on the Microstructural, Morphological, and Optical Properties of Electrospayed ZnO Thin Films. <i>Advances in Condensed Matter Physics</i> , <b>2018</b> , 2018, 1-7  | 1   | 6 |
| 32 | Structural and optical properties of LuVO <sub>4</sub> single crystals. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 794, 012029  | 0.3 | 5 |
| 31 | Zeolites from fly ash embedded in a thin niobium oxide matrix for optical and sensing applications. <i>Journal of Physics: Conference Series</i> , <b>2019</b> , 1186, 012024   | 0.3 | 5 |
| 30 | Phase characterization and ethanol adsorption in TiO <sub>2</sub> nanotubes anodically grown on Ti6Al4V alloy substrates. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 798, 394-402   | 5.7 | 5 |
| 29 | All niobia Bragg stacks for optical sensing of vapors. <i>Optical and Quantum Electronics</i> , <b>2020</b> , 52, 1   | 2.4 | 5 |
| 28 | Generating porosity in metal oxides thin films through introduction of polymer micelles. <i>Optical and Quantum Electronics</i> , <b>2018</b> , 50, 1   | 2.4 | 5 |
| 27 | Influence of ZnCl <sub>2</sub> concentration on the structural and optical properties of electrochemically deposited nanostructured ZnO. <i>Applied Surface Science</i> , <b>2018</b> , 456, 69-74  | 6.7 | 5 |
| 26 | Poly(vinyl alcohol)-based thin films for optical humidity sensing. <i>Journal of Physics: Conference Series</i> , <b>2020</b> , 1492, 012040  | 0.3 | 4 |

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|----|---|-----|---|
| 25 | Optical and holographic properties of nano-sized As <sub>2</sub> S <sub>3</sub> films. <i>Optics and Lasers in Engineering</i> , <b>2012</b> , 50, 838-843  | 4.6 | 4 |
| 24 | The Influence of Annealing on Optical and Humidity Sensing Properties of Poly(Vinyl Alcohol-Co-Vinyl Acetal) Thin Films. <i>Proceedings (mdpi)</i> , <b>2020</b> , 42, 16                           | 0.3 | 4 |
| 23 | Flexible and Transparent Polymer-Based Optical Humidity Sensor. <i>Sensors</i> , <b>2021</b> , 21,  | 3.8 | 4 |
| 22 | Triblock copolymer micelles as templates for preparation of mesoporous niobia thin films. <i>Journal of Physics: Conference Series</i> , <b>2018</b> , 992, 012037                                  | 0.3 | 4 |
| 21 | In-Situ Ellipsometric Study of the Optical Properties of LTL-Doped Thin Film Sensors for Copper(II) Ion Detection. <i>Coatings</i> , <b>2020</b> , 10, 423  | 2.9 | 3 |
| 20 | Color sensing of humidity using thin films of hydrophilic cationic copolymers <b>2017</b> ,   |     | 3 |
| 19 | Tunable Bragg stacks from sol-gel derived Ta <sub>2</sub> O <sub>5</sub> and MEL zeolite films. <i>Journal of Physics: Conference Series</i> , <b>2012</b> , 398, 012026                            | 0.3 | 3 |
| 18 | Processing of high-grade zeolite nanocomposites from solid fuel combustion by-products as critical raw materials substitutes. <i>Manufacturing Review</i> , <b>2020</b> , 7, 22                     | 1.4 | 3 |
| 17 | Polymer Top-Covered Bragg Reflectors as Optical Humidity Sensors. <i>Proceedings (mdpi)</i> , <b>2019</b> , 3, 12   | 0.3 | 2 |
| 16 | Thin films from hydrophilic poly(N,N-dimethyl acrylamide) copolymers as optical indicators for humidity. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 794, 012022                   | 0.3 | 2 |
| 15 | Optical Sensing of Humidity Using Polymer Top-Covered Bragg Stacks and Polymer/Metal Thin Film Structures. <i>Nanomaterials</i> , <b>2019</b> , 9,  | 5.4 | 2 |
| 14 | Surface and Morphological Features of ZrO <sub>2</sub> Sol-Gel Coatings Obtained by Polymer Modified Solution <b>2020</b> ,   |     | 2 |
| 13 | Optical and sensing properties of sol-gel derived vanadium pentoxide thin films with porous and dense structures. <i>Journal of Physics: Conference Series</i> , <b>2018</b> , 992, 012038          | 0.3 | 1 |
| 12 | One dimensional photonic crystals from As <sub>2</sub> S <sub>3</sub> and PMMA films for photonic and sensor applications. <i>Journal of Physics: Conference Series</i> , <b>2012</b> , 398, 012025 | 0.3 | 1 |
| 11 | Organic framework engineering in mesoporous Nb <sub>2</sub> O <sub>5</sub> thin films used as an active medium for organic vapors sensing <b>2018</b> ,   |     | 1 |
| 10 | Sol-gel tantalum pentoxide thin films with tunable refractive index for optical sensing applications. <i>Optical and Quantum Electronics</i> , <b>2020</b> , 52, 1                                  | 2.4 | 1 |
| 9  | Influence of Macromolecular Architecture on the Optical and Humidity-Sensing Properties of Poly(-Dimethylacrylamide)-Based Block Copolymers. <i>Polymers</i> , <b>2018</b> , 10,                    | 4.5 | 1 |
| 8  | Optical Detection of VOC Vapors Using Nb <sub>2</sub> O <sub>5</sub> Bragg Stack in Transmission Mode. <i>Photonics</i> , <b>2021</b> , 8, 399  | 2.2 | 1 |

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| 7 | Synthesis and characterization of 2D platinum diselenide. <i>Journal of Physics: Conference Series</i> , <b>2020</b> , 1492, 012022   | 0.3 | 0 |
| 6 | Optical Characterization of Acetone-Sensitive Thin Films of poly(vinyl alcohol)-g-poly(methyl acrylate). <i>Chemistry Proceedings</i> , <b>2021</b> , 5, 41                                   |     |   |
| 5 | Modelling Two-Dimensional Photopolymer Patterns Produced with Multiple-Beam Holography. <i>Mathematics in Industry</i> , <b>2012</b> , 365-371  | 0.2 |   |
| 4 | Improvement of the photoinduced birefringence in PAZO azopolymer doped with ZnO via electro spray deposition. <i>Journal of Physics: Conference Series</i> , <b>2020</b> , 1492, 012041       | 0.3 |   |
| 3 | Morphological features and optical properties of nanosized ZrO <sub>2</sub> films prepared by sol-gel spin coating. <i>Journal of Physics: Conference Series</i> , <b>2020</b> , 1492, 012024 | 0.3 |   |
| 2 | Effect of Milling Time on the Sensing Properties of Fly Ash Zeolite Composite Thin Films. <i>Engineering Proceedings</i> , <b>2021</b> , 6, 55  | 0.5 |   |
| 1 | Study of the Effect of Bending Deformation on the Performance of Flexible Polymer Layered Humidity Sensor. <i>Engineering Proceedings</i> , <b>2021</b> , 6, 6                                | 0.5 |   |