Tsvetanka Babeva

List of Publications by Year in Descending Order

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	Optical Characterization of Acetone-Sensitive Thin Films of poly(vinyl alcohol)-g-poly(methyl acrylate). *Chemistry Proceedings*, **2021**, 5, 41		
59	Flexible and Transparent Polymer-Based Optical Humidity Sensor. *Sensors*, **2021**, 21,	3.8	4
58	Effect of Milling Time on the Sensing Properties of Fly Ash Zeolite Composite Thin Films. *Engineering Proceedings*, **2021**, 6, 55	0.5	
57	Study of the Effect of Bending Deformation on the Performance of Flexible Polymer Layered Humidity Sensor. *Engineering Proceedings*, **2021**, 6, 6	0.5	
56	Optical Detection of VOC Vapors Using Nb2O5 Bragg Stack in Transmission Mode. *Photonics*, **2021**, 8, 399	2.2	1
55	Poly(vinyl alcohol)-based thin films for optical humidity sensing. *Journal of Physics: Conference Series*, **2020**, 1492, 012040	0.3	4
54	In-Situ Ellipsometric Study of the Optical Properties of LTL-Doped Thin Film Sensors for Copper(II) Ion Detection. *Coatings*, **2020**, 10, 423	2.9	3
53	Progress in the Utilization of Coal Fly Ash by Conversion to Zeolites with Green Energy Applications. *Materials*, **2020**, 13,	3.5	12
52	Synthesis and characterization of 2D platinum diselenide. *Journal of Physics: Conference Series*, **2020**, 1492, 012022	0.3	0
51	Amphiphilic Poly(vinyl Alcohol) Copolymers Designed for Optical Sensor Applications: Synthesis and Properties. *Coatings*, **2020**, 10, 460	2.9	7
50	All niobia Bragg stacks for optical sensing of vapors. *Optical and Quantum Electronics*, **2020**, 52, 1	2.4	5
49	Sol–gel tantalum pentoxide thin films with tunable refractive index for optical sensing applications. *Optical and Quantum Electronics*, **2020**, 52, 1	2.4	1
48	The Influence of Annealing on Optical and Humidity Sensing Properties of Poly(Vinyl Alcohol-Co-Vinyl Acetal) Thin Films. *Proceedings (mdpi)*, **2020**, 42, 16	0.3	4
47	Processing of high-grade zeolite nanocomposites from solid fuel combustion by-products as critical raw materials substitutes. *Manufacturing Review*, **2020**, 7, 22	1.4	3
46	Improvement of the photoinduced birefringence in PAZO azopolymer doped with ZnO via electrospray deposition. *Journal of Physics: Conference Series*, **2020**, 1492, 012041	0.3	
45	Surface and Morphological Features of ZrO₂ Sol-Gel Coatings Obtained by Polymer Modified Solution **2020**,		2
44	Morphological features and optical properties of nanosized ZrO2 films prepared by sol-gel spin coating. *Journal of Physics: Conference Series*, **2020**, 1492, 012024	0.3	

43	Polymer Top-Covered Bragg Reflectors as Optical Humidity Sensors. *Proceedings (mdpi)*, **2019**, 3, 12	0.3	2
42	Zeolites from fly ash embedded in a thin niobium oxide matrix for optical and sensing applications. *Journal of Physics: Conference Series*, **2019**, 1186, 012024	0.3	5
41	Phase characterization and ethanol adsorption in TiO2 nanotubes anodically grown on Ti6Al4V alloy substrates. *Journal of Alloys and Compounds*, **2019**, 798, 394-402	5.7	5
40	Aluminum-doped zinc oxide thin films deposited by electrospray method. *Optical Materials*, **2019**, 89, 390-395	3.3	7
39	Optical Sensing of Humidity Using Polymer Top-Covered Bragg Stacks and Polymer/Metal Thin Film Structures. *Nanomaterials*, **2019**, 9,	5.4	2
38	Generating porosity in metal oxides thin films through introduction of polymer micelles. *Optical and Quantum Electronics*, **2018**, 50, 1	2.4	5
37	Atomic layer deposition prepared Al-doped ZnO for liquid crystal displays applications. *Optical and Quantum Electronics*, **2018**, 50, 1	2.4	16
36	Optical and sensing properties of sol-gel derived vanadium pentoxide thin films with porous and dense structures. *Journal of Physics: Conference Series*, **2018**, 992, 012038	0.3	1
35	Influence of ZnCl2 concentration on the structural and optical properties of electrochemically deposited nanostructured ZnO. *Applied Surface Science*, **2018**, 456, 69-74	6.7	5
34	Organic framework engineering in mesoporous Nb2O5 thin films used as an active medium for organic vapors sensing **2018**,		1
33	Triblock copolymer micelles as templates for preparation of mesoporous niobia thin films. *Journal of Physics: Conference Series*, **2018**, 992, 012037	0.3	4
32	Influence of Macromolecular Architecture on the Optical and Humidity-Sensing Properties of Poly(,-Dimethylacrylamide)-Based Block Copolymers. *Polymers*, **2018**, 10,	4.5	1
31	Effect of Substrate Temperature on the Microstructural, Morphological, and Optical Properties of Electrosprayed ZnO Thin Films. *Advances in Condensed Matter Physics*, **2018**, 2018, 1-7	1	6
30	Optical fiber□a2O5 waveguide coupler covered with hydrophobic zeolite film for vapor sensing. *Sensors and Actuators B: Chemical*, **2017**, 248, 359-366	8.5	6
29	Structural and optical properties of LuVO4 single crystals. *Journal of Physics: Conference Series*, **2017**, 794, 012029	0.3	5
28	Thin films from hydrophilic poly(N,N-dimethyl acrylamide) copolymers as optical indicators for humidity. *Journal of Physics: Conference Series*, **2017**, 794, 012022	0.3	2
27	Color sensing of humidity using thin films of hydrophilic cationic opolymers **2017**,		3
26	One-dimensional PMMA□/2O5 photonic crystals used as color indicators of chloroform vapors. *Optical and Quantum Electronics*, **2016**, 48, 1	2.4	7

25	Optical Properties of Sol-Gel Nb2O5Films with Tunable Porosity for Sensing Applications. *Advances in Condensed Matter Physics*, **2015**, 2015, 1-8	1	15
24	Effect of zeolite nanoparticles on the optical properties of diacetone acrylamide-based photopolymer. *Optical Materials*, **2014**, 37, 181-187	3.3	11
23	Zeolite films as building blocks for antireflective coatings and vapor responsive Bragg stacks. *Dalton Transactions*, **2014**, 43, 8868-76	4.3	18
22	Preparation and characterization of mesoporous Nb2O5 films for sensing applications. *Journal of Physics: Conference Series*, **2014**, 558, 012042	0.3	7
21	Vapor responsive one-dimensional photonic crystals from zeolite nanoparticles and metal oxide films for optical sensing. *Sensors*, **2014**, 14, 12207-18	3.8	33
20	Optical characterization of sol□gel derived Nb2O5 thin films. *Optics and Laser Technology*, **2014**, 58, 114-118	4.1	49
19	Optical and holographic properties of nano-sized As2S3 films. *Optics and Lasers in Engineering*, **2012** , 50, 838-843	4.6	4
18	One dimensional photonic crystals from As2S3and PMMA films for photonic and sensor applications. *Journal of Physics: Conference Series*, **2012**, 398, 012025	0.3	1
17	Tunable Bragg stacks from sol-gel derived Ta2O5and MEL zeolite films. *Journal of Physics: Conference Series*, **2012**, 398, 012026	0.3	3
16	Nanosized MEL zeolite and GeSe2 chalcogenide layers as functional building blocks of tunable Bragg stacks. *Journal of Materials Chemistry*, **2012**, 22, 18136		8
15	Modelling Two-Dimensional Photopolymer Patterns Produced with Multiple-Beam Holography. *Mathematics in Industry*, **2012**, 365-371	0.2	
14	Study of the photoinduced surface relief modulation in photopolymers caused by illumination with a Gaussian beam of light. *Journal of Optics (United Kingdom)*, **2010**, 12, 124011	1.7	7
13	Multilayer As2Se3/GeS2quarter wave structures for photonic applications. *Journal Physics D: Applied Physics*, **2010**, 43, 505103	3	17
12	Two-way diffusion model for short-exposure holographic grating formation in acrylamide-based photopolymer. *Journal of the Optical Society of America B: Optical Physics*, **2010**, 27, 197	1.7	51
11	Optical Properties of Photopolymer Layers Doped with Aluminophosphate Nanocrystals. *Journal of Physical Chemistry C*, **2010**, 114, 16767-16775	3.8	31
10	Investigation of the light induced redistribution of zeolite Beta nanoparticles in an acrylamide-based photopolymer. *Journal of Optics*, **2009**, 11, 024016		16
9	Optical properties of silica MFI doped acrylamide-based photopolymer. *Journal of Optics*, **2009**, 11, 024015		11
8	Method for characterization of diffusion properties of photopolymerisable systems. *Optics Express*, **2008**, 16, 8487-97	3.3	23

7	Reflectance spectra and refractive index of a Nd:YAG laser-oxidized Si surface. *Materials Chemistry and Physics*, **2005**, 89, 316-320	4.4	9
6	Optical properties of (Al2O3)x(TiO2)1− films deposited by the sol–gel method. *Vacuum*, **2004**, 76, 219-222	3.7	16
5	Photoinduced changes in the optical properties of obliquely deposited a-As2S3 thin films. *Vacuum*, **2002**, 69, 395-398	3.7	7
4	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. *Applied Optics*, **2001**, 40, 2675-81	1.7	9
3	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. *Applied Optics*, **2001**, 40, 2682-6	1.7	12
2	Optical properties of phase-change optical disks with SbxSe100− films. *Vacuum*, **2000**, 58, 496-501	3.7	14
1	Analysis of errors in thin-film optical parameters derived from spectrophotometric measurements at normal light incidence. *Applied Optics*, **1998**, 37, 4260-7	1.7	71