Andrzej Budkowski

List of Publications by Citations

137 papers	2,968 citations	29 h-index	46 g-index
144 ext. papers	3,315 ext. citations	4.8 avg, IF	4.76 L-index

#	Paper	IF	Citations
137	Morphology and Phase Segregation of Spin-Casted Films of Polyfluorene/PCBM Blends. *Macromolecules*, **2007**, 40, 8291-8301	5.5	279
136	Vertical phase separation in spin-coated films of a low bandgap polyfluorene/PCBM blend Effects of specific substrate interaction. *Applied Surface Science*, **2007**, 253, 3906-3912	6.7	122
135	Complete wetting from polymer mixtures. *Science*, **1992**, 258, 1126-9	33.3	110
134	Swelling of poly(3-alkylthiophene) films exposed to solvent vapors and humidity: Evaluation of solubility parameters. *Synthetic Metals*, **2007**, 157, 726-732	3.6	82
133	Multilayer formation in spin-coated thin films of low-bandgap polyfluorene:PCBM blends. *Journal of Physics Condensed Matter*, **2005**, 17, L529-L534	1.8	81
132	Interfacial Phenomena in Thin Polymer Films: Phase Coexistence and Segregation **1999**, 1-111		73
131	Substrate-Determined Shape of Free Surface Profiles in Spin-Cast Polymer Blend Films. *Macromolecules*, **2003**, 36, 4060-4067	5.5	62
130	Hierarchic Structure Formation in Binary and Ternary Polymer Blends. *Journal of Materials Science*, **2003**, 11, 225-235		61
129	Breath figures in polymer and polymer blend films spin-coated in dry and humid ambience. *Langmuir*, **2008**, 24, 3517-24	4	58
128	Surface Patterns in Solvent-Cast Polymer Blend Films Analyzed with an Integral-Geometry Approach. *Macromolecules*, **2003**, 36, 2419-2427	5.5	56
127	Device Performance of APFO-3/PCBM Solar Cells with Controlled Morphology. *Advanced Materials*, **2009**, 21, 4398-403	24	51
126	Polymer vs Solvent Diagram of Film Structures Formed in Spin-Cast Poly(3-alkylthiophene) Blends. *Macromolecules*, **2008**, 41, 4802-4810	5.5	51
125	Surface phase behavior in binary polymer mixtures. I. Miscibility, phase coexistence, and interactions in polyolefin blends. *Journal of Chemical Physics*, **1996**, 104, 8786-8794	3.9	49
124	Phase decomposition in polymer blend films cast on substrates patterned with self-assembled monolayers. *Vacuum*, **2001**, 63, 307-313	3.7	47
123	AFM/LFM surface studies of a ternary polymer blend cast on substrates covered by a self-assembled monolayer. *Surface Science*, **2002**, 507-510, 700-706	1.8	45
122	PDMS substrate stiffness affects the morphology and growth profiles of cancerous prostate and melanoma cells. *Journal of the Mechanical Behavior of Biomedical Materials*, **2015**, 41, 13-22	4.1	42
121	Humidity and solvent effects in spin-coated polythiophene Polystyrene blends. *Journal of Applied Polymer Science*, **2007**, 105, 67-79	2.9	42

120	The effects of confinement and surface interactions on coexistence in a binary polymer mixture. *Journal of Chemical Physics*, **1992**, 97, 5229-5238	3.9	42
119	Surface phase behavior in binary polymer mixtures. II. Surface enrichment from polyolefin blends. *Journal of Chemical Physics*, **1996**, 104, 8795-8806	3.9	40
118	Temperature and pH dual-responsive coatings of oligoperoxide-graft-poly(N-isopropylacrylamide): wettability, morphology, and protein adsorption. *Journal of Colloid and Interface Science*, **2012**, 387, 95-105	9.3	39
117	Tuning the Vertical Phase Separation in Polyfluorene:Fullerene Blend Films by Polymer Functionalization. *Chemistry of Materials*, **2011**, 23, 2295-2302	9.6	39
116	Selective protein adsorption on polymer patterns formed by self-organization and soft lithography. *Biomacromolecules*, **2009**, 10, 2101-9	6.9	39
115	Three-Dimensional Information on the Phase Domain Structure of Thin Films of Polymer Blends Revealed by Secondary Ion Mass Spectrometry. *Macromolecular Rapid Communications*, **2001**, 22, 829-834	4.8	39
114	Spectroscopic and microscopic characterization of biosensor surfaces with protein/amino-organosilane/silicon structure. *Colloids and Surfaces B: Biointerfaces*, **2012**, 90, 159-68	6	38
113	Composition Effects in Polymer Blends Spin-Cast on Patterned Substrates. *Macromolecules*, **2005**, 38, 8486-8493	5.5	38
112	Temperature and pH dual-responsive POEGMA-based coatings for protein adsorption. *Journal of Colloid and Interface Science*, **2013**, 411, 247-56	9.3	35
111	Protein adsorption and covalent bonding to silicon nitride surfaces modified with organo-silanes: comparison using AFM, angle-resolved XPS and multivariate ToF-SIMS analysis. *Colloids and Surfaces B: Biointerfaces*, **2013**, 110, 217-24	6	34
110	Structures Formed in Spin-Cast Films of Polystyrene Blends with Poly(butyl methacrylate) Isomers. *Macromolecules*, **2004**, 37, 7308-7315	5.5	34
109	Physico-chemical properties of PDMS surfaces suitable as substrates for cell cultures. *Applied Surface Science*, **2016**, 389, 247-254	6.7	29
108	Simultaneous determination of aflatoxin B, fumonisin B and deoxynivalenol in beer samples with a label-free monolithically integrated optoelectronic biosensor. *Journal of Hazardous Materials*, **2018**, 359, 445-453	12.8	29
107	Ordering domains of spin cast blends of conjugated and dielectric polymers on surfaces patterned by soft- and photo-lithography. *Soft Matter*, **2009**, 5, 234-241	3.6	28
106	Coexistence in a Binary Isotopic Polymer Mixture. *Europhysics Letters*, **1992**, 18, 705-710	1.6	28
105	Lamellar structures formed in spin-cast blends of insulating and conducting polymers. *Synthetic Metals*, **2004**, 144, 253-257	3.6	27
104	Temperature-Controlled Three-Stage Switching of Wetting, Morphology, and Protein Adsorption. *ACS Applied Materials & Interfaces*, **2017**, 9, 12035-12045	9.5	25
103	Temperature-responsive properties of poly(4-vinylpyridine) coatings: influence of temperature on the wettability, morphology, and protein adsorption. *RSC Advances*, **2016**, 6, 87469-87477	3.7	25

102	Matrix-Modulated Swelling of a Polymer Brush. *Europhysics Letters*, **1992**, 20, 499-504	1.6	25
101	Substructure formation during pattern transposition from substrate into polymer blend film. *Europhysics Letters*, **2003**, 62, 855-861	1.6	24
100	Brush Formation by Symmetric and by Highly Asymmetric Diblock Copolymers at Homopolymer Interfaces. *Macromolecules*, **1995**, 28, 8571-8578	5.5	24
99	Temperature-Controlled Orientation of Proteins on Temperature-Responsive Grafted Polymer Brushes: Poly(butyl methacrylate) vs Poly(butyl acrylate): Morphology, Wetting, and Protein Adsorption. *Biomacromolecules*, **2019**, 20, 2185-2197	6.9	23
98	"Command" surfaces with thermo-switchable antibacterial activity. *Materials Science and Engineering C*, **2019**, 103, 109806	8.3	22
97	Model immunoassay on silicon surfaces: vertical and lateral nanostructure vs. protein coverage. *Colloids and Surfaces B: Biointerfaces*, **2013**, 103, 253-60	6	22
96	Effects of polythiophene surface structure on adsorption and conformation of bovine serum albumin: a multivariate and multitechnique study. *Langmuir*, **2014**, 30, 13925-33	4	22
95	Integral geometry analysis of fluorescence micrographs for quantitative relative comparison of protein adsorption onto polymer surfaces. *Langmuir*, **2008**, 24, 10253-8	4	22
94	Influence of humid atmosphere on phase separation in polyaniline–polystyrene thin films. *Synthetic Metals*, **2005**, 155, 516-522	3.6	22
93	Phase decomposition in polymer blend films cast on homogeneous substrates modified by self-assembled monolayers. *Vacuum*, **2001**, 63, 297-305	3.7	21
92	Diblock copolymers attached to homopolymer surfaces and interfaces. *Macromolecules*, **1993**, 26, 2470-2478	5.5	21
91	Protein coverage on silicon surfaces modified with amino-organic films: a study by AFM and angle-resolved XPS. *Colloids and Surfaces B: Biointerfaces*, **2010**, 80, 63-71	6	20
90	Surface density dependent orientation and immunological recognition of antibody on silicon: TOF-SIMS and surface analysis of two covalent immobilization methods. *Applied Surface Science*, **2020**, 518, 146269	6.7	19
89	Shape-Controlled synthesis of silver nanoparticles in temperature-responsive grafted polymer brushes for optical applications. *Applied Surface Science*, **2019**, 463, 1124-1133	6.7	19
88	Non-cytotoxic, temperature-responsive and antibacterial POEGMA based nanocomposite coatings with silver nanoparticles.. *RSC Advances*, **2020**, 10, 10155-10166	3.7	19
87	Synthesis and Postpolymerization Modification of Thermoresponsive Coatings Based on Pentaerythritol Monomethacrylate: Surface Analysis, Wettability, and Protein Adsorption. *Langmuir* , **2015**, 31, 9675-83	4	18
86	Wetting transition in a binary polymer blend. *Europhysics Letters*, **2000**, 50, 35-40	1.6	18
85	Temperature-responsive grafted polymer brushes obtained from renewable sources with potential application as substrates for tissue engineering. *Applied Surface Science*, **2017**, 407, 546-554	6.7	17

84	Structure evolution in layers of polymer blend nanoparticles. *Langmuir*, **2007**, 23, 7235-40	4	17
83	Depth profiling studies of the surface directed phase decomposition in thin polymer films. *Vacuum*, **1999**, 54, 303-307	3.7	17
82	Cholesterol-Based Grafted Polymer Brushes as Alignment Coating with Temperature-Tuned Anchoring for Nematic Liquid Crystals. *Langmuir*, **2016**, 32, 11029-11038	4	17
81	Temperature-responsive and multi-responsive grafted polymer brushes with transitions based on critical solution temperature: synthesis, properties, and applications. *Colloid and Polymer Science*, **2021**, 299, 363-383	2.4	17
80	Protocol of single cells preparation for time of flight secondary ion´mass spectrometry. *Analytical Biochemistry*, **2016**, 511, 52-60	3.1	16
79	Surface phase behavior in binary polymer mixtures. III. Temperature dependence of surface enrichment and of wetting. *Journal of Chemical Physics*, **1997**, 106, 719-727	3.9	16
78	Temperature-responsive peptide-mimetic coating based on poly(N-methacryloyl-l-leucine): properties, protein adsorption and cell growth. *Colloids and Surfaces B: Biointerfaces*, **2014**, 118, 270-9	6	15
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75	Hydrodynamic-flow-driven phase evolution in a polymer blend film modified by diblock copolymers. *European Physical Journal E*, **2001**, 5, 207-219	1.5	15
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72	Imaging and spectroscopic comparison of multi-step methods to form DNA arrays based on the biotin-streptavidin system. *Analyst, The*, **2015**, 140, 1127-39	5	14
71	Differentiation between single bladder cancer cells using principal component analysis of time-of-flight secondary ion mass spectrometry. *Analytical Chemistry*, **2015**, 87, 3195-201	7.8	14
70	Compositional Mismatch between Chemical Patterns on a Substrate and Polymer Blends Yielding Spin-Cast Films with Subpattern Periodicity. *Macromolecules*, **2007**, 40, 2120-2125	5.5	14
69	Imaging and chemical surface analysis of biomolecular functionalization of monolithically integrated on silicon Mach-Zehnder interferometric immunosensors. *Applied Surface Science*, **2016**, 385, 529-542	6.7	14
68	Orientation and biorecognition of immunoglobulin adsorbed on spin-cast poly(3-alkylthiophenes): Impact of polymer film crystallinity. *Colloids and Surfaces B: Biointerfaces*, **2016**, 148, 278-286	6	13
67	Surface-directed spinodal decomposition modified by a surface active copolymer. *Europhysics Letters*, **1997**, 40, 503-508	1.6	13

66	Pattern replication in polyaniline/polystyrene thin films. *Synthetic Metals*, **2007**, 157, 935-939	3.6	13
65	Friction force microscopy as an alternative method to probe molecular interactions. *Journal of Chemical Physics*, **2005**, 123, 014702	3.9	13
64	Interference of microstructure and isotope labeling effects in polymer blend compatibility. *Macromolecules*, **1993**, 26, 3858-3861	5.5	13
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62	Structures of two low-temperature incommensurate NbTe4 phases. *Acta Crystallographica Section B: Structural Science*, **1990**, 46, 587-591		12
61	X-ray study of crystal structure and pressure dependence of the Néel temperature of the GdRh2Si2 and TbRh2Si2 compounds. *Solid State Communications*, **1986**, 57, 813-815	1.6	12
60	Immobilization and detection of platelet-derived extracellular vesicles on functionalized silicon substrate: cytometric and spectrometric approach. *Analytical and Bioanalytical Chemistry*, **2017**, 409, 1109-1119	4.4	11
59	Magnetic interactions in RECu2Si2 compounds (RE = Tb-Tm). *Journal of Magnetism and Magnetic Materials*, **1987**, 67, 316-322	2.8	11
58	Buried polymer/metal interfaces examined with Kelvin Probe Force Microscopy. *Thin Solid Films*, **2013**, 531, 271-276	2.2	10
57	Indirect immunoassay on functionalized silicon surface: Molecular arrangement, composition and orientation examined step-by-step with multi-technique and multivariate analysis. *Colloids and Surfaces B: Biointerfaces*, **2017**, 150, 437-444	6	10
56	Pattern guided structure formation in polymer films of asymmetric blends. *Surface Science*, **2006**, 600, 1004-1011	1.8	10
55	Diffusion-Limited Segregation of Diblock Copolymers to a Homopolymer Surface. *Israel Journal of Chemistry*, **1995**, 35, 55-64	3.4	10
54	Temperature-responsive hybrid nanomaterials based on modified halloysite nanotubes uploaded with silver nanoparticles. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2022**, 641, 128525	5.1	10
53	Improved DNA microarray detection sensitivity through immobilization of preformed in solution streptavidin/biotinylated oligonucleotide conjugates. *Colloids and Surfaces B: Biointerfaces*, **2015**, 128, 464-472	6	9
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51	Engineering a Poly(3,4-ethylenedioxythiophene):(Polystyrene Sulfonate) Surface Using Self-Assembling Molecules-A Chemical Library Approach. *ACS Omega*, **2018**, 3, 3631-3639	3.9	9
50	Spectroscopic and microscopic examination of protein adsorption and blocking of non-specific binding to silicon surfaces modified with APTES and GOPS. *Procedia Engineering*, **2011**, 25, 334-337		9
49	Structures in Multicomponent Polymer Films: Their Formation, Observation and Applications in Electronics and Biotechnology. *Acta Physica Polonica A*, **2009**, 115, 435-440	0.6	9

48	Contact pin-printing of albumin-fungicide conjugate for silicon nitride-based sensors biofunctionalization: Multi-technique surface analysis for optimum immunoassay performance. *Applied Surface Science*, **2017**, 410, 79-86	6.7	8
47	Protein adsorption/desorption and antibody binding stoichiometry on silicon interferometric biosensors examined with TOF-SIMS. *Applied Surface Science*, **2018**, 444, 187-196	6.7	8
46	Electron-Beam Lithographic Grafting of Functional Polymer Structures from Fluoropolymer Substrates. *Langmuir*, **2016**, 32, 10641-10650	4	8
45	Biophysical and Biochemical Characteristics as Complementary Indicators of Melanoma Progression. *Analytical Chemistry*, **2019**, 91, 9885-9892	7.8	8
44	Competitive Adsorption at Homopolymer Interfaces from a Binary Mixture of Diblock Copolymers. *Macromolecules*, **1995**, 28, 8579-8586	5.5	8
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42	An approach to the structure of incommensurately modulated NbS3type II. *Journal of Physics C: Solid State Physics*, **1988**, 21, 4171-4187		8
41	Controlling orientation, conformation, and biorecognition of proteins on silane monolayers, conjugate polymers, and thermo-responsive polymer brushes: investigations using TOF-SIMS and principal component analysis. *Colloid and Polymer Science*, **2021**, 299, 385-405	2.4	8
40	Immobilization of oligonucleotide probes on silicon surfaces using biotin–streptavidin system examined with microscopic and spectroscopic techniques. *Applied Surface Science*, **2014**, 290, 199-206	6.7	7
39	Polymer blends spin-cast into films with complementary elements for electronics and biotechnology. *Journal of Applied Polymer Science*, **2012**, 125, 4275-4284	2.9	7
38	Modification of poly(ethylene terephthalate) surface with attached dextran macromolecules. *Polymer International*, **2009**, 58, 1034-1040	3.3	7
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33	Evolution of 3D structures in a phase-separating polymer blend film confined by symmetric flat walls. *European Physical Journal E*, **2003**, 12, 211-214	1.5	6
32	Chemical stability of polymers under argon gas cluster ion beam and x-ray irradiation. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2016**, 34, 030604	1.3	6
31	Examination of polymer/metal interface modified by self-assembled monolayer by Kelvin probe force microscopy and secondary ion mass spectrometry. *Electrochimica Acta*, **2013**, 104, 462-467	6.7	5

30	Surface segregation in the minority component of the binary polymer mixture. *Vacuum*, **1999**, 54, 273-277	3.7	5
29	Passive antifouling and active self-disinfecting antiviral surfaces. *Chemical Engineering Journal*, **2022**, 446, 137048	14.7	5
28	Patterning of cancerous cells driven by a combined modification of mechanical and chemical properties of the substrate. *European Polymer Journal*, **2017**, 93, 726-732	5.2	4
27	Proteins grouped into a variety of regular micro-patterns by substrate-guided domains of self-assembling poly(ethylene oxide)/polystyrene blends. *Soft Matter*, **2012**, 8, 5550	3.6	4
26	Effect of deuterium substitution on the surface interactions in binary polymer mixtures. *Journal of Polymer Science, Part B: Polymer Physics*, **1998**, 36, 2691-2702	2.6	4
25	Influence of solvents and substrates on the morphology and the performance of low-bandgap polyfluorene: PCBM photovoltaic devices **2006**, 6192, 339		4
24	Implementation of NSOM to Biological Samples. *Acta Physica Polonica A*, **2012**, 121, 533-538	0.6	4
23	Fabrication and Impact of Fouling-Reducing Temperature-Responsive POEGMA Coatings with Embedded CaCO Nanoparticles on Different Cell Lines. *Materials*, **2021**, 14,	3.5	4
22	Multilayers of poly(styrene/□ert-butoxy-□vinylbenzyl-polyglycidol) microspheres with core-shell morphology: Characterization by AFM, SIMS and XPS. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2016**, 507, 200-209	5.1	4
21	Sequential binary protein patterning on surface domains of thermo-responsive polymer blends cast by horizontal-dipping. *Materials Science and Engineering C*, **2019**, 99, 1477-1484	8.3	3
20	Comparing surface properties of melanoma cells using time of flight secondary ions mass spectrometry. *Analyst, The*, **2016**, 141, 6217-6225	5	3
19	Formation, structure and wettability of fluorescent nanolayers of oligoperoxide europium complexes adsorbed to glass surface. *Thin Solid Films*, **2010**, 518, 4318-4321	2.2	3
18	Surface Segregation and Wetting from Polymer Mixtures **1994**, 313-322		3
17	Spatially selective biomolecules immobilization on silicon nitride waveguides through contact printing onto plasma treated photolithographic micropattern: Step-by-step analysis with TOF-SIMS chemical imaging. *Applied Surface Science*, **2020**, 506, 145002	6.7	3
16	Dewetting of Polymer Films Controlled by Protein Adsorption. *Langmuir*, **2020**, 36, 11817-11828	4	3
15	Adaptability of single melanoma cells to surfaces with distinct hydrophobicity and roughness. *Applied Surface Science*, **2018**, 457, 881-890	6.7	3
14	Grafted polymer brush coatings for growth of cow granulosa cells and oocyte-cumulus cell complexes. *Biointerphases*, **2020**, 15, 031006	1.8	2
13	Humidity and wetting effects in spin-cast blends of insulating polymers and conducting polyaniline doped with DBSA. *Journal of Applied Polymer Science*, **2013**, 127, 2354-2361	2.9	2

12	Reverse contrast and substructures in protein micro-patterns on 3D polymer surfaces. *Colloids and Surfaces B: Biointerfaces*, **2012**, 90, 144-51	6	2
11	Pattern Formation in Thin Polymer Films Containing Conducting Polyaniline. *Macromolecular Symposia*, **2008**, 263, 47-52	0.8	2
10	Wetting transition in polyolefin blends studied by profiling techniques. *Macromolecular Symposia*, **2000**, 149, 277-282	0.8	2
9	The Two-Dimensional Modulation in Bulk and Thin-Film Au2 + xCd1 □x. *Physica Status Solidi A*, **1990**, 117, 351-362		2
8	Impact of the various buffer solutions on the temperature-responsive properties of POEGMA-grafted brush coatings. *Colloid and Polymer Science*,1	2.4	2
7	Study of Magnetism and Interface Processes between Thin Iron Film and Nickel Substrateby in-Situ Conversion Electron M□ssbauer Spectroscopy. *Physica Status Solidi A*, **1986**, 96, 573-579		1
6	Extraordinary conduction increase in model conjugated/insulating polymer system induced by surface located electric dipoles. *Applied Materials Today*, **2020**, 21, 100880	6.6	1
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4	Data on step-by-step atomic force microscopy monitoring of changes occurring in single melanoma cells undergoing ToF SIMS specialized sample preparation protocol. *Data in Brief*, **2016**, 8, 1322-32	1.2	1
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2	Influence of Acrylic Polymers Stereoregularity on Interface Interactions in Model Thin Film Systems. *Macromolecular Chemistry and Physics*, **2018**, 219, 1800097	2.6	
1	Adsorption and Wetting from Tunable Polyolefin Mixtures **1997**, 81-94		