Adam Gadomski

List of Publications by Year
in descending order

90	774	567281 15	677142 22
papers	citations	h-index	g-index

92	92	92	388
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Effect of Chitosan Deacetylation on Its Affinity to Type III Collagen: A Molecular Dynamics Study. Materials, 2022, 15, 463.	2.9	7
2	Spherulites: How Do They Emerge at an Onset of Nonequilibrium Kinetic-Thermodynamic and Structural Singularity Addressing Conditions?. Entropy, 2022, 24, 663.	2.2	3
3	Information and Statistical Measures in Classical vs. Quantum Condensed-Matter and Related Systems. Entropy, 2020, 22, 645.	2.2	1
4	Changes of Conformation in Albumin with Temperature by Molecular Dynamics Simulations. Entropy, 2020, 22, 405.	2.2	3
5	Derivation of the refractive index of lipid monolayers at an air-water interface. Optical Materials, 2019, 93, 1-5.	3.6	1
6	Spatiotemporal models in biology and the health sciences. BioSystems, 2019, 179, 15-16.	2.0	5
7	On (sub)mesoscopic scale peculiarities of diffusion driven growth in an active matter confined space, and related (bio)material realizations. BioSystems, 2019, 176, 56-58.	2.0	2
8	Physical crosslinking of hyaluronic acid in the presence of phospholipids in an aqueous nano-environment. Soft Matter, 2018, 14, 8997-9004.	2.7	23
9	Temperature dependent volume expansion of microgel in nonequilibria. European Physical Journal B, 2018, 91, 1.	1.5	2
10	Entropy Production Associated with Aggregation into Granules in a Subdiffusive Environment. Entropy, 2018, 20, 651.	2.2	8
11	The Anomalies of Hyaluronan Structures in Presence of Surface Active Phospholipidsâ€"Molecular Mass Dependence. Polymers, 2018, 10, 273.	4.5	8
12	Capstan-like mechanism in hyaluronanâ€"phospholipid systems. Chemistry and Physics of Lipids, 2018, 216, 17-24.	3.2	6
13	A Tribute to Marian Smoluchowski's Legacy on Soft Grains Assembly and Hydrogel Formation. Acta Physica Polonica B, 2018, 49, 993.	0.8	1
14	Fractional Calculus Evaluation ofÂHyaluronic Acid Crosslinking in a Nanoscopic Part of Articular Cartilage Model System. Springer Proceedings in Mathematics and Statistics, 2018, , 25-35.	0.2	0
15	Note on Appearance of Zigzak Type Self Similarity in Flying Bird Flocks Performing Directional Collective Motions in Mild-Weather Conditions. Current Topics in Biophysics, 2018, 41, 5-9.	0.3	0
16	Hyaluronic acid and phospholipid interactions useful for repaired articular cartilage surfacesâ€"a mini review toward tribological surgical adjuvants. Colloid and Polymer Science, 2017, 295, 403-412.	2.1	26
17	Anomalous Behavior of Hyaluronan Crosslinking Due to the Presence of Excess Phospholipids in the Articular Cartilage System of Osteoarthritis. International Journal of Molecular Sciences, 2017, 18, 2779.	4.1	13
18	Molecular Dynamic Analysis of Hyaluronic Acid and Phospholipid Interaction in Tribological Surgical Adjuvant Design for Osteoarthritis. Molecules, 2017, 22, 1436.	3.8	29

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19	Modelling Complex Projects and Their Managerâ€™s Behavior with Cybernetic and Nonlinear Dynamic Systems Theory (NDS). DEStech Transactions on Materials Science and Engineering, 2017, , .	0.0	0
20	The amphoteric effect on friction between the bovine cartilage/cartilage surfaces under slightly sheared hydration lubrication mode. Colloids and Surfaces B: Biointerfaces, 2016, 146, 452-458.	5.0	13
21	Shape Change of Micelles Dragged with Constant Velocity as Addressed in Terms of Biolubrication Application. Acta Physica Polonica A, 2016, 129, 188-189.	0.5	2
22	Unravelling a Self-healing Thermo- and Hydrodynamic Mechanism of Transient Pore's Late-stage Closing in Vesicles, and Related Soft-matter Systems, in Terms of Liaison Between Surface-tension and Bending Effects. Acta Physica Polonica B, 2016, 47, 1341.	0.8	2
23	Micelle Confined in Aqueous Environment: Lubrication at the Nanoscale and Its Nonlinear Characteristics. Springer Proceedings in Mathematics and Statistics, 2016, , 73-80.	0.2	0
24	On two opposing (bio)surfaces as comprehended in terms of an extension of the Coulomb-Amontons law of friction with its virtual usefulness for biotribology at the nanoscale. Biophysics (Russian) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 53	0.7	10
25	Multilevel-interaction friction procedure applicable in case of two opposing surfaces competing with one anotherâ€”A gedanken experiment. Physics Essays, 2015, 28, 650-653.	0.4	4
26	Three types of computational soft-matter problems revisited, an own-selection-based opinion. Frontiers in Physics, 2014, 2, .	2.1	2
27	Ranking structures and rankâ€“rank correlations of countries: The FIFA and UEFA cases. International Journal of Modern Physics C, 2014, 25, 1450060.	1.7	8
28	Primacy and ranking of UEFA soccer teams from biasing organization rules. Physica Scripta, 2014, 89, 108002.	2.5	8
29	Lipid distribution in human knee and hip articular cartilage correlated to tissue surface roughness and surface active phospholipid layer presence: evidence of cooperative interfacial lipid delivery mechanisms. Osteoarthritis and Cartilage, 2014, 22, S312-S313.	1.3	3
30	Thermodiffusion as a close-to-interface effect that matters in non-isothermal (dis)orderly protein aggregations. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 2881-2887.	2.1	4
31	Some conceptual thoughts toward nanoscale oriented friction in a model of articular cartilage. Mathematical Biosciences, 2013, 244, 188-200.	1.9	28
32	On the origin of the phaseâ€“space diffusion limit in (dis)ordered protein aggregation. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 3155-3167.	2.6	2
33	A Method of Mechanical Control of Structure-property Relationship in Grains-containing Material Systems. Acta Physica Polonica B, 2013, 44, 1049.	0.8	3
34	Toward a Governing Mechanism of Nanoscale Articular Cartilage (Physiologic) Lubrication: Smoluchowski-type Dynamics in Amphiphile Proton Channels. Acta Physica Polonica B, 2013, 44, 1801.	0.8	7
35	The role of lamellate phospholipid bilayers in lubrication of joints. Acta of Bioengineering and Biomechanics, 2012, 14, 101-6.	0.4	14
36	Controlling protein crystal growth rate by means of temperature. Journal of Physics Condensed Matter, 2011, 23, 235101.	1.8	14

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37	Jan Czochralski, the pioneer of crystal research. Europhysics News, 2011, 42, 22-24.	0.3	0
38	Revealing solâ€“gel type main effects by exploring a molecular cluster behavior in model in-plane amphiphilic aggregations. Physica A: Statistical Mechanics and Its Applications, 2010, 389, 3053-3068.	2.6	2
39	The ultra-low friction of the articular surface is pH-dependent and is built on a hydrophobic underlay including a hypothesis on joint lubrication mechanism. Tribology International, 2010, 43, 1719-1725.	5.9	23
40	On morphological selection rule of noisy character applied to model (dis)orderly protein formations. Journal of Chemical Physics, 2010, 132, 195103.	3.0	5
41	Comment on â€œHow skew distributions emerge in evolving systemsâ€•by Choi M. Y. et al.. Europhysics Letters, 2010, 89, 40002.	2.0	4
42	Supermolecular structure formation of PMP membranes: Theoretical argumentation in terms of the experimental evidences. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 163, 105-113.	3.5	2
43	Directed Ion Transport as Virtual Cause of Some Facilitated Frictionâ€“Lubrication Mechanism Prevailing in Articular Cartilage: A Hypothesis. Tribology Letters, 2008, 30, 83-90.	2.6	17
44	On the spherical prototype of a complex dissipative late-stage formation seen in terms of least action Vojtaâ€“Natanson principle. BioSystems, 2008, 94, 242-247.	2.0	4
45	Simple example of structure versus property relationship applied to a reduced-friction biosystem, a quite personal opinion. BioSystems, 2008, 94, 215-217.	2.0	5
46	Editorial introduction to the special issue on bio(nano)materials with structureâ€“property relationship. BioSystems, 2008, 94, 191-192.	2.0	1
47	On the formation of crystalline microstructures of monolayers seen in terms of qualitative diffusion-type models at mesoscale. Technical Physics Letters, 2008, 34, 803-805.	0.7	3
48	Growing lysozyme crystals under various physicochemical conditions: Computer modelling. Journal of Non-Crystalline Solids, 2008, 354, 4221-4226.	3.1	2
49	Thermokinetic Approach of Single Particles and Clusters Involving Anomalous Diffusion under Viscoelastic Response. Journal of Physical Chemistry B, 2007, 111, 2293-2298.	2.6	33
50	Soft-Material Dissipative Formation by a Kramers-Type Picture. Research Letters in Materials Science, 2007, 2007, 1-4.	0.2	0
51	Kineticâ€“thermodynamic effects accompanying model protein-like aggregation: The wave-like limit and beyond it. Physica A: Statistical Mechanics and Its Applications, 2007, 373, 43-57.	2.6	16
52	On the Protein Crystal Formation as an Interface-Controlled Process with Prototype Ion-Channeling Effect. Journal of Biological Physics, 2007, 33, 313-329.	1.5	9
53	On the Harmonic-Mean Property of Model Dispersive Systems Emerging Under Mononuclear, Mixed and Polynuclear Path Conditions. , 2007, , 283-296.		2
54	COMPUTER MODEL OF A LYSOZYME CRYSTAL GROWTH WITH/WITHOUT NANOTEMPLATE â€” A COMPARISON. International Journal of Modern Physics C, 2006, 17, 1359-1366.	1.7	6

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55	COMPUTER MODEL OF BIOPOLYMER CRYSTAL GROWTH AND AGGREGATION BY ADDITION OF MACROMOLECULAR UNITS â€" A COMPARATIVE STUDY. International Journal of Modern Physics C, 2006, 17, 1037-1053.	1.7	8
56	Agglomeration/Aggregation and Chaotic Behaviour in d-Dimensional Spatio-Temporal Matter Rearrangements Number-Theoretic Aspects. , 2006, , 275-294.		3
57	On temperature- and space-dimension dependent matter agglomerations in a mature growing stage. Chemical Physics, 2005, 310, 153-161.	1.9	15
58	On the elastic contribution to crystal growth in complex environments. Physica Status Solidi (B): Basic Research, 2005, 242, 538-549.	1.5	7
59	Czochralski's contribution: 50 years on. Europhysics News, 2004, 35, 20-22.	0.3	0
60	On the two principal curvatures as potential barriers in a model of complex matter agglomeration. Chemical Physics, 2003, 293, 169-177.	1.9	20
61	Finite volume effects in a model grain growth. Physica A: Statistical Mechanics and Its Applications, 2003, 325, 284-291.	2.6	8
62	Nonequilibrium thermodynamics versus model grain growth: derivation and some physical implications. Physica A: Statistical Mechanics and Its Applications, 2003, 326, 333-343.	2.6	29
63	MULTILINEAL RANDOM PATTERNS EVOLVING SUBDIFFUSIVELY IN SQUARE LATTICE. Fractals, 2003, 11, 233-241.	3.7	21
64	CURVATURE EFFECTS IN CLUSTERS GROWN IN A 2D DISCRETE SPACE: AN ALGEBRAIC APPROACH. International Journal of Modern Physics C, 2002, 13, 1285-1299.	1.7	1
65	A Kinetic Model of Protein Crystal Growth in Mass Convection Regime. Crystal Research and Technology, 2002, 37, 281-291.	1.3	23
66	MODEL MULTILINEAL PATTERN FORMATION: A COMPUTER EXPERIMENT. Computational Methods in Science and Technology, 2001, 7, 75-90.	0.3	1
67	On the kinetics of polymer crystallization: a possible mechanism. Journal of Molecular Liquids, 2000, 86, 237-247.	4.9	8
68	On the crystalline-amorphous supermolecular structure of poly(4-methyl-1-pentene) films cast from solution: experimental evidences and theoretical remarks. Journal of Molecular Liquids, 2000, 86, 249-257.	4.9	14
69	Stochastic Evolution of a Discrete Line: Numerical Results. , 2000, , 496-506.		1
70	Polymorphic phase transitions in systems evolving in a two-dimensional discrete space. Physical Review E, 1999, 60, 1252-1261.	2.1	11
71	Fractal-type relations and extensions suitable for systems of evolving polycrystalline microstructures. Physica A: Statistical Mechanics and Its Applications, 1999, 274, 325-332.	2.6	8
72	Nucleation-and-growth problem in model lipid membranes undergoing subgel phase transitions is a problem of time scale. European Physical Journal B, 1999, 9, 569-571.	1.5	9

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73	Influence of temporal surface effects on the asymptotic behaviour of the nucleation-and-growth phenomena in some biopolymeric systems. Vacuum, 1998, 50, 79-83.	3.5	6
74	Phase transformation kinetics in d-dimensional grains-containing systems: diffusion-type model. Physica A: Statistical Mechanics and Its Applications, 1998, 248, 365-378.	2.6	11
75	A Simple Phenomenological Model of the Stress Relaxation in Slowly Evolving 3D Polycrystalline Materials. Modern Physics Letters B, 1997, 11, 645-657.	1.9	8
76	Description of the kinetics of a model tribopolymerization process. Journal of Mathematical Chemistry, 1997, 22, 161-183.	1.5	7
77	Phenomenological Description for a Formation of Cylindrolites in Coâ€Operative and Dynamic 2Dâ€(Bio)Polymeric Systems. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1996, 100, 134-137.	0.9	8
78	Stochastic approach to the evolution of some polycrystalline (bio) polymeric complex systems. Chemical Physics Letters, 1996, 258, 6-12.	2.6	14
79	Stretched Exponential Kinetics of the Pressure Induced Hydration of Model Lipid Membranes. A Possible Scenario. Journal De Physique II, 1996, 6, 1537-1546.	0.9	9
80	On thermal properties of poly(4-methyl-1-pentene) membranes cast from solution. Journal of Thermal Analysis, 1995, 45, 1175-1181.	0.6	14
81	Diffusion-migration concept applied to growth and structure formation in model biomembranes. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 203, 367-372.	2.1	7
82	Diffusion of clusters with randomly growing masses. Physical Review E, 1995, 51, 5762-5769.	2.1	29
83	Non-Markovian process driven by quadratic noise: Kramers-Moyal expansion and Fokker-Planck modeling. Physical Review E, 1995, 51, 2933-2938.	2.1	27
84	A critical discussion of the analytical approach to the normal grain growth of materials in aD-dimensional space with some possible extensions to other growth phenomena. Philosophical Magazine Letters, 1994, 70, 335-343.	1.2	15
85	On anomalous diffusion of fractal clusters under certain realistic physical conditions. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1994, 16, 1265-1270.	0.4	3
86	Scaling concept applied to the defect formation caused by interactions between melittin and phosphatidylcholine (PC) model membranes. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1994, 16, 1551-1557.	0.4	0
87	Some remarks concerning spherulitic growth. International Journal of Quantum Chemistry, 1994, 52, 301-308.	2.0	10
88	The growing processes in diffusive and convective fields. Chemical Engineering Science, 1993, 48, 3713-3721.	3.8	16
89	ON ANOMALOUS DIFFUSION OF GROWING CLUSTERS. Fractals, 1993, 01, 875-880.	3.7	6
90	On the diffusion-driven growth: The perturbed sphere problem revisited. European Physical Journal D, 1992, 42, 577-590.	0.4	6