Zoltan Horvolgyi

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6468917/publications.pdf

Version: 2024-02-01

49 papers	1,051 citations	361045 20 h-index	433756 31 g-index
49 all docs	49 docs citations	49 times ranked	1031 citing authors

#	Article	IF	Citations
1	Monoparticulate Layers of Silanized Glass Spheres at the Waterâ^'Air Interface:Â Particleâ^'Particle and Particleâ^'Subphase Interactions. Langmuir, 1996, 12, 997-1004.	1.6	110
2	Self-division of giant vesicles driven by an internal enzymatic reaction. Chemical Science, 2020, 11, 3228-3235.	3.7	63
3	Spreading of hydrophobic silica beads at waterâ€"air interfaces. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1993, 71, 327-335.	2.3	53
4	Surface free energy of natural and surface-modified tropical and European wood species. Journal of Adhesion Science and Technology, 2004, 18, 687-713.	1.4	53
5	Eco-friendly indigo carmine-loaded chitosan coatings for improved anti-corrosion protection of zinc substrates. Carbohydrate Polymers, 2019, 215, 63-72.	5.1	47
6	Wetting behaviour of silanized glass microspheres at water-air interfaces: a Wilhelmy film balance study. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1999, 156, 501-507.	2.3	45
7	Eliminating Surface Pressure Gradient Effects in Contact Angle Determination of Nano- and Microparticles Using a Film Balance. Langmuir, 1998, 14, 6501-6504.	1.6	44
8	Contact angle determination of nanoparticles: film balance and scanning angle reflectometry studies. Physical Chemistry Chemical Physics, 2007, 9, 6359.	1.3	43
9	Compression of Langmuir Films Composed of Fine Particles:Â Collapse Mechanism and Wettability. Langmuir, 2006, 22, 6944-6950.	1.6	41
10	Nanostructured silica Langmuirâ€"Blodgett films with antireflective properties prepared on glass substrates. Thin Solid Films, 2005, 484, 310-317.	0.8	36
11	Ellipsometry of Silica Nanoparticulate Langmuirâ^'Blodgett Films for the Verification of the Validity of Effective Medium Approximations. Langmuir, 2006, 22, 8416-8423.	1.6	36
12	Mesoporous silica coatings with improved corrosion protection properties. Microporous and Mesoporous Materials, 2015, 206, 102-113.	2.2	34
13	Water-repellent acylated and silylated wood samples and their surface analytical characterization. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 319, 204-212.	2.3	30
14	Langmuirâ€"Blodgett films composed of size-quantized ZnO nanoparticles: Fabrication and optical characterization. Thin Solid Films, 2006, 515, 2587-2595.	0.8	29
15	Langmuir and Langmuirâ^'Blodgett Films of Bidisperse Silica Nanoparticles. Langmuir, 2010, 26, 2694-2699.	1.6	28
16	Experimental study of the aggregate structures formed in the boundary layer of waterâ€"air phases. Colloids and Surfaces, 1991, 60, 79-95.	0.9	24
17	Solâ€"gel-derived mesoporous SiO2/ZnO active coating and development of multifunctional ceramic membranes. Separation and Purification Technology, 2008, 59, 304-309.	3.9	23
18	Carbon nanosphere templates for the preparation of inverse opal titania photonic crystals by atomic layer deposition. Applied Surface Science, 2020, 504, 144443.	3.1	23

#	Article	IF	Citations
19	Silylation of wood for potential protection against biodegradation. An ATR-FTIR, ESCA and contact angle study. Polymers for Advanced Technologies, 2003, 14, 790-795.	1.6	21
20	Wettability and spectroscopic characterization of silylated wood samples. Polymers for Advanced Technologies, 2006, 17, 932-939.	1.6	21
21	On the structure formation of hydrophobed particles in the boundary layer of water and octane phases. Colloid and Polymer Science, 1993, 271, 396-403.	1.0	16
22	Complex Langmuirâ"Blodgett Films of SiO₂ and ZnO Nanoparticles with Advantageous Optical and Photocatalytical Properties. Langmuir, 2008, 24, 12575-12580.	1.6	16
23	Silica sol â€" gel protective coatings against corrosion of zinc substrates. Periodica Polytechnica: Chemical Engineering, 2014, 58, 61-66.	0.5	16
24	Bilayered (silicaâ€"chitosan) coatings for studying dye release in aqueous media: The role of chitosan properties. Carbohydrate Polymers, 2016, 136, 137-145.	5.1	15
25	Robust Contact Angle Determination for Needle-in-Drop Type Measurements. ACS Omega, 2019, 4, 18465-18471.	1.6	15
26	Chitosan coatings ionically cross-linked with ammonium paratungstate as anticorrosive coatings for zinc. European Polymer Journal, 2019, 118, 205-212.	2.6	15
27	Structure formation and interaction of silanized glass beads at water-fluid interfaces: a redispersability study. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1996, 108, 147-157.	2.3	14
28	Comparison of aggregation of rodlike and spherical particles: A fractal analysis. Journal of Chemical Physics, 1997, 107, 7451-7458.	1.2	14
29	Modeling the Structure Formation of Particulate Langmuir Films: the Effect of Polydispersity. Langmuir, 2007, 23, 5445-5451.	1.6	14
30	Accumulation of 2-Acetylamino-5-mercapto-1,3,4-thiadiazole in chitosan coatings for improved anticorrosive effect on zinc. International Journal of Biological Macromolecules, 2020, 142, 423-431.	3.6	13
31	Estimation of contact angle for hydrophobic silica nanoparticles in their hexagonally ordered layer. Materials Chemistry and Physics, 2013, 140, 602-609.	2.0	11
32	Influence of embedded inhibitors on the corrosion resistance of zinc coated with mesoporous silica layers. Surfaces and Interfaces, 2019, 15, 216-223.	1.5	11
33	Aggregation kinetics in two dimensions: Real experiments and computer simulations. Journal of Chemical Physics, 2001, 114, 520.	1.2	10
34	Experimental studies on the control of slug flow by interfacial forces in silylated glass capillaries. Colloids and Surfaces, 1991, 55, 257-270.	0.9	9
35	Stabilization of gas chromatographic stationary phases with nanosized particles. Chromatographia, 2001, 53, 69-75.	0.7	7
36	Durability of microporous hybrid silica coatings: Optical and wetting properties. Thin Solid Films, 2020, 699, 137914.	0.8	7

#	Article	IF	Citations
37	Two-Dimensional Aggregation of Rod-Like Particles:â€‰ A Model Investigation. Journal of Physical Chemistry B, 2002, 106, 2404-2414.	1.2	6
38	Obtaining surface tension from contact angle data by the individual representation approach. Colloid and Polymer Science, 2007, 285, 1009-1018.	1.0	6
39	Characterisation of Solid Supported Nanostructured Thin Films by Scanning Angle Reflectometry and UV-Vis Spectrometry. Materials Science Forum, 2007, 537-538, 329-336.	0.3	5
40	Ammonia-vapour-induced two-layer transformation of mesoporous silica coatings on various substrates. Vacuum, 2021, 192, 110415.	1.6	5
41	Weak flocculation of aqueous kaolin suspensions initiating by NaCMC with different molecular weights. Macromolecular Symposia, 2003, 202, 307-324.	0.4	4
42	Preparation and characterization of Thioflavin T doped silica nanoparticles. Periodica Polytechnica: Chemical Engineering, 2009, 53, 49.	0.5	3
43	Combined Langmuirâ€“Blodgett and sol-gel coatings. Thin Solid Films, 2012, 520, 2537-2544.	0.8	3
44	Photoinduced processes of adsorbed and associated dye molecules in mesoporous titania coatings. Dyes and Pigments, 2019, 167, 109-119.	2.0	3
45	Effect of Silver Modification on the Photoactivity of Titania Coatings with Different Pore Structures. Nanomaterials, 2021, 11, 2240.	1.9	3
46	Plasma-assisted template removal and consolidation of silica coatings on polycarbonate. Thin Solid Films, 2021, 738, 138976.	0.8	3
47	Nanostructured antireflective bilayers: Optical design and preparation. Materials Chemistry and Physics, 2014, 145, 176-185.	2.0	1
48	Thin layer photocatalysts of TiO2-Ag composites. Studia Universitatis Babes-Bolyai Chemia, 2019, 64, 81-98.	0.1	1
49	Chemically modified chitosan coatings: wetting and electrochemical studies. Studia Universitatis Babes-Bolyai Chemia, 2020, 65, 63-79.	0.1	1