

# Andras Deak

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3605236/publications.pdf>

Version: 2024-02-01

88  
papers

1,519  
citations

279487

23  
h-index

360668

35  
g-index

89  
all docs

89  
docs citations

89  
times ranked

2555  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Three-Dimensional Analysis of Magnetic Nanopattern Formation in FeRh Thin Films on MgO Substrates: Implications for Spintronic Devices. ACS Applied Nano Materials, 2022, 5, 5516-5526.	2.4	4
2	Current-induced switching of antiferromagnetic order in $\text{Mn}_2\text{Sb}$ from first principles. Physical Review B, 2022, 105, .		
3	Additive and subtractive modification of butterfly wing structural colors. Colloids and Interface Science Communications, 2021, 40, 100346.	2.0	9
4	Element-Specific Magnetization Damping in Ferrimagnetic $\text{DyCo}_5$ Alloys Revealed by Ultrafast X-ray Measurements. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100047.	1.2	7
5	Exceptional sign changes of the nonlocal spin Seebeck effect in antiferromagnetic hematite. Physical Review B, 2021, 103, .	1.1	14
6	Spontaneous creation and annihilation dynamics of magnetic skyrmions at elevated temperature. Physical Review B, 2021, 104, .	1.1	8
7	Tuning the nanoscale rippling of graphene with PEGylated gold nanoparticles and ion irradiation. Carbon Trends, 2021, 5, 100080.	1.4	0
8	Chemical Interface Damping as an Indicator for Hexadecyltrimethylammonium Bromide Replacement by Short-Chain Thiols on Gold Nanorods. Journal of Physical Chemistry C, 2020, 124, 19736-19742.	1.5	6
9	Vapour sensing properties of graphene-covered gold nanoparticles. Nanoscale Advances, 2019, 1, 2408-2415.	2.2	2
10	Preparation and Characterization of Perforated SERS Active Array for Particle Trapping and Sensitive Molecular Analysis. Biosensors, 2019, 9, 93.	2.3	7
11	Robust Contact Angle Determination for Needle-in-Drop Type Measurements. ACS Omega, 2019, 4, 18465-18471.	1.6	15
12	Novel method for the production of SiC micro and nanopatterns. Surface and Coatings Technology, 2019, 372, 427-433.	2.2	6
13	Exchange interactions from a nonorthogonal basis set: From bulk ferromagnets to the magnetism in low-dimensional graphene systems. Physical Review B, 2019, 99, .	1.1	7
14	Detecting spatial rearrangement of individual gold nanoparticle heterodimers. Physical Chemistry Chemical Physics, 2019, 21, 10146-10151.	1.3	2
15	Weak ferromagnetism in hexagonal $\text{Mn}_3\text{Z}$ alloys ( $\text{Z}=\text{Sn,Ge,Ga}$ ). Physical Review B, 2019, 100, .	1.1	7
16	Relativistic spin-polarized KKR theory for superconducting heterostructures: Oscillating order parameter in the Au layer of Nb/Au/Fe trilayers. Physical Review B, 2018, 97, .	1.1	18
17	Investigation of Patchiness on Tip-Selectively Surface-Modified Gold Nanorods. Journal of Physical Chemistry C, 2018, 122, 1706-1710.	1.5	9
18	CoPt/TiN films nanopatterned by RF plasma etching towards dot-patterned magnetic media. Applied Surface Science, 2018, 435, 31-38.	3.1	6

#	ARTICLE	IF	CITATIONS
19	Magnetic excitations in non-collinear antiferromagnetic Weyl semimetal Mn <sub>3</sub> Sn. Npj Quantum Materials, 2018, 3, .	1.8	45
20	Existence of a Precipitation Threshold in the Electrostatic Precipitation of Oppositely Charged Nanoparticles. Angewandte Chemie, 2018, 130, 16294-16298.	1.6	4
21	SERS Activity of Reporter-Particle-Loaded Single Plasmonic Nanovoids. Journal of Physical Chemistry C, 2018, 122, 23683-23690.	1.5	8
22	Existence of a Precipitation Threshold in the Electrostatic Precipitation of Oppositely Charged Nanoparticles. Angewandte Chemie - International Edition, 2018, 57, 16062-16066.	7.2	14
23	Gold Nanorod Plasmon Resonance Damping Effects on a Nanopatterned Substrate. Journal of Physical Chemistry C, 2018, 122, 24941-24948.	1.5	5
24	Site-Resolved Contributions to the Magnetic-Anisotropy Energy and Complex Spin Structure of $\text{Fe}/\text{MgO}$ Sandwiches. Physical Review Applied, 2018, 9, .	1.5	6
25	Interaction of Positively Charged Gold Nanoparticles with Cancer Cells Monitored by an in Situ Label-Free Optical Biosensor and Transmission Electron Microscopy. ACS Applied Materials & Interfaces, 2018, 10, 26841-26850.	4.0	39
26	A technique for nanopatterning diverse materials. Surface and Coatings Technology, 2017, 313, 115-120.	2.2	2
27	Formation and stability of metastable skyrmionic spin structures with various topologies in an ultrathin film. Physical Review B, 2017, 95, .	1.1	61
28	Structural and Optical Properties of Gold/Silica "Mushroom" Particles Prepared by Interfacial Templating. Particle and Particle Systems Characterization, 2017, 34, 1600291.	1.2	5
29	Detecting patchy nanoparticle assembly at the single-particle level. Nanoscale, 2017, 9, 10344-10349.	2.8	7
30	Magnetization compensation and spin reorientation transition in ferrimagnetic $\text{DyCo}_5$ : Multiscale modeling and element-specific measurements. Physical Review B, 2017, 96, .	1.8	18
31	Role of temperature-dependent spin model parameters in ultra-fast magnetization dynamics. Journal of Physics Condensed Matter, 2017, 29, 314003.	0.7	1
32	Optical Simulations of Self-assembly Relevant Gold Aggregates: A Comparative Study. Periodica Polytechnica: Chemical Engineering, 2016, 60, 244-251.	0.5	7
33	Preparation and characterization of two-dimensional metallic nanoparticle and void films derived from a colloidal template layer. Optics Express, 2016, 24, A424.	1.7	2
34	Nanoparticle Clusters: Assembly and Control Over Internal Order, Current Capabilities, and Future Potential. Advanced Materials, 2016, 28, 5400-5424.	11.1	91
35	Skyrmions with Attractive Interactions in an Ultrathin Magnetic Film. Physical Review Letters, 2016, 117, 157205.	2.9	80
36	Anisotropic nanoparticles: general discussion. Faraday Discussions, 2016, 191, 229-254.	1.6	8

#	ARTICLE	IF	CITATIONS
37	Mapping the nanomechanical properties of graphene suspended on silica nanoparticles. <i>Journal of Experimental Nanoscience</i> , 2016, 11, 1011-1018.	1.3	2
38	Self-assembly of like-charged nanoparticles into Voronoi diagrams. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 25735-25740.	1.3	6
39	Janus and patchy nanoparticles: general discussion. <i>Faraday Discussions</i> , 2016, 191, 117-139.	1.6	3
40	WO <sub>3</sub> nano-rods sensitized with noble metal nano-particles for H <sub>2</sub> S sensing in the ppb range. <i>Materials Research Bulletin</i> , 2016, 84, 480-485.	2.7	23
41	Nanoparticle Assemblies: Nanoparticle Clusters: Assembly and Control Over Internal Order, Current Capabilities, and Future Potential ( <i>Adv. Mater.</i> 27/2016). <i>Advanced Materials</i> , 2016, 28, 5764-5764.	11.1	3
42	Assembling patchy nanorods with spheres: limitations imposed by colloidal interactions. <i>Nanoscale</i> , 2016, 8, 3523-3529.	2.8	14
43	Identification of Dewetting Stages and Preparation of Single Chain Gold Nanoparticle Rings by Colloidal Lithography. <i>Langmuir</i> , 2016, 32, 963-971.	1.6	5
44	Aggregation kinetics and cluster structure of amino-PEG covered gold nanoparticles. <i>RSC Advances</i> , 2016, 6, 27151-27157.	1.7	13
45	Langmuir-Blodgett Films of Gold Nanorods with Different Silica Shell Thicknesses. <i>Periodica Polytechnica: Chemical Engineering</i> , 2015, 59, 104-110.	0.5	3
46	Gas Sensitivity Enhancement of WO <sub>3</sub> Nano-rods by Gold Nanoparticles. <i>Procedia Engineering</i> , 2015, 120, 1128-1131.	1.2	3
47	Magnetism of Gadolinium: A First-Principles Perspective. <i>Physical Review Letters</i> , 2015, 115, 096402.	2.9	30
48	Preparation of Compact Nanoparticle Clusters from Polyethylene Glycol-Coated Gold Nanoparticles by Fine-Tuning Colloidal Interactions. <i>Langmuir</i> , 2015, 31, 2662-2668.	1.6	32
49	The structure and properties of graphene on gold nanoparticles. <i>Nanoscale</i> , 2015, 7, 5503-5509.	2.8	50
50	Introducing nanoscaled surface morphology and percolation barrier network into mesoporous silica coatings. <i>RSC Advances</i> , 2015, 5, 60041-60053.	1.7	11
51	Evolution of magnetism on a curved nano-surface. <i>Nanoscale</i> , 2015, 7, 12878-12887.	2.8	9
52	Magnetic correlations beyond the Heisenberg model in an Fe monolayer on Rh(111). <i>Journal of Physics Condensed Matter</i> , 2015, 27, 146003.	0.7	2
53	Self-Assembly of Charged Nanoparticles by an Autocatalytic Reaction Front. <i>Langmuir</i> , 2015, 31, 12019-12024.	1.6	10
54	Ar <sup>+</sup> ion irradiation-induced reorganization of colloidal silica nanoparticles in Langmuir-Blodgett monolayers. <i>Thin Solid Films</i> , 2015, 574, 136-145.	0.8	4



#	ARTICLE	IF	CITATIONS
73	Langmuir and Langmuir-Blodgett Films of Bidisperse Silica Nanoparticles. <i>Langmuir</i> , 2010, 26, 2694-2699.	1.6	28
74	A 3D-RBS study of irradiation-induced deformation and masking properties of ordered colloidal nanoparticulate masks. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2010, 268, 79-86.	0.6	18
75	Optical Models for the Characterization of Silica Nanosphere Monolayers Prepared by the Langmuir-Blodgett Method Using Ellipsometry in the Quasistatic Regime. <i>Langmuir</i> , 2010, 26, 16122-16128.	1.6	9
76	Finite permutable Putcha semigroups. <i>Acta Scientiarum Mathematicarum</i> , 2010, 76, 397-410.	0.2	0
77	Testing accuracy of analytical methods by regression. <i>Journal of Chemometrics</i> , 2009, 23, 211-216.	0.7	3
78	Comparative investigation of Stober silica Langmuir-Blodgett films as optical model structures. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2008, 205, 936-940.	0.8	2
79	Use of the optical admittance function and its WKB approximation to simulate and evaluate transmittance spectra of graded-index colloidal films. <i>Journal of Optics</i> , 2007, 9, 920-930.	1.5	23
80	Characterisation of Solid Supported Nanostructured Thin Films by Scanning Angle Reflectometry and UV-Vis Spectrometry. <i>Materials Science Forum</i> , 2007, 537-538, 329-336.	0.3	5
81	Contact angle determination of nanoparticles: film balance and scanning angle reflectometry studies. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 6359.	1.3	43
82	Regular patterning of PS substrates by a self-assembled mask. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2007, 4, 2021-2025.	0.8	0
83	Large area self-assembled masking for photonic applications. <i>Applied Physics Letters</i> , 2006, 89, 063104.	1.5	30
84	Ellipsometry of Silica Nanoparticulate Langmuir-Blodgett Films for the Verification of the Validity of Effective Medium Approximations. <i>Langmuir</i> , 2006, 22, 8416-8423.	1.6	36
85	Complex Langmuir-Blodgett films from silica nanoparticles: An optical spectroscopy study. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2006, 278, 10-16.	2.3	45
86	Langmuir-Blodgett films composed of size-quantized ZnO nanoparticles: Fabrication and optical characterization. <i>Thin Solid Films</i> , 2006, 515, 2587-2595.	0.8	29
87	Nanostructured silica Langmuir-Blodgett films with antireflective properties prepared on glass substrates. <i>Thin Solid Films</i> , 2005, 484, 310-317.	0.8	36
88	CONTACT ANGLE DETERMINATION OF NANOPARTICLES: REAL EXPERIMENTS AND COMPUTER SIMULATIONS. <i>Journal of Adhesion</i> , 2004, 80, 1055-1072.	1.8	18