Alexander I Shames

List of Publications by Year
in descending order

91 papers	1,833 citations	218381 26 h-index	301761 39 g-index
91 all docs	91 docs citations	91 times ranked	2225 citing authors

#	Article	IF	Citations
1	Review Article: Synthesis, properties, and applications of fluorescent diamond particles. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, 030802.	0.6	115
2	Nuclear magnetic resonance study of ultrananocrystalline diamonds. European Physical Journal B, 2006, 52, 397-402.	0.6	86
3	Factors Affecting DNP NMR in Polycrystalline Diamond Samples. Journal of Physical Chemistry C, 2011, 115, 19041-19048.	1.5	72
4	Observation of magnetic inhomogeneities in crystalline-doped manganites by electron magnetic resonance. Physical Review B, 2001, 64, .	1.1	71
5	Efficient solar cells are more stable: the impact of polymer molecular weight on performance of organic photovoltaics. Journal of Materials Chemistry A, 2016, 4, 7274-7280.	5.2	66
6	Paramagnetic Impurities in Graphene Oxide. Applied Magnetic Resonance, 2013, 44, 107-116.	0.6	59
7	Disorder-induced phase coexistence in bulk doped manganites and its suppression in nanometer-sized crystals: The case ofLa0.9Ca0.1MnO3. Physical Review B, 2007, 76, .	1.1	57
8	Structure and Bonding in Fluorinated Nanodiamond. Journal of Physical Chemistry C, 2010, 114, 774-782.	1.5	51
9	Electron magnetic resonance inLa1â^’xCaxMnO3(x=0.18,0.20,0.22):â€ƒCrossing through the boundary between ferromagnetic insulating and metallic ground states. Physical Review B, 2003, 68, .	1.1	46
10	Light-induced generation of free radicals by fullerene derivatives: an important degradation pathway in organic photovoltaics?. Journal of Materials Chemistry A, 2017, 5, 8044-8050.	5.2	46
11	Gd(III)-Grafted Detonation Nanodiamonds for MRI Contrast Enhancement. Journal of Physical Chemistry C, 2019, 123, 2627-2631.	1.5	46
12	Structure and magnetic properties of detonation nanodiamond chemically modified by copper. Journal of Applied Physics, 2010, 107, .	1.1	45
13	Nanometer size effect on magnetic order in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>La</mml:mtext></mml:mrow><mml:mrow><mml:mn>0.4</mm Predominant influence of doped electron localization. Physical Review B, 2008, 78, .	1.1	41
14	Proton magnetic resonance study of diamond nanoparticles decorated by transition metal ions. Journal Physics D: Applied Physics, 2011, 44, 125303.	1.3	40
15	Magnetic resonance tracking of fluorescent nanodiamond fabrication. Journal Physics D: Applied Physics, 2015, 48, 155302.	1.3	38
16	Monodisperse Five-Nanometer-Sized Detonation Nanodiamonds Enriched in Nitrogen-Vacancy Centers. ACS Nano, 2019, 13, 6461-6468.	7.3	38
17	Magnetic Resonance Study of Detonation Nanodiamonds with Surface Chemically Modified by Transition Metal Ions. Applied Magnetic Resonance, 2009, 36, 317-329.	0.6	37
18	PVPâ€coated Gdâ€grafted nanodiamonds as a novel and potentially safer contrast agent for in vivo MRI. Magnetic Resonance in Medicine, 2021, 86, 935-942.	1.9	32

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19	Direct Synthesis of Polyaryls by Consecutive Oxidative Cross-Coupling of Phenols with Arenes. Organic Letters, 2016, 18, 4324-4327.	2.4	31
20	Soluble Complexes of Cobalt Oxide Fragments Bring the Unique CO₂ Photoreduction Activity of a Bulk Material into the Flexible Domain of Molecular Science. Journal of the American Chemical Society, 2021, 143, 20769-20778.	6.6	30
21	Magnetic, transport, and electron magnetic resonance properties ofPr0.8Ca0.2MnO3single crystals. Physical Review B, 2003, 68, .	1.1	29
22	From Fancy Blue to Red: Controlled Production of a Vibrant Color Spectrum of Fluorescent Diamond Particles. Advanced Functional Materials, 2019, 29, 1808362.	7.8	29
23	Polysilyl radicals: EPR study of the formation and decomposition of star polysilanes. Applied Magnetic Resonance, 2000, 18, 425-434.	0.6	28
24	In situ Generation of Superoxide Anion Radical in Aqueous Medium under Ambient Conditions. ChemPhysChem, 2013, 14, 4158-4164.	1.0	28
25	Magnetic Resonance Study of Gadolinium-Grafted Nanodiamonds. Journal of Physical Chemistry C, 2016, 120, 19804-19811.	1.5	28
26	Do food microemulsions and dietary mixed micelles interact?. Colloids and Surfaces B: Biointerfaces, 2010, 77, 22-30.	2.5	27
27	On the correlation between the structure of lyotropic carriers and the delivery profiles of two common NSAIDs. Colloids and Surfaces B: Biointerfaces, 2014, 122, 231-240.	2.5	27
28	Size dependence of¹³C nuclear spin-lattice relaxation in micro- and nanodiamonds. Journal of Physics Condensed Matter, 2015, 27, 072203.	0.7	26
29	XRD, NMR, and EPR study of polycrystalline microâ€•and nanoâ€•diamonds prepared by a shock wave compression method. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2400-2409.	0.8	25
30	Inherent inhomogeneity in the crystals of low-doped lanthanum manganites. Applied Physics Letters, 2008, 92, .	1.5	24
31	Photoredoxâ€Mediated Reaction of <i>gem</i>â€Diborylalkenes: Reactivity Toward Diverse 1,1â€Bisborylalkanes. Chemistry - A European Journal, 2020, 26, 5360-5364.	1.7	24
32	Changes in the photoelectrical properties and generation of photoinduced defects under light/air exposure of C60 thin films. Journal of Applied Physics, 1998, 84, 3333-3337.	1.1	23
33	Fluence-Dependent Evolution of Paramagnetic Triplet Centers in e-Beam Irradiated Microcrystalline Ib Type HPHT Diamond. Journal of Physical Chemistry C, 2017, 121, 22335-22346.	1.5	22
34	Chemical disorder influence on magnetic state of optimally-doped La0.7Ca0.3MnO3. Journal of Applied Physics, 2011, 110, .	1.1	21
35	Silver(II) Complexes of Tetraazamacrocycles: Studies on e.p.r. and Electron Transfer Kinetics with Thiosulfate Ion. Transition Metal Chemistry, 2004, 29, 463-470.	0.7	20
36	Parasitic Light Absorption Processes in Transparent Polycrystalline <scp><scp>MgAl</scp></scp>₂<scp><scp>O</scp></scp>₄ and <scp>YAG</scp>. Journal of the American Ceramic Society, 2013, 96, 3523-3529.	1.9	20

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37	Magnetic Correlations and Spin Dynamics in Crystalline La$_{1-x}$Ca$_{x}$MnO$_{3} (x = 0, 0.1, 0.2,) Tj ETQq1 1 0.784314 rgBT /Ov	1.2	18
38	Does Progressive Nitrogen Doping Intensify Negatively Charged Nitrogen Vacancy Emission from e-Beam-Irradiated Ib Type High-Pressureâ€"High-Temperature Diamonds?. Journal of Physical Chemistry C, 2017, 121, 5232-5240.	1.5	18
39	Magnetic resonance study of multiwall boron nitride nanotubes. Physical Review B, 2005, 72, .	1.1	17
40	Native and induced triplet nitrogen-vacancy centers in nano- and micro-diamonds: Half-field electron paramagnetic resonance fingerprint. Applied Physics Letters, 2014, 104, .	1.5	17
41	Thiourea-Mediated Halogenation of Alcohols. Journal of Organic Chemistry, 2020, 85, 12901-12911.	1.7	17
42	W/O Microemulsions as Dendrimer Nanocarriers: An EPR Study. Journal of Physical Chemistry B, 2012, 116, 12633-12640.	1.2	16
43	Photoxidation of Benzyl Alcohol with Heterogeneous Photocatalysts in the UV Range: The Complex Interplay with the Autoxidative Reaction. ChemCatChem, 2018, 10, 2541-2545.	1.8	16
44	Thermodynamics of Paramagnetic-Ferromagnetic Phase Transition in ${m La}_{0.7}{m Ca}_{0.3}{m MnO}_{3}$ Manganite: â€œGriffiths singularityâ€•versus Chemical Disorder and Lattice Effects. IEEE Transactions on Magnetics, 2010, 46, 1299-1302.	1.2	14
45	Spin<i>S</i>= 1 centers: a universal type of paramagnetic defects in nanodiamonds of dynamic synthesis. Journal of Physics Condensed Matter, 2012, 24, 225302.	0.7	14
46	Assessing the outdoor photochemical stability of conjugated polymers by EPR spectroscopy. Journal of Materials Chemistry A, 2016, 4, 13166-13170.	5.2	13
47	Nearâ€Infrared Fluorescence from Siliconâ€•and Nickelâ€Based Color Centers in Highâ€Pressure Highâ€Temperature Diamond Microâ€•and Nanoparticles. Advanced Optical Materials, 2020, 8, 2001047.	3.6	11
48	High Temperature Treatment of Diamond Particles Toward Enhancement of Their Quantum Properties. Frontiers in Physics, 2020, 8, .	1.0	11
49	Magnetic phase transition in YCo3B2 studied by magnetic resonance. Journal of Applied Physics, 2005, 98, 074105.	1.1	10
50	Unusual Stabilization of Zinc Peroxide by Manganese Oxide: Mechanistic Understanding by Temperature-Dependent EPR Studies. Journal of Physical Chemistry C, 2019, 123, 20884-20892.	1.5	10
51	Identification of Barium Hydroxo-Hydroperoxostannate Precursor for Low-Temperature Formation of Perovskite Barium Stannate. Inorganic Chemistry, 2020, 59, 18358-18365.	1.9	10
52	Paramagnetic defects in nanodiamonds. , 2017, , 131-154.		9
53	Comparative electron magnetic resonance study of magnetic ordering in La1â^'xCaxMnO3 (x=0.1,0.3) bulk and nanometer sized manganite crystals. Journal of Applied Physics, 2008, 103, 07F715.	1.1	8
54	Enhanced Optical 13 C Hyperpolarization in Diamond Treated by Highâ€Temperature Rapid Thermal Annealing. Advanced Quantum Technologies, 2020, 3, 2000050.	1.8	8

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55	Sources of parasitic features in the visible range of oxide transparent ceramics absorption spectra. Journal of the American Ceramic Society, 2020, 103, 4803-4821.	1.9	8
56	Mitochondria membrane transformations in colon and prostate cancer and their biological implications. Biochimica Et Biophysica Acta - Biomembranes, 2021, 1863, 183471.	1.4	8
57	Room-temperature hyperpolarization of polycrystalline samples with optically polarized triplet electrons: pentacene or nitrogen-vacancy center in diamond?. Magnetic Resonance, 2021, 2, 33-48.	0.8	8
58	Nanometer size effects on magnetic order in La1âˆ’xCaxMnO3 (xâ€‰=â€‰0.5 and 0.6) manganites, probed by ferromagnetic resonance. Journal of Applied Physics, 2012, 111, 07D701.	1.1	7
59	The redox chemistry of copper tetraphenylporphyrin revisited. Journal of Porphyrins and Phthalocyanines, 2012, 16, 1124-1131.	0.4	7
60	Light-induced electron paramagnetic resonance evidence of charge transfer in electrospun fibers containing conjugated polymer/fullerene and conjugated polymer/fullerene/carbon nanotube blends. Applied Physics Letters, 2012, 100, 113303.	1.5	6
61	Novel technology for the rapid total mineralization of carbon tetrachloride under ambient conditions. RSC Advances, 2013, 3, 24440.	1.7	6
62	Influence of chemical treatment on the microstructure of nanographite. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 2765-2772.	0.8	6
63	How to Identify, Attribute, and Quantify Triplet Defects in Ensembles of Small Nanoparticles. Journal of Physical Chemistry Letters, 2020, 11, 7438-7442.	2.1	6
64	Anomalous Formation of Irradiation-Induced Nitrogen-Vacancy Centers in 5 nm-Sized Detonation Nanodiamonds. Journal of Physical Chemistry C, 2022, 126, 5206-5217.	1.5	6
65	Spin Diffusion in Pure Multiple-Pulse NQR. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2000, 55, 54-60.	0.7	5
66	EMR Probing of Magnetic Ordering in ${m Pr}_{1-x}{m Sr}_{x}{m MnO}_{3}$ ($x=$ 0.22, 0.24, 0.26) Manganite Single Crystals. IEEE Transactions on Magnetics, 2008, 44, 2918-2921.	1.2	5
67	Behavior of PPI-G2 Dendrimer in a Microemulsion. Journal of Physical Chemistry B, 2017, 121, 2339-2349.	1.2	5
68	Structural Characterization of Reconstituted Bioactive-Loaded Nanodomains after Embedding in Films Using Electron Paramagnetic Resonance and Self-Diffusion Nuclear Magnetic Resonance Techniques. Langmuir, 2019, 35, 7879-7886.	1.6	5
69	All-inorganic ferric wheel based on hexaniobate-anion linkers. Dalton Transactions, 2022, 51, 8600-8604.	1.6	5
70	Triphenyllead Hydroperoxide: A 1D Coordination Peroxo Polymer, Single-Crystal-to-Single-Crystal Disproportionation to a Superoxo/Hydroxo Complex, and Application in Catalysis. Inorganic Chemistry, 2022, 61, 8193-8205.	1.9	5
71	NMR Studies of electrostatic fields around charged monosaccharides and related molecules. Israel Journal of Chemistry, 2000, 40, 263-269.	1.0	4
72	Comparative Study of Magnetic Ordering in Bulk and Nano-Grained La$_{0.4}$Ca$_{0.6}$MnO$_{3}$ Manganite. IEEE Transactions on Magnetics, 2008, 44, 2914-2917.	1.2	4

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73	Comment on â€œQuantification of Câ•C and Câ•O Surface Carbons in Detonation Nanodiamond by NMRâ€• Journal of Physical Chemistry C, 2015, 119, 21286-21287.	1.5	4
74	Micro-characterization of modified microemulsions loaded with gossypol, pure and extracted from cottonseed. Colloids and Surfaces B: Biointerfaces, 2019, 180, 487-494.	2.5	4
75	Stabilization of Ni(I)(1,4,8,11â€tetraazacyclotetradecane)⁺ in a Solâ€Gel Matrix: It's Plausible Use in Catalytic Processes. Israel Journal of Chemistry, 2020, 60, 557-562.	1.0	4
76	Examining relaxivities in suspensions of nanodiamonds grafted by magnetic entities: comparison of two approaches. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2020, 33, 885-888.	1.1	4
77	EPR spin labeling study of conformational transitions of Î²-glycosidase from the hyperthermophilic archaeonSulfolobus solfataricus expressed inEscherichia coli. Applied Magnetic Resonance, 2000, 18, 515-526.	0.6	3
78	Diagnostics of plasmon resonance in optical absorption spectra of nanographite aqueous suspensions. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2011, 111, 220-223.	0.2	3
79	Evolution of Triplet Paramagnetic Centers in Diamonds Obtained by Sintering of Detonation Nanodiamonds at High Pressure and Temperature. Physics of the Solid State, 2018, 60, 723-729.	0.2	3
80	A Surface Study of Ultrathin Ceria Nanoparticles Decorated with Transitionâ€Metal Ions. Particle and Particle Systems Characterization, 2019, 36, 1800452.	1.2	3
81	Pyrophosphate and ATP as Stabilizing Ligands for High-Valent Nickel Complexes. European Journal of Inorganic Chemistry, 2006, 2006, 523-525.	1.0	2
82	Electron Magnetic Resonance, Neutron Diffraction and ac Susceptibility Study of CaMn1â^'x Ru{ x O3 (x) Tj ETQq0 0 0 rgBT /Overlock 1	0.8	2
83	Examining the binding mechanism of 3,4-dihydro-3-(2-oxo-2-phenylethylidene)-quinoxalin-2(1H)-one and its fragments to Cu2+. Journal of Coordination Chemistry, 2013, 66, 2351-2366.	0.8	2
84	Fluorescent Diamond Particles: From Fancy Blue to Red: Controlled Production of a Vibrant Color Spectrum of Fluorescent Diamond Particles (Adv. Funct. Mater. 19/2019). Advanced Functional Materials, 2019, 29, 1970128.	7.8	2
85	Toward production of diamond particles with improved fluorescence uniformity. Physica B: Condensed Matter, 2020, 579, 411868.	1.3	2
86	Effect of chemical treatment on the structure of ultradisperse diamond and onion-like carbon. AIP Conference Proceedings, 2001, , .	0.3	1
87	Comment on â€œAngstrom-scale probing of paramagnetic center location in nanodiamonds by 3He NMR at low temperaturesâ€•by V. Kuzmin, K. Safiullin, G. Dolgorukov, A. Stanislavovas, E. Alakshin, T. Safin, B. Yavkin, S. Orlinskii, A. Kiiamov, M. Presnyakov, A. Klochkov and M. Tagirov, Phys. Chem. Chem. Phys., 2018, 20, 1476. Physical Chemistry Chemical Physics, 2018, 20, 27694-27696.	1.3	1
88	Magnetic resonance study of lightly boron-doped diamond. Materials Research Express, 2019, 6, 075612.	0.8	1
89	Influence of inversion level on the optical absorption spectra of Tiâ€doped transparent MgGa₂O₄ ceramics. Journal of the American Ceramic Society, 2022, 105, 5944-5955.	1.9	1
90	Carbon Encapsulated Magnetic Nanoparticles Produced by a Catalytic Disproportionation of Carbon Monoxide. Materials Research Society Symposia Proceedings, 2005, 877, 1.	0.1	0

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91	Comment on â€œSub-5 nm Nanodiamonds Fabricated by Plasma Immersion Ion Implantation as Fluorescent Probesâ€. ACS Applied Nano Materials, 2021, 4, 5621-5623.	2.4	0