

Kyriakos Porfyrakis

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7833813/publications.pdf>

Version: 2024-02-01

129
papers

3,403
citations

126708

33
h-index

168136

53
g-index

135
all docs

135
docs citations

135
times ranked

3967
citing authors

#	ARTICLE	IF	CITATIONS
1	How Surface Topography Relates to Materials' Properties. <i>Science</i> , 2002, 297, 973-976.	6.0	222
2	Bangâ€“bang control of fullerene qubits using ultrafast phase gates. <i>Nature Physics</i> , 2006, 2, 40-43.	6.5	174
3	Towards a fullerene-based quantum computer. <i>Journal of Physics Condensed Matter</i> , 2006, 18, S867-S883.	0.7	138
4	Molecular design and control of fullerene-based bi-thermoelectric materials. <i>Nature Materials</i> , 2016, 15, 289-293.	13.3	132
5	A Cyclic Porphyrin Trimer as a Receptor for Fullerenes. <i>Organic Letters</i> , 2010, 12, 3544-3547.	2.4	124
6	Chemical reactions inside single-walled carbon nano test-tubes. <i>Chemical Communications</i> , 2005, , 37.	2.2	118
7	Electron spin relaxation of N@C60 in CS2. <i>Journal of Chemical Physics</i> , 2006, 124, 014508.	1.2	99
8	Redox-Dependent Franckâ€“Condon Blockade and Avalanche Transport in a Grapheneâ€“Fullerene Single-Molecule Transistor. <i>Nano Letters</i> , 2016, 16, 170-176.	4.5	93
9	High Fidelity Single Qubit Operations Using Pulsed Electron Paramagnetic Resonance. <i>Physical Review Letters</i> , 2005, 95, 200501.	2.9	77
10	Ultrasonic exfoliation of graphene in water: A key parameter study. <i>Carbon</i> , 2020, 168, 737-747.	5.4	76
11	Molecular Motion of Endohedral Fullerenes in Single-Walled Carbon Nanotubes. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 1386-1389.	7.2	68
12	All-Fullerene-Based Cells for Nonaqueous Redox Flow Batteries. <i>Journal of the American Chemical Society</i> , 2018, 140, 401-405.	6.6	62
13	Field-Effect Control of Grapheneâ€“Fullerene Thermoelectric Nanodevices. <i>Nano Letters</i> , 2017, 17, 7055-7061.	4.5	61
14	Environmental effects on electron spin relaxation in $N@C_{60}$. <i>Physical Review B</i> , 2007, 76, .	1.1	59
15	Exploiting the mechanical bond for molecular recognition and sensing of charged species. <i>Materials Chemistry Frontiers</i> , 2020, 4, 1052-1073.	3.2	58
16	Rotating Fullerene Chains in Carbon Nanopeapods. <i>Nano Letters</i> , 2008, 8, 2328-2335.	4.5	57
17	Nanoscale solid-state quantum computing. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2003, 361, 1473-1485.	1.6	52
18	Anion-Mediated Photophysical Behavior in a C_{60} Fullerene [3]Rotaxane Shuttle. <i>Journal of the American Chemical Society</i> , 2018, 140, 1924-1936.	6.6	52

#	ARTICLE	IF	CITATIONS
19	Pairs and heptamers of C70 molecules ordered via PTCDI-melamine supramolecular networks. Applied Physics Letters, 2007, 91, 253109.	1.5	50
20	Efficient Dynamic Nuclear Polarization at High Magnetic Fields. Physical Review Letters, 2007, 98, 220501.	2.9	49
21	Dynamics of Paramagnetic Metallofullerenes in Carbon Nanotube Peapods. Nano Letters, 2008, 8, 1005-1010.	4.5	48
22	The Green Box: An Electronically Versatile Perylene Diimide Macrocyclic Host for Fullerenes. Journal of the American Chemical Society, 2020, 142, 349-364.	6.6	48
23	Azafullerenes Encapsulated within Single-Walled Carbon Nanotubes. Journal of the American Chemical Society, 2008, 130, 6062-6063.	6.6	47
24	Measuring errors in single-qubit rotations by pulsed electron paramagnetic resonance. Physical Review A, 2005, 71, .	1.0	44
25	Template Ordered Open-Grid Arrays of Paired Endohedral Fullerenes. Journal of the American Chemical Society, 2006, 128, 13976-13977.	6.6	44
26	Purification by HPLC and the UV/Vis absorption spectra of the nitrogen-containing incar-fullerenes iNC60, and iNC70. Chemical Communications, 2004, , 210.	2.2	40
27	Pauli spin blockade in carbon nanotube double quantum dots. Physical Review B, 2008, 77, .	1.1	40
28	Chemistry at the Nanoscale: Synthesis of an N@C₆₀-N@C₆₀ Endohedral Fullerene Dimer. Angewandte Chemie - International Edition, 2012, 51, 3587-3590.	7.2	40
29	Photoisomerization of a Fullerene Dimer. Journal of Physical Chemistry C, 2008, 112, 2802-2804.	1.5	38
30	Detecting Mechanochemical Atropisomerization within an STM Break Junction. Journal of the American Chemical Society, 2018, 140, 710-718.	6.6	38
31	New insights into sono-exfoliation mechanisms of graphite: In situ high-speed imaging studies and acoustic measurements. Materials Today, 2021, 49, 10-22.	8.3	36
32	Controlled surface ordering of endohedral fullerenes with a SrTiO ₃ template. Nanotechnology, 2007, 18, 075301.	1.3	34
33	Coherent State Transfer between an Electron and Nuclear Spin in $N@C_{60}$. Physical Review Letters, 2011, 106, 110504.	2.9	34
34	N@C₆₀-Porphyrin: A Dyad of Two Radical Centers. Journal of the American Chemical Society, 2012, 134, 1938-1941.	6.6	34
35	A New Type of Radical-Pair-Based Model for Magnetoreception. Biophysical Journal, 2012, 102, 961-968.	0.2	32
36	An Anomaly-Based Intrusion Detection System for Internet of Medical Things Networks. Electronics (Switzerland), 2021, 10, 2562.	1.8	32

#	ARTICLE	IF	CITATIONS
55	AFM and UFM surface characterization of rubber-toughened poly(methyl methacrylate) samples. Journal of Applied Polymer Science, 2001, 82, 2790-2798.	1.3	19
56	Grating of single Lu@C82 molecules using supramolecular network. Chemical Communications, 2008, , 4616.	2.2	19
57	ErSc_2N Rotor within a C_{80} Fullerene Cage: An Electron Paramagnetic Resonance and Photoluminescence Excitation Study. Physical Review Letters,	2.9	19
58	Photochemical stability of N@C60 and its pyrrolidine derivatives. Chemical Physics Letters, 2011, 508, 187-190.	1.2	18
59	Alignment of N@C ₆₀ Derivatives in a Liquid Crystal Matrix. Journal of Physical Chemistry B, 2013, 117, 5925-5931.	1.2	18
60	Direct Imaging and Chemical Identification of the Encapsulated Metal Atoms in Bimetallic Endofullerene Peapods. ACS Nano, 2010, 4, 3943-3948.	7.3	17
61	Distinguishing two isomers of Nd@C82 by scanning tunneling microscopy and density functional theory. Chemical Physics Letters, 2005, 414, 307-310.	1.2	16
62	Acuminated fluorescence of $\text{Er}_2\text{N}_3\text{C}_{106}$ centres in endohedral fullerenes through the incarceration of a carbide cluster. Chemical Physics Letters, 2009, 476, 41-45.	1.2	16
63	Charge separated states and singlet oxygen generation of mono and bis adducts of C60 and C70. Chemical Physics, 2016, 465-466, 28-39.	0.9	16
64	Optical properties of Er ³⁺ in fullerenes and in PbF_2 single-crystals. Optical Materials, 2009, 32, 251-256.	1.7	15
65	A bimetallic endohedral fullerene: PrSc@C80. Chemical Communications, 2009, , 4082.	2.2	15
66	Configuration-selective spectroscopic studies of Er ³⁺ centers in ErSc ₂ N@C80 and Er ₂ ScN@C80 fullerenes. Journal of Chemical Physics, 2007, 127, 194504.	1.2	14
67	Synthesis and Magnetic Properties of a Nitrogen-Containing Fullerene Dimer. European Journal of Organic Chemistry, 2011, 2011, 117-121.	1.2	14
68	Synthesis of the first completely spin-compatible N@C60 cyclopropane derivatives by carefully tuning the DBU base catalyst. Chemical Communications, 2015, 51, 7096-7099.	2.2	14
69	Ultrafast synchrotron X-ray imaging and multiphysics modelling of liquid phase fatigue exfoliation of graphite under ultrasound. Carbon, 2022, 186, 227-237.	5.4	14
70	Synthesis and Chemistry of Endohedral Fullerenes. Current Organic Chemistry, 2011, 15, 1197-1207.	0.9	13
71	Implementation of Quantum Level Addressability and Geometric Phase Manipulation in Aligned Endohedral Fullerene Qu ₁ d ₁ its. Angewandte Chemie - International Edition, 2022, 61, e202115263.	7.2	13
72	Detecting the photosensitization from fullerenes and their dyads with gold nanoparticles with singlet oxygen sensor green. Chemical Physics Letters, 2019, 730, 130-137.	1.2	12

#	ARTICLE	IF	CITATIONS
73	The interrelationship between processing conditions, microstructure and mechanical properties for injection moulded rubber-toughened poly(methyl methacrylate) (RTPMMA) samples. <i>Polymer</i> , 2002, 43, 4769-4781.	1.8	11
74	C70 ordering on nanostructured SrTiO ₃ (001). <i>Chemical Communications</i> , 2007, , 2941.	2.2	11
75	Exploring seebeck-coefficient fluctuations in endohedral-fullerene, single-molecule junctions. <i>Nanoscale Horizons</i> , 2022, 7, 616-625.	4.1	11
76	Synthesis of an asymmetric fullerene dimer via sequential cycloadditions. <i>Tetrahedron Letters</i> , 2006, 47, 8595-8597.	0.7	9
77	Temperature-dependent photoluminescence study of ErSc ₂ N@C ₈₀ and Er ₂ ScN@C ₈₀ fullerenes. <i>Physica Status Solidi (B): Basic Research</i> , 2008, 245, 1998-2001.	0.7	9
78	Electronic transport characterization of Sc@C ₈₂ single-wall carbon nanotube peapods. <i>Journal of Applied Physics</i> , 2008, 104, 083717.	1.1	9
79	Self-assembly and electronic effects of Er ₃ N@C ₈₀ and Sc ₃ N@C ₈₀ on Au(111) and Ag/Si(111) surfaces. <i>Journal of Physics: Conference Series</i> , 2008, 100, 052080.	0.3	9
80	Optically enhanced charge transfer between C ₆₀ and single-wall carbon nanotubes in hybrid electronic devices. <i>Nanoscale</i> , 2014, 6, 572-580.	2.8	9
81	<i>In Situ</i> Atomic-Level Studies of Gd Atom Release and Migration on Graphene from a Metallofullerene Precursor. <i>ACS Nano</i> , 2018, 12, 10439-10451.	7.3	9
82	Shear alignment of fullerenes in nanotubular supramolecular complexes. <i>Polymer</i> , 2015, 56, 516-522.	1.8	8
83	Distance Measurement of a Noncovalently Bound Y@C ₈₂ Pair with Double Electron Electron Resonance Spectroscopy. <i>Journal of the American Chemical Society</i> , 2018, 140, 7420-7424.	6.6	8
84	Achieving 6.7% Efficiency in P3HT/Indene@C ₇₀ Bisadduct Solar Cells through the Control of Vertical Volume Fraction Distribution and Optimized Regioisomer Ratios. <i>Advanced Electronic Materials</i> , 2016, 2, 1600362.	2.6	7
85	Classification of carbon nanostructure families occurring in a chemically activated arc discharge reaction. <i>RSC Advances</i> , 2016, 6, 24912-24920.	1.7	7
86	Synthesis and EPR studies of the first water-soluble N@C ₆₀ derivative. <i>Chemical Communications</i> , 2017, 53, 12742-12745.	2.2	7
87	Ordering and interaction of molecules encapsulated in carbon nanotubes. <i>Materials Science and Technology</i> , 2004, 20, 969-974.	0.8	6
88	Investigations of N@C ₆₀ and N@C ₇₀ stability under high pressure and high temperature conditions. <i>Physica Status Solidi (B): Basic Research</i> , 2009, 246, 2767-2770.	0.7	6
89	Using electron paramagnetic resonance to map N@C ₆₀ during high throughput processing. <i>Analyst</i> , The, 2014, 139, 4519-4524.	1.7	6
90	Semiconducting end-perfluorinated P3HT@fullerene hybrids as potential additives for P3HT/IC ₇₀ BA blends. <i>RSC Advances</i> , 2016, 6, 98306-98316.	1.7	6

#	ARTICLE	IF	CITATIONS
91	Mapping and Tuning the Fluorescence of Perfluorinated Polyanilines Synthesized through Liquid-Liquid Interfaces. <i>Journal of Physical Chemistry B</i> , 2016, 120, 3441-3454.	1.2	6
92	Functionalisation of Fullerenes for Biomedical Applications. , 2019, , 109-122.		6
93	Synthesis of a short-chain fullerene dimer. <i>Tetrahedron Letters</i> , 2006, 47, 7413-7415.	0.7	5
94	Long Stokes shifts and vibronic couplings in perfluorinated polyanilines. <i>Chemical Communications</i> , 2017, 53, 2602-2605.	2.2	5
95	Are Buckminsterfullerenes Molecular Ball Bearings?. <i>Journal of Physical Chemistry B</i> , 2019, 123, 310-316.	1.2	5
96	Manipulation of quantum information in N@C ₆₀ using electron and nuclear magnetic resonance. <i>Physica Status Solidi (B): Basic Research</i> , 2007, 244, 3874-3878.	0.7	4
97	Dynamic Nuclear Polarization with Simultaneous Excitation of Electronic and Nuclear Transitions. <i>Applied Magnetic Resonance</i> , 2008, 34, 347-353.	0.6	4
98	Photostability of N@C ₆₀ in Common Solvents. <i>ECS Transactions</i> , 2011, 35, 113-117.	0.3	4
99	Ultra-stiff large-area carpets of carbon nanotubes. <i>Nanoscale</i> , 2016, 8, 11993-12001.	2.8	4
100	Effect of the Type and Number of Organic Addends on Fullerene Acceptors for n-Type Electronic Devices: Redox Properties and Energy Levels. <i>ChemistrySelect</i> , 2018, 3, 5778-5785.	0.7	4
101	Effect of Temperature and Acoustic Pressure During Ultrasound Liquid-Phase Processing of Graphite in Water. <i>Jom</i> , 2021, 73, 3745-3752.	0.9	4
102	Implementation of Quantum Level Addressability and Geometric Phase Manipulation in Aligned Endohedral Fullerene Qu d its. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	4
103	Atomic-molecular superlattices. <i>Chemical Communications</i> , 2006, , 1944-1946.	2.2	3
104	Synthesis of fullerene dimers with controllable length. <i>Physica Status Solidi (B): Basic Research</i> , 2007, 244, 3849-3852.	0.7	3
105	Catalytic and non-catalytic roles of pendant groups in the decomposition of N@C ₆₀ : a DFT investigation. <i>Chemical Communications</i> , 2012, 48, 5148.	2.2	3
106	The application of the surface energy based solubility parameter theory for the rational design of polymer-functionalized MWCNTs. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 5331-5334.	1.3	3
107	Generating IoT Edge Network Datasets based on the TON_IoT Telemetry Dataset. , 2021, , .		3
108	CF ₂ -Bridged C ₆₀ Fullerene Dimers and their Optical Transitions. <i>ChemPhysChem</i> , 2017, 18, 3540-3543.	1.0	2

#	ARTICLE	IF	CITATIONS
109	Keeping perfect time with caged atoms. IEEE Spectrum, 2017, 54, 34-39.	0.5	2
110	A porphyrin-centred fullerene tetramer containing an N@C ₆₀ substituent. Royal Society Open Science, 2018, 5, 180338.	1.1	2
111	Inserting Fullerene Dimers into Carbon Nanotubes: Pushing the Boundaries of Molecular Self-assembly. AIP Conference Proceedings, 2004, , .	0.3	1
112	Preparation and Chemistry of N@C60. Nanostructure Science and Technology, 2017, , 265-295.	0.1	1
113	Mesoscale modelling of processing rubber-toughened acrylic polymers. Plastics, Rubber and Composites, 2004, 33, 223-232.	0.9	0
114	Isolation and spectroscopic characterization of two isomers of the metallofullerene Nd@C82. AIP Conference Proceedings, 2005, , .	0.3	0
115	Isolation, Spectroscopic Characterization, and Study of Island Formation of Two Isomers of the Metallofullerene Nd@C82. ECS Transactions, 2006, 1, 43-49.	0.3	0
116	Carbon Nanomaterials: Synthesis, Properties and Applications. Nanoscience and Technology, 2012, , 23-46.	1.5	0
117	Nitrogen Atom-Based Endohedral Fullerenes and Potential Applications. , 2014, , 211-232.		0
118	Endohedral Fullerenes: Optical Properties and Biomedical Applications. , 2016, , 259-274.		0
119	Electrochemically active water repelling perfluorinated polyaniline films. Chemical Physics, 2020, 528, 110540.	0.9	0
120	(Invited) Endohedral Fullerene Hybrids: From Gold Nanoparticles to Graphene. ECS Meeting Abstracts, 2021, MA2021-01, 626-626.	0.0	0
121	Endohedral Nitrogen Fullerenes. , 2021, , 1-28.		0
122	The Electrical Properties of Porphyrin Single Molecule Wires. ECS Meeting Abstracts, 2018, , .	0.0	0
123	(Invited) Recent Developments Regarding Orientation Studies of Endohedral Nitrogen Fullerenes and Their Water-Solubilization. ECS Meeting Abstracts, 2018, , .	0.0	0
124	(Invited) Paramagnetic Endohedral Fullerenes for Biomedical Applications. ECS Meeting Abstracts, 2018, , .	0.0	0
125	(Invited) A Porphyrin-centered Fullerene Tetramer Containing N@C60. ECS Meeting Abstracts, 2019, , .	0.0	0
126	(Invited) Endohedral Fullerene Hybrids: From Gold Nanoparticles to Graphene. ECS Meeting Abstracts, 2020, MA2020-01, 803-803.	0.0	0

#	ARTICLE	IF	CITATIONS
127	Templated ordering of fullerenes on nanostructured oxide surfaces. , 2008, , 171-172.		0
128	Rational synthesis of polymer coated inorganic nanoparticles-MWCNT hybrids via solvophobic effects. Carbon Trends, 2022, 6, 100141.	1.4	0
129	(Invited) N@C ₆₀ and N@C ₇₀ for Quantum Information Processing: Beyond Qubits. ECS Meeting Abstracts, 2022, MA2022-01, 817-817.	0.0	0