

# Andrea Lucotti

## List of Publications by Year in descending order

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172386

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docs citations

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times ranked

3317  
citing authors

#	ARTICLE	IF	CITATIONS
1	Bottom-Up Synthesis of Soluble and Narrow Graphene Nanoribbons Using Alkyne Benzannulations. <i>Journal of the American Chemical Society</i> , 2016, 138, 9137-9144.	6.6	181
2	Nanoparticles Engineering by Pulsed Laser Ablation in Liquids: Concepts and Applications. <i>Nanomaterials</i> , 2020, 10, 2317.	1.9	140
3	Helical Sense-Responsive and Substituent-Sensitive Features in Vibrational and Electronic Circular Dichroism, in Circularly Polarized Luminescence, and in Raman Spectra of Some Simple Optically Active Hexahelicenes. <i>Journal of Physical Chemistry C</i> , 2014, 118, 1682-1695.	1.5	135
4	Helically Coiled Graphene Nanoribbons. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 6213-6217.	7.2	103
5	Raman and SERS investigation of isolated sp carbon chains. <i>Chemical Physics Letters</i> , 2006, 417, 78-82.	1.2	102
6	Chiral Peropyrene: Synthesis, Structure, and Properties. <i>Journal of the American Chemical Society</i> , 2017, 139, 13102-13109.	6.6	99
7	Evidence for Solution-State Nonlinearity of sp-Carbon Chains Based on IR and Raman Spectroscopy: Violation of Mutual Exclusion. <i>Journal of the American Chemical Society</i> , 2009, 131, 4239-4244.	6.6	93
8	Fiber-optic SERS sensor with optimized geometry. <i>Sensors and Actuators B: Chemical</i> , 2007, 121, 356-364.	4.0	83
9	Raman spectroscopy as a tool to investigate the structure and electronic properties of carbon-atom wires. <i>Beilstein Journal of Nanotechnology</i> , 2015, 6, 480-491.	1.5	83
10	Raman and SERS recognition of $\beta$ -carotene and haemoglobin fingerprints in human whole blood. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2011, 79, 915-919.	2.0	65
11	Toward carbyne: Synthesis and stability of really long polyynes. <i>Pure and Applied Chemistry</i> , 2010, 82, 891-904.	0.9	59
12	Charge Transfer and Vibrational Structure of sp-Hybridized Carbon Atomic Wires Probed by Surface Enhanced Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2011, 115, 12836-12843.	1.5	56
13	OFF/ON switching of circularly polarized luminescence by oxophilic interaction of homochiral sulfoxide-containing <i>oxo</i> -OPEs with metal cations. <i>Chemical Communications</i> , 2018, 54, 13985-13988.	2.2	53
14	Stabilization of linear carbon structures in a solid Ag nanoparticle assembly. <i>Applied Physics Letters</i> , 2007, 90, 013111.	1.5	50
15	Structure and chain polarization of long polyynes investigated with infrared and Raman spectroscopy. <i>Journal of Raman Spectroscopy</i> , 2013, 44, 1398-1410.	1.2	50
16	Au nanoparticle arrays produced by Pulsed Laser Deposition for Surface Enhanced Raman Spectroscopy. <i>Applied Surface Science</i> , 2012, 258, 9148-9152.	3.1	49
17	CZTS absorber layer for thin film solar cells from electrodeposited metallic stacked precursors (Zn/Cu-Sn). <i>Applied Surface Science</i> , 2016, 379, 91-97.	3.1	49
18	Fingerprints of polycyclic aromatic hydrocarbons (PAHs) in infrared absorption spectroscopy. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2016, 152, 134-148.	2.0	48

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19	Ï€-Conjugation and End Group Effects in Long Cumulenes: Raman Spectroscopy and DFT Calculations. <i>Journal of Physical Chemistry C</i> , 2014, 118, 26415-26425.	1.5	46
20	Semiconductor-to-Metal Transition in Carbon-Atom Wires Driven by $sp^{2.2}$ Conjugated End Groups. <i>Journal of Physical Chemistry C</i> , 2017, 121, 10562-10570.	1.5	43
21	$sp$ Carbon chain interaction with silver nanoparticles probed by Surface Enhanced Raman Scattering. <i>Chemical Physics Letters</i> , 2009, 478, 45-50.	1.2	40
22	TLCâ€™ surface enhanced Raman scattering of apomorphine in human plasma. <i>Vibrational Spectroscopy</i> , 2012, 62, 286-291.	1.2	40
23	Helically Coiled Graphene Nanoribbons. <i>Angewandte Chemie</i> , 2017, 129, 6309-6313.	1.6	39
24	Photoactive TiO <sub>2</sub> coatings obtained by Plasma Electrolytic Oxidation in refrigerated electrolytes. <i>Applied Surface Science</i> , 2016, 385, 498-505.	3.1	38
25	Toward Thiopheneâ€™Annulated Graphene Nanoribbons. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 3588-3592.	7.2	36
26	Heterostructured TiO <sub>2</sub> /SiO <sub>2</sub> /Î³-Fe <sub>2</sub> O <sub>3</sub> /rGO Coating with Highly Efficient Visible-Light-Induced Self-Cleaning Properties for Metallic Artifacts. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 29671-29683.	4.0	34
27	Use of a Geometry Optimized Fiber-Optic Surface-Enhanced Raman Scattering Sensor in Trace Detection. <i>Applied Spectroscopy</i> , 2007, 61, 260-268.	1.2	33
28	Four-Fold Alkyne Benzannulation: Synthesis, Properties, and Structure of Pyreno[ <i>a</i> ]pyrene-Based Helicene Hybrids. <i>Organic Letters</i> , 2019, 21, 8652-8656.	2.4	32
29	Ag and Au nanoparticles for SERS substrates produced by pulsed laser ablation. <i>Crystal Research and Technology</i> , 2011, 46, 836-840.	0.6	31
30	Absolute Raman intensity measurements and determination of the vibrational second hyperpolarizability of adamantyl endcapped polyynes. <i>Journal of Raman Spectroscopy</i> , 2012, 43, 1293-1298.	1.2	30
31	SERS detection and DFT calculation of 2-naphthalene thiol adsorbed on Ag and Au probes. <i>Sensors and Actuators B: Chemical</i> , 2016, 237, 545-555.	4.0	30
32	Reversible switching of molecular nonlinear optical properties of photochromic diarylethene systems. <i>Synthetic Metals</i> , 2003, 139, 933-935.	2.1	28
33	Nonlinear Optical Properties of Polyynes: An Experimental Prediction for Carbyne. <i>Journal of Physical Chemistry C</i> , 2016, 120, 11131-11139.	1.5	28
34	Cove-Edged Graphene Nanoribbons with Incorporation of Periodic Zigzag-Edge Segments. <i>Journal of the American Chemical Society</i> , 2022, 144, 228-235.	6.6	28
35	Bent polyynes: ring geometry studied by Raman and IR spectroscopy. <i>Journal of Raman Spectroscopy</i> , 2012, 43, 95-101.	1.2	27
36	New Insights into the Dynamics That Control the Activity of Ceriaâ€™Zirconia Solid Solutions in Thermochemical Water Splitting Cycles. <i>Journal of Physical Chemistry C</i> , 2017, 121, 17746-17755.	1.5	26

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37	Structure modulated charge transfer in carbon atomic wires. <i>Scientific Reports</i> , 2019, 9, 1648.	1.6	26
38	Pyrrrole-Embedded Linear and Helical Graphene Nanoribbons. <i>Journal of the American Chemical Society</i> , 2021, 143, 11302-11308.	6.6	26
39	The Bi sulfates from the Alfenza Mine, Crodo, Italy: An automatic electron diffraction tomography (ADT) study. <i>American Mineralogist</i> , 2014, 99, 500-510.	0.9	23
40	CZTS thin film solar cells on flexible Molybdenum foil by electrodeposition-annealing route. <i>Journal of Applied Electrochemistry</i> , 2021, 51, 209-218.	1.5	23
41	'Optical' fatigue in a solid state diarylethene polymer. <i>Chemical Physics Letters</i> , 2004, 392, 549-554.	1.2	21
42	Laser-Synthesized SERS Substrates as Sensors toward Therapeutic Drug Monitoring. <i>Nanomaterials</i> , 2019, 9, 677.	1.9	21
43	Excitation Wavelength- and Medium-Dependent Photoluminescence of Reduced Nanostructured TiO <sub>2</sub> Films. <i>Journal of Physical Chemistry C</i> , 2019, 123, 11292-11303.	1.5	21
44	A new class of molecules with large, switchable vibrational non-linear optical responses: Photochromic diarylethene systems. <i>Vibrational Spectroscopy</i> , 2007, 43, 249-253.	1.2	19
45	Ruthenium Electrodeposition from Deep Eutectic Solvents. <i>Journal of the Electrochemical Society</i> , 2018, 165, D620-D627.	1.3	18
46	Chemical pathways in the partial oxidation and steam reforming of acetic acid over a Rh-Al <sub>2</sub> O <sub>3</sub> catalyst. <i>Catalysis Today</i> , 2017, 289, 162-172.	2.2	17
47	Graphite particles induce ROS formation in cell free systems and human cells. <i>Nanoscale</i> , 2017, 9, 13640-13650.	2.8	16
48	Effect of Co-Electrodeposited Cu-Zn-Sn Precursor Compositions on Sulfurized CZTS Thin Films for Solar Cell. <i>ECS Transactions</i> , 2015, 64, 33-41.	0.3	15
49	Co-Electrodeposition of Metallic Precursors for the Fabrication of CZTSe Thin Films Solar Cells on Flexible Mo Foil. <i>Journal of the Electrochemical Society</i> , 2017, 164, D302-D306.	1.3	14
50	Toward Thiophene-Annulated Graphene Nanoribbons. <i>Angewandte Chemie</i> , 2018, 130, 3650-3654.	1.6	14
51	Structural, Electronic, and Vibrational Properties of a Two-Dimensional Graphdiyne-like Carbon Nanonetwork Synthesized on Au(111): Implications for the Engineering of sp <sup>2</sup> Carbon Nanostructures. <i>ACS Applied Nano Materials</i> , 2020, 3, 12178-12187.	2.4	14
52	Experimental Characterization of Polymer Surfaces Subject to Corona Discharges in Controlled Atmospheres. <i>Polymers</i> , 2019, 11, 1646.	2.0	13
53	Size-selected polyynes synthesised by submerged arc discharge in water. <i>Chemical Physics Letters</i> , 2020, 740, 137054.	1.2	13
54	Magnetically Recoverable TiO <sub>2</sub> /SiO <sub>2</sub> /Fe <sup>3+</sup> -Fe <sub>2</sub> O <sub>3</sub> /rGO Composite with Significantly Enhanced UV-Visible Light Photocatalytic Activity. <i>Molecules</i> , 2020, 25, 2996.	1.7	13

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55	Exploiting Direct Current Plasma Electrolytic Oxidation to Boost Photoelectrocatalysis. <i>Catalysts</i> , 2020, 10, 325.	1.6	13
56	Annular reactor testing and Raman surface characterization in the CPO of methane and propylene. <i>Applied Catalysis A: General</i> , 2014, 474, 149-158.	2.2	12
57	Au nanoparticle-based sensor for apomorphine detection in plasma. <i>Beilstein Journal of Nanotechnology</i> , 2015, 6, 2224-2232.	1.5	12
58	Annular reactor testing and Raman surface characterization of the CPO of i-octane and n-octane on Rh based catalyst. <i>Chemical Engineering Journal</i> , 2016, 294, 9-21.	6.6	12
59	Pulsed laser deposition of gold thin films with long-range spatial uniform SERS activity. <i>Applied Physics A: Materials Science and Processing</i> , 2019, 125, 1.	1.1	12
60	Vibrational and nonlinear optical properties of amine-capped push-pull polyynes by infrared and Raman spectroscopy. <i>Carbon Trends</i> , 2021, 5, 100115.	1.4	11
61	Molecular interactions of DNA with transfectants: a study based on infrared spectroscopy and quantum chemistry as aids to fluorescence spectroscopy and dynamic light scattering analyses. <i>RSC Advances</i> , 2014, 4, 49620-49627.	1.7	10
62	Protein-Metal Interactions Probed by SERS: Lysozyme on Nanostructured Gold Surface. <i>Plasmonics</i> , 2018, 13, 2117-2124.	1.8	10
63	On the performance of laser-synthesized, SERS-based sensors for drug detection. <i>Applied Surface Science</i> , 2020, 507, 145109.	3.1	10
64	Cannonite [Bi <sub>2</sub> O(SO <sub>4</sub> )(OH) <sub>2</sub> ] from Alfenza (Crodo, Italy): crystal structure and morphology. <i>Mineralogical Magazine</i> , 2013, 77, 3067-3079.	0.6	9
65	Solution Processed, Versatile Multilayered Structures for the Generation of Metal-Enhanced Fluorescence. <i>Journal of Physical Chemistry C</i> , 2013, 117, 13197-13201.	1.5	9
66	Laser tailored nanoparticle arrays to detect molecules at dilute concentration. <i>Applied Surface Science</i> , 2017, 396, 1866-1874.	3.1	9
67	Functionalization of nanostructured gold substrates with chiral chromophores for SERS applications: The case of 5-azahelicene. <i>Chirality</i> , 2018, 30, 875-882.	1.3	8
68	Immobilized Nano-TiO <sub>2</sub> Photocatalysts for the Degradation of Three Organic Dyes in Single and Multi-Dye Solutions. <i>Coatings</i> , 2020, 10, 919.	1.2	8
69	Fiber-optic SERS sensor with optimized geometry: testing and optimization. <i>Journal of Raman Spectroscopy</i> , 2010, 41, 256-267.	1.2	7
70	Retinal in bacteriorhodopsin and related molecular models investigated with Raman spectroscopy and density functional theory calculations. <i>Journal of Raman Spectroscopy</i> , 2011, 42, 1207-1214.	1.2	7
71	Investigation of graphene layers on electrodeposited polycrystalline metals. <i>Surface and Interface Analysis</i> , 2016, 48, 456-460.	0.8	7
72	Growth and characterization of ultrathin carbon films on electrodeposited Cu and Ni. <i>Surface and Interface Analysis</i> , 2017, 49, 1088-1094.	0.8	7

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73	Enhancement of second order hyperpolarizabilities via SERS techniques in organic materials. <i>Journal of Raman Spectroscopy</i> , 2005, 36, 974-977.	1.2	5
74	Experimental and theoretical investigation of the apomorphine Raman spectrum. <i>Journal of Raman Spectroscopy</i> , 2009, 40, 2074-2079.	1.2	5
75	Design and testing of an operando-Raman annular reactor for kinetic studies in heterogeneous catalysis. <i>Reaction Chemistry and Engineering</i> , 2017, 2, 908-918.	1.9	5
76	Effect of Gamma Irradiation on Fully Aliphatic Poly(Propylene/Neopentyl Cyclohexanedicarboxylate) Random Copolymers. <i>Journal of Polymers and the Environment</i> , 2018, 26, 3017-3033.	2.4	5
77	SERS sensing of perampanel with nanostructured arrays of gold particles produced by pulsed laser ablation in water. <i>Medical Devices &amp; Sensors</i> , 2018, 1, e10003.	2.7	5
78	Understanding the Failure Mode of Electroless Nickel Immersion Gold Process: In Situ-Raman Spectroscopy and Electrochemical Characterization. <i>Journal of the Electrochemical Society</i> , 2020, 167, 082507.	1.3	5
79	In Situ-Raman Spectroscopy and Electrochemical Characterization on Electroless Nickel Immersion Gold Process. <i>ECS Transactions</i> , 2017, 75, 1-6.	0.3	4
80	Microstructure and cytocompatibility of electrospun nanocomposites based on poly(epsilon-caprolactone) and carbon nanostructures. <i>International Journal of Artificial Organs</i> , 2010, 33, 271-82.	0.7	4
81	Graphene Growth on Electroformed Copper Substrates by Atmospheric Pressure CVD. <i>Materials</i> , 2022, 15, 1572.	1.3	4
82	Sensing the Anti-Epileptic Drug Perampanel with Paper-Based Spinning SERS Substrates. <i>Molecules</i> , 2022, 27, 30.	1.7	4
83	Synthesis by pulsed laser ablation of 2D nanostructures for advanced biomedical sensing. <i>Journal of Instrumentation</i> , 2016, 11, C05006-C05006.	0.5	3
84	Resonant Raman-based cytochrome C biosensor as a tool for evaluating the oxidative properties of the diesel exhaust particulate matter. <i>Journal of Raman Spectroscopy</i> , 2016, 47, 796-800.	1.2	3
85	Evaluation of Coatings to Improve the Durability and Water-Barrier Properties of Corrugated Cardboard. <i>Coatings</i> , 2022, 12, 10.	1.2	3
86	Rewritable photochromic focal plane masks. , 2003, , .		2
87	Laser Synthesized Nanoparticles for Therapeutic Drug Monitoring. <i>Springer Series in Materials Science</i> , 2018, , 339-360.	0.4	2
88	Synthesis by picosecond laser ablation of ligand-free Ag and Au nanoparticles for SERS applications. <i>EPJ Web of Conferences</i> , 2018, 167, 05002.	0.1	2
89	One-step CZT electroplating from alkaline solution on flexible Mo foil for CZTS absorber. <i>Journal of Solid State Electrochemistry</i> , 2021, 25, 1807-1813.	1.2	2
90	Self-Assembled Monolayers Assisted all Wet Metallization of SU-8 Negative Tone Photoresist. <i>Journal of the Electrochemical Society</i> , 2020, 167, 142506.	1.3	2

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91	Extended Helical Nanographenes: Synthesis and Photophysical Properties of Naphtho[1,2-a]pyrenes**. European Journal of Organic Chemistry, 0, , .	1.2	2
92	Biocompatible rapid few-layers-graphene synthesis in aqueous lignin solutions. Carbon Trends, 2022, 7, 100169.	1.4	2
93	Low Temperature Electroless Deposition of Hard Magnetic Alloys for the Metallization of Additive Manufactured Functional Microstructures. ECS Transactions, 2017, 75, 43-60.	0.3	1
94	A Raman and SERS study on the interactions of aza[5]helicene and aza[6]helicene with a nanostructured gold surface. Vibrational Spectroscopy, 2020, 111, 103180.	1.2	0
95	From single-layer graphene to HOPG: Universal functionalization strategy with perfluoropolyether for the graphene family materials. Diamond and Related Materials, 2022, 122, 108810.	1.8	0
96	The effects of ring strain on cyclic tetraaryl[5]cumulenes. Chemistry - A European Journal, 2022, , .	1.7	0