

Carlo S Casari

List of Publications by Year in descending order

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136
all docs

136
docs citations

136
times ranked

6027
citing authors

#	ARTICLE	IF	CITATIONS
1	Identifying Efficient Cooling Approach of Cylindrical Lithium-Ion Batteries. Energy Technology, 2022, 10, 2100888.	3.8	5
2	Interface-Driven Assembly of Pentacene/MoS ₂ Lateral Heterostructures. Journal of Physical Chemistry C, 2022, 126, 1132-1139.	3.1	6
3	In situ surface-enhanced Raman spectroscopy to investigate polyyne formation during pulsed laser ablation in liquid. Carbon, 2022, 189, 219-229.	10.3	7
4	Stable and Solution-Processable Cumulenic sp ² -Carbon Wires: A New Paradigm for Organic Electronics. Advanced Materials, 2022, 34, e2110468.	21.0	12
5	Vibrational properties of graphdiynes as 2D carbon materials beyond graphene. Physical Chemistry Chemical Physics, 2022, 24, 10524-10536.	2.8	6
6	Steric hindrance in the on-surface synthesis of diethynyl-linked anthracene polymers. Physical Chemistry Chemical Physics, 2022, 24, 13616-13624.	2.8	2
7	Nanoparticle-enhanced multifunctional nanocarbons—recent advances on electrochemical energy storage applications. Journal Physics D: Applied Physics, 2022, 55, 413001.	2.8	15
8	Hydrophilic Character of Single-Layer MoS ₂ Grown on Ag(111). Journal of Physical Chemistry C, 2021, 125, 9479-9485.	3.1	11
9	Designing All Graphdiyne Materials as Graphene Derivatives: Topologically Driven Modulation of Electronic Properties. Journal of Physical Chemistry C, 2021, 125, 18456-18466.	3.1	19
10	Topology-dependent conjugation effects in graphdiyne molecular fragments. Carbon, 2021, 180, 265-273.	10.3	11
11	Graphdiynes interacting with metal surfaces: first-principles electronic and vibrational properties. 2D Materials, 2021, 8, 044014.	4.4	6
12	Vibrational and nonlinear optical properties of amine-capped push-pull polyynes by infrared and Raman spectroscopy. Carbon Trends, 2021, 5, 100115.	3.0	11
13	Size-selected polyynes synthesised by submerged arc discharge in water. Chemical Physics Letters, 2020, 740, 137054.	2.6	13
14	Solvent-dependent termination, size and stability in polyynes synthesized via laser ablation in liquids. Physical Chemistry Chemical Physics, 2020, 22, 26312-26321.	2.8	16
15	In situ synthesis of polyynes in a polymer matrix via pulsed laser ablation in a liquid. Materials Advances, 2020, 1, 2729-2736.	5.4	8
16	A Field-Effect Transistor Based on Cumulenic sp-Carbon Atomic Wires. Journal of Physical Chemistry Letters, 2020, 11, 1970-1974.	4.6	18
17	Light management in TiO ₂ thin films integrated with Au plasmonic nanoparticles. Semiconductor Science and Technology, 2020, 35, 035016.	2.0	11
18	Nature of Point Defects in Single-Layer MoS ₂ Supported on Au(111). Journal of Physical Chemistry C, 2020, 124, 12424-12431.	3.1	30

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19	Structural, Electronic, and Vibrational Properties of a Two-Dimensional Graphdiyne-like Carbon Nanonetwork Synthesized on Au(111): Implications for the Engineering of sp^2 Carbon Nanostructures. ACS Applied Nano Materials, 2020, 3, 12178-12187.	5.0	14
20	Raman and IR spectra of graphdiyne nanoribbons. Physical Review Materials, 2020, 4, .	2.4	13
21	Pulsed laser deposition of single-layer MoS_2 on Au(111): from nanosized crystals to large-area films. Nanoscale Advances, 2019, 1, 643-655.	4.6	52
22	Excitation Wavelength- and Medium-Dependent Photoluminescence of Reduced Nanostructured TiO_2 Films. Journal of Physical Chemistry C, 2019, 123, 11292-11303.	3.1	21
23	Integrated Au/ TiO_2 Nanostructured Photoanodes for Photoelectrochemical Organics Degradation. Catalysts, 2019, 9, 340.	3.5	18
24	Structure modulated charge transfer in carbon atomic wires. Scientific Reports, 2019, 9, 1648.	3.3	26
25	Scanning tunneling microscopy and Raman spectroscopy of polymeric sp^2 carbon atomic wires synthesized on the Au(111) surface. Nanoscale, 2019, 11, 18191-18200.	5.6	24
26	Carbyne: from the elusive allotrope to stable carbon atom wires. MRS Communications, 2018, 8, 207-219.	1.8	92
27	Assembly and Soldering Procedure of Nonstabilized YBCO Coils for 1000 A SFCL. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-4.	1.7	1
28	One-pot synthesis and characterization of polyynes end-capped by biphenyl groups (\pm -biphenylpolyynes). Carbon, 2018, 126, 232-240.	10.3	14
29	Engineering plasmonic nanostructured surfaces by pulsed laser deposition. Applied Surface Science, 2018, 434, 1064-1073.	6.1	47
30	Fingerprints of sp^1 Hybridized C in the Near-Edge X-ray Absorption Spectra of Surface-Grown Materials. Materials, 2018, 11, 2556.	2.9	5
31	Integration of plasmonic Au nanoparticles in TiO_2 hierarchical structures in a single-step pulsed laser co-deposition. Materials and Design, 2018, 156, 311-319.	7.0	49
32	Electrochemical Properties of Transparent Conducting Films of Tantalum-Doped Titanium Dioxide. Electrochimica Acta, 2017, 232, 44-53.	5.2	16
33	Semiconductor-to-Metal Transition in Carbon-Atom Wires Driven by sp^2 Conjugated End Groups. Journal of Physical Chemistry C, 2017, 121, 10562-10570.	3.1	43
34	Hydrogen-treated hierarchical titanium oxide nanostructures for photoelectrochemical water splitting. Solar Energy Materials and Solar Cells, 2017, 169, 19-27.	6.2	32
35	Microscopic Analysis of the Different Perchlorate Anions Intercalation Stages of Graphite. Journal of Physical Chemistry C, 2017, 121, 14246-14253.	3.1	23
36	Preparation and optimization of TiO_2 photoanodes fabricated by pulsed laser deposition for photoelectrochemical water splitting. Journal of Solid State Electrochemistry, 2017, 21, 3139-3154.	2.5	13

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37	Tuning the photoelectrochemical properties of hierarchical TiO ₂ nanostructures by control of pulsed laser deposition and annealing in reducing conditions. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 26639-26651.	7.1	5
38	Evolution of the graphite surface in phosphoric acid: an AFM and Raman study. <i>Beilstein Journal of Nanotechnology</i> , 2016, 7, 1878-1884.	2.8	22
39	Sensor Properties of Pristine and Functionalized Carbon Nanohorns. <i>Electroanalysis</i> , 2016, 28, 2489-2499.	2.9	23
40	Controlling the Electrical Properties of Undoped and Ta-Doped TiO ₂ Polycrystalline Films via Ultra-Fast Annealing Treatments. <i>Advanced Electronic Materials</i> , 2016, 2, 1500316.	5.1	19
41	Carbon-atom wires produced by nanosecond pulsed laser deposition in a background gas. <i>Carbon</i> , 2016, 104, 190-195.	10.3	35
42	Pulsed laser deposition of porous N-carbon supported cobalt (oxide) thin films for highly efficient oxygen evolution. <i>Chemical Communications</i> , 2016, 52, 11947-11950.	4.1	27
43	Highly active nickel-cobalt/nanocarbon thin films as efficient water splitting electrodes. <i>Nanoscale</i> , 2016, 8, 18507-18515.	5.6	56
44	Vibrational-Electrical Properties Relationship in Donor-Doped TiO ₂ by Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2016, 120, 18878-18886.	3.1	43
45	Pulsed laser deposition of two-dimensional ZnO nanocrystals on Au(111): growth, surface structure and electronic properties. <i>Nanotechnology</i> , 2016, 27, 475703.	2.6	23
46	Disclosing the Early Stages of Electrochemical Anion Intercalation in Graphite by a Combined Atomic Force Microscopy/Scanning Tunneling Microscopy Approach. <i>Journal of Physical Chemistry C</i> , 2016, 120, 6088-6093.	3.1	43
47	Carbon-atom wires: 1-D systems with tunable properties. <i>Nanoscale</i> , 2016, 8, 4414-4435.	5.6	221
48	Two-dimensional TiO ₂ nanostructures on Au(111): a scanning tunneling microscopy and spectroscopy investigation. <i>2D Materials</i> , 2015, 2, 045011.	4.4	10
49	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.	2.8	83
50	Note: Fabrication and characterization of molybdenum tips for scanning tunneling microscopy and spectroscopy. <i>Review of Scientific Instruments</i> , 2015, 86, 016112.	1.3	1
51	Tuning of Electrical and Optical Properties of Highly Conducting and Transparent Ta-Doped TiO ₂ Polycrystalline Films. <i>Journal of Physical Chemistry C</i> , 2015, 119, 6988-6997.	3.1	46
52	Chemical Bonds and Charge-Transfer Dynamics of a Dye-Hierarchical-TiO ₂ Hybrid Interface. <i>Journal of Physical Chemistry C</i> , 2015, 119, 8671-8680.	3.1	7
53	Tuning electrical properties of hierarchically assembled Al-doped ZnO nanoforests by room temperature Pulsed Laser Deposition. <i>Thin Solid Films</i> , 2015, 594, 12-17.	1.8	12
54	Nanoscale Analysis of a Hierarchical Hybrid Solar Cell in 3D. <i>Advanced Functional Materials</i> , 2014, 24, 3043-3050.	14.9	16

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55	Morphology-driven electrical and optical properties in graded hierarchical transparent conducting Al:ZnO. Materials Research Society Symposia Proceedings, 2014, 1699, 13.	0.1	2
56	Growth and electronic properties of Ti nanoislands on Au(111). Surface Science, 2014, 619, 77-82.	1.9	7
57	Multi-wavelength Raman scattering of nanostructured Al-doped zinc oxide. Journal of Applied Physics, 2014, 115, .	2.5	198
58	Nanostructured Pd barrier for low methanol crossover DMFC. International Journal of Hydrogen Energy, 2014, 39, 2801-2811.	7.1	24
59	Enhancing light harvesting by hierarchical functionally graded transparent conducting Al-doped ZnO nano- and mesoarchitectures. Solar Energy Materials and Solar Cells, 2014, 128, 248-253.	6.2	14
60	Fabrication of Nano-engineered Transparent Conducting Oxides by Pulsed Laser Deposition. Journal of Visualized Experiments, 2013, , e50297.	0.3	4
61	A Hydrophobic Gold Surface Triggers Misfolding and Aggregation of the Amyloidogenic Josephin Domain in Monomeric Form, While Leaving the Oligomers Unaffected. PLoS ONE, 2013, 8, e58794.	2.5	24
62	Nanostructured Ag ₄ O ₄ thin films produced by ion beam oxidation of silver. Applied Surface Science, 2013, 266, 161-169.	6.1	14
63	Electronic and magnetic properties of bulk Cr tips for scanning tunneling spectroscopy. Physical Review B, 2013, 87, .	3.2	4
64	Hyperbranched Quasi-1D Nanostructures for Solid-State Dye-Sensitized Solar Cells. ACS Nano, 2013, 7, 10023-10031.	14.6	65
65	Tuning Hierarchical Cluster Assembly in Pulsed Laser Deposition of Al-doped ZnO. Materials Research Society Symposia Proceedings, 2013, 1497, 1.	0.1	2
66	Highly Performing Al:ZnO Thin Films Grown by Pulsed Laser Deposition at Room Temperature. Nanoscience and Nanotechnology Letters, 2013, 5, 484-486.	0.4	13
67	Ultrafast spectroscopic imaging of exfoliated graphene. Physica Status Solidi (B): Basic Research, 2012, 249, 2497-2499.	1.5	7
68	Nucleation and growth mechanisms of Fe on Au(111) in the sub-monolayer regime. Surface Science, 2012, 606, 702-710.	1.9	14
69	Temperature profoundly affects ataxin-3 fibrillogenesis. Biochimie, 2012, 94, 1026-1031.	2.6	8
70	Structure-dependent optical and electrical transport properties of nanostructured Al-doped ZnO. Nanotechnology, 2012, 23, 365706.	2.6	55
71	CARBON ATOMIC WIRES: FROM STARS TO NANOTECHNOLOGY. Istituto Lombardo - Accademia Di Scienze E Lettere - Rendiconti Di Scienze, 2012, , .	0.0	0
72	Fe nanoparticles on ZnSe: Reversible temperature dependence of the surface barrier potential. Physical Review B, 2012, 85, .	3.2	0

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91	Thermoelectric properties of Bi ₂ Te films with controlled structure and morphology. Journal of Applied Physics, 2009, 105, .	2.5	93
92	Titanium oxide nanostructured films by reactive pulsed laser deposition. Applied Surface Science, 2009, 255, 5334-5337.	6.1	34
93	Nanostructured high valence silver oxide produced by pulsed laser deposition. Applied Surface Science, 2009, 255, 5248-5251.	6.1	34
94	sp Carbon chain interaction with silver nanoparticles probed by Surface Enhanced Raman Scattering. Chemical Physics Letters, 2009, 478, 45-50.	2.6	40
95	Titanium Dioxide Coated MALDI Plate for On Target Analysis of Phosphopeptides. Journal of Proteome Research, 2009, 8, 1932-1942.	3.7	71
96	Hierarchically organized nanostructured TiO ₂ for photocatalysis applications. Nanotechnology, 2009, 20, 015604.	2.6	122
97	Direct observation of the basic mechanisms of Pd island nucleation on Au(111). Physical Review B, 2009, 79, .	3.2	42
98	Growth regimes in pulsed laser deposition of aluminum oxide films. Applied Physics A: Materials Science and Processing, 2008, 93, 765-769.	2.3	73
99	Raman spectroscopy of Bi ₂ Te thin films. Journal of Raman Spectroscopy, 2008, 39, 205-210.	2.5	109
100	Low-frequency modes in the Raman spectrum of s_p carbon. Physical Review B, 2008, 77, .	3.2	69
101	Au ⁺ Ag Template Stripped Pattern for Scanning Probe Investigations of DNA Arrays Produced by Dip Pen Nanolithography. Langmuir, 2008, 24, 13212-13217.	3.5	10
102	Nanostructured Ag ₄ O ₄ films with enhanced antibacterial activity. Nanotechnology, 2008, 19, 475602.	2.6	38
103	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. Journal of Physics: Conference Series, 2008, 100, 052080.	0.4	9
104	Bulk Cr tips for scanning tunneling microscopy and spin-polarized scanning tunneling microscopy. Applied Physics Letters, 2007, 91, .	3.3	39
105	Stabilization of linear carbon structures in a solid Ag nanoparticle assembly. Applied Physics Letters, 2007, 90, 013111.	3.3	50
106	Influence of Cumulenic Chains on the Vibrational and Electronic Properties of s_p Amorphous Carbon. Physical Review Letters, 2007, 98, 216103.	7.8	117
107	Different W cluster deposition regimes in pulsed laser ablation observed by in situ scanning tunneling microscopy. Surface Science, 2007, 601, 1892-1897.	1.9	21
108	Nanostructured tungsten oxide with controlled properties: Synthesis and Raman characterization. Thin Solid Films, 2007, 515, 6465-6469.	1.8	128

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109	Photocatalytic behavior of different titanium dioxide layers. <i>Thin Solid Films</i> , 2007, 515, 6309-6313.	1.8	59
110	In situ STM of pulsed laser nanostructured deposits: First stages of film formation. <i>Applied Surface Science</i> , 2007, 253, 7917-7921.	6.1	10
111	Pulsed laser deposition of Bi ₂ Te ₃ thermoelectric films. <i>Applied Surface Science</i> , 2007, 254, 1249-1254.	6.1	80
112	Synthesis, Structure and Thermal Properties of Copper and Silver Polyyinides and Acetylides. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2007, 17, 641-651.	3.7	39
113	Pulsed laser deposition of tungsten and tungsten oxide thin films with tailored structure at the nano- and mesoscale. <i>Applied Surface Science</i> , 2007, 253, 8130-8135.	6.1	70
114	Synthesis and characterization of tungsten and tungsten oxide nanostructured films. <i>Catalysis Today</i> , 2006, 116, 69-73.	4.4	72
115	Raman and SERS investigation of isolated sp carbon chains. <i>Chemical Physics Letters</i> , 2006, 417, 78-82.	2.6	102
116	Photo-induced production of sp-hybridized carbon species from Ag-coated polytetrafluoroethylene (PTFE). <i>Carbon</i> , 2005, 43, 1337-1339.	10.3	11
117	Inelastic light scattering for the investigations of nano- and meso-structures. <i>European Physical Journal Special Topics</i> , 2005, 129, 3-9.	0.2	0
118	Pulsed Laser Deposition of Cluster-Assembled Thin Films with Controlled Nanostructure. <i>Materials Research Society Symposia Proceedings</i> , 2005, 901, 1.	0.1	0
119	Leaving the fullerene road: presence and stability of sp chains in sp ² carbon clusters and cluster-assembled solids. <i>New Journal of Physics</i> , 2005, 7, 81-81.	2.9	37
120	Nanoscale and Mesoscale Properties of Nanostructured Carbon Films. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2005, 13, 199-210.	2.1	0
121	Growth of multi-wall and single-wall carbon nanotubes with in situ high vacuum catalyst deposition. <i>Carbon</i> , 2004, 42, 440-443.	10.3	15
122	Gas exposure and thermal stability of linear carbon chains in nanostructured carbon films investigated by in situ Raman spectroscopy. <i>Carbon</i> , 2004, 42, 1103-1106.	10.3	16
123	Inelastic light scattering: a multiscale characterization approach to vibrational, structural and thermo-mechanical properties of nanostructured materials. <i>Applied Surface Science</i> , 2004, 226, 271-281.	6.1	8
124	Chemical and thermal stability of carbyne-like structures in cluster-assembled carbon films. <i>Physical Review B</i> , 2004, 69, .	3.2	150
125	Brillouin light scattering investigation of cluster-assembled carbon films: acoustic phonon propagation and elastic properties. <i>Diamond and Related Materials</i> , 2003, 12, 856-860.	3.9	6
126	Inelastic light scattering from magnetically aligned single-walled carbon nanotubes and estimate of their two-dimensional Young's modulus. <i>Diamond and Related Materials</i> , 2003, 12, 806-810.	3.9	10

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127	Structural evolution of crystalline polymer latex films: Propagating and confined acoustic modes. Applied Physics Letters, 2003, 82, 1532-1534.	3.3	4
128	Structural evolution and acoustic phonon behavior in crystalline PTFE latex films. Materials Research Society Symposia Proceedings, 2003, 779, 781.	0.1	0
129	Acoustic phonon propagation and elastic properties of nano-sized carbon films investigated by Brillouin light scattering. Thin Solid Films, 2002, 420-421, 300-305.	1.8	5
130	Cluster-Beam Deposition and in situ Characterization of Carbyne-Rich Carbon Films. Physical Review Letters, 2002, 89, 285506.	7.8	240
131	Acoustic phonon propagation and elastic properties of cluster-assembled carbon films investigated by Brillouin light scattering. Physical Review B, 2001, 64, .	3.2	29
132	Elastic and Structural Properties of Carbon Materials Investigated by Brillouin Light Scattering. , 0, , 153-174.		0