Silvia Giordani

List of Publications by Citations

126 papers	7,076 citations	44 h-index	82 g-index
134 ext. papers	7,745 ext. citations	7.8 avg, IF	6.19 L-index

#	Paper	IF	Citations
126	Organic functionalisation and characterisation of single-walled carbon nanotubes. *Chemical Society Reviews*, **2009**, 38, 2214-30	58.5	498
125	Carbon nanotubes might improve neuronal performance by favouring electrical shortcuts. *Nature Nanotechnology*, **2009**, 4, 126-33	28.7	428
124	Molecular switches as photocontrollable "smart" receptors. *Chemical Society Reviews*, **2012**, 41, 4010-29	58.5	367
123	Recent developments in carbon nanomaterial sensors. *Chemical Society Reviews*, **2015**, 44, 4433-53	58.5	350
122	Signal processing at the molecular level. *Journal of the American Chemical Society*, **2001**, 123, 4651-2	16.4	330
121	Debundling of single-walled nanotubes by dilution: observation of large populations of individual nanotubes in amide solvent dispersions. *Journal of Physical Chemistry B*, **2006**, 110, 15708-18	3.4	302
120	Towards Solutions of Single-Walled Carbon Nanotubes in Common Solvents. *Advanced Materials*, **2008**, 20, 1876-1881	24	299
119	Carbon nanomaterials: multi-functional agents for biomedical fluorescence and Raman imaging. *Chemical Society Reviews*, **2015**, 44, 4672-98	58.5	202
118	All-optical processing with molecular switches. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 4941-4	11.5	180
117	Digital processing with a three-state molecular switch. *Journal of Organic Chemistry*, **2003**, 68, 4158-69	4.2	176
116	Memory effects based on intermolecular photoinduced proton transfer. *Journal of the American Chemical Society*, **2003**, 125, 2361-4	16.4	175
115	Carbon nano-onions (multi-layer fullerenes): chemistry and applications. *Beilstein Journal of Nanotechnology*, **2014**, 5, 1980-98	3	161
114	Multichannel digital transmission in an optical network of communicating molecules. *Journal of the American Chemical Society*, **2002**, 124, 2004-7	16.4	147
113	Neuropsychological investigation of decision-making in anorexia nervosa. *Psychiatry Research*, **2004** , 127, 259-66	9.9	137
112	Functionalization of carbon nanoparticles modulates inflammatory cell recruitment and NLRP3 inflammasome activation. *Small*, **2013**, 9, 4194-206	11	112
111	Reversible microwave-assisted cycloaddition of aziridines to carbon nanotubes. *Journal of the American Chemical Society*, **2007**, 129, 14580-1	16.4	103
110	Signal communication between molecular switches. *Organic Letters*, **2001**, 3, 3475-8	6.2	102

109	Immunoasssay based on the antibody-conjugated PAMAM-dendrimer-gold quantum dot complex. *Chemical Communications*, **2006**, 5068-70	5.8	97
108	Digital communication through intermolecular fluorescence modulation. *Organic Letters*, **2001**, 3, 1833-6	6.2	80
107	A photoswitchable Zn (II) selective spiropyran-based sensor. *Tetrahedron*, **2010**, 66, 7612-7617	2.4	79
106	Functionalization of multilayer fullerenes (carbon nano-onions) using diazonium compounds and "click" chemistry. *Organic Letters*, **2010**, 12, 840-3	6.2	76
105	Multifunctional hybrid materials composed of [60]fullerene-based functionalized-single-walled carbon nanotubes. *Carbon*, **2009**, 47, 578-588	10.4	70
104	Linear and nonlinear optical characterization of a tetraphenylporphyrin-carbon nanotube composite system. *Journal of Physical Chemistry B*, **2006**, 110, 23136-41	3.4	68
103	Fluorescence Modulation in Polymer Bilayers Containing Fluorescent and Photochromic Dopants. *Advanced Functional Materials*, **2005**, 15, 787-794	15.6	66
102	Synthesis and characterization of boron azadipyrromethene single-wall carbon nanotube electron donor-acceptor conjugates. *ACS Nano*, **2011**, 5, 1198-206	16.7	65
101	Photoinduced proton exchange between molecular switches. *Tetrahedron*, **2004**, 60, 10973-10981	2.4	65
100	Does rTMS hasten the response to escitalopram, sertraline, or venlafaxine in patients with major depressive disorder? A double-blind, randomized, sham-controlled trial. *Journal of Clinical Psychiatry*, **2005**, 66, 1569-75	4.6	65
99	Carbon Nanomaterials Interfacing with Neurons: An In vivo Perspective. *Frontiers in Neuroscience*, **2016**, 10, 250	5.1	64
98	The Utility of Zebrafish as a Model for Screening Developmental Neurotoxicity. *Frontiers in Neuroscience*, **2018**, 12, 976	5.1	63
97	NIR fluorescence labelled carbon nano-onions: synthesis, analysis and cellular imaging. *Journal of Materials Chemistry B*, **2014**, 2, 7459-7463	7.3	62
96	Boron dipyrromethene (BODIPY) functionalized carbon nano-onions for high resolution cellular imaging. *Nanoscale*, **2014**, 6, 13761-9	7.7	62
95	A switch in a cage with a memory. *Organic Letters*, **2003**, 5, 3559-62	6.2	59
94	Screening the cytotoxicity of single-walled carbon nanotubes using novel 3D tissue-mimetic models. *ACS Nano*, **2011**, 5, 9278-90	16.7	56
93	Multi-Functionalized Carbon Nano-onions as Imaging Probes for Cancer Cells. *Chemistry - A European Journal*, **2015**, 21, 19071-80	4.8	55
92	The role of metal ions and counterions in the switching behavior of a carboxylic acid functionalized spiropyran. *Dalton Transactions*, **2010**, 39, 8269-77	4.3	55

91	Critical Investigation of Defect Site Functionalization on Single-Walled Carbon Nanotubes. *Chemistry of Materials*, **2011**, 23, 67-74	9.6	54
90	Molecular Engineering of Nonplanar Porphyrin and Carbon Nanotube Assemblies: A Linear and Nonlinear Spectroscopic and Modeling Study. *Journal of Nanotechnology*, **2011**, 2011, 1-12	3.5	54
89	Carbon nano-onions in biomedical applications: Promising theranostic agents. *Inorganica Chimica Acta*, **2017**, 468, 67-76	2.7	49
88	Biocompatibility and biodistribution of functionalized carbon nano-onions (f-CNOs) in a vertebrate model. *Scientific Reports*, **2016**, 6, 33923	4.9	49
87	Controlled carboxylic acid introduction: a route to highly purified oxidised single-walled carbon nanotubes. *Journal of Materials Chemistry*, **2011**, 21, 17881		49
86	Toxicity Assessment of Carbon Nanomaterials in Zebrafish during Development. *Nanomaterials*, **2017**, 7,	5.4	47
85	Functionalization of single-walled carbon nanotubes with optically switchable spiropyrans. *Carbon*, **2010**, 48, 2815-2824	10.4	47
84	Interaction studies between photochromic spiropyrans and transition metal cations: the curious case of copper. *Organic and Biomolecular Chemistry*, **2012**, 10, 1162-71	3.9	46
83	Effect of carbon nanotube surface modification on dispersion and structural properties of electrospun fibers. *Applied Physics Letters*, **2009**, 95, 233113	3.4	46
82	Impact of Carbon Nano-Onions on as a Model Organism for Nanoecotoxicology. *Nanomaterials*, **2015**, 5, 1331-1350	5.4	44
81	Exfoliation in ecstasy: liquid crystal formation and concentration-dependent debundling observed for single-wall nanotubes dispersed in the liquid drug Ebutyrolactone. *Nanotechnology*, **2007**, 18, 455705	3.4	43
80	Synthesis and Characterization of Far-Red/NIR-Fluorescent BODIPY Dyes, Solid-State Fluorescence, and Application as Fluorescent Tags Attached to Carbon Nano-onions. *Chemistry - A European Journal*, **2015**, 21, 9727-32	4.8	42
79	Non-covalent functionalization of carbon nano-onions with pyreneBODIPY dyads for biological imaging. *RSC Advances*, **2015**, 5, 50253-50258	3.7	41
78	Banning carbon nanotubes would be scientifically unjustified and damaging to innovation. *Nature Nanotechnology*, **2020**, 15, 164-166	28.7	40
77	Determination of spiropyran cytotoxicity by high content screening and analysis for safe application in bionanosensing. *Chemical Research in Toxicology*, **2010**, 23, 1459-66	4	39
76	Effect of Surfactant Structure on Carbon Nanotube Sidewall Adsorption. *European Journal of Organic Chemistry*, **2011**, 2011, 5641-5648	3.2	38
75	Fabrication of stable dispersions containing up to 70% individual carbon nanotubes in a common organic solvent. *Physica Status Solidi (B): Basic Research*, **2006**, 243, 3058-3062	1.3	37
74	Far-red fluorescent carbon nano-onions as a biocompatible platform for cellular imaging. *RSC Advances*, **2017**, 7, 45676-45681	3.7	36

73	Role of serotonergic gene polymorphisms on response to transcranial magnetic stimulation in depression. *European Neuropsychopharmacology*, **2007**, 17, 651-7	1.2	36
72	Diffusion-ordered NMR spectroscopy in the structural characterization of functionalized carbon nanotubes. *Journal of the American Chemical Society*, **2009**, 131, 9086-93	16.4	35
71	Personality subtypes in adolescents with anorexia nervosa. *Comprehensive Psychiatry*, **2013**, 54, 702-12	7.3	33
70	Boron/Nitrogen-Codoped Carbon Nano-Onion Electrocatalysts for the Oxygen Reduction Reaction. *ACS Applied Nano Materials*, **2018**, 1, 5763-5773	5.6	33
69	Native chemical ligation,thiol-ene click: a methodology for the synthesis of functionalized peptides. *Journal of Organic Chemistry*, **2013**, 78, 4270-7	4.2	32
68	Highly surface functionalized carbon nano-onions for bright light bioimaging. *Methods and Applications in Fluorescence*, **2015**, 3, 044005	3.1	31
67	Biodistribution and biocompatibility of passion fruit-like nano-architectures in zebrafish. *Nanotoxicology*, **2018**, 12, 914-922	5.3	30
66	Purified and Oxidized Single-Walled Carbon Nanotubes as Robust Near-IR Fluorescent Probes for Molecular Imaging. *Journal of Physical Chemistry C*, **2010**, 114, 18407-18413	3.8	29
65	Probing Metal Ion Complexation of Ligands with Multiple Metal Binding Sites: The Case of Spiropyrans. *Chemistry - A European Journal*, **2016**, 22, 13976-13984	4.8	28
64	Synthesis and photochemical properties of spiropyran graft and star polymers obtained by “click” chemistry. *Polymer Chemistry*, **2014**, 5, 6318-6324	4.9	28
63	Surface-enhanced Raman scattering from small numbers of purified and oxidised single-walled carbon nanotubes. *Chemical Physics Letters*, **2012**, 535, 146-151	2.5	28
62	Structural modifications of ionic liquid surfactants for improving the water dispersibility of carbon nanotubes: an experimental and theoretical study. *Physical Chemistry Chemical Physics*, **2011**, 13, 11373-83	3.6	28
61	Fluorescent single-digit detonation nanodiamond for biomedical applications. *Methods and Applications in Fluorescence*, **2018**, 6, 035010	3.1	26
60	Recent advances in smart biotechnology: Hydrogels and nanocarriers for tailored bioactive molecules depot. *Advances in Colloid and Interface Science*, **2017**, 249, 163-180	14.3	25
59	The balance between closed and open forms of spiropyrans in the solid state. *CrystEngComm*, **2010**, 12, 1027-1033	3.3	24
58	Antibody-gold quantum dot-PAMAM dendrimer complex as an immunoglobulin immunoassay. *Analyst, The*, **2008**, 133, 667-72	5	24
57	Spectroscopic changes induced by sonication of porphyrin–carbon nanotube composites in chlorinated solvents. *Carbon*, **2007**, 45, 2665-2671	10.4	24
56	Ratiometric temperature sensing with fluorescent thermochromic switches. *Chemical Communications*, **2019**, 55, 1112-1115	5.8	23

55	Photo-Responsive Graphene and Carbon Nanotubes to Control and Tackle Biological Systems. *Frontiers in Chemistry*, **2018**, 6, 102	5	23
54	Photo-controlled release of zinc metal ions by spiropyran receptors anchored to single-walled carbon nanotubes. *Physical Chemistry Chemical Physics*, **2012**, 14, 6034-43	3.6	23
53	Quantifying the contributions of inner-filter, re-absorption and aggregation effects in the photoluminescence of high-concentration conjugated polymer solutions. *Journal of Luminescence*, **2008**, 128, 31-40	3.8	23
52	Supramolecular functionalization of carbon nano-onions with hyaluronic acid-phospholipid conjugates for selective targeting of cancer cells. *Colloids and Surfaces B: Biointerfaces*, **2020**, 188, 110779	6	23
51	Porous graphite oxide pillared with tetrapod-shaped molecules. *Carbon*, **2017**, 120, 145-156	10.4	22
50	Spiropyrans for light-controlled drug delivery. *Dalton Transactions*, **2019**, 48, 15537-15544	4.3	21
49	Carbon nano-onions as fluorescent on/off modulated nanoprobes for diagnostics. *Beilstein Journal of Nanotechnology*, **2017**, 8, 1878-1888	3	21
48	Toxicity assessment of laser-induced graphene by zebrafish during development. *JPhys Materials*, **2020**, 3, 034008	4.2	20
47	Iron-related toxicity of single-walled carbon nanotubes and crocidolite fibres in human mesothelial cells investigated by Synchrotron XRF microscopy. *Scientific Reports*, **2018**, 8, 706	4.9	18
46	Structural, spectroscopic, and anion-binding properties of 5,10-porphodimethenes, an unusual class of calixphyrins. *Journal of Physical Chemistry A*, **2010**, 114, 2464-70	2.8	18
45	Conjugated Quantum Dots Inhibit the Amyloid (1-42) Fibrillation Process. *International Journal of Alzheimerls Disease*, **2011**, 2011, 502386	3.7	17
44	Zebrafish structural development in Mueller-matrix scanning microscopy. *Scientific Reports*, **2019**, 9, 19974	4.9	17
43	Photocatalytic Initiation of Radical Thiol-Ene Reactions Using Carbon-Bi2O3 Nanocomposites. *ACS Applied Nano Materials*, **2018**, 1, 4120-4126	5.6	15
42	Excited state on/off switching of a boron azadipyrromethene single-wall carbon nanotube conjugate. *Supramolecular Chemistry*, **2012**, 24, 23-28	1.8	15
41	Surface analysis of zinc-porphyrin functionalized carbon nano-onions. *Biointerphases*, **2015**, 10, 019006	1.8	13
40	Lipophilic guanosine derivatives as carbon nanotube dispersing agents. *Carbon*, **2012**, 50, 4663-4672	10.4	13
39	Supramolecular chemistry of carbon nano-onions. *Nanoscale*, **2020**, 12, 9352-9358	7.7	13
38	Photochemically Triggered Alkylthiol Reactions on Highly Ordered Pyrolytic Graphite. *Journal of Physical Chemistry C*, **2011**, 115, 10196-10204	3.8	12

37	Carbon Nano-onions: A Valuable Class of Carbon Nanomaterials in Biomedicine. *Current Medicinal Chemistry*, **2019**, 26, 6915-6929	4.3	11
36	Biomedical Applications of Functionalised Carbon Nanotubes. *Carbon Materials*, **2008**, 23-50		10
35	Osteoblastic Differentiation on Graphene Oxide-Functionalized Titanium Surfaces: An In Vitro Study. *Nanomaterials*, **2020**, 10,	5.4	9
34	Internalization of Carbon Nano-onions by Hippocampal Cells Preserves Neuronal Circuit Function and Recognition Memory. *ACS Applied Materials & Interfaces*, **2018**, 10, 16952-16963	9.5	9
33	Spectroscopy of single-walled carbon nanotubes in aqueous surfactant dispersion. *Physica Status Solidi (B): Basic Research*, **2009**, 246, 2704-2707	1.3	9
32	Toxicological profile of calcium carbonate nanoparticles for industrial applications. *Colloids and Surfaces B: Biointerfaces*, **2020**, 190, 110947	6	8
31	Carbon Nano-Onions as Non-Cytotoxic Carriers for Cellular Uptake of Glycopeptides and Proteins. *Nanomaterials*, **2019**, 9,	5.4	8
30	Carbon Nanomaterials for Nanomedicine **2018**, 103-113		8
29	Spiropyran-Based Drug Delivery Systems. *Frontiers in Chemistry*, **2021**, 9, 720087	5	8
28	Sonication of porphyrin–nanotube composites: a cautionary tale. *Physica Status Solidi (B): Basic Research*, **2007**, 244, 4227-4230	1.3	6
27	Electrochemical Properties of Screen-Printed Carbon Nano-Onion Electrodes. *Molecules*, **2020**, 25,	4.8	6
26	Carbon nano-onions as potential nanocarriers for drug delivery. *Dalton Transactions*, **2021**, 50, 2300-2309	4.3	6
25	Carbon Nano-onions for Bioimaging and Cancer Therapy Applications. *Nanomedicine and Nanotoxicology*, **2018**, 417-455	0.3	5
24	Effects of the Molecular Weight of Hyaluronic Acid in a Carbon Nanotube Drug Delivery Conjugate. *Frontiers in Chemistry*, **2020**, 8, 578008	5	4
23	Surfactant-mediated dispersions of carbon nano-onions in aqueous solution. *Nano Express*, **2020**, 1, 010021	2.8	4
22	Effect of Solvents and Dispersants on the Bundle Dissociation of Single-walled Carbon Nanotube. *AIP Conference Proceedings*, **2005**,	0	4
21	Hyaluronic Acid-Conjugated Carbon Nanomaterials for Enhanced Tumour Targeting Ability.. *Molecules*, **2021**, 27,	4.8	4
20	Toxicity of Carbon Nanotubes **2012**, 175		3

19	Surface-enhanced Raman scattering spectra of radial breathing and G band modes in functionalised nanotubes. *Chemical Physics Letters*, **2013**, 568-569, 95-100	2.5	3
18	Effect of solvent and dispersant on the bundle dissociation of single-walled carbon nanotube **2005**,		3
17	Carbon Nanomaterials (CNMs) and Enzymes: From Nanozymes to CNM-Enzyme Conjugates and Biodegradation.. *Materials*, **2022**, 15,	3.5	3
16	Synthesis of green fluorescent carbon dots from carbon nano-onions and graphene oxide.. *RSC Advances*, **2020**, 10, 36404-36412	3.7	3
15	Iron-related toxicity effects of single-walled carbon nanotubes in human placental cells (BeWo) investigated by X-ray fluorescence microscopy. *X-Ray Spectrometry*, **2019**, 48, 413-421	0.9	3
14	Diversity-oriented synthesis of blue emissive nitrogen heterocycles and their conjugation with carbon nano-onions. *Frontiers of Chemical Science and Engineering*, **2020**, 14, 76-89	4.5	3
13	Modulation of Efficient Diiodo-BODIPY Phototoxicity to Cancer Cells by Carbon Nano-Onions. *Frontiers in Chemistry*, **2020**, 8, 573211	5	2
12	Efficient and reversible CO2 capture in bio-based ionic liquids solutions. *Journal of CO2 Utilization*, **2021**, 55, 101815	7.6	2
11	Synchrotron soft X-ray microscopy and XRF to image Single-walled carbon nanotubes in epithelial cells. *Nuclear Instruments & Methods in Physics Research B*, **2020**, 465, 79-84	1.2	2
10	Human Dental Pulp Stem Cell Osteogenic Differentiation Seeded on Equine Bone Block with Graphene and Melatonin. *Applied Sciences (Switzerland)*, **2021**, 11, 3218	2.6	2
9	Molecular Switches-Tools for Imparting Control in Drug Delivery Systems.. *Frontiers in Chemistry*, **2022**, 10, 859450	5	2
8	Functionalized Carbon Nano-onions as Imaging Probes for Cancer Cells **2016**, 141-142		1
7	Characterisation of Single-walled Carbon Nanotube Bundle Dissociation in Amide Solvents. *AIP Conference Proceedings*, **2005**,	0	1
6	Graphene-Like Layers from Carbon Black: In Vivo Toxicity Assessment. *Nanomaterials*, **2020**, 10,	5.4	1
5	Biocompatible Dispersants for Carbon Nanomaterials. *Applied Sciences (Switzerland)*, **2021**, 11, 10565	2.6	0
4	Carbon Nanotubes: Functionalization of Carbon Nanoparticles Modulates Inflammatory Cell Recruitment and NLRP3 Inflammasome Activation (Small 24/2013). *Small*, **2013**, 9, 4280-4280	11	
3	Oxidized Single-Walled Carbon Nanotubes: Removal of Carbonaceous Functionalized Material by Washing with Solvents or Base. *Materials Research Society Symposia Proceedings*, **2011**, 1362, 1		
2	EFFECT OF SOLVENT AND DISPERSANT ON THE BUNDLE DISSOCIATION OF SINGLE-WALLED CARBON NANOTUBES. *NATO Science Series Series II, Mathematics, Physics and Chemistry*, **2006**, 211-212		

List of Publications

1 Carbon Nanomaterials for Deep-Tissue Imaging in the NIR Spectral Window **2018**, 87-114