Martin Kalbac

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2190790/publications.pdf

Version: 2024-02-01

227 6,320 38 papers citations h-index

230 230 230 8868
all docs docs citations times ranked citing authors

68

g-index

#	Article	IF	CITATIONS
1	Lithium Storage in Nanostructured TiO2 Made by Hydrothermal Growth. Chemistry of Materials, 2004, 16, 477-485.	3.2	406
2	Graphene substrates promote adherence of human osteoblasts and mesenchymal stromal cells. Carbon, 2010, 48, 4323-4329.	5.4	394
3	The Influence of Strong Electron and Hole Doping on the Raman Intensity of Chemical Vapor-Deposition Graphene. ACS Nano, 2010, 4, 6055-6063.	7.3	243
4	Surface refinement and electronic properties of graphene layers grown on copper substrate: An XPS, UPS and EELS study. Applied Surface Science, 2011, 257, 9785-9790.	3.1	185
5	Interaction between graphene and copper substrate: The role of lattice orientation. Carbon, 2014, 68, 440-451.	5.4	180
6	Rapid Identification of Stacking Orientation in Isotopically Labeled Chemical-Vapor Grown Bilayer Graphene by Raman Spectroscopy. Nano Letters, 2013, 13, 1541-1548.	4.5	146
7	Novel Catalysts, Room Temperature, and the Importance of Oxygen for the Synthesis of Single-Walled Carbon Nanotubes. Nano Letters, 2005, 5, 1209-1215.	4.5	120
8	The control of graphene double-layer formation in copper-catalyzed chemical vapor deposition. Carbon, 2012, 50, 3682-3687.	5.4	120
9	Raman Spectroscopy and in Situ Raman Spectroelectrochemistry of Bilayer ¹² C/ ¹³ C Graphene. Nano Letters, 2011, 11, 1957-1963.	4.5	104
10	Sensitization of TiO[sub 2] by Polypyridine Dyes. Journal of the Electrochemical Society, 2003, 150, E155.	1.3	99
11	Evaluating arbitrary strain configurations and doping in graphene with Raman spectroscopy. 2D Materials, 2018, 5, 015016.	2.0	95
12	Probing high-pressure properties of single-wall carbon nanotubes through fullerene encapsulation. Physical Review B, 2008, 77, .	1.1	93
13	Defects in Individual Semiconducting Single Wall Carbon Nanotubes: Raman Spectroscopic and in Situ Raman Spectroelectrochemical Study. Nano Letters, 2010, 10, 4619-4626.	4.5	79
14	Ionâ€irradiationâ€induced Defects in Isotopicallyâ€Labeled Two Layered Graphene: Enhanced Inâ€Situ Annealing of the Damage. Advanced Materials, 2013, 25, 1004-1009.	11.1	79
15	Single Layer Molybdenum Disulfide under Direct Out-of-Plane Compression: Low-Stress Band-Gap Engineering. Nano Letters, 2015, 15, 3139-3146.	4.5	75
16	Gadolinium-Based Mixed-Metal Nitride Clusterfullerenes GdxSc3â^'xN@C80 (x=1, 2). ChemPhysChem, 2006, 7, 1990-1995.	1.0	74
17	Novel Synthesis of the TiO2(B) Multilayer Templated Films. Chemistry of Materials, 2009, 21, 1457-1464.	3.2	69
18	A Facile Route to the Non-IPR Fullerene Sc3N@C68: Synthesis, Spectroscopic Characterization, and Density Functional Theory Computations (IPR=Isolated Pentagon Rule). Chemistry - A European Journal, 2006, 12, 7856-7863.	1.7	62

#	Article	IF	Citations
19	The Isomers of Gadolinium Scandium Nitride Clusterfullerenes Gd _{<i>x</i>} Sc _{3â^²<i>x</i>} N@C ₈₀ (<i>x</i> =1, 2) and Their Influence on Cluster Structure. Chemistry - A European Journal, 2008, 14, 2084-2092.	1.7	60
20	Development of the Tangential Mode in the Raman Spectra of SWCNT Bundles during Electrochemical Charging. Nano Letters, 2008, 8, 1257-1264.	4.5	60
21	Multilayer Films from Templated TiO ₂ and Structural Changes during their Thermal Treatment. Chemistry of Materials, 2008, 20, 2985-2993.	3.2	59
22	Electrochemical Doping of Chirality-Resolved Carbon Nanotubes. Journal of Physical Chemistry B, 2005, 109, 19613-19619.	1.2	57
23	The effect of SWCNT and nano-diamond films on human osteoblast cells. Physica Status Solidi (B): Basic Research, 2007, 244, 4356-4359.	0.7	57
24	Raman spectroscopy of graphene at high pressure: Effects of the substrate and the pressure transmitting media. Physical Review B, 2013, 88, .	1.1	56
25	Raman Spectroscopy and <i>in Situ</i> Raman Spectroelectrochemistry of Isotopically Engineered Graphene Systems. Accounts of Chemical Research, 2015, 48, 111-118.	7.6	55
26	Temperature-induced strain and doping in monolayer and bilayer isotopically labeled graphene. Physical Review B, 2015, 92, .	1.1	52
27	Electrochemical Charging of Individual Single-Walled Carbon Nanotubes. ACS Nano, 2009, 3, 2320-2328.	7.3	51
28	Two Positions of Potassium in Chemically Doped C60Peapods:Â An in situ Spectroelectrochemical Study. Journal of Physical Chemistry B, 2004, 108, 6275-6280.	1.2	48
29	Softening of the Radial Breathing Mode in Metallic Carbon Nanotubes. Physical Review Letters, 2009, 102, 126804.	2.9	48
30	Phase-pure nanocrystalline Li 4 Ti 5 O 12 for a lithium-ion battery. Journal of Solid State Electrochemistry, 2003, 8, 2-6.	1.2	46
31	In-Situ Vis-Near-Infrared and Raman Spectroelectrochemistry of Double-Walled Carbon Nanotubes. Advanced Functional Materials, 2005, 15, 418-426.	7.8	45
32	Fermi energy dependence of theG-band resonance Raman spectra of single-wall carbon nanotubes. Physical Review B, 2009, 80, .	1.1	45
33	Observation of Electronic Raman Scattering in Metallic Carbon Nanotubes. Physical Review Letters, 2011, 107, 157401.	2.9	44
34	Influence of single-walled carbon nanotube films on metabolic activity and adherence of human osteoblasts. Carbon, 2007, 45, 2266-2272.	5.4	43
35	Competition between the Spring Force Constant and the Phonon Energy Renormalization in Electrochemically Doped Semiconducting Single-Walled Carbon Nanotubes. Nano Letters, 2008, 8, 3532-3537.	4.5	43
36	Thermally Tunable Dual Emission of the d ⁸ –d ⁸ Dimer [Pt ₂ (ν-P ₂) ₅ (BF ₂) ₂) ₄] ^{4⪠Inorganic Chemistry, 2016, 55, 2441-2449.}	€"4/ s up>.	42

#	Article	IF	CITATIONS
37	Electrochemical tuning of high energy phonon branches of double wall carbon nanotubes. Carbon, 2004, 42, 2915-2920.	5.4	41
38	Interaction of nanodiamond with in situ generated sp-carbon chains probed by Raman spectroscopy. Carbon, 2006, 44, 3113-3116.	5.4	39
39	Sexithiophene Encapsulated in a Singleâ€Walled Carbon Nanotube: An In Situ Raman Spectroelectrochemical Study of a Peapod Structure. Chemistry - A European Journal, 2010, 16, 11753-11759.	1.7	39
40	Carbon isotope labelling in graphene research. Nanoscale, 2014, 6, 6363.	2.8	38
41	Strain Assessment in Graphene Through the Raman 2D′ Mode. Journal of Physical Chemistry C, 2015, 119, 25651-25656.	1.5	38
42	Raman Spectroscopy as a Tool to Address Individual Graphene Layers in Few-Layer Graphene. Journal of Physical Chemistry C, 2012, 116, 19046-19050.	1.5	37
43	Towards the evaluation of defects in MoS ₂ using cryogenic photoluminescence spectroscopy. Nanoscale, 2020, 12, 3019-3028.	2.8	37
44	Neutron Activated ¹⁵³ Sm Sealed in Carbon Nanocapsules for <i>in Vivo</i> Imaging and Tumor Radiotherapy. ACS Nano, 2020, 14, 129-141.	7.3	37
45	Selective detection of phosgene by nanocrystalline diamond layer. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 2070-2073.	0.8	36
46	An in situ Raman spectroelectrochemical study of the controlled doping of single walled carbon nanotubes in a conducting polymer matrix. Carbon, 2007, 45, 1463-1470.	5.4	35
47	Graphene wrinkling induced by monodisperse nanoparticles: facile control and quantification. Scientific Reports, 2015, 5, 15061.	1.6	35
48	The study of the interaction of human mesenchymal stem cells and monocytes/macrophages with single-walled carbon nanotube films. Physica Status Solidi (B): Basic Research, 2006, 243, 3514-3518.	0.7	34
49	Tuning of Sorted Double-Walled Carbon Nanotubes by Electrochemical Charging. ACS Nano, 2010, 4, 459-469.	7. 3	34
50	Effects of Heat Treatment on Raman Spectra of Two‣ayer ¹² C/ ¹³ C Graphene. Chemistry - A European Journal, 2012, 18, 13877-13884.	1.7	34
51	Study of Adenine and Guanine Oxidation Mechanism by Surface-Enhanced Raman Spectroelectrochemistry. Journal of Physical Chemistry C, 2015, 119, 8191-8198.	1.5	34
52	Graphene field effect transistor as a probe of electronic structure and charge transfer at organic molecule–graphene interfaces. Nanoscale, 2015, 7, 1471-1478.	2.8	34
53	Comparative study of shortening and cutting strategies of single-walled and multi-walled carbon nanotubes assessed by Ascanning electron microscopy. Carbon, 2018, 139, 922-932.	5.4	34
54	Heating Isotopically Labeled Bernal Stacked Graphene: A Raman Spectroscopy Study. Journal of Physical Chemistry Letters, 2014, 5, 549-554.	2.1	33

#	Article	IF	CITATIONS
55	Covalent Reactions on Chemical Vapor Deposition Grown Graphene Studied by Surfaceâ€Enhanced Raman Spectroscopy. Chemistry - A European Journal, 2016, 22, 5404-5408.	1.7	33
56	Mastering the Wrinkling of Self-supported Graphene. Scientific Reports, 2017, 7, 10003.	1.6	33
57	Magnetic impurities in single-walled carbon nanotubes and graphene: a review. Analyst, The, 2016, 141, 2639-2656.	1.7	32
58	Electronic structure of the trimetal nitride fullereneDy3N@C80. Physical Review B, 2005, 72, .	1.1	31
59	The influence of doping on the Raman intensity of the D band in single walled carbon nanotubes. Carbon, 2010, 48, 832-838.	5.4	31
60	Influence of the fetal bovine serum proteins on the growth of human osteoblast cells on graphene. Journal of Biomedical Materials Research - Part A, 2012, 100A, 3001-3007.	2.1	31
61	Electrochemical Doping of Double-Walled Carbon Nanotubes: An In Situ Raman Spectroelectrochemical Study. ChemPhysChem, 2004, 5, 274-277.	1.0	30
62	Chemical States of Electrochemically Doped Single Wall Carbon Nanotubes As Probed by Raman Spectroelectrochemistry and ex Situ X-ray Photoelectron Spectroscopy. Journal of Physical Chemistry C, 2008, 112, 13856-13861.	1.5	30
63	Gas sensing properties of nanocrystalline diamond films. Diamond and Related Materials, 2010, 19, 196-200.	1.8	30
64	Large Variations of the Raman Signal in the Spectra of Twisted Bilayer Graphene on a BN Substrate. Journal of Physical Chemistry Letters, 2012, 3, 796-799.	2.1	30
65	Two-Dimensional CVD-Graphene/Polyaniline Supercapacitors: Synthesis Strategy and Electrochemical Operation. ACS Applied Materials & Samp; Interfaces, 2021, 13, 34686-34695.	4.0	30
66	High-quality PVD graphene growth by fullerene decomposition on Cu foils. Carbon, 2017, 119, 535-543.	5.4	29
67	Thermal treatment of fluorinated graphene: An in situ Raman spectroscopy study. Carbon, 2015, 84, 347-354.	5.4	27
68	Nanocarbon Allotropes-Graphene and Nanocrystalline Diamond-Promote Cell Proliferation. Small, 2016, 12, 2499-2509.	5.2	27
69	Influence of an Extended Fullerene Cage:  Study of Chemical and Electrochemical Doping of C70 Peapods by in Situ Raman Spectroelectrochemistry. Journal of Physical Chemistry C, 2007, 111, 1079-1085.	1.5	26
70	Probing Charge Transfer between Shells of Doubleâ€Walled Carbon Nanotubes Sorted by Outerâ€Wall Electronic Type. Chemistry - A European Journal, 2011, 17, 9806-9815.	1.7	26
71	The Intermediate Frequency Modes of Single- and Double-Walled Carbon Nanotubes: A Raman Spectroscopic and In Situ Raman Spectroelectrochemical Study. Chemistry - A European Journal, 2006, 12, 4451-4457.	1.7	25
72	Changes in the Electronic States of Single-Walled Carbon Nanotubes as Followed by a Raman Spectroelectrochemical Analysis of the Radial Breathing Mode. Journal of Physical Chemistry C, 2008, 112, 16759-16763.	1.5	25

#	Article	IF	Citations
73	Controlled oxygen plasma treatment of single-walled carbon nanotube films improves osteoblastic cells attachment and enhances their proliferation. Carbon, 2011, 49, 2926-2934.	5.4	25
74	Fluorination of Isotopically Labeled Turbostratic and Bernal Stacked Bilayer Graphene. Chemistry - A European Journal, 2015, 21, 1081-1087.	1.7	25
75	Laser-ablation-assisted SF6 decomposition for extensive and controlled fluorination of graphene. Carbon, 2019, 145, 419-425.	5.4	25
76	Filling factor and electronic structure of Dy3N@C80 filled single-wall carbon nanotubes studied by photoemission spectroscopy. Physical Review B, 2006, 73, .	1.1	24
77	Temperature and face dependent copper–graphene interactions. Carbon, 2015, 93, 793-799.	5.4	24
78	Monitoring the doping of graphene on SiO ₂ /Si substrates during the thermal annealing process. RSC Advances, 2016, 6, 72859-72864.	1.7	24
79	Transformation of fullerene peapods to double-walled carbon nanotubes induced by UV radiation. Carbon, 2005, 43, 1610-1616.	5.4	23
80	In situ EPR spectroelectrochemistry of single-walled carbon nanotubes and C60 fullerene peapods. Carbon, 2006, 44, 2147-2154.	5 . 4	23
81	The Change of the State of an Endohedral Fullerene by Encapsulation into SWCNT: A Raman Spectroelectrochemical Study of Dy ₃ N@C ₈₀ Peapods. Chemistry - A European Journal, 2007, 13, 8811-8817.	1.7	23
82	The Extended View on the Empty <i>C</i> ₂ (3)â€C ₈₂ Fullerene: Isolation, Spectroscopic, Electrochemical, and Spectroelectrochemical Characterization and DFT Calculations. Chemistry - A European Journal, 2008, 14, 9960-9967.	1.7	23
83	The effect of a thin gold layer on graphene: a Raman spectroscopy study. RSC Advances, 2014, 4, 60929-60935.	1.7	22
84	Host–Guest Interactions in Metal–Organic Frameworks Doped with Acceptor Molecules as Revealed by Resonance Raman Spectroscopy. Journal of Physical Chemistry C, 2020, 124, 24245-24250.	1.5	22
85	Electrochemical and gas-phase photocatalytic performance of nanostructured TiO2(B) prepared by novel synthetic route. Progress in Solid State Chemistry, 2005, 33, 253-261.	3.9	21
86	Electrochemical and chemical redox doping of fullerene (C60) peapods. Carbon, 2006, 44, 99-106.	5 . 4	21
87	Formation of wrinkles on graphene induced by nanoparticles: Atomic force microscopy study. Carbon, 2015, 95, 573-579.	5. 4	21
88	Novel catalysts for low temperature synthesis of single wall carbon nanotubes. Physica Status Solidi (B): Basic Research, 2006, 243, 3101-3105.	0.7	20
89	Magnetic Properties of Iron Catalyst Particles in HiPco Single Wall Carbon Nanotubes. Journal of Physical Chemistry C, 2011, 115, 17303-17309.	1.5	20
90	Effects of intercalation and inhomogeneous filling on the collapse pressure of double-wall carbon nanotubes. Physical Review B, 2012, 86, .	1.1	20

#	Article	IF	Citations
91	Tuning the electronic properties of monolayer and bilayer transition metal dichalcogenide compounds under direct out-of-plane compression. Physical Chemistry Chemical Physics, 2017, 19, 13333-13340.	1.3	20
92	Strong and efficient doping of monolayer MoS ₂ by a graphene electrode. Physical Chemistry Chemical Physics, 2019, 21, 25700-25706.	1.3	20
93	Influence of the Resonant Electronic Transition on the Intensity of the Raman Radial Breathing Mode of Single Walled Carbon Nanotubes during Electrochemical Charging. Journal of Physical Chemistry C, 2009, 113, 16408-16413.	1.5	19
94	Decomposition of Fluorinated Graphene under Heat Treatment. Chemistry - A European Journal, 2016, 22, 8990-8997.	1.7	19
95	Extended characterization methods for covalent functionalization of graphene on copper. Carbon, 2017, 118, 200-207.	5.4	19
96	Strong localization effects in the photoluminescence of transition metal dichalcogenide heterobilayers. 2D Materials, 2021, 8, 025028.	2.0	19
97	SPECTROELECTROCHEMICAL RECOGNITION OF CHEMICAL DOPANTS IN THE INNER SPACE OF CARBON NANOSTRUCTURES. Nano, 2006, 01, 219-227.	0.5	18
98	Selective Etching of Thin Single-Walled Carbon Nanotubes. Journal of the American Chemical Society, 2009, 131, 4529-4534.	6.6	18
99	Graphene-enhanced Raman scattering on single layer and bilayers of pristine and hydrogenated graphene. Scientific Reports, 2020, 10, 4516.	1.6	18
100	In Situ Raman Spectroelectrochemistry as a Tool for the Differentiation of Inner Tubes of Double-Wall Carbon Nanotubes and Thin Single-Wall Carbon Nanotubes. Analytical Chemistry, 2007, 79, 9074-9081.	3.2	17
101	Structural properties and electrochemical behavior of CNTâ€TiO ₂ nanocrystal heterostructures. Physica Status Solidi (B): Basic Research, 2007, 244, 4040-4045.	0.7	17
102	Effect of Bundling on the Tangential Displacement Mode in the Raman Spectra of Semiconducting Single-Walled Carbon Nanotubes during Electrochemical Charging. Journal of Physical Chemistry C, 2009, 113, 1340-1345.	1.5	17
103	Mass-related inversion symmetry breaking and phonon self-energy renormalization in isotopically labeled AB-stacked bilayer graphene. Scientific Reports, 2013, 3, 2061.	1.6	17
104	Proton-Gradient-Driven Oriented Motion of Nanodiamonds Grafted to Graphene by Dynamic Covalent Bonds. ACS Nano, 2018, 12, 7141-7147.	7.3	17
105	In Situ Spectroelectrochemistry of Poly(N,Nâ€~-ethylenebis(salicylideneiminato)Cu(II)). Analytical Chemistry, 2004, 76, 5918-5923.	3.2	16
106	Raman spectroelectrochemistry of index-identified metallic carbon nanotubes: The resonance rule revisited. Physica Status Solidi (B): Basic Research, 2006, 243, 3130-3133.	0.7	16
107	Controlled doping of double walled carbon nanotubes and conducting polymers in a composite: An in situ Raman spectroelectrochemical study. Composites Science and Technology, 2009, 69, 1553-1557.	3.8	16
108	Effect of layer number and layer stacking registry on the formation and quantification of defects in graphene. Carbon, 2016, 98, 592-598.	5.4	16

#	Article	IF	CITATIONS
109	S- and N-doped graphene-based catalysts for the oxygen evolution reaction. Electrochimica Acta, 2020, 340, 135975.	2.6	16
110	Heterostructures from Single-Wall Carbon Nanotubes and TiO[sub 2] Nanocrystals. Journal of the Electrochemical Society, 2007, 154, K19.	1.3	15
111	An in situ Raman spectroelectrochemical study of the controlled doping of semiconducting single walled carbon nanotubes in a conducting polymer matrix. Synthetic Metals, 2009, 159, 2245-2248.	2.1	15
112	Multipurpose Nature of Rapid Covalent Functionalization on Carbon Nanotubes. Chemistry - A European Journal, 2015, 21, 18631-18641.	1.7	15
113	Tuning the Reactivity of Graphene by Surface Phase Orientation. Chemistry - A European Journal, 2017, 23, 1839-1845.	1.7	15
114	Superlattice in collapsed graphene wrinkles. Scientific Reports, 2019, 9, 9972.	1.6	15
115	Strain and Piezo-Doping Mismatch between Graphene Layers. Journal of Physical Chemistry C, 2020, 124, 11193-11199.	1.5	15
116	Incorporation of innovative compounds in nanostructured photoelectrochemical cells. Journal of Materials Processing Technology, 2005, 161, 107-112.	3.1	14
117	Large Variety of Behaviors for the Raman G′ Mode of Single Walled Carbon Nanotubes upon Electrochemical Gating Arising from Different (⟨i⟩n⟨ i⟩,⟨i⟩m⟨ i⟩) of Individual Nanotubes. Journal of Physical Chemistry C, 2009, 113, 1751-1757.	1.5	14
118	Enhanced Raman scattering on functionalized graphene substrates. 2D Materials, 2017, 4, 025087.	2.0	14
119	On the Suitability of Raman Spectroscopy to Monitor the Degree of Graphene Functionalization by Diazonium Salts. Journal of Physical Chemistry C, 2019, 123, 22397-22402.	1.5	14
120	Thermoreversible magnetic nanochains. Nanoscale, 2019, 11, 16773-16780.	2.8	14
121	Anomalous Freezing of Low-Dimensional Water Confined in Graphene Nanowrinkles. ACS Nano, 2020, 14, 15587-15594.	7.3	14
122	Periodic surface functional group density on graphene via laser-induced substrate patterning at Si/SiO2 interface. Nano Research, 2020, 13, 2332-2339.	5.8	14
123	Crystallization of 2D Hybrid Organic–Inorganic Perovskites Templated by Conductive Substrates. Advanced Functional Materials, 2021, 31, 2009007.	7.8	14
124	Comment on "Determination of the Exciton Binding Energy in Single-Walled Carbon Nanotubes― Physical Review Letters, 2007, 98, 019701; author reply 019702.	2.9	13
125	Inâ€Situ Raman Spectroelectrochemical Study of13C-Labeled Fullerene Peapods and Carbon Nanotubes. Small, 2007, 3, 1746-1752. Isotopic <mml:math <="" td="" xmlns:mml="http://www.w3.org/1998/Math/MathML"><td>5.2</td><td>13</td></mml:math>	5.2	13
126	display="inline"> <mml:msup><mml:mrow></mml:mrow><mml:mn>13</mml:mn></mml:msup> C/ <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow></mml:mrow><mml:mn>12</mml:mn></mml:msup></mml:math> C effect on the resonant Raman spectrum of twisted bilayer graphene. Physical Review B, 2013, 88, .	1.1	13

8

#	Article	IF	CITATIONS
127	Temperature-induced strain release via rugae on the nanometer and micrometer scale in graphene monolayer. Carbon, 2017, 119, 483-491.	5.4	13
128	Surfaceâ€enhanced Raman spectra on graphene. Journal of Raman Spectroscopy, 2018, 49, 168-173.	1.2	13
129	Highly sensitive broadband binary photoresponse in gateless epitaxial graphene on 4H–SiC. Carbon, 2021, 184, 72-81.	5.4	13
130	Stress and charge transfer in uniaxially strained CVD graphene. Physica Status Solidi (B): Basic Research, 2016, 253, 2355-2361.	0.7	12
131	Fine tuning of optical transition energy of twisted bilayer graphene via interlayer distance modulation. Physical Review B, 2017, 95, .	1.1	12
132	Imaging Nanoscale Inhomogeneities and Edge Delamination in Asâ€Grown MoS ₂ Using Tipâ€Enhanced Photoluminescence. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1900381.	1.2	12
133	Superradiant Emission from Coherent Excitons in van Der Waals Heterostructures. Advanced Functional Materials, 2021, 31, 2102196.	7.8	12
134	Chemical vapor deposition (CVD) growth of graphene films. , 2014, , 27-49.		11
135	Preparation and Charge-Transfer Study in a Single-Walled Carbon Nanotube Functionalized with Poly(3,4-ethylenedioxythiophene). Journal of Physical Chemistry C, 2015, 119, 21538-21546.	1.5	11
136	High-quality graphene on single crystal Ir(1 1 1) films on Si(1 1 1) wafers: Synthesis and multi-spectroscopic characterization. Carbon, 2015, 81, 167-173.	5.4	11
137	Effect of Steamâ€Treatment Time on the Length and Structure of Singleâ€Walled and Doubleâ€Walled Carbon Nanotubes. ChemNanoMat, 2016, 2, 108-116.	1.5	11
138	The identification of dispersive and non-dispersive intermediate frequency modes of HiPco single walled carbon nanotubes by in situ Raman spectroelectrochemistry. Physica Status Solidi (B): Basic Research, 2006, 243, 3134-3137.	0.7	10
139	Synthesis of single wall carbon nanotubes with invariant diameters using a modified laser assisted chemical vapour deposition route. Nanotechnology, 2006, 17, 5469-5473.	1.3	10
140	In situ optical spectroelectrochemistry of single-walled carbon nanotube thin films. Journal of Solid State Electrochemistry, 2008, 12, 1279-1284.	1.2	10
141	An Anomalous Enhancement of the Ag(2) Mode in the Resonance Raman Spectra of C60 Embedded in Single-Walled Carbon Nanotubes during Anodic Charging. Journal of Physical Chemistry C, 2010, 114, 2505-2511.	1.5	10
142	Hydrothermal preparation of hydrophobic and hydrophilic nanoparticles of iron oxide and a modification with CM-dextran. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	10
143	Modulated surface of single-layer graphene controls cell behavior. Carbon, 2014, 72, 207-214.	5.4	10
144	Evolution of temperature-induced strain and doping of double-layer graphene: An <i>in situ</i> Raman spectral mapping study. Physica Status Solidi (B): Basic Research, 2015, 252, 2401-2406.	0.7	10

#	Article	IF	Citations
145	Do defects enhance fluorination of graphene?. RSC Advances, 2016, 6, 81471-81476.	1.7	10
146	Chemical Vapor Deposition of MoS ₂ for Energy Harvesting: Evolution of the Interfacial Oxide Layer. ACS Applied Nano Materials, 2020, 3, 6563-6573.	2.4	10
147	Influence of structural properties on (de-)intercalation of ClO4â^ anion in graphite from concentrated aqueous electrolyte. Carbon, 2022, 186, 612-623.	5.4	10
148	Isolated Nanoribbons of Carbon Nanotubes and Peapods. ChemPhysChem, 2005, 6, 426-430.	1.0	9
149	Redox Doping of Doubleâ€Wall Carbon Nanotubes and C60Peapods. Fullerenes Nanotubes and Carbon Nanostructures, 2005, 13, 115-119.	1.0	9
150	HRTEM and EELS investigation of functionalized carbon nanotubes. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 37, 109-114.	1.3	9
151	In situ Raman spectroelectrochemistry of SWCNT bundles: Development of the tangential mode during electrochemical charging in different electrolyte solutions. Diamond and Related Materials, 2009, 18, 972-974.	1.8	9
152	Charging of Selfâ€Doped Poly(Anilineboronic Acid) Films Studied by in Situ ESR/UV/Vis/NIR Spectroelectrochemistry and ex Situ FTIR Spectroscopy. ChemPhysChem, 2011, 12, 2920-2924.	1.0	9
153	Structure and magnetic response of a residual metal catalyst in highly purified single walled carbon nanotubes. Physical Chemistry Chemical Physics, 2013, 15, 5992.	1.3	9
154	Photovoltaic characterization of graphene/silicon Schottky junctions from local and macroscopic perspectives. Chemical Physics Letters, 2017, 676, 82-88.	1.2	9
155	Raman excitation profiles of hybrid systems constituted by singleâ€layer graphene and free base phthalocyanine: Manifestations of two mechanisms of grapheneâ€enhanced Raman scattering. Journal of Raman Spectroscopy, 2017, 48, 1270-1281.	1.2	9
156	Surface enhanced infrared absorption spectroscopy for graphene functionalization on copper. Carbon, 2017, 124, 250-255.	5.4	9
157	EDOT polymerization at photolithographically patterned functionalized graphene. Carbon, 2017, 113, 33-39.	5.4	9
158	A tool box to ascertain the nature of doping and photoresponse in single-walled carbon nanotubes. Physical Chemistry Chemical Physics, 2019, 21, 4063-4071.	1.3	9
159	Large scale chemical functionalization of locally curved graphene with nanometer resolution. Carbon, 2020, 164, 207-214.	5.4	9
160	Highly Sensitive Room-Temperature Ammonia Sensors Based on Single-Wall Carbon Nanotubes Modified by PEDOT. IEEE Sensors Journal, 2022, 22, 3024-3032.	2.4	9
161	Activation of Raman modes in monolayer transition metal dichalcogenides through strong interaction with gold. Physical Review B, 2022, 105, .	1.1	9
162	Supramolecular Assembly of Single-Walled Carbon Nanotubes with a Ruthenium(II)â^'Bipyridine Complex: An in Situ Raman Spectroelectrochemical Study. Journal of Physical Chemistry C, 2009, 113, 2611-2617.	1.5	8

#	Article	IF	CITATIONS
163	Chiral angle dependence of resonance window widths in (2n+m) families of single-walled carbon nanotubes. Applied Physics Letters, 2010, 96, .	1.5	8
164	Addressing Raman features of individual layers in isotopically labeled Bernal stacked bilayer graphene. 2D Materials, 2016, 3, 025022.	2.0	8
165	SERS of Isotopically Labeled ¹² C/ ¹³ C Graphene Bilayer–Gold Nanostructured Film Hybrids: Graphene Layer as Spacer and SERS Probe. Journal of Physical Chemistry C, 2017, 121, 11680-11686.	1.5	8
166	Functionalization of Hydrogenated Chemical Vapour Deposition rown Graphene by On urface Chemical Reactions. Chemistry - A European Journal, 2017, 23, 4073-4078.	1.7	8
167	Surface-Confined Macrocyclization <i>via</i> Dynamic Covalent Chemistry. ACS Nano, 2020, 14, 2956-2965.	7.3	8
168	Localized Spectroelectrochemical Identification of Basal Plane and Defect-Related Charge-Transfer Processes in Graphene. Journal of Physical Chemistry Letters, 2022, 13, 642-648.	2.1	8
169	Charge distribution of potassium intercalated Dy3N@C80 observed with core-level and valence-band photoemission. Physica Status Solidi (B): Basic Research, 2006, 243, 3004-3007.	0.7	7
170	Raman spectroscopy investigation of defect occurrence in graphene grown on copper single crystals. Physica Status Solidi (B): Basic Research, 2013, 250, 2653-2658.	0.7	7
171	Extreme electrochemical doping of a graphene–polyelectrolyte heterostructure. RSC Advances, 2014, 4, 11311.	1.7	7
172	Analysis of metal catalyst content in magnetically filtered SWCNTs by SQUID magnetometry. Journal of Materials Science, 2015, 50, 2544-2553.	1.7	7
173	Graphene under direct compression: Stress effects and interlayer coupling. Physica Status Solidi (B): Basic Research, 2016, 253, 2336-2341.	0.7	7
174	Adsorption Site-Dependent Mobility Behavior in Graphene Exposed to Gas Oxygen. Journal of Physical Chemistry C, 2018, 122, 21493-21499.	1.5	7
175	Dynamic covalent conjugated polymer epitaxy on graphene. Journal of Materials Chemistry C, 2019, 7, 12240-12247.	2.7	7
176	Charge transfer in steam purified arc discharge single walled carbon nanotubes filled with lutetium halides. Physical Chemistry Chemical Physics, 2020, 22, 10063-10075.	1.3	7
177	Fluorination of graphene leads to susceptibility for nanopore formation by highly charged ion impact. Physical Review Materials, 2021, 5, .	0.9	7
178	Doping of C ₆₀ Fullerene Peapods with Lithium Vapor: Raman Spectroscopic and Spectroelectrochemical Studies. Chemistry - A European Journal, 2008, 14, 6231-6236.	1.7	6
179	Influence of oxygen and hydrogen treated graphene on cell adhesion in the presence or absence of fetal bovine serum. Physica Status Solidi (B): Basic Research, 2012, 249, 2503-2506.	0.7	6
180	Raman spectroscopy of strongly doped CVD-graphene. Physica Status Solidi (B): Basic Research, 2013, 250, 2659-2661.	0.7	6

#	Article	IF	CITATIONS
181	Towards quantification of the ratio of the single and double wall carbon nanotubes in their mixtures: An in situ Raman spectroelectrochemical study. Carbon, 2014, 78, 366-373.	5.4	6
182	Quenching of photoluminescence of Rhodamine 6G molecules on functionalized graphene. Physica Status Solidi (B): Basic Research, 2016, 253, 2347-2350.	0.7	6
183	NO2 sensor with a graphite nanopowder working electrode. Sensors and Actuators B: Chemical, 2016, 226, 299-304.	4.0	6
184	Addressing asymmetry of the charge and strain in a two-dimensional fullerene peapod. Nanoscale, 2016, 8, 735-740.	2.8	6
185	Selective self-assembly and light emission tuning of layered hybrid perovskites on patterned graphene. Nanoscale, 2018, 10, 3198-3211.	2.8	6
186	Excitation Wavelength Dependence of Combined Surface- and Graphene-Enhanced Raman Scattering Experienced by Free-Base Phthalocyanine Localized on Single-Layer Graphene-Covered Ag Nanoparticle Arrays. Journal of Physical Chemistry C, 2018, 122, 20850-20860.	1.5	6
187	The Intermediate Frequency Modes of Single- and Double-Walled Carbon Nanotubes: A Raman Spectroscopic and In Situ Raman Spectroelectrochemical Study. Chemistry - A European Journal, 2006, 12, 5415-5415.	1.7	5
188	Growth of adlayers studied by fluorination of isotopically engineered graphene. Physica Status Solidi (B): Basic Research, 2014, 251, 2505-2508.	0.7	5
189	Effect of Ethanethiolate Spacer on Morphology and Optical Responses of Ag Nanoparticle Array–Single Layer Graphene Hybrid Systems. Langmuir, 2017, 33, 14414-14424.	1.6	5
190	Rippled Metallicâ€Nanowire/Graphene/Semiconductor Nanostack for a Gateâ€Tunable Ultrahighâ€Performance Stretchable Phototransistor. Advanced Optical Materials, 2020, 8, 2000859.	3.6	5
191	Optical Near-Field Electron Microscopy. Physical Review Applied, 2021, 16, .	1.5	5
192	Evaluation of defect concentration in doped SWCNT. Physica Status Solidi (B): Basic Research, 2010, 247, 2797-2800.	0.7	4
193	Doping of bi-layer graphene by gradually polarizing a ferroelectric polymer. Physica Status Solidi (B): Basic Research, 2013, 250, 2649-2652.	0.7	4
194	Doping of C ₇₀ fullerene peapods with lithium vapor: Raman spectroscopic and Raman spectroelectrochemical studies. Nanotechnology, 2014, 25, 485706.	1.3	4
195	Electrochemical charging of the singleâ€kayer graphene membrane. Physica Status Solidi (B): Basic Research, 2016, 253, 2331-2335.	0.7	4
196	Temperature-induced evolution of strain and doping in an isotopically labeled two-dimensional graphene - C70 fullerene peapod. Diamond and Related Materials, 2017, 75, 140-145.	1.8	4
197	Reversibility of Grapheneâ€Enhanced Raman Scattering with Fluorinated Graphene. Physica Status Solidi (B): Basic Research, 2017, 254, 1700177.	0.7	4
198	Towards Catalytically Active Porous Graphene Membranes with Pulsed Laser Deposited Ceria Nanoparticles. Chemistry - A European Journal, 2021, 27, 4150-4158.	1.7	4

#	Article	IF	Citations
199	Chemical vapor deposition (CVD) growth of graphene films. , 2021, , 199-222.		4
200	Raman spectroscopy and spectroelectrochemistry of the chemically nâ€doped DWCNT. Physica Status Solidi (B): Basic Research, 2007, 244, 4086-4091.	0.7	3
201	Raman spectroscopy of isotopically labeled twoâ€layer graphene. Physica Status Solidi (B): Basic Research, 2012, 249, 2500-2502.	0.7	3
202	Introducing Well-Defined Nanowrinkles in CVD Grown Graphene. Nanomaterials, 2019, 9, 353.	1.9	3
203	Transferless Inverted Graphene/Silicon Heterostructures Prepared by Plasma-Enhanced Chemical Vapor Deposition of Amorphous Silicon on CVD Graphene. Nanomaterials, 2020, 10, 589.	1.9	3
204	The use of sample positioning to control defect creation by oxygen plasma in isotopically labelled bilayer graphene membranes. RSC Advances, 2021, 11, 10316-10322.	1.7	3
205	Electron-phonon coupling origin of the graphene π* -band kink via isotope effect. Physical Review B, 2021, 103, .	1.1	3
206	Evolution of the Raman 2D' mode in monolayer graphene during electrochemical doping. Microchemical Journal, 2022, 181, 107739.	2.3	3
207	The reaction of lithium metal vapor with single walled carbon nanotubes of large diameters. Physica Status Solidi (B): Basic Research, 2009, 246, 2428-2431.	0.7	2
208	Selfâ€ordering of iron oxide nanoparticles covered by graphene. Physica Status Solidi (B): Basic Research, 2014, 251, 2499-2504.	0.7	2
209	Raman spectroscopy and AFM study of ¹² C graphene/fullerenes C ₇₀ / ¹³ C graphene heterostructure. Physica Status Solidi (B): Basic Research, 2015, 252, 2418-2422.	0.7	2
210	Tuning the Interlayer Interaction of a Twisted Multilayer Wrinkle With Temperature. Physica Status Solidi (B): Basic Research, 2017, 254, 1700237.	0.7	2
211	Coexistence of Van Hove singularities and pseudomagnetic fields in modulated graphene bilayer. Nanotechnology, 2020, 31, 165705.	1.3	2
212	Thermal Traits of MNPs under High-Frequency Magnetic Fields: Disentangling the Effect of Size and Coating. Nanomaterials, 2021, 11, 797.	1.9	2
213	Hierarchical TiO2 Layers Prepared by Plasma Jets. Nanomaterials, 2021, 11, 3254.	1.9	2
214	Anatase Inverse Opal: Preparation and Electrochemical Properties. Materials Research Society Symposia Proceedings, 2004, 820, 19.	0.1	1
215	Ordered graphene strips onto polymer backing prepared by laser scanning. Applied Physics Letters, 2012, 101, 173102.	1.5	1
216	Electronic and mechanical response of graphene on BaTiO3at martensitic phase transitions. Journal of Physics Condensed Matter, 2018, 30, 085001.	0.7	1

#	Article	IF	CITATIONS
217	Reversible Lectin Binding to Glycan-Functionalized Graphene. International Journal of Molecular Sciences, 2021, 22, 6661.	1.8	1
218	Introduction to Raman Spectroscopy of Chemically Functionalized CVD Graphene., 2020, , 1-17.		1
219	Electrochromic 2,5â€Dihydroxyterephthalic Acid Linker in Metalâ^'Organic Frameworks. Advanced Photonics Research, 0, , 2100219.	1.7	1
220	Toward Grapheneâ€Enhanced Spectroelectrochemical Sensors. Advanced Materials Interfaces, 0, , 2200478.	1.9	1
221	Fabrication of nano-interdigitated electrodes. , 2003, , .		0
222	Distinct Redox Doping of Core/Shell Nanostructures: Double Wall Carbon Nanotubes. AIP Conference Proceedings, 2004, , .	0.3	0
223	Isolation of Carbon Nanostructures. AIP Conference Proceedings, 2005, , .	0.3	O
224	Selective and Scalable Chemical Removal of Thin Singleâ€Walled Carbon Nanotubes from their Mixtures with Doubleâ€Walled Carbon Nanotubes. Chemistry - A European Journal, 2015, 21, 16147-16153.	1.7	0
225	Temperature dependence of the 2D′ mode of an isotopically labelled graphene double layer. Physica Status Solidi (B): Basic Research, 2016, 253, 2342-2346.	0.7	0
226	Functionalization of Hydrogenated Chemical Vapour Deposition-Grown Graphene by On-Surface Chemical Reactions. Chemistry - A European Journal, 2017, 23, 4022-4022.	1.7	0
227	OPTICAL AND RAMAN SPECTROELECTROCHEMISTRY OF CARBON NANOSTRUCTURES., 2005, , .		O