Sebastiano Trusso

List of Publications by Year in descending order

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137	2,162	26 h-index	37
papers	citations		g-index
139	139	139	2383
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Nanoparticles Engineering by Pulsed Laser Ablation in Liquids: Concepts and Applications. Nanomaterials, 2020, 10, 2317.	4.1	140
2	The controlled pulsed laser deposition of Ag nanoparticle arrays for surface enhanced Raman scattering. Nanotechnology, 2009, 20, 245606.	2.6	58
3	Experimental Evidence for Self-Similar Structures in the Aggregation of Porphyrins in Aqueous Solutions. Physical Review Letters, 1996, 76, 4741-4744.	7.8	57
4	Growth process of nanostructured silver films pulsed laser ablated in high-pressure inert gas. Applied Surface Science, 2009, 255, 9676-9679.	6.1	55
5	Time-of-Flight Neutron Imaging on IMAT@ISIS: A New User Facility for Materials Science. Journal of Imaging, 2018, 4, 47.	3.0	50
6	Au nanoparticle arrays produced by Pulsed Laser Deposition for Surface Enhanced Raman Spectroscopy. Applied Surface Science, 2012, 258, 9148-9152.	6.1	49
7	Aggregation in Fluid Solution of Dendritic Supermolecules made of Ruthenium(II)- and Osmium(II)-Polypyridine Building Blocks. Journal of the American Chemical Society, 1995, 117, 1754-1758.	13.7	47
8	Nano-Raman imaging of Cu–TCNQ clusters in TCNQ thin films by scanning near-field optical microscopyPresented at the LANMAT 2001 Conference on the Interaction of Laser Radiation with Matter at Nanoscopic Scales: From Single Molecule Spectroscopy to Materials Processing, Venice, 3–6 October, 2001 Physical Chemistry Chemical Physics, 2002, 4, 2747-2753.	2.8	45
9	Ag nanocluster synthesis by laser ablation in Ar atmosphere: A plume dynamics analysis. Laser and Particle Beams, 2009, 27, 281-290.	1.0	44
10	Phage–AgNPs complex as SERS probe for U937 cell identification. Biosensors and Bioelectronics, 2015, 74, 398-405.	10.1	44
11	<i>Ab initio</i> spectroscopy of water under electric fields. Physical Chemistry Chemical Physics, 2019, 21, 21205-21212.	2.8	44
12	Surface-enhanced Raman scattering of SnO <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow></mml:mrow><mml:mn>2</mml:mn></mml:msub></mml:math> bulk material and colloidal solutions. Physical Review B, 2012, 85, .	3.2	41
13	Light-emitting silicon nanowires obtained by metal-assisted chemical etching. Semiconductor Science and Technology, 2017, 32, 043004.	2.0	39
14	Dynamical properties of water-methanol solutions studied by depolarized Rayleigh scattering. Physical Review E, 1996, 54, 1720-1724.	2.1	37
15	SERS activity of pulsed laser ablated silver thin films with controlled nanostructure. Journal of Raman Spectroscopy, 2011, 42, 1298-1304.	2.5	34
16	Decoration of silicon nanowires with silver nanoparticles for ultrasensitive surface enhanced Raman scattering. Nanotechnology, 2016, 27, 375603.	2.6	33
17	Catalytic Activity of Silicon Nanowires Decorated with Gold and Copper Nanoparticles Deposited by Pulsed Laser Ablation. Nanomaterials, 2018, 8, 78.	4.1	32
18	Ag and Au nanoparticles for SERS substrates produced by pulsed laser ablation. Crystal Research and Technology, 2011, 46, 836-840.	1.3	31

#	Article	IF	CITATIONS
19	Materials analysis opportunities on the new neutron imaging facility IMAT@ISIS. Journal of Instrumentation, 2016, 11, C03014-C03014.	1.2	31
20	Phage-based assay for rapid detection of bacterial pathogens in blood by Raman spectroscopy. Journal of Immunological Methods, 2019, 465, 45-52.	1.4	31
21	Raman microscopy study of pulsed laser ablation deposited silicon carbide films. Thin Solid Films, 1998, 332, 290-294.	1.8	30
22	SERS detection and DFT calculation of 2-naphthalene thiol adsorbed on Ag and Au probes. Sensors and Actuators B: Chemical, 2016, 237, 545-555.	7.8	30
23	Hydrolysis of Aspirin Studied by Spectrophotometric and Fluorometric Variable-Temperature Kinetics. Journal of Pharmaceutical Sciences, 1996, 85, 1105-1108.	3.3	29
24	Time resolved imaging studies of the plasma produced by laser ablation of silicon in O2/Ar atmosphere. Laser and Particle Beams, 2005, 23, 149-153.	1.0	29
25	Light emitting porous silicon diode based on a silicon/porous silicon heterojunction. Journal of Applied Physics, 1999, 86, 6474-6482.	2.5	28
26	Bonding configurations and optical band gap for nitrogenated amorphous silicon carbide films prepared by pulsed laser ablation. Journal of Applied Physics, 2002, 92, 2485-2489.	2.5	26
27	Structural and optical properties of novel surfactant-coated Yb@TiO2 nanoparticles. Journal of Nanoparticle Research, 2011, 13, 5833-5839.	1.9	26
28	Pulsed laser ablation of SiC in a nitrogen atmosphere: formation of CN. Applied Physics A: Materials Science and Processing, 2004, 79, 1997-2005.	2.3	25
29	Noble metal nanoparticles produced by nanosecond laser ablation. Applied Physics A: Materials Science and Processing, 2011, 104, 829-837.	2.3	24
30	Raman spectroscopy differentiates between sensitive and resistant multiple myeloma cell lines. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 187, 15-22.	3.9	24
31	SERS and DFT study of indigo adsorbed on silver nanostructured surface. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 205, 465-469.	3.9	24
32	Spinodal decomposition of a three-component water-in-oil microemulsion system. Physical Review E, 1995, 51, 5818-5823.	2.1	23
33	Surface-enhanced Raman scattering study of organic pigments using silver and gold nanoparticles prepared by pulsed laser ablation. Applied Surface Science, 2013, 272, 36-41.	6.1	23
34	Excimer laser ablation of silicon carbide ceramic targets. Diamond and Related Materials, 2002, 11, 273-279.	3.9	21
35	Laser-Synthesized SERS Substrates as Sensors toward Therapeutic Drug Monitoring. Nanomaterials, 2019, 9, 677.	4.1	21
36	Investigation of a nanocrystalline silicon phase embedded in SiO[sub x] thin films grown by pulsed laser deposition. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 519.	1.6	20

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37	A platinum-free nanostructured gold counter electrode for DSSCs prepared by pulsed laser ablation. Applied Surface Science, 2020, 506, 144690.	6.1	20
38	Optical near-field Raman imaging with subdiffraction resolution. Applied Optics, 2003, 42, 2724.	2.1	19
39	SERS activity of silver and gold nanostructured thin films deposited by pulsed laser ablation. Applied Physics A: Materials Science and Processing, 2014, 117, 347-351.	2.3	19
40	Functionalization of silicon nanowire arrays by silver nanoparticles for the laser desorption ionization mass spectrometry analysis of vegetable oils. Journal of Mass Spectrometry, 2016, 51, 849-856.	1.6	19
41	Percolative phenomena in lecithin reverse micelles: the role of water. Colloid and Polymer Science, 2002, 280, 193-202.	2.1	18
42	Synthesis by pulsed laser ablation in Ar and SERS activity of silver thin films with controlled nanostructure. Laser Physics, 2011, 21, 818-822.	1.2	18
43	Rapid detection of Pseudomonas aeruginosa by phage-capture system coupled with micro-Raman spectroscopy. Vibrational Spectroscopy, 2016, 86, 1-7.	2.2	18
44	Electric-Field-Induced Effects on the Dipole Moment and Vibrational Modes of the Centrosymmetric Indigo Molecule. Journal of Physical Chemistry A, 2020, 124, 10856-10869.	2.5	18
45	Residual Crystalline Silicon Phase in Silicon-Rich-Oxide Films Subjected to High Temperature Annealing. Journal of the Electrochemical Society, 2002, 149, G376.	2.9	17
46	Metal Nanoparticles Deposited on Porous Silicon Templates as Novel Substrates for SERS. Croatica Chemica Acta, 2015, 88, 437-444.	0.4	17
47	Porphyrin aggregation in aqueous solutions: small angle and quasielastic light scattering results. Journal of Molecular Structure, 1996, 383, 255-260.	3.6	16
48	A light scattering study of spinodal decomposition in systems containing surfactant molecules. Journal of Physics Condensed Matter, 1996, 8, A81-A101.	1.8	16
49	Pulsed laser deposition of boron nitride thin films. Radiation Effects and Defects in Solids, 2008, 163, 293-298.	1.2	16
50	A multivariate statistical approach of X-ray fluorescence characterization of a large collection of reverse glass paintings. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2019, 159, 105655.	2.9	16
51	CN x thin films grown by pulsed laser deposition: Raman, infrared and X-ray photoelectron spectroscopy study. Thin Solid Films, 1999, 355-356, 219-222.	1.8	15
52	Synthesis and physico-chemical characterization of Au/TiO2 nanostructures formed by novel "cold― and "hot―nanosoldering of Au and TiO2 nanoparticles dispersed in water. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 392, 171-177.	4.7	15
53	Raman spectroscopy of organic dyes adsorbed on pulsed laser deposited silver thin films. Applied Surface Science, 2013, 278, 259-264.	6.1	15
54	Laser Controlled Synthesis of Noble Metal Nanoparticle Arrays for Low Concentration Molecule Recognition. Micromachines, 2014, 5, 1296-1309.	2.9	15

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55	Correlation between structural and electrical properties of PLD prepared ZnO thin films used as a photodetector material. Applied Surface Science, 2015, 359, 266-271.	6.1	15
56	Measurement of the dielectric constant of amorphousCNxfilms in the 0–45 eV energy range. Physical Review B, 2000, 62, 16893-16899.	3.2	14
57	Influence of the plasma expansion dynamics on the structural properties of pulsed laser ablation deposited tin oxide thin films. Thin Solid Films, 2010, 518, 5409-5415.	1.8	14
58	Light Scattering Enhancement in Nanostructured Silver Film Composites. Journal of Physical Chemistry C, 2013, 117, 3497-3502.	3.1	14
59	Structural and optical properties of pulsed laser deposited ZnO thin films. Current Applied Physics, 2013, 13, 710-716.	2.4	14
60	On the role of the ablated mass on the propagation of a laser-generated plasma in an ambient gas. Europhysics Letters, 2015, 109, 25002.	2.0	14
61	Removal of As(III) from Biological Fluids: Mono- versus Dithiolic Ligands. Chemical Research in Toxicology, 2020, 33, 967-974.	3.3	14
62	Micro-Raman study of free-standing porous silicon samples. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1999, 17, 468.	1.6	13
63	Optical constants of CNx thin films from reflection electron energy loss spectroscopy. Thin Solid Films, 2000, 377-378, 631-634.	1.8	12
64	Nanostructured silver thin films deposited by pulsed laser ablation. Radiation Effects and Defects in Solids, 2008, 163, 673-683.	1.2	12
65	Au nanoparticle-based sensor for apomorphine detection in plasma. Beilstein Journal of Nanotechnology, 2015, 6, 2224-2232.	2.8	12
66	A micro-Raman spectroscopic investigation of leukemic U-937 cells in aged cultures. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2016, 159, 21-29.	3.9	12
67	Pulsed laser deposition of gold thin films with long-range spatial uniform SERS activity. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	12
68	Rotational dynamics of water molecules in a water–short-chain-nonionic-amphiphile mixture: Depolarized light scattering. Physical Review E, 1995, 51, 2349-2355.	2.1	11
69	Quantitative estimation of the threefold and fourfold carbon coordination in amorphous CNx films. Applied Physics Letters, 2001, 78, 326-328.	3.3	11
70	Near-field imaging of surface-plasmon vortex-modes around a single elliptical nanohole in a gold film. Scientific Reports, 2019, 9, 5320.	3.3	11
71	Driving electromagnetic field enhancements in tailored gold surface nanostructures: Optical properties and macroscale simulations. Applied Surface Science, 2019, 466, 19-27.	6.1	11
72	Influence of the deposition parameters on the electronic and structural properties of pulsed laser ablation prepared Si1â^'xCx thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2007, 25, 117-125.	2.1	10

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73	Structural properties of pulsed laser deposited SnOx thin films. Applied Surface Science, 2011, 257, 2520-2525.	6.1	10
74	Growth Analysis of Pulsed Laser Ablated Films. Plasmonics, 2013, 8, 1707-1712.	3.4	10
75	On the influence of the mass ablated by a laser pulse on thin film morphology and optical properties. Applied Physics A: Materials Science and Processing, 2014, 117, 137-142.	2.3	10
76	Protein-Metal Interactions Probed by SERS: Lysozyme on Nanostructured Gold Surface. Plasmonics, 2018, 13, 2117-2124.	3.4	10
77	Interaction between As(III) and Simple Thioacids in Water: An Experimental and ab Initio Molecular Dynamics Investigation. Journal of Physical Chemistry B, 2019, 123, 6090-6098.	2.6	10
78	On the performance of laser-synthesized, SERS-based sensors for drug detection. Applied Surface Science, 2020, 507, 145109.	6.1	10
79	Arsenic–nucleotides interactions: an experimental and computational investigation. Dalton Transactions, 2020, 49, 6302-6311.	3.3	10
80	Small-angle light scattering in microemulsions (spinodal decomposition). , 1993, , 311-316.		9
81	Characterization of pulsed laser deposited a-C films by means of reflection electron energy loss spectroscopy. Thin Solid Films, 2001, 398-399, 228-232.	1.8	9
82	Laser tailored nanoparticle arrays to detect molecules at dilute concentration. Applied Surface Science, 2017, 396, 1866-1874.	6.1	9
83	Dynamics of water confined in non-ionic amphiphiles supramolecular structures. Physica A: Statistical Mechanics and Its Applications, 1996, 231, 207-219.	2.6	8
84	Electronic properties of PLD prepared nitrogenated a-SiC thin films. Thin Solid Films, 2003, 433, 34-38.	1.8	8
85	sp2and sp3bonding configurations in low nitrogen content a-CNxthin films. Journal Physics D: Applied Physics, 2003, 36, 541-544.	2.8	8
86	Laser induced breakdown spectroscopy for the analysis of archaeological dyes from Licata (Sicily). Radiation Effects and Defects in Solids, 2008, 163, 535-543.	1.2	8
87	Functionalization of nanostructured gold substrates with chiral chromophores for SERS applications: The case of 5â€Aza[5]helicene. Chirality, 2018, 30, 875-882.	2.6	8
88	Light-scattering studies on water–nonionic-amphiphile solutions. Physical Review E, 1995, 51, 2341-2348.	2.1	7
89	Nearâ€field Raman imaging of morphological and chemical defects in organic crystals with subdiffraction resolution. Journal of Microscopy, 2003, 209, 228-235.	1.8	7
90	Structural characterization of pulsed laser deposited poly(methylmethacrylate) thin films. Journal of Raman Spectroscopy, 2008, 39, 182-185.	2.5	7

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91	Propagation of laser generated plasmas through inert gases. Laser and Particle Beams, 2010, 28, 53-59.	1.0	7
92	Laser-Mediated Nanoparticle Synthesis and Self-Assembling. Springer Series in Materials Science, 2014, , 175-212.	0.6	7
93	Understanding the behaviour of carnosine in aqueous solution: an experimental and quantum-based computational investigation on acid–base properties and complexation mechanisms with Ca ²⁺ and Mg ²⁺ . New Journal of Chemistry, 2021, 45, 20352-20364.	2.8	7
94	Hydrolysis of Al3+ in Aqueous Solutions: Experiments and Ab Initio Simulations. Liquids, 2022, 2, 26-38.	2.5	6
95	Synthesis of Yb nanoparticles by laser ablation of ytterbium target in sodium bis(2-ethylhexyl)sulfosuccinate reverse micellar solution. Materials Letters, 2010, 64, 576-579.	2.6	5
96	Near-Field Optical Detection of Plasmon Resonance from Gold Nanoparticles: Theoretical and Experimental Evidence. Plasmonics, 2015, 10, 63-70.	3.4	5
97	SERS sensing of perampanel with nanostructured arrays of gold particles produced by pulsed laser ablation in water. Medical Devices & Sensors, 2018, 1, e10003.	2.7	5
98	The silver collection of San Gennaro treasure (Neaples): A multivariate statistic approach applied to X-ray fluorescence data. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2021, 180, 106171.	2.9	5
99	Near-Field Raman Spectroscopy and Imaging. Nanoscience and Technology, 2007, , 287-329.	1.5	5
100	Micro-Raman study of reactive pulsed laser ablation deposited silicon carbon alloy films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1998, 16, 3020-3024.	2.1	4
101	Dynamics of a pulsed laser generated tin plasma expanding in an oxygen atmosphere. Radiation Effects and Defects in Solids, 2005, 160, 647-653.	1.2	4
102	Time evolution of a laser-generated silver plasma expanding in a background gas. Radiation Effects and Defects in Solids, 2010, 165, 559-565.	1.2	4
103	Low-energy laser irradiation promotes cellular damage in glucocorticoid-resistant multiple myeloma cells. Leukemia and Lymphoma, 2015, 56, 1514-1516.	1.3	4
104	Preparation and characterization of SERS substrates: From colloids to solid substrates. , 2015, , .		4
105	A multivariate analysis of Multiple Myeloma subtype plasma cells. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 258, 119813.	3.9	4
106	Metal-decorated silicon nanowires for laser desorption-ionization mass spectrometry. SPIE Newsroom, $0, \dots$	0.1	4
107	An investigation of the electronic and structural properties of pulsed laser-deposited a-C films. Thin Solid Films, 2001, 398-399, 233-237.	1.8	3
108	Laser Ablation-Deposited CN x Thin Films. , 0, , 287-302.		3

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109	Optical and structural properties of silicon carbon nitride thin films deposited by reactive pulsed laser ablation. Radiation Effects and Defects in Solids, 2010, 165, 754-759.	1.2	3
110	Synthesis by pulsed laser ablation of 2D nanostructures for advanced biomedical sensing. Journal of Instrumentation, 2016, 11, C05006-C05006.	1.2	3
111	Role of pH on Nanostructured SERS Active Substrates for Detection of Organic Dyes. Molecules, 2021, 26, 2360.	3.8	3
112	Phage-Phenotype Imaging of Myeloma Plasma Cells by Phage Display. Applied Sciences (Switzerland), 2021, 11, 7910.	2.5	3
113	Binding of Arsenic by Common Functional Groups: An Experimental and Quantum-Mechanical Study. Applied Sciences (Switzerland), 2022, 12, 3210.	2.5	3
114	Dynamical properties of water-methanol solutions: Brillouin and depolarized Rayleigh scattering. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1994, 16, 923-931.	0.4	2
115	Small-angle light scattering in dense microemulsions, transition from droplet to bicontinuous phase. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1994, 16, 1627-1633.	0.4	2
116	Growth and structural properties of hydrogenated silicon films deposited by pulsed laser ablation. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1999, 17, 921-925.	2.1	2
117	Evolution of Î ² -SiC in laser-generated plasmas. Applied Surface Science, 2013, 272, 19-24.	6.1	2
118	Phage display as a tool for rapid in vitro cell characterization by fluorescence imaging and Raman spectroscopy. New Biotechnology, 2014, 31, S107.	4.4	2
119	Laser Synthesized Nanoparticles for Therapeutic Drug Monitoring. Springer Series in Materials Science, 2018, , 339-360.	0.6	2
120	Synthesis by picosecond laser ablation of ligand-free Ag and Au nanoparticles for SERS applications. EPJ Web of Conferences, 2018, 167, 05002.	0.3	2
121	Ion transmission spectroscopy of pores filled with Au nanoparticles. Nuclear Instruments & Methods in Physics Research B, 2021, 491, 29-33.	1.4	2
122	A.c. Conductivity of reactive-evaporation-depositeda-Si:H films. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1991, 13, 787-793.	0.4	1
123	Frequency-dependent coductivity in boron- and phosphorus-doped amorphous silicon films. Thin Solid Films, 1992, 209, 97-103.	1.8	1
124	Amorphous silicon-carbon films prepared by reactive evaporation. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1993, 15, 917-924.	0.4	1
125	Anisotropic light scattering in water-alcohol mixtures. European Physical Journal Special Topics, 1993, 03, C1-309-C1-318.	0.2	1
126	Sound propagation and viscosity in water short-chain amphiphiles solutions, evidence of percolation phenomena. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1994, 16, 1619-1625.	0.4	1

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127	Pulsed laser-deposited SnOx: plasma expansion dynamics effects. Radiation Effects and Defects in Solids, 2010, 165, 700-705.	1.2	1
128	Generation of periodic structures on SiC upon laser plasma XUV/NIR radiations. Laser and Particle Beams, 2013, 31, 547-550.	1.0	1
129	FITC-Labelled Clone from Phage Display for Direct Detection of Leukemia Cells in Blood. Lecture Notes in Electrical Engineering, 2019, , 165-172.	0.4	1
130	Electric Field and Temperature Effects on the Ab Initio Spectroscopy of Liquid Methanol. Applied Sciences (Switzerland), 2021, 11, 5457.	2.5	1
131	Spinodal Decomposition of the Three-Component Microemulsion System: Aot/Water/Decane. Materials Research Society Symposia Proceedings, 1994, 376, 329.	0.1	0
132	Small-angle light scattering studies of dense AOT-water-decane microemulsions. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1996, 18, 1317-1332.	0.4	0
133	Correlation of structural and electrical transport properties in hydrogenated silicon films. AIP Conference Proceedings, 2000, , .	0.4	0
134	Gas pressure effects on the structure of CNxthin films deposited by laser ablation. Radiation Effects and Defects in Solids, 2005, 160, 601-608.	1.2	0
135	Effects of the plasma expansion dynamics and of the laser fluence on CNxthin films deposited by laser ablation. Radiation Effects and Defects in Solids, 2010, 165, 809-814.	1.2	0
136	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.	2.2	0
137	Synthesis of Silver Nanoparticle Arrays for SERS Based Sensing. Lecture Notes in Electrical Engineering, 2011, , 137-143.	0.4	0