Miklos Veres

List of Publications by Year
in descending order

122	1,349	394421 19	454955 30
papers	citations	h-index	g-index

124	124	124	1579
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	IR study of the formation process of polymeric hydrogenated amorphous carbon film. Diamond and Related Materials, 2002, 11, 1110-1114.	3.9	64
2	Characterisation of a-C:H and oxygen-containing Si:C:H films by Raman spectroscopy and XPS. Diamond and Related Materials, 2005, 14, 1051-1056.	3.9	60
3	Surface enhanced Raman scattering (SERS) investigation of amorphous carbon. Diamond and Related Materials, 2004, 13, 1412-1415.	3.9	59
4	Investigation of the performance of thermally generated gold nanoislands for LSPR and SERS applications. Sensors and Actuators B: Chemical, 2018, 255, 433-439.	7.8	59
5	New aspects of Raman scattering in carbon-based amorphous materials. Diamond and Related Materials, 2008, 17, 1692-1696.	3.9	42
6	Structural Changes in Doped Ge2Sb2Te5 Thin Films Studied by Raman Spectroscopy. Physics Procedia, 2013, 44, 82-90.	1.2	39
7	On photoinduced volume change in amorphous selenium: Quantum chemical calculation and Raman spectroscopy. Journal of Applied Physics, 2010, 107, .	2.5	36
8	Grain boundary fine structure of ultrananocrystalline diamond thin films measured by Raman scattering. Applied Physics Letters, 2007, 91, .	3.3	35
9	Characterization of luminescent silicon carbide nanocrystals prepared by reactive bonding and subsequent wet chemical etching. Applied Physics Letters, 2011, 99, .	3.3	33
10	Photoluminescence of ultra-high molecular weight polyethylene modified by fast atom bombardment. Thin Solid Films, 2006, 497, 279-283.	1.8	32
11	A generalized exponential relationship between the surface-enhanced Raman scattering (SERS) efficiency of gold/silver nanoisland arrangements and their non-dimensional interparticle distance/particle diameter ratio. Sensors and Actuators A: Physical, 2020, 314, 112225.	4.1	32
12	Raman spectroscopic study of magnetron sputtered carbonâ€“nickel and carbon nitrideâ€“nickel composite films: The effect of nickel on the atomic structure of the C/CNx matrix. Thin Solid Films, 2008, 516, 7910-7915.	1.8	30
13	Structure of e-beam sculptured poly(N-vinylpyrrolidone) networks across different length-scales, from macro to nano. Polymer, 2013, 54, 54-64.	3.8	29
14	Comparison of structural transforma- tions in bulk and as-evaporated optical media under action of polychromatic or photon-energy dependent monochromatic illumination. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2705-2708.	0.8	28
15	Ultraviolet photoluminescence and its relation to atomic bonding properties of hydrogenated amorphous carbon. Diamond and Related Materials, 2002, 11, 53-58.	3.9	25
16	Low temperature growth of nanocrystalline and ultrananocrystalline diamond films: A comparison. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 1664-1674.	1.8	24
17	Raman scattering of ultra-high molecular weight polyethylene treated by plasma-based ion implantation. Thin Solid Films, 2005, 482, 211-215.	1.8	23
18	New evidence of light-induced structural changes detected in Asâ€“S glasses by photon energy dependent Raman spectroscopy. Journal of Non-Crystalline Solids, 2006, 352, 1607-1611.	3.1	20

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19	Coordination disordering in near-stoichiometric arsenic sulfide glass. Journal of Non-Crystalline Solids, 2014, 402, 236-243.	3.1	20
20	Nanoparticles in analytical laser and plasma spectroscopy â€“ a review of recent developments in methodology and applications. Journal of Analytical Atomic Spectrometry, 2021, 36, 1826-1872.	3.0	20
21	Influence of layer thickness on the photoluminescence and Raman scattering of a-C:H prepared from benzene. Diamond and Related Materials, 2006, 15, 967-971.	3.9	19
22	Size of spatial confinement at luminescence centers determined from resonant excitation bands of a-C:H photoluminescence. Journal of Non-Crystalline Solids, 2006, 352, 1340-1343.	3.1	19
23	In vitro and in silico (IVIS) flow characterization in an idealized human airway geometry using laser Doppler anemometry and computational fluid dynamics techniques. Measurement: Journal of the International Measurement Confederation, 2016, 90, 144-150.	5.0	19
24	Influence of amorphous carbon nano-clusters on the capacity of carbon black electrodes. Thin Solid Films, 2005, 482, 207-210.	1.8	17
25	Reactive pulsed laser deposition of hydrogenated carbon thin films: The effect of hydrogen pressure. Journal of Applied Physics, 2006, 100, 043501.	2.5	17
26	Structural and optical changes in As2S3 thin films induced by light ion irradiation. Physica Status Solidi A, 2004, 201, 3193-3199.	1.7	16
27	Spectroscopic studies on self-supporting multi-wall carbon nanotube based composite films for sensor applications. Journal of Molecular Structure, 2007, 834-836, 471-476.	3.6	16
28	Ab initio calculations and the effect of atomic substitution in the Raman spectra of As(Sb,Bi)‹sub›2‹/sub›S‹sub›3‹/sub› films. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 893-896.	0.8	15
29	TiC crystallite formation and the role of interfacial energies on the composition during the deposition process of TiC/a:C thin films. Surface and Coatings Technology, 2016, 302, 410-419.	4.8	15
30	Multi-band structure of amorphous carbon luminescence. Diamond and Related Materials, 2002, 11, 1115-1118.	3.9	14
31	Investigation of the initial growth of ultrananocrystalline diamond films by multiwavelength Raman spectroscopy. Diamond and Related Materials, 2011, 20, 1076-1080.	3.9	14
32	Influence of gold nanoparticles on the photo-polymerization processes and structure in acrylate nanocomposites. European Polymer Journal, 2015, 64, 189-195.	5.4	13
33	Nonâ€linear optical properties and structure of wide band gap nonâ€crystalline semiconductors. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2696-2700.	0.8	12
34	Grafting of manganese phthalocyanine on nanocrystalline diamond films. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 2048-2054.	1.8	12
35	Effective implantation of light emitting centers by plasma immersion ion implantation and focused ion beam methods into nanosized diamond. Applied Surface Science, 2015, 328, 577-582.	6.1	12
36	Analyzing Raman â€“ Infrared spectral correlation in the recently found meteorite CsÃ¡talja. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 173, 637-646.	3.9	12

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37	Creation of deep blue light emitting nitrogen-vacancy center in nanosized diamond. Applied Physics Letters, 2014, 104, 093101.	3.3	11
38	Small-angle neutron scattering investigation of polyurethane aged in dry and wet air. EXPRESS Polymer Letters, 2014, 8, 345-351.	2.1	11
39	Examination of nanocrystalline TiC/amorphous C deposited thin films. Journal of the European Ceramic Society, 2014, 34, 3421-3425.	5.7	11
40	Comparative Analysis of SERS Substrates of Different Morphology. Procedia Engineering, 2016, 168, 371-374.	1.2	11
41	Coherent Light Photo-modification, Mass Transport Effect, and Surface Relief Formation in AsxS100-x Nanolayers: Absorption Edge, XPS, and Raman Spectroscopy Combined with Profilometry Study. Nanoscale Research Letters, 2017, 12, 149.	5.7	11
42	Deliberation between PM 1 and PM 2.5 as air quality indicators based on comprehensive characterization of urban aerosols in Bangkok, Thailand. Particuology, 2017, 35, 1-9.	3.6	11
43	Thickness dependence of the structure of a-C:H thin films prepared by rf-CVD evidenced by Raman spectroscopy. Journal of Non-Crystalline Solids, 2006, 352, 1348-1351.	3.1	10
44	Surface plasmon enhanced light-induced changes in Ge-Se amorphous chalcogenide â€“ gold nanostructures. Journal of Non-Crystalline Solids, 2021, 553, 120491.	3.1	10
45	Carbon nano-particles prepared by ion-clustering in plasma. Vacuum, 2003, 71, 171-176.	3.5	9
46	In situ investigations of laser and thermally modified As2S3 nanolayers: Synchrotron radiation photoelectron spectroscopy and density functional theory calculations. Journal of Applied Physics, 2015, 118, .	2.5	9
47	Investigation of atmospheric corrosion by photon energy dependent luminescence and Raman spectroscopy in aged and freshly fractured g-,c-As2S3 with photosensitive realgar inclusions. Journal of Non-Crystalline Solids, 2016, 453, 23-27.	3.1	9
48	Peculiarities of photonic crystal recording in functional polymer nanocomposites by multibeam interference holography. Polymer, 2017, 112, 136-143.	3.8	9
49	An Investigation of Surface-Enhanced Raman Scattering of Different Analytes Adsorbed on Gold Nanoislands. Applied Sciences (Switzerland), 2021, 11, 9838.	2.5	9
50	Composite character of the photoluminescence in hydrogenated amorphous carbon films. Journal of Non-Crystalline Solids, 2002, 299-302, 852-857.	3.1	8
51	Simultaneous preparation of amorphous solid carbon films, and their cluster building blocks. Journal of Non-Crystalline Solids, 2005, 351, 981-986.	3.1	8
52	Catalytic activity of gold on nanocrystalline diamond support. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, NA-NA.	0.8	8
53	Boson peak in low-frequency Raman spectra of AsxS100-xglasses: nanocluster contribution. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, NA-NA.	0.8	8
54	Local surface structure and structural properties of Asâ€“Se nanolayers studied by synchrotron radiation photoelectron spectroscopy and DFT calculations. Journal of Non-Crystalline Solids, 2015, 410, 180-185.	3.1	8

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55	Optical recording of surface relief on amorphous selenium. Journal of Non-Crystalline Solids, 2015, 408, 57-61.	3.1	8
56	Spectral properties of the zero-phonon line from ensemble of siliconâ€“vacancy center in nanodiamond. Optical and Quantum Electronics, 2016, 48, 1.	3.3	8
57	Peculiarities of interaction of gold nanoparticles with photoinitiators in polymer nanocomposites for holographic recording. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 359, 111-120.	3.9	8
58	Investigation of the combined effect of argon addition and substrate bias on the growth of ultrananocrystalline diamond layers. Diamond and Related Materials, 2009, 18, 1459-1465.	3.9	7
59	Sp2carbon defects in nanocrystalline diamond detected by Raman spectroscopy. IOP Conference Series: Materials Science and Engineering, 2010, 15, 012023.	0.6	7
60	Zero-phonon line characteristics of SiV center emission in microcrystalline diamond probed with intensive optical excitation. Journal of Luminescence, 2015, 158, 260-264.	3.1	7
61	Preparation and Characterization of Perforated SERS Active Array for Particle Trapping and Sensitive Molecular Analysis. Biosensors, 2019, 9, 93.	4.7	7
62	Optical strength in UV region of amorphous carbon. Diamond and Related Materials, 2002, 11, 1106-1109.	3.9	6
63	Two bands structure of the photoluminescence excitation spectrum of the composite bands in a-C:H luminescence. Diamond and Related Materials, 2005, 14, 1041-1046.	3.9	6
64	Modified Ï€-states in ion-irradiated carbon. Applied Surface Science, 2008, 254, 2790-2796.	6.1	6
65	Formation of amorphous carbon on the surface of poly(ethylene terephthalate) by helium plasma based ion implantation. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 1855-1858.	1.4	6
66	Stimulated structural changes of Se in nanolayered composite films. Materials Chemistry and Physics, 2014, 143, 889-893.	4.0	6
67	Surface patterning in Ge Se amorphous layers. Journal of Non-Crystalline Solids, 2017, 459, 51-56.	3.1	6
68	Investigation of PDMS-gold nanoparticle composite films for plasmonic sensors. , 2017, , .		6
69	PDMS-Au/Ag Nanocomposite Films as Highly Sensitive SERS Substrates. Proceedings (mdpi), 2018, 2, 1060.	0.2	6
70	Gold nanoparticle assisted synthesis and characterization of Asâ€“S crystallites: Scanning electron microscopy, X-ray diffraction, energy-dispersive X-ray and Raman spectroscopy combined with DFT calculations. Journal of Alloys and Compounds, 2022, 894, 162467.	5.5	6
71	Two-wavelength Raman study of poly(ethylene terephthalate) surfaces modified by helium plasma-based ion implantation. Applied Surface Science, 2012, 263, 423-429.	6.1	5
72	Shock and thermal annealing history of the ALH 77005 Martian meteorite: a micro-Raman spectroscopical investigation. Central European Geology, 2012, 55, 33-48.	0.4	5

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73	Cerium and europium nanospecies in quartz glass: synthesis and spectral study. Materialwissenschaft Und Werkstofftechnik, 2016, 47, 193-197.	0.9	5
74	Modeling and first-principles calculation of low-frequency quasi-localized vibrations of soft and rigid Asâ€“S nanoclusters. Applied Nanoscience (Switzerland), 2019, 9, 975-986.	3.1	5
75	Plasmonic enhancement in gold coated inverse pyramid substrates with entrapped gold nanoparticles. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 253, 107128.	2.3	5
76	Structural Nature of Boson Peak and Lowâ€Temperature Heat Excess in As 2 S 3 Glass. Physica Status Solidi (B): Basic Research, 2020, 257, 1900525.	1.5	5
77	Raman Spectroscopy of CVD Carbon Thin Films Excited by Near-Infrared Light. , 0, , 423-445.		4
78	Raman Analysis of Diamond-Like Carbon Films Deposited onto Corrosion Resistant Alloys Used for Coronary Stent Fabrication. Materials Science Forum, 2007, 537-538, 277-284.	0.3	4
79	Spatially resolved near-infrared excited Raman spectroscopy of nanocrystalline diamond films. Diamond and Related Materials, 2008, 17, 515-519.	3.9	4
80	Photoinduced bond breaking in a-Se: Raman spectroscopic study. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2789-2791.	0.8	4
81	Simultaneous Photoluminescence and SERS Observation of Nanodiamond at Laser Deposition on Noble Metals. Plasmonics, 2013, 8, 325-333.	3.4	4
82	Fabrication of optical channel waveguides in crystals and glasses using macro- and micro ion beams. Nuclear Instruments & Methods in Physics Research B, 2014, 331, 157-162.	1.4	4
83	Optical properties of nano- and ultrananocrystalline diamond thin layers in the UV and visible spectral range. IOP Conference Series: Materials Science and Engineering, 0, 426, 012049.	0.6	4
84	Super-bandgap light stimulated reversible transformation and laser-driven mass transport at the surface of As2S3 chalcogenide nanolayers studied in situ. Journal of Chemical Physics, 2018, 149, 214702.	3.0	4
85	Reversible structural changes of in situ prepared As40Se60 nanolayers studied by XPS spectroscopy. Applied Nanoscience (Switzerland), 2019, 9, 917-924.	3.1	4
86	Surface plasmon enhanced light-induced changes in Ge Se amorphous chalcogenide â€“ Gold nanostructures. Journal of Non-Crystalline Solids: X, 2020, 6, 100045.	1.2	4
87	Application of gold nanoparticlesâ€“epoxy surface nanocomposites for controlling hotspot density on a large surface area for SERS applications. Nano Structures Nano Objects, 2021, 28, 100787.	3.5	4
88	Incorporation of Si in a-C:Si:H films monitored by infrared excited Raman scattering. Diamond and Related Materials, 2006, 15, 932-935.	3.9	3
89	Structureâ€“property and compositionâ€“property relationships for poly(ethylene terephthalate) surfaces modified by helium plasma-based ion implantation. Applied Surface Science, 2011, 257, 10815-10820.	6.1	3
90	Ellipsometric study of nanostructured carbon films deposited by pulsed laser deposition. Thin Solid Films, 2011, 519, 2989-2993.	1.8	3

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91	A Combined Petrographic and Micro-Raman Study of Meteoritic Microdiamond in ALH-77257 Ureilite and ALH-78113 Aubrite. Spectroscopy Letters, 2012, 45, 151-155.	1.0	3
92	Radiation induced preparation of new multifunctional nanobiowebs. Radiation Physics and Chemistry, 2012, 81, 1407-1410.	2.8	3
93	Influence of microwave plasma parameters on light emission from SiV color centers in nanocrystalline diamond films. Open Chemistry, 2014, 13, .	1.9	3
94	Determination of the deposited amount of inhalation drugs in realistic human airways by Raman and infrared spectroscopy. Measurement: Journal of the International Measurement Confederation, 2017, 104, 237-242.	5.0	3
95	Determination of emitted particle characteristics and upper airway deposition of SymbicortÂ® TurbuhalerÂ® dry powder inhaler. Journal of Drug Delivery Science and Technology, 2019, 54, 101229.	3.0	3
96	Raman spectroscopic study of gamma radiationâ€initiated polymerization of diethylene glycol dimethacrylate in different solvents. Journal of Raman Spectroscopy, 2021, 52, 1735-1743.	2.5	3
97	Raman Spectroscopy Of Uncd Grain Boundaries. NATO Science for Peace and Security Series B: Physics and Biophysics, 2009, , 115-121.	0.3	3
98	Investigation of the Performance of Thermally Generated Au/Ag Nanoislands for SERS and LSPR Applications. Procedia Engineering, 2016, 168, 1152-1155.	1.2	2
99	Synthesis of porous silicon based nanoparticles for applications in surface enhanced Raman spectroscopy. Vacuum, 2021, 191, 110335.	3.5	2
100	Electronic structure of pulsed laser deposited carbon thin films monitored by photoluminescence. Diamond and Related Materials, 2003, 12, 911-916.	3.9	1
101	Specific statistical features of surface enhanced Raman scattering (SERS) spectra of graphite. Journal of Non-Crystalline Solids, 2004, 338-340, 496-498.	3.1	1
102	Fabryâ€“Perot resonance enhancementâ€“inhibition of spontaneous light emission from a-C:H thin films. Journal of Non-Crystalline Solids, 2006, 352, 1336-1339.	3.1	1
103	Supercapacitor Electrodes Made from Mixture of Amorphous Carbon Nano-Particles and Carbon Black. Materials Science Forum, 2007, 537-538, 263-268.	0.3	1
104	Creation of Blue Light Emitting Color Centers in Nanosized Diamond for Different Applications. NATO Science for Peace and Security Series A: Chemistry and Biology, 2015, , 93-101.	0.5	1
105	The use of ion beam techniques for the fabrication of integrated optical elements. , 2016, , .		1
106	SERS Active Periodic 3D Structure for Trapping and High Sensitive Molecular Analysis of Particles or Cells. Proceedings (mdpi), 2017, 1, .	0.2	1
107	Hierarchically Combined Periodic SERS Active 3D Micro- and Nanostructures for High Sensitive Molecular Analysis. Proceedings (mdpi), 2018, 2, .	0.2	1
108	Origin of the asymmetric zero-phonon line shape of the silicon-vacancy center in nanocrystalline diamond films. Journal of Luminescence, 2019, 215, 116681.	3.1	1

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109	Dual Effects of Photo-Darkening and Photo-Bleaching in Ge-Se Films. Journal of Materials Science and Engineering A, 2015, 5, .	0.1	1
110	Real-Time Determination of Absorptivity of Ambient Particles in Urban Aerosol in Budapest, Hungary. Aerosol and Air Quality Research, 2016, 16, 1-10.	2.1	1
111	Preparation of Small Silicon Carbide Quantum Dots by Wet Chemical Etching. Materials Research Society Symposia Proceedings, 2012, 1468, 25.	0.1	0
112	Ion beam irradiated optical channel waveguides. , 2014, , .		0
113	Spectroscopic evidence of coexistence of clusters based on low (α) and high temperature (β) GeS<inf>2</inf> crystalline phases in glassy germanium disulfide matrix. , 2014, , .		0
114	In vivo study of cell division with stimulated Raman scattering. , 2018, , .		0
115	Enhancement of the light emission of color center containing nanodiamond structures. , 2018, , .		0
116	Characterisation of biological smoke generated by short pulse lasers. , 2018, , .		0
117	Experimental Study of Spectral Parameters of Silicon-Vacancy Centers in MWCVD Nanodiamond Films Important for Sensing Applications. NATO Science for Peace and Security Series B: Physics and Biophysics, 2018, , 215-220.	0.3	0
118	Preparation and Characterization of SERS Substrates of Different Morphology. NATO Science for Peace and Security Series B: Physics and Biophysics, 2018, , 63-68.	0.3	0
119	Swift heavy ion irradiated planar waveguides in a rare earth doped tungsten Tellurite glass and a tungstate crystal. AIP Conference Proceedings, 2019, , .	0.4	0
120	Reversible laser-assisted structural modification of the surface of As-rich nanolayers for active photonics media. Applied Surface Science, 2020, 518, 146240.	6.1	0
121	Optimization of the production parameters of substrates for SERS applications. , 2021, , .		0
122	Investigation of the Thermally Generated Au and Ag Nanoislands for SERS and LSPR Applications. Engineering Proceedings, 2021, 6, .	0.4	0