

VISHAL SHARMA

List of Publications by Year in descending order

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Version: 2024-02-01

102
papers

2,517
citations

172207

29
h-index

253896

43
g-index

102
all docs

102
docs citations

102
times ranked

2288
citing authors

#	ARTICLE	IF	CITATIONS
1	Genome-Wide Organization and Expression Profiling of the NAC Transcription Factor Family in Potato (<i>Solanum tuberosum</i> L.). <i>DNA Research</i> , 2013, 20, 403-423.	1.5	174
2	Chemometrics in forensic science. <i>TrAC - Trends in Analytical Chemistry</i> , 2018, 105, 191-201.	5.8	140
3	Application of ionic liquid and alkali pretreatment for enhancing saccharification of sunflower stalk biomass for potential biofuel-ethanol production. <i>Bioresource Technology</i> , 2018, 267, 560-568.	4.8	114
4	A Review of Adsorbents for Heavy Metal Decontamination: Growing Approach to Wastewater Treatment. <i>Materials</i> , 2021, 14, 4702.	1.3	95
5	Potential of Sm ³⁺ doped LiSrVO ₄ nanophosphor to fill amber gap in LEDs. <i>Physica B: Condensed Matter</i> , 2018, 535, 221-226.	1.3	57
6	Potential of Sr ₄ Al ₁₄ O ₂₅ : Eu ²⁺ , Dy ³⁺ inorganic oxide-based nanophosphor in Latent fingerprint detection. <i>Journal of Materials Science</i> , 2014, 49, 2225-2234.	1.7	52
7	Trends of chemometrics in bloodstain investigations. <i>TrAC - Trends in Analytical Chemistry</i> , 2018, 107, 181-195.	5.8	51
8	Soil forensics: A spectroscopic examination of trace evidence. <i>Microchemical Journal</i> , 2018, 139, 74-84.	2.3	49
9	Green synthesis of agar/Gum Arabic based superabsorbent as an alternative for irrigation in agriculture. <i>Vacuum</i> , 2018, 157, 458-464.	1.6	48
10	Characterization and application of biosynthesized iron oxide nanoparticles using <i>Citrus paradisi</i> peel: A sustainable approach. <i>Inorganic Chemistry Communication</i> , 2020, 119, 108116.	1.8	48
11	In vitro cytotoxic potential of <i>Polyalthia longifolia</i> on human cancer cell lines and induction of apoptosis through mitochondrial-dependent pathway in HL-60 cells. <i>Chemico-Biological Interactions</i> , 2008, 171, 45-56.	1.7	47
12	Ecofriendly synthesis of monodispersed silver nanoparticles using Andean <i>Mortinõo</i> berry as reductant and its photocatalytic activity. <i>Vacuum</i> , 2019, 160, 272-278.	1.6	46
13	Fourier transform infrared spectroscopy and chemometrics for the characterization and discrimination of writing/photocopier paper types: Application in forensic document examinations. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2017, 170, 19-28.	2.0	44
14	Eu ²⁺ , Dy ³⁺ codoped SrAl ₂ O ₄ nanocrystalline phosphor for latent fingerprint detection in forensic applications. <i>Materials Research Express</i> , 2016, 3, 015004.	0.8	43
15	Analysis of laser printer and photocopier toners by spectral properties and chemometrics. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 196, 40-48.	2.0	43
16	On the rapid and non-destructive approach for wood identification using ATR-FTIR spectroscopy and chemometric methods. <i>Vibrational Spectroscopy</i> , 2020, 110, 103097.	1.2	43
17	Effect of alkali metal ions (Li ⁺ , Na ⁺ and K ⁺) on the luminescence properties of CaMgB ₂ O ₅ : Sm ³⁺ nanophosphor. <i>Nano Structures Nano Objects</i> , 2015, 3, 9-16.	1.9	40
18	Combustion synthesis and characterization of blue long lasting phosphor CaAl ₂ O ₄ : Eu ²⁺ , Dy ³⁺ and its novel application in latent fingerprint and lip mark detection. <i>Physica B: Condensed Matter</i> , 2018, 535, 149-156.	1.3	40

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19	Synthesis of \hat{I}^2 -ionone derived chalcones as potent antimicrobial agents. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012, 22, 6343-6346.	1.0	38
20	Energy transfer mechanism from Gd^{3+} to Sm^{3+} in $K_3Gd(PO_4)_2:Sm^{3+}$ phosphor. <i>Materials Research Express</i> , 2015, 2, 076202.	0.8	38
21	On the spectroscopic investigation of lipstick stains: Forensic trace evidence. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 215, 48-57.	2.0	38
22	A novel combined approach of diffuse reflectance UV-Vis-NIR spectroscopy and multivariate analysis for non-destructive examination of blue ballpoint pen inks in forensic application. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2017, 175, 67-75.	2.0	37
23	Dating of ballpoint pen writing inks via spectroscopic and multiple linear regression analysis: A novel approach. <i>Microchemical Journal</i> , 2017, 134, 104-113.	2.3	36
24	Fourier transform infrared spectroscopy and high performance thin layer chromatography for characterization and multivariate discrimination of blue ballpoint pen ink for forensic applications. <i>Vibrational Spectroscopy</i> , 2017, 92, 96-104.	1.2	36
25	Recent advances in rare earth doped alkali-alkaline earth borates for solid state lighting applications. <i>Physica B: Condensed Matter</i> , 2018, 535, 106-113.	1.3	36
26	Anticonvulsant activity of schiff bases of 3-amino-6,8-dibromo-2-phenyl-quinazolin-4(3H)-ones. <i>Indian Journal of Pharmaceutical Sciences</i> , 2010, 72, 375.	1.0	36
27	Methylene Blue Dye Adsorption from Wastewater Using Hydroxyapatite/Gold Nanocomposite: Kinetic and Thermodynamics Studies. <i>Nanomaterials</i> , 2021, 11, 1403.	1.9	33
28	A novel orange-red emitting $Ba_2Ca(BO_3)_2:Sm^{3+}$ phosphor to fill the amber gap in LEDs: Synthesis, structural and luminescence characterizations. <i>Current Applied Physics</i> , 2017, 17, 1369-1375.	1.1	32
29	On the spectroscopic investigation of Kohl stains via ATR-FTIR and multivariate analysis: Application in forensic trace evidence. <i>Vibrational Spectroscopy</i> , 2019, 101, 81-91.	1.2	32
30	Bloodstain age estimation through infrared spectroscopy and Chemometric models. <i>Science and Justice - Journal of the Forensic Science Society</i> , 2020, 60, 538-546.	1.3	32
31	Discrimination of Various Paper Types Using Diffuse Reflectance Ultraviolet-Visible Near-Infrared (UV-Vis-NIR) Spectroscopy: Forensic Application to Questioned Documents. <i>Applied Spectroscopy</i> , 2015, 69, 714-720.	1.2	29
32	Spectroscopic and chemometric evaluation of cling films used for wrapping of foodstuff and illicit drugs. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 206, 558-568.	2.0	29
33	Thermogravimetric analysis and chemometric based methods for soil examination: Application to soil forensics. <i>Forensic Chemistry</i> , 2020, 17, 100191.	1.7	28
34	Nanoparticles as fingermark sensors. <i>TrAC - Trends in Analytical Chemistry</i> , 2021, 143, 116378.	5.8	28
35	Development of an off-on selective fluorescent sensor for the detection of Fe^{3+} ions based on Schiff base and its Hirshfeld surface and DFT studies. <i>Journal of Molecular Liquids</i> , 2019, 296, 111814.	2.3	27
36	Chemometric analysis of ATR-FTIR spectra of fingernail clippings for classification and prediction of sex in forensic context. <i>Microchemical Journal</i> , 2020, 159, 105504.	2.3	27

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37	Preparation of gum acacia-poly(acrylamide-IPN-acrylic acid) based nanocomposite hydrogels via polymerization methods for antimicrobial applications. <i>Journal of Molecular Structure</i> , 2020, 1215, 128298.	1.8	27
38	A novel near white light emitting phosphor K ₂ SrYSi ₂ O ₇ :Dy ³⁺ : Synthesis, characterization and luminescence properties. <i>Vacuum</i> , 2020, 174, 109179.	1.6	26
39	Investigation of structural, morphological and optical properties of Mg: ZnO thin films prepared by sol-gel spin coating method. <i>Vacuum</i> , 2017, 146, 524-529.	1.6	25
40	Spectral and surface investigations of Mn ²⁺ doped SrZnO ₂ nanocrystalline phosphors. <i>Journal of Materials Science</i> , 2013, 48, 3327-3333.	1.7	23
41	Multifarious potential applications of keratinase of <i>Bacillus subtilis</i> K-5. <i>Biocatalysis and Biotransformation</i> , 2014, 32, 333-342.	1.1	22
42	Swift heavy ion induced structural, optical and luminescence modification in NaSrBO ₃ :Dy ³⁺ phosphor. <i>Journal of Materials Science</i> , 2014, 49, 6404-6412.	1.7	22
43	Spectral characteristics of organic soil matter: A comprehensive review. <i>Microchemical Journal</i> , 2021, 171, 106836.	2.3	22
44	Energy loss and straggling of MeV heavy ions in polypropylene absorber foils. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2007, 258, 293-298.	0.6	21
45	Î ² -Ionone derived chalcones as potent antiproliferative agents. <i>European Journal of Medicinal Chemistry</i> , 2013, 69, 310-315.	2.6	21
46	Differentiation of locally manufactured Kajal by Attenuated Total Reflectance Fourier Transform Infrared Spectroscopy supported by chemometric analysis. <i>Forensic Science International</i> , 2019, 303, 109930.	1.3	21
47	Slowing down of MeV heavy ions with Z=64 in PEN (C ₇ H ₅ O ₂). <i>Nuclear Instruments & Methods in Physics Research B</i> , 2003, 201, 389-395.	0.6	20
48	Recent advances in enhanced luminescence upconversion of lanthanide-doped NaYF ₄ phosphors. <i>Physica B: Condensed Matter</i> , 2018, 535, 278-286.	1.3	20
49	Synthesis and evaluation of novel 3a,9a-dihydro-1-ethoxycarbonyl-1-cyclopenteno[5,4-b]benzopyran-4-ones as antifungal agents. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012, 22, 4665-4667.	1.0	19
50	Rapid and non-destructive identification of claws using ATR-FTIR spectroscopy—A novel approach in wildlife forensics. <i>Science and Justice - Journal of the Forensic Science Society</i> , 2019, 59, 622-629.	1.3	18
51	Microwave-assisted synthesis of gum gellan-cl-poly(acrylic-co- methacrylic acid) hydrogel for cationic dyes removal. <i>Polymer Bulletin</i> , 2020, 77, 4917-4935.	1.7	18
52	A Short Review on Rare Earth Doped NaYF ₄ Upconverted Nanomaterials for Solar Cell Applications. <i>Materials Today: Proceedings</i> , 2020, 21, 1868-1874.	0.9	18
53	A luminescent Zn-MOF for the detection of explosives and development of fingerprints. <i>Analytical Methods</i> , 2022, 14, 700-707.	1.3	18
54	A mechanistic study of the synthesis, single crystal X-ray data and anticarcinogenic potential of bis(2-pyridyl)selenides and -diselenides. <i>RSC Advances</i> , 2015, 5, 78669-78676.	1.7	17

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55	On the spectroscopic cum chemometric approach for differentiation and classification of inkjet, laser and photocopier printed documents. <i>Science and Justice - Journal of the Forensic Science Society</i> , 2020, 60, 347-357.	1.3	17
56	Energy loss and straggling in LR-115 and Kapton polymeric foils for energetic ions. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2008, 266, 2556-2563.	0.6	16
57	Chemometrics based ATR-FTIR spectroscopy method for rapid and non-destructive discrimination between eyeliner and mascara traces. <i>Microchemical Journal</i> , 2021, 164, 106080.	2.3	16
58	Synthesis and cytotoxicity evaluation of regioisomeric substituted N-phenyl-3- β -(chrom-4-one-3-yl)-isoxazolidines: induction of apoptosis through a mitochondrial-dependent pathway. <i>MedChemComm</i> , 2013, 4, 972.	3.5	14
59	Synthesis, characterization and upconversion luminescence of core-shell nanocomposites NaYF ₄ :Er/Yb@SiO ₂ @Ag/Au. <i>Vacuum</i> , 2018, 157, 492-496.	1.6	14
60	On the spectroscopic examination of printed documents by using a field emission scanning electron microscope with energy-dispersive X-ray spectroscopy (FE-SEM-EDS) and chemometric methods: application in forensic science. <i>Analytical and Bioanalytical Chemistry</i> , 2019, 411, 3477-3495.	1.9	14
61	Isolation, Purification, and Characterization of Antimicrobial Compound 6-[1,2-dimethyl-6-(2-methyl-allyloxy)-hexyl]-3-(2-methoxy-phenyl)-chromen-4-one from <i>Penicillium</i> sp. HT-28. <i>Applied Biochemistry and Biotechnology</i> , 2014, 173, 1963-1976.	1.4	13
62	Solvent-free synthesis of novel (E)-2-(3,5-dimethyl-4-(aryldiazenyl)-1H-pyrazol-1-yl)-4-arylthiazoles: determination of their biological activity. <i>Medicinal Chemistry Research</i> , 2015, 24, 3863-3875.	1.1	13
63	Analysis of writing/printing paper via Thermogravimetric Analysis: application in forensic science. <i>Australian Journal of Forensic Sciences</i> , 2019, 51, 22-39.	0.7	13
64	Neem gum based pH responsive hydrogel matrix: A new pharmaceutical excipient for the sustained release of anticancer drug. <i>International Journal of Biological Macromolecules</i> , 2020, 142, 742-755.	3.6	13
65	On the IR spectroscopy and chemometric based rapid and non-destructive method for the investigation of sunscreen stains: Application in forensic science. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2020, 242, 118708.	2.0	13
66	A rapid and non-destructive ATR-FTIR spectroscopy method supported by chemometrics for discriminating between facial creams and the classification into herbal and non-herbal brands. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2021, 258, 119803.	2.0	13
67	Stopping force of 0.5-3.5 MeV/u Cl ions in polymers. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2008, 266, 4738-4741.	0.6	12
68	Electronic stopping power of polymers for heavy ions in the ion energy domain of LSS theory. <i>Radiation Measurements</i> , 2009, 44, 363-368.	0.7	12
69	β -Ionone derived apoptosis inducing endoperoxides; Discovery of potent leads for anticancer agents. <i>European Journal of Medicinal Chemistry</i> , 2014, 87, 228-236.	2.6	12
70	Influence of Fe-doping on the structural, optical and luminescent behavior of ZnO thin films deposited by spin coating technique. <i>Vacuum</i> , 2017, 146, 478-482.	1.6	12
71	Synthesis And Characterization Of Eu ³⁺ Doped γ -Al ₂ O ₃ Nanocrystalline Powder For Novel Application In Latent Fingerprint Development. <i>Advanced Materials Letters</i> , 2016, 7, 302-306.	0.3	12
72	Energy loss straggling of Li, C and O ions in mylar and polycarbonate absorber foils. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2006, 244, 289-293.	0.6	9

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73	Synthesis and thermoluminescence studies of UV-C exposed Li ₄ Ca(BO ₃) ₂ : Dy ³⁺ phosphors. <i>Vacuum</i> , 2018, 156, 370-374.	1.6	9
74	Multivariate analysis for forensic characterization, discrimination, and classification of marker pen inks. <i>Spectroscopy Letters</i> , 2018, 51, 205-215.	0.5	9
75	Forensic Examination of Textile Fibers Using UV-Vis Spectroscopy Combined with Multivariate Analysis. <i>Journal of Applied Spectroscopy</i> , 2019, 86, 96-100.	0.3	9
76	Stopping power of polymeric foils for swift heavy ions. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2008, 266, 3988-3992.	0.6	8
77	PLS-DA and infrared spectroscopy based rapid and non-destructive discrimination of black ball and gel pen inks for forensic application. <i>Forensic Science International: Reports</i> , 2021, 3, 100162.	0.4	8
78	Statistical fluctuations in energy loss for swift heavy ions in thick polymeric foils. <i>Physical Review A</i> , 2009, 80, .	1.0	7
79	Registration temperature effect on sensitivity of CR-39(DOP) and SR-90 polymer track detectors. <i>Radiation Measurements</i> , 2003, 36, 89-92.	0.7	6
80	Energy loss straggling of Si and Cl ions in polymeric foils. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2008, 266, 1933-1937.	0.6	6
81	Photochemical formation and decomposition of 8-[² -arylethenyl]-2,2,6-trimethyl-7,9,10-trioxa-tricyclo[6.2.2.0 _{1,6}]dodec-11-ene to novel 6-hydroxy-1,7,7-trimethyl-2-oxa-bicyclo[4.4.0]dec-4-en-3-one in the presence of oxygen. <i>Tetrahedron Letters</i> , 2012, 53, 5649-5651.	0.7	6
82	Synthesis and evaluation of 3-salicyloylpyridine derivatives as cytotoxic mitochondrial apoptosis inducers. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014, 24, 4724-4728.	1.0	6
83	Stature estimation in forensic examinations using regression analysis: A likelihood ratio perspective. <i>Forensic Science International: Reports</i> , 2020, 2, 100069.	0.4	6
84	Bioactivity Guided Isolation of Quercetin as Anxiolytic Compound from <i>Elaeocarpus ganitrus</i> Beads. <i>Natural Products Journal</i> , 2013, 3, 224-229.	0.1	6
85	Energy loss of light ions in polypropylene absorber foils. <i>Indian Journal of Physics</i> , 2009, 83, 937-941.	0.9	5
86	Estimation of sex in forensic examinations using logistic regression and likelihood ratios. <i>Forensic Science International: Reports</i> , 2020, 2, 100118.	0.4	5
87	Thermal reactions involving 1-azadienes and allenic esters-(II):1a reactions of 3-(N-aryliminomethyl)chromones with allenic esters-tandem reorganization of [2+2] cycloadducts to novel compounds. <i>Tetrahedron Letters</i> , 2015, 56, 4784-4787.	0.7	4
88	Energy loss straggling in Aluminium foils for Li and C ions in fractional energy loss limits ($\hat{I}^n E/E$) $\hat{I}^n E/E \approx 60\%$. <i>Radiation Physics and Chemistry</i> , 2016, 119, 180-185.	1.4	4
89	Energy loss straggling of \hat{I}^n -particles in Tb, Ta and Au metallic foils. <i>Vacuum</i> , 2018, 158, 42-47.	1.6	4
90	Novel use of logistic regression and likelihood ratios for the estimation of gender of the writer from a database of handwriting features. <i>Australian Journal of Forensic Sciences</i> , 2023, 55, 89-106.	0.7	4

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91	In Vitro Activity of Vancomycin and Teicoplanin Against Coagulase Negative Staphylococci. Oman Medical Journal, 2011, 26, 186-188.	0.3	4
92	Ultrasonic Velocities of Binary Mixtures of Homologous Series of Ethylene Glycol and Glycerol at Different Temperatures: A Comparative Study. Materials Today: Proceedings, 2020, 21, 1875-1881.	0.9	3
93	Formulation and Characterization of Corn Grits- Propylene Glycol Extrudates. Materials Today: Proceedings, 2020, 21, 1772-1780.	0.9	3
94	Effect of UV-irradiation on the optical properties of transparent PET polymeric foils. Materials Today: Proceedings, 2020, 21, 2105-2111.	0.9	3
95	Preparation and Characterizations Graft Copolymer of Poly(acrylamide-aniline)-Grafted Gum Ghatti. Materials Today: Proceedings, 2020, 21, 1856-1861.	0.9	3
96	Correspondence. Applied Spectroscopy, 2016, 70, 1598-1601.	1.2	2
97	Proof of concept study for paper discrimination and age estimation through its degradation process by ATR-FTIR spectroscopy and chemometric models. Australian Journal of Forensic Sciences, 2021, 53, 703-726.	0.7	2
98	FTIR and NIRS in Forensic Chemical Sensing. RSC Detection Science, 2019, , 164-197.	0.0	2
99	On the examination of raw, pasteurized, powdered, and adulterated milk samples and their multivariate classification: applications in food and forensic science. Spectroscopy Letters, 2019, 52, 583-598.	0.5	1
100	Voice recognition through phonetic features with Punjabi utterances. AIP Conference Proceedings, 2017, , .	0.3	0
101	Voice stress analysis for Punjabi and Hindi database: Detection of deception. AIP Conference Proceedings, 2018, , .	0.3	0
102	Correspondence regarding the article "A novel metastable state nanoparticle-enhanced Raman spectroscopy coupled with thin layer chromatography for determination of multiple pesticides" Food Chemistry 270 (2019) 494-501. Food Chemistry, 2019, 277, 31.	4.2	0