

# VISHAL SHARMA

## List of Publications by Year in descending order

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Version: 2024-02-01

102  
papers

2,517  
citations

172457

29  
h-index

254184

43  
g-index

102  
all docs

102  
docs citations

102  
times ranked

2288  
citing authors

#	ARTICLE	IF	CITATIONS
1	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.	1.2	4
2	A luminescent Zn-MOF for the detection of explosives and development of fingerprints. <i>Analytical Methods</i> , 2022, 14, 700-707.	2.7	18
3	Proof of concept study for paper discrimination and age estimation through its degradation process by ATR-FTIR spectroscopy and chemometric models. <i>Australian Journal of Forensic Sciences</i> , 2021, 53, 703-726.	1.2	2
4	Chemometrics based ATR-FTIR spectroscopy method for rapid and non-destructive discrimination between eyeliner and mascara traces. <i>Microchemical Journal</i> , 2021, 164, 106080.	4.5	16
5	Methylene Blue Dye Adsorption from Wastewater Using Hydroxyapatite/Gold Nanocomposite: Kinetic and Thermodynamics Studies. <i>Nanomaterials</i> , 2021, 11, 1403.	4.1	33
6	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.	0.8	8
7	A Review of Adsorbents for Heavy Metal Decontamination: Growing Approach to Wastewater Treatment. <i>Materials</i> , 2021, 14, 4702.	2.9	95
8	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.	3.9	13
9	Nanoparticles as fingermark sensors. <i>TrAC - Trends in Analytical Chemistry</i> , 2021, 143, 116378.	11.4	28
10	Spectral characteristics of organic soil matter: A comprehensive review. <i>Microchemical Journal</i> , 2021, 171, 106836.	4.5	22
11	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.	3.3	18
12	Thermogravimetric analysis and chemometric based methods for soil examination: Application to soil forensics. <i>Forensic Chemistry</i> , 2020, 17, 100191.	2.8	28
13	A novel near white light emitting phosphor $\text{KSrYSi}_2\text{O}_7:\text{Dy}^{3+}$ : Synthesis, characterization and luminescence properties. <i>Vacuum</i> , 2020, 174, 109179.	3.5	26
14	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.	7.5	13
15	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.	3.9	13
16	Bloodstain age estimation through infrared spectroscopy and Chemometric models. <i>Science and Justice - Journal of the Forensic Science Society</i> , 2020, 60, 538-546.	2.1	32
17	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.	4.5	27
18	Ultrasonic Velocities of Binary Mixtures of Homologous Series of Ethylene Glycol and Glycerol at Different Temperatures: A Comparative Study. <i>Materials Today: Proceedings</i> , 2020, 21, 1875-1881.	1.8	3

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19	Formulation and Characterization of Corn Grits- Propylene Glycol Extrudates. <i>Materials Today: Proceedings</i> , 2020, 21, 1772-1780.	1.8	3
20	On the rapid and non-destructive approach for wood identification using ATR-FTIR spectroscopy and chemometric methods. <i>Vibrational Spectroscopy</i> , 2020, 110, 103097.	2.2	43
21	Characterization and application of biosynthesized iron oxide nanoparticles using Citrus paradisi peel: A sustainable approach. <i>Inorganic Chemistry Communication</i> , 2020, 119, 108116.	3.9	48
22	Estimation of sex in forensic examinations using logistic regression and likelihood ratios. <i>Forensic Science International: Reports</i> , 2020, 2, 100118.	0.8	5
23	Effect of UV-irradiation on the optical properties of transparent PET polymeric foils. <i>Materials Today: Proceedings</i> , 2020, 21, 2105-2111.	1.8	3
24	A Short Review on Rare Earth Doped NaYF <sub>4</sub> Upconverted Nanomaterials for Solar Cell Applications. <i>Materials Today: Proceedings</i> , 2020, 21, 1868-1874.	1.8	18
25	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.	2.1	17
26	Stature estimation in forensic examinations using regression analysis: A likelihood ratio perspective. <i>Forensic Science International: Reports</i> , 2020, 2, 100069.	0.8	6
27	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.	3.6	27
28	Preparation and Characterizations Graft Copolymer of Poly(acrylamide-aniline)-Grafted Gum Ghatti. <i>Materials Today: Proceedings</i> , 2020, 21, 1856-1861.	1.8	3
29	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.	2.1	18
30	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.	2.2	21
31	Development of an off-on selective fluorescent sensor for the detection of Fe <sup>3+</sup> ions based on Schiff base and its Hirshfeld surface and DFT studies. <i>Journal of Molecular Liquids</i> , 2019, 296, 111814.	4.9	27
32	On the examination of raw, pasteurized, powdered, and adulterated milk samples and their multivariate classification: applications in food and forensic science. <i>Spectroscopy Letters</i> , 2019, 52, 583-598.	1.0	1
33	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.	3.7	14
34	Forensic Examination of Textile Fibers Using UV-Vis Spectroscopy Combined with Multivariate Analysis. <i>Journal of Applied Spectroscopy</i> , 2019, 86, 96-100.	0.7	9
35	On the spectroscopic investigation of lipstick stains: Forensic trace evidence. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 215, 48-57.	3.9	38
36	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.	2.2	32

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37	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.	3.9	29
38	Ecofriendly synthesis of monodispersed silver nanoparticles using Andean Mortiñó berry as reductant and its photocatalytic activity. <i>Vacuum</i> , 2019, 160, 272-278.	3.5	46
39	Correspondence regarding the article "A novel metastable state nanoparticle-enhanced Raman spectroscopy coupled with thin layer chromatography for determination of multiple pesticides" <i>Food Chemistry</i> 270 (2019) 494-501. <i>Food Chemistry</i> , 2019, 277, 31.	8.2	0
40	Analysis of writing/printing paper via Thermogravimetric Analysis: application in forensic science. <i>Australian Journal of Forensic Sciences</i> , 2019, 51, 22-39.	1.2	13
41	FTIR and NIRS in Forensic Chemical Sensing. <i>RSC Detection Science</i> , 2019, , 164-197.	0.0	2
42	Soil forensics: A spectroscopic examination of trace evidence. <i>Microchemical Journal</i> , 2018, 139, 74-84.	4.5	49
43	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.	3.9	43
44	Combustion synthesis and characterization of blue long lasting phosphor $\text{CaAl}_2\text{O}_4 : \text{Eu}^{2+}, \text{Dy}^{3+}$ and its novel application in latent fingerprint and lip mark detection. <i>Physica B: Condensed Matter</i> , 2018, 535, 149-156.	2.7	40
45	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.	2.7	36
46	Potential of $\text{Sm}^{3+}$ doped $\text{LiSrVO}_4$ nanophosphor to fill amber gap in LEDs. <i>Physica B: Condensed Matter</i> , 2018, 535, 221-226.	2.7	57
47	Recent advances in enhanced luminescence upconversion of lanthanide-doped $\text{NaYF}_4$ phosphors. <i>Physica B: Condensed Matter</i> , 2018, 535, 278-286.	2.7	20
48	Energy loss straggling of $\text{H}^+$ -particles in Tb, Ta and Au metallic foils. <i>Vacuum</i> , 2018, 158, 42-47.	3.5	4
49	Synthesis, characterization and upconversion luminescence of core-shell nanocomposites $\text{NaYF}_4 : \text{Er}/\text{Yb}@ \text{SiO}_2 @ \text{Ag}/\text{Au}$ . <i>Vacuum</i> , 2018, 157, 492-496.	3.5	14
50	Green synthesis of agar/Gum Arabic based superabsorbent as an alternative for irrigation in agriculture. <i>Vacuum</i> , 2018, 157, 458-464.	3.5	48
51	Trends of chemometrics in bloodstain investigations. <i>TrAC - Trends in Analytical Chemistry</i> , 2018, 107, 181-195.	11.4	51
52	Chemometrics in forensic science. <i>TrAC - Trends in Analytical Chemistry</i> , 2018, 105, 191-201.	11.4	140
53	Synthesis and thermoluminescence studies of UV-C exposed $\text{Li}_4\text{Ca}(\text{BO}_3)_2 : \text{Dy}^{3+}$ phosphors. <i>Vacuum</i> , 2018, 156, 370-374.	3.5	9
54	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.	9.6	114

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55	Voice stress analysis for Punjabi and Hindi database: Detection of deception. AIP Conference Proceedings, 2018, , .	0.4	0
56	Multivariate analysis for forensic characterization, discrimination, and classification of marker pen inks. Spectroscopy Letters, 2018, 51, 205-215.	1.0	9
57	Fourier transform infrared spectroscopy and chemometrics for the characterization and discrimination of writing/photocopier paper types: Application in forensic document examinations. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 170, 19-28.	3.9	44
58	Investigation of structural, morphological and optical properties of Mg: ZnO thin films prepared by sol-gel spin coating method. Vacuum, 2017, 146, 524-529.	3.5	25
59	Dating of ballpoint pen writing inks via spectroscopic and multiple linear regression analysis: A novel approach. Microchemical Journal, 2017, 134, 104-113.	4.5	36
60	Fourier transform infrared spectroscopy and high performance thin layer chromatography for characterization and multivariate discrimination of blue ballpoint pen ink for forensic applications. Vibrational Spectroscopy, 2017, 92, 96-104.	2.2	36
61	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. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 175, 67-75.	3.9	37
62	A novel orange-red emitting Ba <sub>2</sub> Ca(BO <sub>3</sub> ) <sub>2</sub> :Sm <sup>3+</sup> phosphor to fill the amber gap in LEDs: Synthesis, structural and luminescence characterizations. Current Applied Physics, 2017, 17, 1369-1375.	2.4	32
63	Influence of Fe-doping on the structural, optical and luminescent behavior of ZnO thin films deposited by spin coating technique. Vacuum, 2017, 146, 478-482.	3.5	12
64	Voice recognition through phonetic features with Punjabi utterances. AIP Conference Proceedings, 2017, , .	0.4	0
65	Correspondence. Applied Spectroscopy, 2016, 70, 1598-1601.	2.2	2
66	Eu <sup>2+</sup> , Dy <sup>3+</sup> codoped SrAl <sub>2</sub> O <sub>4</sub> nanocrystalline phosphor for latent fingerprint detection in forensic applications. Materials Research Express, 2016, 3, 015004.	1.6	43
67	Energy loss straggling in Aluminium foils for Li and C ions in fractional energy loss limits ( $\hat{I}^n E/E$ ) $\approx 1/4$ to $\approx 60\%$ . Radiation Physics and Chemistry, 2016, 119, 180-185.	2.8	4
68	Synthesis And Characterization Of Eu <sup>3+</sup> Doped $\gamma$ -Al <sub>2</sub> O <sub>3</sub> Nanocrystalline Powder For Novel Application In Latent Fingerprint Development. Advanced Materials Letters, 2016, 7, 302-306.	0.6	12
69	Discrimination of Various Paper Types Using Diffuse Reflectance Ultraviolet-Visible Near-Infrared (UV-Vis-NIR) Spectroscopy: Forensic Application to Questioned Documents. Applied Spectroscopy, 2015, 69, 714-720.	2.2	29
70	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. Tetrahedron Letters, 2015, 56, 4784-4787.	1.4	4
71	Energy transfer mechanism from Gd <sup>3+</sup> to Sm <sup>3+</sup> in K <sub>3</sub> Gd(PO <sub>4</sub> ) <sub>2</sub> :Sm <sup>3+</sup> phosphor. Materials Research Express, 2015, 2, 076202.	1.6	38
72	Effect of alkali metal ions (Li <sup>+</sup> , Na <sup>+</sup> and K <sup>+</sup> ) on the luminescence properties of CaMgB <sub>2</sub> O <sub>5</sub> : Sm <sup>3+</sup> nanophosphor. Nano Structures Nano Objects, 2015, 3, 9-16.	3.5	40

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73	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.	2.4	13
74	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.	3.6	17
75	Multifarious potential applications of keratinase of <i>Bacillus subtilis</i> K-5. <i>Biocatalysis and Biotransformation</i> , 2014, 32, 333-342.	2.0	22
76	Potential of Sr <sub>4</sub> Al <sub>14</sub> O <sub>25</sub> : Eu <sup>2+</sup> , Dy <sup>3+</sup> inorganic oxide-based nanophosphor in Latent fingermark detection. <i>Journal of Materials Science</i> , 2014, 49, 2225-2234.	3.7	52
77	Synthesis and evaluation of 3-salicyloylpyridine derivatives as cytotoxic mitochondrial apoptosis inducers. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014, 24, 4724-4728.	2.2	6
78	Î <sup>2</sup> -Ionone derived apoptosis inducing endoperoxides; Discovery of potent leads for anticancer agents. <i>European Journal of Medicinal Chemistry</i> , 2014, 87, 228-236.	5.5	12
79	Swift heavy ion induced structural, optical and luminescence modification in NaSrBO <sub>3</sub> :Dy <sup>3+</sup> phosphor. <i>Journal of Materials Science</i> , 2014, 49, 6404-6412.	3.7	22
80	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.	2.9	13
81	Î <sup>2</sup> -Ionone derived chalcones as potent antiproliferative agents. <i>European Journal of Medicinal Chemistry</i> , 2013, 69, 310-315.	5.5	21
82	Spectral and surface investigations of Mn <sup>2+</sup> doped SrZnO <sub>2</sub> nanocrystalline phosphors. <i>Journal of Materials Science</i> , 2013, 48, 3327-3333.	3.7	23
83	Synthesis and cytotoxicity evaluation of regioisomeric substituted N-phenyl-3-oxo-2-(chrom-4-one-3-yl)-isoxazolines: induction of apoptosis through a mitochondrial-dependent pathway. <i>MedChemComm</i> , 2013, 4, 972.	3.4	14
84	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.	3.4	174
85	Bioactivity Guided Isolation of Quercetin as Anxiolytic Compound from <i>Elaeocarpus ganitrus</i> Beads. <i>Natural Products Journal</i> , 2013, 3, 224-229.	0.3	6
86	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.	2.2	19
87	Photochemical formation and decomposition of 8-[[ <sup>2</sup> -arylethenyl]-2,2,6-trimethyl-7,9,10-trioxa-tricyclo[6.2.2.0 <sup>1,6</sup> ]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.	1.4	6
88	Synthesis of Î <sup>2</sup> -ionone derived chalcones as potent antimicrobial agents. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012, 22, 6343-6346.	2.2	38
89	In Vitro Activity of Vancomycin and Teicoplanin Against Coagulase Negative Staphylococci. <i>Oman Medical Journal</i> , 2011, 26, 186-188.	1.0	4
90	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

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91	Statistical fluctuations in energy loss for swift heavy ions in thick polymeric foils. <i>Physical Review A</i> , 2009, 80, .	2.5	7
92	Electronic stopping power of polymers for heavy ions in the ion energy domain of LSS theory. <i>Radiation Measurements</i> , 2009, 44, 363-368.	1.4	12
93	Energy loss of light ions in polypropylene absorber foils. <i>Indian Journal of Physics</i> , 2009, 83, 937-941.	1.8	5
94	Energy loss straggling of Si and Cl ions in polymeric foils. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2008, 266, 1933-1937.	1.4	6
95	Energy loss and straggling in LR-115 and Kapton polymeric foils for energetic ions. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2008, 266, 2556-2563.	1.4	16
96	Stopping power of polymeric foils for swift heavy ions. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2008, 266, 3988-3992.	1.4	8
97	Stopping force of 0.5â€“3.5MeV/u Cl ions in polymers. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2008, 266, 4738-4741.	1.4	12
98	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.	4.0	47
99	Energy loss and straggling of MeV heavy ions in polypropylene absorber foils. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2007, 258, 293-298.	1.4	21
100	Energy loss straggling of Li, C and O ions in mylar and polycarbonate absorber foils. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2006, 244, 289-293.	1.4	9
101	Slowing down of MeV heavy ions with $Z=6\text{--}29$ in PEN (C <sub>7</sub> H <sub>5</sub> O <sub>2</sub> ). <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2003, 201, 389-395.	1.4	20
102	Registration temperature effect on sensitivity of CR-39(DOP) and SR-90 polymer track detectors. <i>Radiation Measurements</i> , 2003, 36, 89-92.	1.4	6