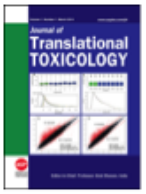
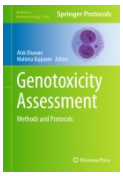
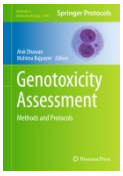
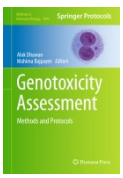
Publications during the last Five Years

S.No	Authors	Title	Journal/Book name, year, volume no., pgs
1.	Krupa Kansara, Pal Patel, Darshini Shah, Ritesh K Shukla, Sanjay Singh, Ashutosh Kumar and **Alok Dhawan**	TiO2 Nanoparticles induce DNA double strand breaks and cell cycle arrest in human alveolar cells	Environmental and Molecular Mutagenesis. (2015); 56(2): 204-217.
2.	Lokesh Baweja, K. Balamurugan, V. Subramanian and **Alok Dhawan**	Effect of graphene oxide on the conformational transitions of amyloid beta peptide: A molecular dynamics simulation study	Journal of Molecular Graphics and Modelling. (2015); 61:175-185.
3.	Ashutosh Kumar, Mojgan Najafzadeh, Badie K Jacob, **Alok Dhawan** and Diana Anderson	Zinc oxide nanoparticles affect the expression of p53, Ras p21 and JNKs: An *ex vivo*/*in vitro* exposure study in respiratory disease patients	Mutagenesis. (2015); 30(2): 237-245.
4.	Violet Aileen Senapati, A.K. Jain, Govind Sharan Gupta, Alok Kumar Pandey and **Alok Dhawan**	Chromium oxide nanoparticle-induced genotoxicity and p53-dependent apoptosis in human lung alveolar cells	Journal of Applied Toxicology (2015); 35(10):1179-1188.
5.	Reema Savaliya, Darshini Shah, Ragini Singh, Ashutosh Kumar, Rishi Shankar, **Alok Dhawan** and Sanjay Singh	Nanotechnology in Disease Diagnostic Techniques	Current Drug Metabolism (2015); 16, 645-661.
6.	Ashutosh Kumar, Rishi Shanker and **Alok Dhawan**	Nanotoxicity: aquatic organisms and ecosystems	Aquananotechnology: Global Prospects. Ed: Professor David E. Reisner and Professor T. Pradeep. Publisher: CRC Press, Taylor and Francis Group, (2015). Pages: 97-104.
7.	Violet Aileen Senapati, Ashutosh Kumar, Govind Sharan Gupta, Alok Kumar Pandey and **Alok Dhawan**	ZnO nanoparticles induced inflammatory response and genotoxicity in human blood cells: A mechanistic approach.	Food and Chemical Toxicology. (2015); July 2. pii: S0278-6915(15)30006-5. doi: 10.1016/j.fct.2015.06.018.

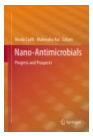
8.	Ashutosh Kumar, Sajid Khan and **Alok Dhawan**	Metal oxide nanoparticles elicit genotoxic responses in mammalian cells: A critical review.	In Nanoscience and Technology for Mankind. Ed. Professor Ashok Misra and Professor Jayesh Bellare. Publisher, Humana Press, pp 160-194 (2014)
9.	Zuzana Magdolenova, Andrew Richard Collins, Ashutosh Kumar, **Alok Dhawan**, Vicki Stone, Maria Dusinska	Mechanisms of genotoxicity: Review of recent *in vitro* and *in vivo* studies with engineered nanoparticles	Nanotoxicology (2014) 8(3), 233-78
10.	Andrew Collins, Gudrun Koppen, Vanessa Valdiglesias, Maria Dusinska, Marcin Kruszewski, Peter, Emilio Rojas, **Alok Dhawan**, Iris Benzie, Erdem Coskun, Massimo Moretti, Guenter Speit, Stefano Bonassi	The comet assay as a tool for human biomonitoring studies: the ComNet Project.	Mutation Research Reviews: (2014); 759:27-39.
11.	Monica Catarina Botelho, Carla Costa, Susana Silva, Solange Costa, **Alok Dhawan**, Paula A. Oliveira, Joao P. Teixeira	Effects of titanium dioxide nanoparticles in human gastric epithelial cells in vitro	Biomedicine & Pharmacotherapy Biomed Pharmacother. (2014); 68(1): 59-64.
12.	Ritesh K. Shukla, Ashutosh Kumar, N.V. Srikanth Vallabani, Alok K. Pandey and **Alok Dhawan**	Titanium dioxide nanoparticles induced oxidative stress triggers DNA damage and hepatic injury in mice	Nanomedicine: (2014); 9(9): 1423-1434.
13.	Ashutosh Kumar, Sajid Khan and **Alok Dhawan**	Comprehensive molecular analysis of the responses induced by titanium dioxide nanoparticles in human keratinocyte cells	Journal of Translational Toxicology. (2014); 1: 28-39. **[Article on Cover Page]** 
14.	Mahima Bajpayee and **Alok Dhawan**	Biomarkers for monitoring adverse health effects of air pollution in humans	Journal of Translational Toxicology. (2014); 1: 1-6.
15.	Nitin Sagar, Alok K Pandey, Deepak Gurbani, K. Khan, D. Singh, B.P. Chaudhari, V.P. Soni, N. Chattopadhyay, **Alok**	*In-Vivo* Efficacy of Compliant 3D Nano-Composite in Critical-Size Bone Defect Repair: a Six Month	*PLoS One*. 8(10): e77578. (2013) doi:10.1371/journal.

	Dhawan, Jayesh R. Bellare.	Preclinical Study in Rabbit.	pone.0077578
16.	Abhinesh Kumar, NS Vallabani, **Alok Dhawan**, Krutika Sawant	Preparation, optimization and characterization of exemestane loaded PEGylated PCL nanoparticles for tumor targeting	J Control Release. (2013). 28;172(1):e14. doi: 10.1016/j.jconrel.2013.08.037.
17.	Lokesh Baweja, Kanagasabai Balamurugan, Venkatesan Subramanian and **Alok Dhawan**	Hydration Patterns of Graphene Based Nanomaterials (GBNMs) Play a Major Role in the Stability of a Helical Protein: A Molecular Dynamics Simulation Study	Langmuir (2013); 29(46):14230-14238
18.	Ashutosh Kumar and **Alok Dhawan**	Nano-safety, Standardization and Certification	Chapter 1: Manual on Critical Issues in Nanotechnology R&D Management: An Asia-Pacific Perspective, Asian and Pacific Centre for Transfer of Technology of the United Nations-Economic and Social Commission for Asia and the Pacific (UNESCAP), United Nations APCTT-ESCAP (2013), pp 1-40
19.	Ashutosh Kumar and **Alok Dhawan**	Genotoxic and carcinogenic potential of engineered nanoparticles: an update	Archives of Toxicology (2013); 87:1883–1900
20.	Tina Mesarič, Lokesh Baweja, Barbara Drašler, Damjana Drobne, Darko Makovec, Peter Dušak, **Alok Dhawan** and Kristina Sepčić	Effects of surface curvature and surface characteristics of carbon-based nanomaterials on the adsorption and activity of acetylcholinesterase	Carbon. (2013); 62: 222–232.
21.	Julian Laubenthal, Michal R. Gdula, **Alok Dhawan** and Diana Anderson	Multicolour laser scanning confocal immunofluorescence microscopy of DNA damage response biomarkers	Chapter 16 In: **Genotoxicity Assessment: Methods and Protocols**. *Methods in Molecular Biology series.* *Volume 1044: 311-*

			323, (2013). Professor Alok Dhawan and Dr. Mahima Bajpayee [Eds]. Publishers-Humana Press 
22.	Mahima Bajpayee, Ashutosh Kumar and **Alok Dhawan**	The comet assay: assessment of *in vitro* and *in vivo* DNA damage	Chapter 17 In: **Genotoxicity Assessment: Methods and Protocols**. *Methods in Molecular Biology series.* *Volume 1044:* 325-345*, (2013).* Professor Alok Dhawan and Dr. Mahima Bajpayee [Eds]. Publishers-Humana Press 
23.	Diana Anderson, **Alok Dhawan**, and Julian Laubenthal	The comet assay in human biomonitoring	Chapter 18 In: **Genotoxicity Assessment: Methods and Protocols**. *Methods in Molecular Biology series.* *Volume 1044: 347-362, (2013).* Professor Alok Dhawan and Dr. Mahima Bajpayee [Eds]. Publishers-Humana Press 

24.	Ashutosh Kumar and **Alok Dhawan**	Nano-safety, standardization and certification	Manual on Critical Issues in Nano-technology R&D Management: An Asia-Pacific Perspective. A United Nations Document, (2013)
25.	Ashutosh Kumar, Vyom Sharma, and **Alok Dhawan**	Methods for detection of oxidative stress and genotoxicity of engineered nanoparticles	Donald Armstrong and Dhruba J. Bharali (eds.), Oxidative Stress and Nanotechnology: Methods and **Protocols**, Methods in Molecular Biology, (2013); 1028: 231-246.
26.	Deepak Gurbani, Santosh Kumar Bharti, Ashutosh Kumar, Alok K. Pandey, Godson R.E.E. Ana, Ambrish Verma, Altaf Husain Khan, Devendra K. Patel, M.K.R. Mudiam, Swatantra K. Jain, Raja Roy and **Alok Dhawan**	Polycyclic aromatic hydrocarbons and their quinones modulate the metabolic profile and induce DNA damage in human alveolar and bronchiolar cells	International Journal of Hygiene and Environmental Health.(2013); 216(5): 553-565.
27.	V. Valdiglesias, Carla Costa, Vyom Sharma, G. Kiliç, E. Pásaro, Joao P. Teixeira, **Alok Dhawan**, Blanca Laffon	Comparative study on effects of two different types of titanium dioxide nanoparticles on human ne.uronal cells.	Food Chem Toxicol. (2013); 57: 352-361.
28.	Ritesh K. Shukla, Ashutosh Kumar, Deepak Gurbani, Alok K. Pandey, Shashi Singh and **Alok Dhawan**	TiO_2 nanoparticles induce oxidative DNA damage and apoptosis in human liver cells	Nanotoxicology. (2013); 7(1): 48-60.
29.	S. Shahin, V.P. Singh, R.K. Shukla, **Alok Dhawan**, R.K. Gangwar, S.P. Singh, C.M. Chaturvedi	2.45 GHz Microwave Irradiation-Induced Oxidative Stress Affects Implantation or Pregnancy in Mice, Mus musculus	Appl Biochem Biotechnol. (2013); 169(5):1727-1751.
30.	Rahul Kumar, Kausar M. Ansari, Bhushan P. Chaudhari, **Alok Dhawan**, Premendra D. Dwivedi, Swatantra K. Jain, Mukul Das	Topical Application of Ochratoxin A Causes DNA damage and tumor initiation in mouse skin	PLOS One. (2012); 7 (10) e47280.
31.	Vyom Sharma, Diana Anderson, **Alok Dhawan**	Zinc oxide nanoparticles induce oxidative DNA damage and ROS-triggered	Apoptosis. (2012); 17(8):852-870.

		mitochondria mediated apoptosis in human liver cells (HepG2)	
32.	Deepak Gurbani, Vandna Kukshal, Julian Laubenthal, Ashutosh Kumar, Alok K. Pandey, Sarita Tripathi, Ashish Arora, Swatantra K. Jain, Ravishankar Ramachandran, Diana Anderson, **Alok Dhawan**	Mechanism of inhibition of the ATPase domain of human topoisomerase IIα by 1,4-benzoquinone, 1,2-naphthoquinone, 1,4-naphthoquinone, and 9,10-phenanthroquinone	Toxicological Sciences. (2012); 126(2): 372–390. ***(Cover page article)*** 
33.	A.A. Bakare, Sushila Patel, Alok K. Pandey, Mahima Bajpayee, **Alok Dhawan**	DNA and oxidative damage induced in somatic organs and tissues of mouse by municipal sludge leachate	Toxicology and Industrial Health. (2012); 28 (7): 614 – 623.
34.	R. Goswami, A. Singh, N. Gupta, Indian Genome Variation Consortium, **Alok Dhawan**, *et al* and R. Rani	Presence of strong association of the major histocompatibility complex (MHC) class I allele HLA-A*26:01 with idiopathic hypoparathyroidism.	J Clin Endocrinol Metab. (2012); 97(9):E1820-1824.
35.	Vyom Sharma, Poonam Singh, Alok K. Pandey and **Alok Dhawan**	Induction of oxidative stress, DNA damage and apoptosis in mouse liver after sub-acute oral exposure to zinc oxide nanoparticles	Mutation Research/Genetic Toxicology and Environmental Mutagenesis. (2012); 745(1-2):84-91.
36.	Virginia D'Britto, Philem Pushparani Devi, B. L. V. Prasad, **Alok Dhawan**, Vivek G. Mantri and Asmita Prabhune	Medicinal plant extracts used for blood sugar and obesity therapy shows excellent inhibition of invertase activity: synthesis of nanoparticles using this extract and its cytotoxic and genotoxic effects	International Journal of Life Science and Pharma Research. (2012); 2(3): 61-74.
37.	Kajal Kumar Dey, Ashutosh Kumar, Rishi Shanker, **Alok Dhawan**, Meher Wan, Raja Ram Yadav and Avanish Kumar Srivastava	Growth morphologies, phase formation, optical & biological responses of nanostructures of CuO and their application as cooling fluid in high energy density devices	RSC Advances. (2012); 2: 1387-1403.
38.	Ashutosh Kumar, Alok K. Pandey, Rishi Shanker and **Alok Dhawan**	Microorganisms: A versatile model for toxicity assessment of engineered nanoparticles	Nano - antimicrobials: Progress and Prospects. Eds: Dr. Nicola Cioffi and Dr. Mahendra Rai.

			Publkisher: Springer Verlag, GmbH, (2012); pp. 497-524. 
39.	**Alok Dhawan** and Mahima Bajpayee	Biomarkers in human biomonitoring studies: an Indian perspective	Chapter 2E, In: Biomarkers and Human Biomonitoring, Volume 1: Ongoing Programs and Exposures: Lisbeth E. Knudsen and Domenico Franco Merlo (Eds). Publishers-The Royal Society of Chemistry: (2012); pp. 107-134.
40.	Ashutosh Kumar, Alok K. Pandey, Shashi S. Singh, Rishi Shanker and **Alok Dhawan**	Engineered ZnO and TiO2 nanoparticles induce oxidative stress and DNA damage leading to reduced viability of Escherichia coli	Free Radical Biology and Medicine (2011); 51: 1872–1881
41.	Ashutosh Kumar, Alok K Pandey, Shashi Singh, Rishi Shanker and **Alok Dhawan**	A flow cytometric method to assess nanoparticle uptake in bacteria	Cytometry Part A. (2011); 79A: 707-712 ***(Highlighted article)***
42.	R. Kumar, P. D. Dwivedi, **Alok Dhawan**, Mukul Das and K. M. Ansari	Citrinin generated reactive oxygen species cause cell cycle arrest leading to apoptosis via the intrinsic mitochondrial pathway in mouse skin	Toxicological Sciences (2011); 122(2): 557-566.
43.	Ashutosh Kumar, Alok K Pandey, Shashi Singh, Rishi Shanker and **Alok Dhawan**	Cellular uptake and mutagenic potential of metal oxide nanoparticles in bacterial cells	Chemosphere. (2011); 83 (8): 1124-1132.
44.	Vyom Sharma, Suman K. Singh, Diana Anderson, Desmond J. Tobin and **Alok Dhawan**	Zinc Oxide Nanoparticle Induced Genotoxicity in Primary Human Epidermal Keratinocytes	Journal of Nanoscience and Nanotechnology. (2011); 11 (5): 3782–3788.
45.	**Alok Dhawan,** Rishi Shanker, Mukul Das and Kailash C. Gupta	Guidance for safe handling of nanomaterials	Journal of Biomedical Nanotechnology. (2011); 7 (1): 218–224.

46.	Lokesh Baweja, Deepak Gurbani, Rishi Shanker, Alok K. Pandey, V. Subramanian and **Alok Dhawan**	C_{60}-fullerene binds with the ATP binding domain of human topoisomerase II alpha	Journal of Biomedical Nanotechnology. (2011); 7 (1): 177–178 ***(Cover page article).*** 
47.	C.M. Chaturvedi, V. P. Singh, P. Singh, P. Basu, M. Singaravel, R. K. Shukla, **Alok Dhawan**, A. K. Pati, R. K. Gangwar and S. P. Singh	2.45 GHz (Cw) Microwave irradiation alters circadian organization, spatial memory, DNA structure in the brain cells and blood cell counts of male mice, Mus musculus	Progress In Electromagnetics Research B,(2011); 29: 23-42.
48.	Poonam Singh, Pushpa Lata, Sushila Patel, Alok K. Pandey, Swatantra K. Jain, Rishi Shanker and **Alok Dhawan**	Expression profiling of toxicity pathway genes by real-time PCR array in cypermethrin-exposed mouse brain	Toxicology Mechanism and Methods. (2011); 21:193-199.
49.	Ritesh K, Shukla, Vyom Sharma, Alok K. Pandey, Shashi Singh, Sarwat Sultana and **Alok Dhawan**	ROS-mediated genotoxicity induced by titanium dioxide nanoparticles in human epidermal cells	Toxicology In Vitro, (2011); 25: 231-241. **(Top 10 most downloaded article of the journal)**