

REPORTS AND SCIENTIFIC PUBLICATIONS
ON THE TOXICITY OF GRAPHENE OXIDE TO LIVING ORGANISMS
AND TO HUMANS IN PARTICULAR

1- Graphene oxide generates thrombi:

https://www.researchgate.net/publication/328338305_Graphene_Oxide_Touches_Blood_In_Vivo_Interactions_of_Bio-Coronated_2D_Materials

2- Graphene oxide generates blood coagulation:

<https://vu2004.admin.hosting8.ing.udec.cl/Proyectos/investigacion-con-grafeno-con-aplicaciones-hemostaticas/>

3- Toxicity of graphene-family nanoparticles: a general review of the origins and mechanisms.

<https://particleandfibretoxicology.biomedcentral.com/articles/10.1186/s12989-016-0168-y>

4- Toxicity of graphene in human sperm:

<https://francis.naukas.com/2016/08/21/toxicidad-del-grafeno-y-los-nanotubos-de-carbono-en-el-esperma-humano/>

5- The dangers of graphene and its side effects on human biology:

<https://computerhoy.com/noticias/hardware/peligros-del-grafeno-sus-efectos-secundarios-12591>

6- Graphene nanomaterials: synthesis, biocompatibility and cytotoxicity:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6274822/>

7- Nanotoxicology: Breathing carbon nanotubes causes pulmonary fibrosis, a cause of lung cancer:

<https://francis.naukas.com/2009/10/29/nanotoxicologia-respirar-nanotubos-de-carbono-produce-fibrosis-pulmonar-una-causa-de-cancer-de-pulmon/>

8- Safety assessment of graphene-based materials: Focus on human health and the environment:

<https://pubs.acs.org/doi/10.1021/acsnano.8b04758#>

9- Graphene oxide is detected in the body by specialized cells of the immune system causing the same symptomatology as the alleged "SARSCOV2":

<https://www.graphene-info.com/graphene-oxide-detected-body-specialized-cells-immune-system>

10- Toxicity of graphene in normal human lung cells:

<https://pubmed.ncbi.nlm.nih.gov/21485826/>

11- Can nanomaterials induce reproductive toxicity in male mammals?:

<https://www.sciencedirect.com/science/article/abs/pii/S0048969720378852>

12- Graphene oxide affects the outcome of in vitro fertilization by interacting with the sperm membrane in an animal model:

<https://www.sciencedirect.com/science/article/pii/S0008622317312757#undfig1>

13- Effects of Nano-Graphene Oxide on Testis, Epididymis and Fertility of Wistar Rats:

https://www.researchgate.net/publication/315776736_Effects_of_Nano-Graphene_Oxide_on_Testis_Epididymis_and_Fertility_of_Wistar_Rats

14- Graphene oxide nano-bio interaction induces inhibition of spermatogenesis and disturbance of fatty acid metabolism in the nematode *Caenorhabditis elegans*: <https://pubmed.ncbi.nlm.nih.gov/30218681/>

15- Graphene oxide touches blood: *in vivo* interactions of "bio-coronated" 2D materials:

<https://pubs.rsc.org/en/content/articlelanding/2019/nh/c8nh00318a#!divAbstract>

16- Toxicity of graphene in human sperm and consequences:

<https://francis.naukas.com/2016/08/21/toxicidad-del-grafeno-y-los-nanotubos-de-carbono-en-el-esperma-humano/>

17- Graphene oxide can induce *in vitro* and *in vivo* mutagenesis (cancer):

<https://www.nature.com/articles/srep03469>

18- Repeated exposure to aerosolized graphene oxide mediates autophagy inhibition and inflammation in a three-dimensional human airway model:
<https://www.sciencedirect.com/science/article/pii/S2590006420300107?via%3Dihub> #fig5

19- Single exposure to aerosolized graphene oxide and graphene nanoplatelets did not initiate an acute biological response in a 3D human lung model:
<https://www.sciencedirect.com/science/article/pii/S0008622318304706?via%3Dihub> #undfig1

20- Physico-chemical properties based on differential toxicity of graphene oxide/reduced graphene oxide in human lung cells mediated by oxidative stress:
<https://www.nature.com/articles/srep39548>

21- An assessment of the cytotoxic effects of graphene nanoparticles on the epithelial cells of the human lungs:
<https://journals.sagepub.com/doi/10.1177/0748233718817180>

22- Role of surface charge and oxidative stress in cytotoxicity and genotoxicity of graphene oxide towards human lung fibroblast cells:
<https://analyticalsciencejournals.onlinelibrary.wiley.com/doi/10.1002/jat.2877>

23- Toxicity of graphene oxide and multi-walled carbon nanotubes against human cells and zebrafish:
<https://link.springer.com/article/10.1007/s11426-012-4620-z>

24- An *in vitro* cytotoxicity assessment of graphene nanosheets on alveolar cells:
<https://www.sciencedirect.com/science/article/abs/pii/S0169433217335109?via%3Di+hub>

25- Graphene nanosheets damage the lysosomal and mitochondrial membranes and induce the apoptosis of RBL-2H3 cells:
<https://www.sciencedirect.com/science/article/abs/pii/S0048969720327467?via%3Di+hub>

26- Genotoxicity of graphene nanoribbons in human mesenchymal stem cells:
<https://www.sciencedirect.com/science/article/abs/pii/S0008622312009499?via%3Di+hub>

27- Differential genotoxic and epigenotoxic effects of graphene family nanomaterials (GFNs) in human bronchial epithelial cells:

<https://www.sciencedirect.com/science/article/abs/pii/S1383571816300262?via%3Di+hub>

28- A closer look at the genotoxicity of graphene based materials:

<https://iopscience.iop.org/article/10.1088/2515-7639/ab5844>

29- DNA Melting and Genotoxicity Induced by Silver Nanoparticles and Graphene:

<https://pubs.acs.org/doi/10.1021/acs.chemrestox.5b00052>

30- Hydroxylated-Graphene Quantum Dots Induce DNA Damage and Disrupt Microtubule Structure in Human Esophageal Epithelial Cells:

<https://academic.oup.com/toxsci/article/164/1/339/4970755>

31- Graphene oxide nanosheets induce DNA damage and activate the base excision repair (BER) signaling pathway both *in vitro* and *in vivo*:

<https://www.sciencedirect.com/science/article/abs/pii/S0045653517309517?via%3Di+hub>

32- Genotoxic response and damage recovery of macrophages to graphene quantum dots:

<https://www.sciencedirect.com/science/article/abs/pii/S0048969719304073?via%3Di+hub>

33- Can graphene quantum dots cause DNA damage in cells?:

<https://pubs.rsc.org/en/content/articlelanding/2015/NR/C5NR01734C>

34- Blood exposure to graphene oxide may cause anaphylactic death in non-human primates:

<https://www.sciencedirect.com/science/article/pii/S1748013220300918?via%3Di+hub>

35- Cellular and molecular mechanistic insight into the DNA-damaging potential of few-layer graphene in human primary endothelial cells:

<https://www.sciencedirect.com/science/article/abs/pii/S1549963416000848?via%3Di+hub>

36- Impact of graphene oxide on human placental trophoblast viability, functionality and barrier integrity:

<https://iopscience.iop.org/article/10.1088/2053-1583/aab9e2>

37- PEGylation of Reduced Graphene Oxide Induces Toxicity in Cells of the Blood–Brain Barrier: An *in Vitro* and *in Vivo* Study:

<https://pubs.acs.org/doi/10.1021/acs.molpharmaceut.6b00696>

38- Oxygen content-related DNA damage of graphene oxide on human retinal pigment epithelium cells:

<https://link.springer.com/article/10.1007%2Fs10856-021-06491-0>

39- Cytotoxicity Effects of Graphene and Single-Wall Carbon Nanotubes in Neural Phaeochromocytoma-Derived PC12 Cells:

<https://pubs.acs.org/doi/10.1021/nn1007176>

40- Evaluation of Graphene Oxide Induced Cellular Toxicity and Transcriptome Analysis in Human Embryonic Kidney Cells:

<https://www.mdpi.com/2079-4991/9/7/969>

41- Toxicology Study of Single-walled Carbon Nanotubes and Reduced Graphene Oxide in Human Sperm:

<https://www.nature.com/articles/srep30270>

42- Dose-dependent effects of nanoscale graphene oxide on reproduction capability of

mammals: <https://www.sciencedirect.com/science/article/abs/pii/S0008622315301366?via%3Di%20hub>

43- Short-term *in vivo* exposure to graphene oxide can cause damage to the gut and

testis: <https://www.sciencedirect.com/science/article/abs/pii/S0304389417300171?via%3Di%20hub>

44- Cyto and genotoxicities of graphene oxide and reduced graphene oxide sheets on spermatozoa:

<https://pubs.rsc.org/en/content/articlelanding/2014/RA/c4ra01047g>

45- Nanotoxicity of Graphene and Graphene Oxide:

<https://pubs.acs.org/doi/10.1021/tx400385x>

46- Graphene toxicity as a double-edged sword of risks and exploitable opportunities: a critical analysis of the most recent trends and developments. *<https://iopscience.iop.org/article/10.1088/2053-1583/aa5476>*

47- A differential effect of graphene oxide on the production of proinflammatory cytokines by murine microglia:

<https://www.worldscientific.com/doi/abs/10.1142/S1682648515500110>

48- Graphene oxide disrupted mitochondrial homeostasis through inducing intracellular redox deviation and autophagy-lysosomal network dysfunction in SH-SY5Y cells:

<https://www.sciencedirect.com/science/article/pii/S0304389421011225?via%3Dihub>

49- Biodistribution and pulmonary toxicity of intratracheally instilled graphene oxide in mice:

<https://www.nature.com/articles/am20137>

50- A review of toxicity studies on graphene-based nanomaterials in laboratory animals: *<https://www.sciencedirect.com/science/article/abs/pii/S0273230017300119?via%3Di%20hub>*

51- Neutrophils degrade graphene oxide, mediated by myeloperoxidase:

https://www.researchgate.net/publication/351888431_Neutrophils_Defensively_Degrade_Graphene_Oxide_in_a_Lateral_Dimension_Dependent_Manner_through_Two_Distinct_Myeloperoxidase_Mediated_Mechanisms

52- Dose ranging, expanded acute toxicity and safety pharmacology studies for intravenously administered functionalized graphene nanoparticle formulations:

<http://europepmc.org/article/MED/24854092>

53- Remote control of the cardiac activity of a living being using graphene:

<https://www.infosalus.com/asistencia/noticia-manejan-celulas-cardiacas-cultivadas-laboratorio-control-remoto-20180522073436.html>

54- Graphene oxide induces apoptotic cell death in endothelial cells by activating autophagy via calcium-dependent phosphorylation of c-Jun N-terminal kinases:

<https://www.sciencedirect.com/science/article/abs/pii/S1742706116304810>

55- Cellular and molecular mechanistic insight into the DNA-damaging potential of few-layer graphene in human primary endothelial

cells: <https://www.sciencedirect.com/science/article/abs/pii/S1549963416000848>

56- Toxicity Evaluation of Graphene Oxide in Kidneys of Sprague-Dawley Rats:

<https://pubmed.ncbi.nlm.nih.gov/27043588/>

57- Toxicology of carbon nanotubes and fullerenes:

https://copro.com.ar/Toxicologia_de_los_fullerenos.html

58- The Puzzling Potential of Carbon Nanomaterials: General Properties, Application, and Toxicity:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7466546/>

59- Synthesis and Toxicity of Graphene Oxide Nanoparticles: A Literature Review of *In Vitro* and *In Vivo* studies:

<https://www.hindawi.com/journals/bmri/2021/5518999/>

60- Radio-frequency characteristics of graphene oxide:

<https://aip.scitation.org/doi/abs/10.1063/1.3506468>