

# Gary N Cherr

## List of Publications by Year in descending order

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97  
papers

6,005  
citations

66343

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h-index

71685

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97  
docs citations

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times ranked

6545  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Preface. <i>Ecotoxicology</i> , 2021, 30, 1279-1280.  | 2.4  | 0         |
| 2  | Shu-Pei Cheng: A life-long pursuit for Environmental Science and Pollution Control. <i>Ecotoxicology</i> , 2021, 30, 1284-1286.   | 2.4  | 1         |
| 3  | Effects of three zinc-containing sunscreens on development of purple sea urchin ( <i>Strongylocentrotus purpuratus</i> ) embryos. <i>Aquatic Toxicology</i> , 2020, 218, 105355.                                | 4.0  | 17        |
| 4  | Fabrication of a multifunctional magnetic-fluorescent material for medical applications. <i>Dalton Transactions</i> , 2020, 49, 4376-4389.  | 3.3  | 6         |
| 5  | Methods for toxicology studies in echinoderm embryos and larvae. <i>Methods in Cell Biology</i> , 2019, 150, 411-426.   | 1.1  | 1         |
| 6  | Review of and Recommendations for Monitoring Contaminants and their Effects in the San Francisco BayâDelta. <i>San Francisco Estuary and Watershed Science</i> , 2019, 17, .                                  | 0.4  | 3         |
| 7  | Effects of soluble copper and copper oxide nanoparticle exposure on the immune system of mussels, <i>Mytilus galloprovincialis</i> . <i>Environmental Toxicology</i> , 2019, 34, 294-302.                       | 4.0  | 9         |
| 8  | Rapid and complete dehalogenation of halonitromethanes in simulated gastrointestinal tract and its influence on toxicity. <i>Chemosphere</i> , 2018, 211, 1147-1155.  | 8.2  | 20        |
| 9  | Scaling Up Endocrine Disruption Effects from Individuals to Populations: Outcomes Depend on How Many Males a Population Needs. <i>Environmental Science &amp; Technology</i> , 2017, 51, 1802-1810.             | 10.0 | 30        |
| 10 | Stage specific effects of soluble copper and copper oxide nanoparticles during sea urchin embryo development and their relation to intracellular copper uptake. <i>Aquatic Toxicology</i> , 2017, 189, 134-141. | 4.0  | 9         |
| 11 | Comparative environmental fate and toxicity of copper nanomaterials. <i>NanoImpact</i> , 2017, 7, 28-40.  | 4.5  | 277       |
| 12 | Chemical and physical guidance of fish spermatozoa into the egg through the micropyle. <i>Biology of Reproduction</i> , 2017, 96, 780-799.  | 2.7  | 67        |
| 13 | Photosynthetic efficiency predicts toxic effects of metal nanomaterials in phytoplankton. <i>Aquatic Toxicology</i> , 2017, 183, 85-93.   | 4.0  | 33        |
| 14 | Impacts of Petroleum-Derived Pollutants on Fish Development. <i>Annual Review of Animal Biosciences</i> , 2017, 5, 185-203.   | 7.4  | 59        |
| 15 | Facilitation of trace metal uptake in cells by inulin coating of metallic nanoparticles. <i>Royal Society Open Science</i> , 2017, 4, 170480.   | 2.4  | 13        |
| 16 | Unusual variation of blocking temperature in bi-magnetic nanoparticles. <i>Journal of Magnetism and Magnetic Materials</i> , 2017, 441, 417-423.  | 2.3  | 14        |
| 17 | Implementing a Restoration Program for the Endangered White Abalone ( <i>Haliotis sorenseni</i> ) in California. <i>Journal of Shellfish Research</i> , 2016, 35, 611-618.                                      | 0.9  | 27        |
| 18 | Comparison of Cytotoxicity and Inhibition of Membrane ABC Transporters Induced by MWCNTs with Different Length and Functional Groups. <i>Environmental Science &amp; Technology</i> , 2016, 50, 3985-3994.      | 10.0 | 56        |

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|----|---|------|-----------|
| 19 | Developmental effects of two different copper oxide nanomaterials in sea urchin ( <i>Lytechinus</i> ) Tj ETQq1 1 0.784314 rgBT /Overlock  | 3.0  | 42        |
| 20 | Low levels of graphene and graphene oxide inhibit cellular xenobiotic defense system mediated by efflux transporters. <i>Nanotoxicology</i> , 2016, 10, 597-606.  | 3.0  | 39        |
| 21 | Progesterone Accelerates the Completion of Sperm Capacitation and Activates CatSper Channel in Spermatozoa from the Rhesus Macaque1. <i>Biology of Reproduction</i> , 2015, 93, 130.  | 2.7  | 58        |
| 22 | Interactive effects of pesticide exposure and habitat structure on behavior and predation of a marine larval fish. <i>Ecotoxicology</i> , 2015, 24, 391-400.  | 2.4  | 13        |
| 23 | Copper Oxide and Zinc Oxide Nanomaterials Act as Inhibitors of Multidrug Resistance Transport in Sea Urchin Embryos: Their Role as Chemosensitizers. <i>Environmental Science &amp; Technology</i> , 2015, 49, 5760-5770.         | 10.0 | 66        |
| 24 | The fish egg's micropyle and sperm attraction. <i>Molecular Reproduction and Development</i> , 2014, 81, 1063-1063.   | 2.0  | 1         |
| 25 | Identification of the Origin and Localization of Chorion (Egg Envelope) Proteins in an Ancient Fish, the White Sturgeon, <i>Acipenser transmontanus</i> 1. <i>Biology of Reproduction</i> , 2014, 90, 132.                        | 2.7  | 24        |
| 26 | Common Strategies and Technologies for the Ecosafety Assessment and Design of Nanomaterials Entering the Marine Environment. <i>ACS Nano</i> , 2014, 8, 9694-9709.  | 14.6 | 149       |
| 27 | Ecological Nanotoxicology: Integrating Nanomaterial Hazard Considerations Across the Subcellular, Population, Community, and Ecosystems Levels. <i>Accounts of Chemical Research</i> , 2013, 46, 813-822.                         | 15.6 | 125       |
| 28 | Sperm Attractant in the Micropyle Region of Fish and Insect Eggs1. <i>Biology of Reproduction</i> , 2013, 88, 47.   | 2.7  | 95        |
| 29 | Survival of Drowning Sperm: Do Spermatozoa from External Fertilizers Adapt to Differing Osmotic Environments Through the Use of Aquaporins?. <i>Biology of Reproduction</i> , 2013, 89, 36.                                       | 2.7  | 0         |
| 30 | From Omics to Otoliths: Responses of an Estuarine Fish to Endocrine Disrupting Compounds across Biological Scales. <i>PLoS ONE</i> , 2013, 8, e74251.   | 2.5  | 36        |
| 31 | A Tale of Two Spills: Novel Science and Policy Implications of an Emerging New Oil Spill Model. <i>BioScience</i> , 2012, 62, 461-469.  | 4.9  | 89        |
| 32 | Larval Pacific Herring ( <i>Clupea pallasii</i> ) Survival in Suspended Sediment. <i>Estuaries and Coasts</i> , 2012, 35, 1229-1236.  | 2.2  | 2         |
| 33 | The in vivo estrogenic and in vitro antiestrogenic activity of permethrin and bifenthrin. <i>Environmental Toxicology and Chemistry</i> , 2012, 31, 2848-2855.  | 4.3  | 74        |
| 34 | Polycyclic aromatic hydrocarbons and dibutyl phthalate disrupt dorsal-ventral axis determination via the Wnt/ $\beta$ -catenin signaling pathway in zebrafish embryos. <i>Aquatic Toxicology</i> , 2012, 124-125, 188-196.        | 4.0  | 34        |
| 35 | Unexpectedly high mortality in Pacific herring embryos exposed to the 2007 Cosco Busan oil spill in San Francisco Bay. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, E51-8. | 7.1  | 136       |
| 36 | Multifunctional glycoprotein DEF126—a curious story of defensin-clad spermatozoa. <i>Nature Reviews Urology</i> , 2012, 9, 365-375.   | 3.8  | 80        |

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|----|--|------|-----------|
| 37 | Potent Phototoxicity of Marine Bunker Oil to Translucent Herring Embryos after Prolonged Weathering. PLoS ONE, 2012, 7, e30116.  | 2.5  | 48        |
| 38 | An approach to detecting estrogenic endocrine disruption via choriogenin expression in an estuarine model fish species. Ecotoxicology, 2012, 21, 1272-1280.  | 2.4  | 25        |
| 39 | Sperm motility-initiating substance in newt egg jelly induces differential initiation of sperm motility based on sperm intracellular calcium levels. Development Growth and Differentiation, 2011, 53, 9-17.                         | 1.5  | 12        |
| 40 | Metal oxide nanomaterials in seawater: Linking physicochemical characteristics with biological response in sea urchin development. Journal of Hazardous Materials, 2011, 192, 1565-1571.   | 12.4 | 126       |
| 41 | A Common Mutation in the Defensin <i>DEFB126</i> Causes Impaired Sperm Function and Subfertility. Science Translational Medicine, 2011, 3, 92ra65.   | 12.4 | 127       |
| 42 | Low extracellular zinc increases neuronal oxidant production through nadph oxidase and nitric oxide synthase activation. Free Radical Biology and Medicine, 2010, 48, 1577-1587.   | 2.9  | 51        |
| 43 | Two different unique cardiac isoforms of protein 4.1R in zebrafish, <i>Danio rerio</i> , and insights into their cardiac functions as related to their unique structures. Development Growth and Differentiation, 2010, 52, 591-602. | 1.5  | 4         |
| 44 | Stability and Aggregation of Metal Oxide Nanoparticles in Natural Aqueous Matrices. Environmental Science & Technology, 2010, 44, 1962-1967.   | 10.0 | 1,162     |
| 45 | Release of DEFB126 from macaque sperm and completion of capacitation are triggered by conditions that simulate periovulatory oviductal fluid. Molecular Reproduction and Development, 2009, 76, 431-443.                             | 2.0  | 9         |
| 46 | Impacts of Suspended Sediments on Fertilization, Embryonic Development, and Early Larval Life Stages of the Pacific Herring, <i>Clupea pallasii</i> . Biological Bulletin, 2009, 216, 175-187.                                       | 1.8  | 33        |
| 47 | Induced thermotolerance and tissue Hsc70 in juvenile coho salmon, <i>Oncorhynchus kisutch</i> . Acta Zoologica, 2008, 89, 331-338.   | 0.8  | 9         |
| 48 | Macaque sperm coating protein DEFB126 facilitates sperm penetration of cervical mucus. Human Reproduction, 2008, 23, 2523-2534.  | 0.9  | 95        |
| 49 | $\beta$ -Defensin 22 is a major component of the mouse sperm glycocalyx. Reproduction, 2008, 136, 753-765.   | 2.6  | 38        |
| 50 | Beta-Defensin 126 on the Surface of Macaque Sperm Mediates Attachment of Sperm to Oviductal Epithelia. Biology of Reproduction, 2008, 78, 400-412.   | 2.7  | 88        |
| 51 | Two egg-derived molecules in sperm motility initiation and fertilization in the Pacific herring ( <i>Clupea</i> ) Tj ETQq1 1 0.784314 rgBT /Overfor 40   | 0.6  | 40        |
| 52 | Using an integrated approach to link biomarker responses and physiological stress to growth impairment of cadmium-exposed larval topmelt. Aquatic Toxicology, 2006, 80, 298-308.   | 4.0  | 42        |
| 53 | Increase in multidrug transport activity is associated with oocyte maturation in sea stars. Development Growth and Differentiation, 2006, 48, 559-573.   | 1.5  | 26        |
| 54 | Polybrominated diphenyl ether (PBDE)-induced alterations in vitamin A and thyroid hormone concentrations in the rat during lactation and early postnatal development. Toxicology and Applied Pharmacology, 2006, 215, 135-145.       | 2.8  | 101       |

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|----|---|-----|-----------|
| 55 | Maternal exposure to estradiol and endocrine disrupting compounds alters the sensitivity of sea urchin embryos and the expression of an orphan steroid receptor. <i>Journal of Experimental Zoology Part A, Comparative Experimental Biology</i> , 2006, 305A, 830-841. | 1.3 | 17        |
| 56 | The Carbohydrate Structure of DEFB126, the Major Component of the Cynomolgus Macaque Sperm Plasma Membrane Glycocalyx. <i>Journal of Membrane Biology</i> , 2005, 207, 119-129.   | 2.1 | 52        |
| 57 | Beta-Defensin 126 on the Cell Surface Protects Sperm from Immunorecognition and Binding of Anti-Sperm Antibodies <sup>1</sup> . <i>Biology of Reproduction</i> , 2005, 73, 1243-1252.   | 2.7 | 111       |
| 58 | Estradiol and endocrine disrupting compounds adversely affect development of sea urchin embryos at environmentally relevant concentrations. <i>Aquatic Toxicology</i> , 2005, 71, 155-173.  | 4.0 | 144       |
| 59 | Pilot study of the Olympia oyster <i>Ostrea conchaphila</i> in the San Francisco Bay estuary: description and distribution of diseases. <i>Diseases of Aquatic Organisms</i> , 2005, 65, 1-8.   | 1.0 | 9         |
| 60 | Macaque sperm release ESP13.2 and PSP94 during capacitation: The absence of ESP13.2 is linked to sperm-zona recognition and binding. <i>Molecular Reproduction and Development</i> , 2004, 69, 325-337.   | 2.0 | 63        |
| 61 | Activation of multidrug efflux transporter activity at fertilization in sea urchin embryos ( <i>Strongylocentrotus purpuratus</i> ). <i>Developmental Biology</i> , 2004, 276, 452-462.   | 2.0 | 83        |
| 62 | Polycyclic aromatic hydrocarbons disrupt axial development in sea urchin embryos through a $\beta$ -catenin dependent pathway. <i>Toxicology</i> , 2003, 186, 93-108.   | 4.2 | 64        |
| 63 | ESP13.2, a Member of the $\beta$ -Defensin Family, Is a Macaque Sperm Surface-Coating Protein Involved in the Capacitation Process. <i>Biology of Reproduction</i> , 2003, 69, 1118-1128.   | 2.7 | 79        |
| 64 | Real-Time Observations of Individual Macaque Sperm Undergoing Tight Binding and the Acrosome Reaction on the Zona Pellucida <sup>1</sup> . <i>Biology of Reproduction</i> , 2003, 68, 664-672.  | 2.7 | 43        |
| 65 | Phenotypic Plasticity of HSP70 and HSP70 Gene Expression in the Pacific Oyster ( <i>Crassostrea gigas</i> ): Implications for Thermal Limits and Induction of Thermal Tolerance. <i>Biological Bulletin</i> , 2003, 205, 160-169.                                       | 1.8 | 160       |
| 66 | Motility initiation in herring sperm is regulated by reverse sodium-calcium exchange. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 2026-2031.   | 7.1 | 90        |
| 67 | Tolerance to biodegraded crude oil in marine invertebrate embryos and larvae is associated with expression of a multixenobiotic resistance transporter. <i>Aquatic Toxicology</i> , 2002, 61, 127-140.  | 4.0 | 48        |
| 68 | Acrosome reaction in spermatozoa from hagfish ( <i>Agnatha</i> ) <i>Eptatretus burgeri</i> and <i>Eptatretus stouti</i> : Acrosomal exocytosis and identification of filamentous actin. <i>Development Growth and Differentiation</i> , 2002, 44, 337-344.              | 1.5 | 14        |
| 69 | Importance of glycosylation and disulfide bonds in hyaluronidase activity of macaque sperm surface PH-20. <i>Journal of Andrology</i> , 2002, 23, 211-9.  | 2.0 | 17        |
| 70 | Lignosulfonic acid blocks in vitro fertilization of macaque oocytes when sperm are treated either before or after capacitation. <i>Journal of Andrology</i> , 2002, 23, 889-98.   | 2.0 | 3         |
| 71 | The dual functions of GPI-anchored PH-20: hyaluronidase and intracellular signaling. <i>Matrix Biology</i> , 2001, 20, 515-525.   | 3.6 | 153       |
| 72 | Redistribution of Transcription Factor AP-2 $\beta$ in Differentiating Cultured Human Epidermal Cells. <i>Journal of Investigative Dermatology</i> , 2001, 117, 864-870.  | 0.7 | 17        |

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|----|---|------|-----------|
| 73 | Impact of UV Radiation on the Early Development of the Giant Kelp ( <i>Macrocystis pyrifera</i> ) Gametophytes. <i>Photochemistry and Photobiology</i> , 2000, 72, 308.   | 2.5  | 41        |
| 74 | Soybean trypsin inhibitor as a probe for the acrosome reaction in motile cynomolgus macaque sperm. <i>Zygote</i> , 2000, 8, 127-137.  | 1.1  | 27        |
| 75 | The effects of diffusible creosote-derived compounds on development in Pacific herring ( <i>Clupea</i> ) Tj ETQq1 1 0.784314 rgBT /Oyerlock 45  | 4.0  | 45        |
| 76 | Hyaluronic acid and the cumulus extracellular matrix induce increases in intracellular calcium in macaque sperm via the plasma membrane protein PH-20. <i>Zygote</i> , 1999, 7, 211-222.  | 1.1  | 55        |
| 77 | Rearrangement of the PH-20 protein on the surface of macaque spermatozoa following exposure to anti-PH-20 antibodies or binding to zona pellucida. <i>Molecular Reproduction and Development</i> , 1998, 50, 207-220.   | 2.0  | 19        |
| 78 | Hyaluronic acid enhances induction of the acrosome reaction of human sperm through interaction with the PH-20 protein. <i>Zygote</i> , 1998, 6, 103-111.  | 1.1  | 59        |
| 79 | Developmental abnormalities and DNA-protein crosslinks in sea urchin embryos exposed to three metals. <i>Aquatic Toxicology</i> , 1997, 39, 247-265.  | 4.0  | 14        |
| 80 | Hyaluronidase activity of macaque sperm assessed by an in vitro cumulus penetration assay. <i>Molecular Reproduction and Development</i> , 1997, 46, 392-400.   | 2.0  | 31        |
| 81 | Biochemical characterization of the PH-20 protein on the plasma membrane and inner acrosomal membrane of cynomolgus macaque spermatozoa. <i>Molecular Reproduction and Development</i> , 1997, 48, 356-366.   | 2.0  | 28        |
| 82 | The PH-20 Protein in Cynomolgus Macaque Spermatozoa: Identification of Two Different Forms Exhibiting Hyaluronidase Activity. <i>Developmental Biology</i> , 1996, 175, 142-153.  | 2.0  | 98        |
| 83 | Sperm motility initiation factor is a minor component of the Pacific herring egg chorion. <i>Development Growth and Differentiation</i> , 1996, 38, 193-202.  | 1.5  | 33        |
| 84 | Inhibition of cellular events during early algal gametophyte development: effects of select metals and an aqueous petroleum waste. <i>Aquatic Toxicology</i> , 1994, 28, 127-144.   | 4.0  | 28        |
| 85 | A polar high molecular mass constituent of bleached kraft mill effluent is toxic to marine organisms. <i>Environmental Science &amp; Technology</i> , 1992, 26, 2413-2420.  | 10.0 | 44        |
| 86 | Factors Controlling Sperm Entry into the Micropyles of Salmonid and Herring Eggs. (fish/sperm/egg/micropyle/fertilization). <i>Development Growth and Differentiation</i> , 1992, 34, 447-461.  | 1.5  | 108       |
| 87 | Preservation and visualization of the sea urchin embryo blastocoelic extracellular matrix. <i>Microscopy Research and Technique</i> , 1992, 22, 11-22.  | 2.2  | 18        |
| 88 | Organization of the Hamster Cumulus Extracellular Matrix: A Hyaluronate-Glycoprotein Gel which Modulates Sperm Access to the Oocyte. Extracellular matrix/Hyaluronate/Oocyte-cumulus complex/Extracellular matrix glycoproteins/Sperm enzymes. <i>Development Growth and Differentiation</i> , 1990, 32, 353-365. | 1.5  | 28        |
| 89 | Toxicity of zinc and bleached kraft mill effluent to larval english sole ( <i>Parophrys vetulus</i> ) and topsmelt ( <i>Atherinops affinis</i> ). <i>Archives of Environmental Contamination and Toxicology</i> , 1990, 19, 680-685.  | 4.1  | 4         |
| 90 | METHODS FOR ASSESSING FERTILIZATION AND EMBRYONIC/LARVAL DEVELOPMENT IN TOXICITY TESTS USING THE CALIFORNIA MUSSEL ( <i>MYTILUS CALIFORNIANUS</i> ). <i>Environmental Toxicology and Chemistry</i> , 1990, 9, 1137.   | 4.3  | 6         |

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| 91 | Structure of the cumulus matrix and zona pellucida in the golden hamster: A new view of sperm interaction with oocyte-associated extracellular matrices. <i>Cell and Tissue Research</i> , 1988, 251, 555-564.                                       | 2.9 | 59        |
| 92 | Toxic effects of selected bleached kraft mill effluent constituents on the sea urchin sperm cell. <i>Environmental Toxicology and Chemistry</i> , 1987, 6, 561-569.  | 4.3 | 33        |
| 93 | In vitro studies of the golden hamster sperm acrosome reaction: Completion on the zona pellucida and induction by homologous soluble zonae pellucidae. <i>Developmental Biology</i> , 1986, 114, 119-131.  | 2.0 | 160       |
| 94 | The evolution of hamster sperm motility during capacitation and interaction with the ovum vestments in vitro. <i>Gamete Research</i> , 1986, 14, 333-346.  | 1.7 | 42        |
| 95 | Induction of the Acrosomal Reaction in Sperm from the White Sturgeon, <i>Acipenser Transmontanus</i> . , 1986, 207, 235-249.   |     | 8         |
| 96 | Gamete interaction in the white sturgeon <i>Acipenser transmontanus</i> : a morphological and physiological review. <i>Environmental Biology of Fishes</i> , 1985, 14, 11-22.  | 1.0 | 61        |
| 97 | Fine Structure of the Envelope and Micropyles in the Eggs of the White Sturgeon, <i>Acipenser transmontanus</i> Richardson. (micropyle/chorion/egg envelopes/sturgeon/egg jelly). <i>Development Growth and Differentiation</i> , 1982, 24, 341-352. | 1.5 | 48        |