

Daphnia stressor database: Taking advantage of a decade of *Daphnia* '-omics' data for gene annotation

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Supporting information File 1:

Table S1: List of gene expression studies in *Daphnia*, authors of the paper, year of publication, stressors used, species, experimental technique used in the study.

Title	Authors	Publication	Technique used	Species	Stressor(s) used in the study
Acclimatory responses of the <i>Daphnia pulex</i> proteome to environmental changes. II. Chronic exposure to different temperatures (10 and 20 degrees C) mainly affects protein metabolism	Schwerin, S., Zeis, B., Lamkemeyer, T., Paul, R. J., Koch, M., Madlung, J., Fladerer, C. and Pirow, R.	2009	Protein 2D-Gel Electrophoresis	<i>Daphnia pulex</i>	Temperature
Adjustments of serine proteases of <i>Daphnia pulex</i> in response to temperature changes	Dolling, R., Becker, D., Hawat, S., Koch, M., Schwarzenberger, A. and Zeis, B.	2016	qPCR	<i>Daphnia pulex</i>	temperature
Assessment of chemical mixtures and groundwater effects on <i>Daphnia magna</i> transcriptomics	Garcia-Reyero, N., Escalon, B. L., Loh, P. R., Laird, J. G., Kennedy, A. J., Berger, B. and Perkins, E. J.	2012	qPCR, microarray	<i>Daphnia magna</i>	RDX; 2; 6-DNT; Tri Nitro Benzene; MIX-1; MIX-3; MIX-4; MIX-5; MIX-6; MIX-7; MIX-8; LAAP-85; LAAP-108; Tri Nitro Toluene; 2; 4-DNT; Dinitrobenzene; MIX-2
Biomarker Discovery and Transcriptomic Responses in <i>Daphnia magna</i> exposed to Munitions Constituents	Garcia-Reyero, N., Poynton, H., Kennedy, A., Guan, X., Escalon, B., Chang, B., Varshavsky, J., Loguinov, A., Vulpe, C. and Perkins, E. J.	2009	microarray	<i>Daphnia magna</i>	Tri Nitro Benzene; Copper; Zinc; WO4; 4-ADNT; Lead; RDX; 2-ADNT; 2; 4-DNT; Dinitrobenzene; Tri Nitro Toluene; 2; 6-DNT
Can metal stress induce transferable changes in gene transcription in <i>Daphnia magna</i> ?	Vandeghechuchte, M. B., Vandenbrouck, T., De Coninck, D., De Coen, W. M. and Janssen, C. R.	2010	microarray	<i>Daphnia magna</i>	Zinc
Candidate innate immune system gene expression in the ecological model <i>Daphnia</i>	Decaestecker, E., Labbe, P., Ellegaard, K., Allen, J. E. and Little, T. J.	2011	qPCR	<i>Daphnia magna</i>	<i>Pasteuria ramosa</i>
Chronic toxicity evaluation of the flame retardant tris (2-butoxyethyl) phosphate (TBOEP) using <i>Daphnia magna</i> transcriptomic response	Giraudou, M., Douville, M. and Houde, M.	2015	microarray	<i>Daphnia magna</i>	Tris (2-butoxyethyl) phosphate (TBOEP)
Cloning, expression and localization of DacaCSP2 and DacaCSP3 during different reproductive stages in <i>Daphnia carinata</i>	Li, H., Yang, Y., Xu, G., Wu, D., Lv, W., Jiang, Q. and Zhao, Y.	2016	qPCR	<i>Daphnia carinata</i>	Reproductive stages; Temperature
Cloning, expression and localization of the <i>Daphnia carinata</i> transformer gene DcarTra during different reproductive stages	Kong, L., Lv, W., Huang, Y., Liu, Z., Yang, Y. and Zhao, Y.	2015	qPCR	<i>Daphnia carinata</i>	Reproductive stages
Comparative ovarian microarray analysis of juvenile hormone-responsive genes in water flea <i>Daphnia magna</i> : potential targets for toxicity	Toyota, K., Williams, T. D., Sato, T., Tatarazako, N. and Iguchi, T.	2017	microarray	<i>Daphnia magna</i>	Fenoxycarb; methyl farnesoate
Conserved Transcription Factors Steer Growth-Related Genomic Programs in <i>Daphnia</i>	Spanier, K. I., Jansen, M., Decaestecker, E., Hulselmans, G., Becker, D., Colbourne, J. K., Orsini, L., De Meester, L. and Aerts, S.	2017	RNA-Seq	<i>Daphnia pulex</i>	Temperature
Conserved transcriptional responses to cyanobacterial stressors are mediated by alternate regulation of paralogous genes in <i>Daphnia</i>	Asselman, J., Pfrender, M. E., Lopez, J. A., De Coninck, D. I., Janssen, C. R., Shaw, J. R. and De Schampelaere, K. A.	2015	microarray	<i>Daphnia pulex</i>	Cyanobacteria
Core chemistry influences the toxicity of multicomponent metal oxide nanomaterials, lithium nickel manganese cobalt oxide, and lithium cobalt oxide to <i>Daphnia magna</i>	Bozich, J., Hang, M., Hamers, R. and Klaper, R.	2017	qPCR	<i>Daphnia magna</i>	Lithium cobalt oxide; Lithium nickel manganese cobalt oxide
<i>Daphnia magna</i> and ecotoxicogenomics: gene expression profiles of the anti-ecdysteroidal fungicide fenarimol using energy-, molting- and life stage-related cDNA libraries	Soetaert, A., van der Ven, K., Moens, L. N., Vandenbrouck, T., van Remortel, P. and De Coen, W. M.	2007	microarray	<i>Daphnia magna</i>	Fenarimol
<i>Daphnia magna</i> Ecotoxicogenomics Provides Mechanistic Insights into Metal Toxicity	Poynton, H. C., Varshavsky, J. R., Chang, B., Cavigliolo, G., Chan, S., Holman, P. S., Loguinov, A. V., Bauer, D. J., Komachi, K., Theil, E. C., Perkins, E. J., Hughes, O. and Vulpe, C. D.	2007	microarray	<i>Daphnia magna</i>	Cadmium; Copper; Zinc
Deciphering mechanisms of malathion toxicity under pulse exposure of the freshwater cladoceran <i>Daphnia magna</i>	Trac, L. N., Andersen, O. and Palmqvist, A.	2016	qPCR	<i>Daphnia magna</i>	malathion
Deciphering the genetic basis of microcystin tolerance	Schwarzenberger, A., Sadler, T., Motameny, S., Ben-Khalifa, K., Frommolt, P., Altmüller, J., Konrad, K. and von Elert, E.	2014	RNA-Seq	<i>Daphnia magna</i>	<i>Chlamydomonas</i> ; Microcystin
Diet quality determines lipase gene expression and lipase/esterase activity in <i>Daphnia pulex</i>	Koussoroplis, A. M., Schwarzenberger, A. and Wacker, A.	2017	qPCR	<i>Daphnia pulex</i>	<i>Synechococcus elongatus</i>
Differential transcriptomic responses of ancient and modern <i>Daphnia</i> genotypes to phosphorus supply	Roy Chowdhury, P., Frisch, D., Becker, D., Lopez, J. A., Weider, L. J., Colbourne, J. K. and Jeyasingh, P. D.	2015	microarray	<i>Daphnia pulex</i>	Phosphorus
Distinct expression profiles of stress defense and DNA repair genes in <i>Daphnia pulex</i> exposed to cadmium, zinc, and quantum dots	Tang, S., Wu, Y., Ryan, C. N., Yu, S., Qin, G., Edwards, D. S. and Mayer, G. D.	2015	qPCR	<i>Daphnia pulex</i>	Cadmium; zinc; quantum dots
Early transcriptional response pathways in <i>Daphnia magna</i> are coordinated in networks of crustacean-specific genes	Orsini, L., Brown, J. B., Shams Solari, O., Li, D., He, S., Podicheti, R., Stoiber, M. H., Spanier, K. I., Gilbert, D., Jansen, M., Rusch, D. B., Pfrender, M. E., Colbourne, J. K., Frilander, M. J., Kvist, J., Decaestecker, E., De Eads, B. D., Andrews, J. and Colbourne, J. K.	2017	RNA-Seq	<i>Daphnia magna</i>	Cadmium; Sodium Chloride; Microcystin; carbaryl; Microcystin-free cyanobacteria; Fish Kairomones; UV; pH 5.5; Lead; crowding
Ecological genomics in <i>Daphnia</i> : stress responses and environmental sex determination	Eads, B. D., Andrews, J. and Colbourne, J. K.	2008	microarray	<i>Daphnia magna</i> and <i>D. Methyl Farnesoate</i>	

Ecotoxicogenomic approaches for understanding molecular mechanisms of environmental chemical toxicity using aquatic invertebrate, <i>Daphnia</i> model organism	Kim, H. J., Koedrith, P. and Seo, Y. R.	2015	Comparative genomics	<i>Daphnia magna</i>	Propicanazole; cadmium; copper; zinc; Ibuprofen; bisphenol-A; silver nanoparticles; Copper sulphate; Hydrogen peroxide; pentachlorophenol; β -naphthlavone
Effects of charge and surface ligand properties of nanoparticles on oxidative stress and gene expression within the gut of <i>Daphnia magna</i>	Dominguez, G. A., Lohse, S. E., Torelli, M. D., Murphy, C. J., Hamers, R. J., Orr, G. and Klaper, R. D.	2015	qPCR	<i>Daphnia magna</i>	Nanoparticles
Effects of environmental contaminants on hemoglobin gene expression in <i>Daphnia magna</i> : a potential biomarker for freshwater quality monitoring	Ha, M. H. and Choi, J.	2009	qPCR	<i>Daphnia magna</i>	nonylphenol; bisphenol A; Benzopyrene; Chloropyrifos; Paraquat dichloride; Lead nitrate
Effects of glyphosate and methidathion on the expression of the <i>Dhb</i> , <i>Vtg</i> , <i>Arnt</i> , <i>CYP4</i> and <i>CYP314</i> in <i>Daphnia magna</i>	Le, T. H., Lim, E. S., Lee, S. K., Choi, Y. W., Kim, Y. H. and Min, J.	2010	qPCR	<i>Daphnia magna</i>	glyphosate; methidathion; pesticides
Effects of midazolam, pentobarbital and ketamine on the mRNA expression of ion channels in a model organism <i>Daphnia pulex</i>	Dong, C., Hu, A., Ni, Y., Zuo, Y. and Li, G. H.	2013	qPCR	<i>Daphnia pulex</i>	midazolam; pentobarbital; ketamine; Flumazenil
Endocrine-disruption potential of perfluoroethylcyclohexane sulfonate (PFECHS) in chronically exposed <i>Daphnia magna</i>	Houde, M., Douville, M., Giraudo, M., Jean, K., Lepine, M., Spencer, C. and De Silva, A. O.	2016	qPCR, microarray	<i>Daphnia magna</i>	perfluoroethylcyclohexane sulfonate (PFECHS)
Ethanol alters the expression of ion channel genes in <i>Daphnia pulex</i>	Hu, A. M., Zhu, T., Dong, L., Luo, N. F. and Du, G. Z.	2016	qPCR	<i>Daphnia pulex</i>	Ethanol
Expression and ecdysteroid responsiveness of the nuclear receptors HR3 and E75 in the crustacean <i>Daphnia magna</i>	Hannas, B. R. and LeBlanc, G. A.	2010	qPCR	<i>Daphnia magna</i>	ecdysteroids
Expression of target and reference genes in <i>Daphnia magna</i> exposed to ibuprofen	Heckmann, L. H., Connon, R., Hutchinson, T. H., Maund, S. J., Sibly, R. M. and Callaghan, A.	2006	qPCR	<i>Daphnia magna</i>	ibuprofen
Functional genomics of acclimation and adaptation in response to thermal stress in <i>Daphnia</i>	Yampolsky, L. Y., Zeng, E., Lopez, J., Williams, P. J., Dick, K. B., Colbourne, J. K. and Pfrender, M. E.	2014	microarray	<i>Daphnia pulex</i>	temperature
Gene expression and activity of digestive proteases in <i>Daphnia</i> : effects of cyanobacterial protease inhibitors	Schwarzenberger, A., Zitt, A., Kroth, P., Mueller, S. and Von Elert, E.	2010	qPCR	<i>Daphnia magna</i>	cyanobacterial protease
Gene Expression Profiling in <i>Daphnia magna</i> Part I: Concentration-Dependent Profiles Provide Support for the No Observed Transcriptional Effect Level	Poynton, H. C., Loguinov, A. V., Varshavsky, J. R., Chan, S., Perkins, E. J. and Vulpe, C. D.	2008	qPCR, microarray	<i>Daphnia magna</i>	Copper; Cadmium; zinc
Gene Expression Profiling in <i>Daphnia magna</i> , Part II: Validation of a Copper Specific Gene Expression Signature with Effluent from Two Copper Mines in California	Poynton, H. C., Zuzow, R., Loguinov, A. V., Perkins, E. J. and Vulpe, C. D.	2008	qPCR, microarray	<i>Daphnia magna</i>	Copper; cadmium; zinc
Gene expression profiling of three different stressors in the water flea <i>Daphnia magna</i>	Jansen, M., Vergauwen, L., Vandenbrouck, T., Knapen, D., Dom, N., Spanier, K. I., Cielen, A. and De Meester, L.	2013	microarray	<i>Daphnia magna</i>	carbaryl; <i>Pasteuria ramosa</i> ; fish kairomones
Gene expression under multiple stressors in <i>Daphnia pulex</i>	Altshuler, I.	2012	qPCR	<i>Daphnia pulex</i>	calcium; fish kairomones
Gene expression variation in duplicate lactate dehydrogenase genes: do ecological species show distinct responses?	Cristescu, M. E., Demiri, B., Altshuler, I. and Crease, T. J.	2014	qPCR	<i>Daphnia pulex</i> and <i>Daf</i>	temperature; oxygen
Gene response of CYP360A, CYP314, and GST and whole-organism changes in <i>Daphnia magna</i> exposed to ibuprofen	Wang, L., Peng, Y., Nie, X., Pan, B., Ku, P. and Bao, S.	2016	qPCR	<i>Daphnia magna</i>	ibuprofen
Gene response profiles for <i>Daphnia pulex</i> exposed to the environmental stressor cadmium reveals novel crustacean metallothioneins	Shaw, J. R., Colbourne, J. K., Davey, J. C., Glaholt, S. P., Hampton, T. H., Chen, C. Y., Folt, C. L. and Hamilton, J. W.	2007	microarray	<i>Daphnia pulex</i>	cadmium
Gene transcription and higher-level effects of multigenerational Zn exposure in <i>Daphnia magna</i>	Vandegheuchte, M. B., Vandenbrouck, T., De Coninck, D., De Coen, W. M. and Janssen, C. R.	2010	microarray	<i>Daphnia magna</i>	Zinc
Gene transcription, metabolite and lipid profiling in eco-indicator <i>Daphnia magna</i> indicate diverse mechanisms of toxicity by legacy and emerging flame-retardants	Scanlan, L. D., Loguinov, A. V., Teng, Q., Antczak, P., Dailey, K. P., Nowinski, D. T., Kornbluh, J., Lin, X. X., Lachenauer, E., Arai, A., Douglas, N. K., Falciani, F., Stapleton, H. M. and Vulpe, C. D.	2015	microarray	<i>Daphnia magna</i>	flame-retardants (FR)
Gene up-regulation in response to predator kairomones in the water flea, <i>Daphnia pulex</i>	Miyakawa, H., Imai, M., Sugimoto, N., Ishikawa, Y., Ishikawa, A., Ishigaki, H., Okada, Y., Miyazaki, S., Koshikawa, S., Cornette, R. and Miura, T.	2010	RT-qPCR	<i>Daphnia pulex</i>	fish kairomones
Genome-wide profiling of 24 hr diel rhythmicity in the water flea, <i>Daphnia pulex</i> : network analysis reveals rhythmic gene expression and enhances functional gene annotation	Rund, S. S., Yoo, B., Alam, C., Green, T., Stephens, M. T., Zeng, E., George, G. F., Sheppard, A. D., Duffield, G. E., Milenkovic, T. and Pfrender, M. E.	2016	microarray	<i>Daphnia pulex</i>	Light Dark Cycle
Genome-wide transcription profiles reveal genotype-dependent responses of biological pathways and gene-families in <i>Daphnia</i> exposed to single and mixed stressors	De Coninck, D. I., Asselman, J., Glaholt, S., Janssen, C. R., Colbourne, J. K., Shaw, J. R. and De Schampelaere, K. A.	2014	microarray	<i>Daphnia pulex</i>	Cadmium; <i>Microcystis</i>

Genomic expression responses toward bisphenol-A toxicity in <i>Daphnia magna</i> in terms of reproductive activity	Jeong, S. W., Lee, S. M., Yum, S. S., Iguchi, T. and Seo, Y. R.	2013 microarray	<i>Daphnia magna</i>	Bisphenol A (BPA)
How do consumers deal with stoichiometric constraints? Lessons from functional genomics using <i>Daphnia pulex</i>	Jeyasingh, P. D., Ragavendran, A., Paland, S., Lopez, J. A., Sterner, R. W. and Colbourne, J. K.	2011 microarray	<i>Daphnia pulex</i>	Phosphorous
Identification and expression analysis of a doublesex1 gene in <i>Daphnia pulex</i> during different reproductive stages	Xu, S. L., Zhou, W., Chen, P., Zhou, J. K., Zou, X., Wang, C. L., Wang, D. L. and Zhao, Y. L.	2014 qPCR	<i>Daphnia pulex</i>	Developmental Stages
Induction of multixenobiotic defense mechanisms in resistant <i>Daphnia magna</i> clones as a general cellular response to stress	Jordao, R., Campos, B., Lemos, M. F., Soares, A. M., Tauler, R. and Barata, C.	2016 qPCR	<i>Daphnia magna</i>	multixenobiotic
Integration of molecular with higher-level effects of dietary zinc exposure in <i>Daphnia magna</i>	De Schampelaere, K. A., Vandenbrouck, T., Muysen, B. T., Soetaert, A., Blust, R., De Coen, W. and Janssen, C. R.	2008 qPCR, microarray	<i>Daphnia magna</i>	Zinc
Interactions of methyl farnesoate and related compounds with a crustacean retinoid X receptor	Wang, Y. H. and LeBlanc, G. A.	2009 Assay	<i>Daphnia magna</i>	methyl farnesoate
Ionotropic glutamate receptors mediate inducible defense in the water flea <i>Daphnia pulex</i>	Miyakawa, H., Sato, M., Colbourne, J. K. and Iguchi, T.	2015 microarray	<i>Daphnia pulex</i>	fish kairomones
Linking Molecular and Population Stress Responses in <i>Daphnia magna</i> exposed to cadmium	Connon, R., Hooper, H. L., Sibly, R. M., Lim, F.-L., Heckmann, L.-H., Moore, D. J., Watanabe, H., Soetaert, A., Cook, K., Maund, S. J., Hutchinson, T. H., Moggs, J., Coen, W. D., Iguchi, T. and Callaghan, A.	2008 microarray	<i>Daphnia magna</i>	Cadmium
Melatonin synthesis follows a daily cycle in <i>Daphnia</i>	Schwarzenberger, A. and Wacker, A.	2015 qPCR	<i>Daphnia pulex</i>	Light Dark Cycle; Melatonin
Metallothionein and Hsp70 trade-off against one another in <i>Daphnia magna</i> cross-tolerance to cadmium and heat stress	Haap, T., Schwarz, S. and Kohler, H. R.	2016 qPCR	<i>Daphnia magna</i>	cadmium; temperature
Metformin preconditioning protects <i>Daphnia pulex</i> from lethal hypoxic insult involving AMPK, HIF and mTOR signaling	Sheng, B., Liu, J. and Li, G. H.	2012 qPCR	<i>Daphnia pulex</i>	Metformin
Molecular characterization of the gene checkpoint homolog 1 in <i>Daphnia carinata</i> during different reproductive phases	Kong, L., Li, H. X., Wu, D. L., Xu, G. R., Wang, D. L. and Zhao, Y. L.	2016 qPCR	<i>Daphnia carinata</i>	Developmental stages
Molecular cloning and sexually dimorphic expression of DM-domain genes in <i>Daphnia magna</i>	Kato, Y., Kobayashi, K., Oda, S., Colbourn, J. K., Tatarazako, N., Watanabe, H. and Iguchi, T.	2008 qPCR	<i>Daphnia magna</i>	Sex organs
Molecular cloning of manganese superoxide dismutase gene in the cladoceran <i>Daphnia magna</i> : effects of microcystin, nitrite, and cadmium on gene expression profiles	Lyu, K., Zhu, X., Chen, R., Chen, Y. and Yang, Z.	2014 qPCR	<i>Daphnia magna</i>	microcystin; nitrite; cadmium
Molecular cloning, characterization and expression analysis of a Doublesex gene from <i>Daphnia carinata</i> (Crustacea: Cladocera) during different reproductive stages	Zhang, M. Q., Ma, C. A., Lv, W. W., Huang, Y. H., Wang, D. L. and Zhao, Y. L.	2015 qPCR	<i>Daphnia carinata</i>	Reproductive stages
Molecular impact of juvenile hormone agonists on neonatal <i>Daphnia magna</i>	Toyota, K., Kato, Y., Miyakawa, H., Yatsu, R., Mizutani, T., Ogino, Y., Miyagawa, S., Watanabe, H., Nishide, H., Uchiyama, I., Tatarazako, N. and Iguchi, T.	2014 microarray	<i>Daphnia magna</i>	methoprene; fenoxycarb; epofenonane
Molecular impact of propiconazole on <i>Daphnia magna</i> using a reproduction-related cDNA array	Soetaert, A., Moens, L. N., Van der Ven, K., Van Leemput, K., Naudts, B., Blust, R. and De Coen, W. M.	2006 microarray	<i>Daphnia magna</i>	propiconazole
Molecular mechanisms of tolerance to cyanobacterial protease inhibitors revealed by clonal differences in <i>Daphnia magna</i>	Schwarzenberger, A., Kuster, C. J. and Von Elert, E.	2012 qPCR	<i>Daphnia magna</i>	dietry trypsin inhibitor
Molecular responses during cadmium-induced stress in <i>Daphnia magna</i> : integration of differential gene expression with higher-level effects	Soetaert, A., Vandenbrouck, T., van der Ven, K., Maras, M., van Remortel, P., Blust, R. and De Coen, W. M.	2007 microarray	<i>Daphnia magna</i>	cadmium
Neverland regulates embryonic moltings through the regulation of ecdysteroid synthesis in the water flea <i>Daphnia magna</i> , and may thus act as a target for chemical disruption of molting	Sumiya, E., Ogino, Y., Toyota, K., Miyakawa, H., Miyagawa, S. and Iguchi, T.	2016 qPCR	<i>Daphnia magna</i>	ecdysteroids
Nickel and binary metal mixture responses in <i>Daphnia magna</i> : molecular fingerprints and (sub)organismal effects	Vandenbrouck, T., Soetaert, A., van der Ven, K., Blust, R. and De Coen, W.	2009 microarray	<i>Daphnia magna</i>	Nickel; Cadmium; Lead
Nickel response in function of temperature differences: effects at different levels of biological organization in <i>Daphnia magna</i>	Vandenbrouck, T., Dom, N., Novais, S., Soetaert, A., Ferreira, A. L., Loureiro, S., Soares, A. M. and De Coen, W.	2011 qPCR, microarray	<i>Daphnia magna</i>	nickel; temperature
NMDA receptor activation upstream of methyl farnesoate signaling for short day-induced male offspring production in the water flea, <i>Daphnia pulex</i>	Toyota, K., Miyakawa, H., Yamaguchi, K., Shigenobu, S., Ogino, Y., Tatarazako, N., Miyagawa, S. and Iguchi, T.	2015 RNA-Seq	<i>Daphnia pulex</i>	Methyl farnesoate

Phenotypic plasticity in three <i>Daphnia</i> genotypes in response to predator kairomone: evidence for an involvement of chitin deacetylases	Christjani, M., Fink, P. and von Elert, E.	2016 qPCR	<i>Daphnia pulex</i>	Fish Kairomones
Population genomics of resource exploitation: insights from gene expression profiles of two <i>Daphnia</i> ecotypes fed alternate resources	Dudycha, J. L., Brandon, C. S. and Deitz, K. C.	2012 microarray	<i>Daphnia pulex</i>	<i>Ankistrodesmus falcatus</i> ; seston
Predator-induced defences in <i>Daphnia pulex</i> : Selection and evaluation of internal reference genes for gene expression studies with real-time PCR	Spanier, K. I., Leese, F., Mayer, C., Colbourne, J. K., Gilbert, D., Pfrender, M. E. and Tollrian, R.	2010 qPCR	<i>Daphnia pulex</i>	Fish kairomones
ProPhenolOxidase in <i>Daphnia magna</i> : cDNA sequencing and expression in relation to resistance to pathogens	Labbe, P. and Little, T. J.	2009 qPCR	<i>Daphnia magna</i>	<i>Pasteuria ramosa</i>
Quantification of differentially expressed genes in <i>Daphnia magna</i> exposed to rubber wastewater	Jo, H. J. and Jung, J.	2008 qPCR	<i>Daphnia magna</i>	Rubber wastewater
Regulation and dysregulation of vitellogenin mRNA accumulation in daphnids (<i>Daphnia magna</i>)	Hannas, B. R., Wang, Y. H., Thomson, S., Kwon, G., Li, H. and Leblanc, G. A.	2011 qPCR	<i>Daphnia magna</i>	Diethyl stilbestrol; 4-Nonyl phenol; Piperonyl butoxide; Cyproterone acetate; Kinoprene; Methoprene; Pyriproxyfen; Fenoxycarb; Bisphenol A; Fenarimol; Testosterone; Chloroform; Zinc (as sulfate); Pentachlorophenol; Methylene chloride; Naphthalene; Acetone; Caffeine; N; N-diethyl-meta-toluamide (DEET); Atrazine; Pyrene; Triclosan; Cadmium (as chloride); Fipronil; 20-Hydroxyecdysone; Chlordane; Dieldrin; Ponasterone A; Methyl farnesoate
Sequence Conservation and Sexually Dimorphic Expression of the Ftz-F1 Gene in the Crustacean <i>Daphnia magna</i>	Mohamad Ishak, N. S., Kato, Y., Matsuura, T. and Watanabe, H.	2016 qPCR	<i>Daphnia pulex</i>	Fenoxycarb
Silver Nanowire Exposure Results in Internalization and Toxicity to <i>Daphnia magna</i>	Scanlan, L. D., Reed, R. B., Loguinov, A. V., Antczak, P., Tagmount, A., Aloni, S., Nowinski, D. T., Luong, P., Tran, C., Karunaratne, N., Pham, D., Lin, X. X., Falciani, F., Higgins, C. P., Ranville, J. F., Vulpe, C. D. and Gilbert, B.	2013 microarray	<i>Daphnia magna</i>	Silver Nanowire
Synergistic interactions of biotic and abiotic environmental stressors on gene expression	Altschuler, I., McLeod, A. M., Colbourne, J. K., Yan, N. D. and Cristescu, M. E.	2015 qPCR	<i>Daphnia pulex</i>	calcium; fish kairomones; Light Dark cycle
Systems Biology Approach Reveals a Calcium-Dependent Mechanism for Basal Toxicity in <i>Daphnia magna</i>	Antczak, P., White, T. A., Giri, A., Michelangeli, F., Viant, M. R., Cronin, M. T., Vulpe, C. and Falciani, F.	2015 qPCR	<i>Daphnia magna</i>	cadmium; nickel; copper; selenium; zinc; manganese; arsenic; silver; chromium; pyriproxyfen; ponasterone A; methyl farnesoate; toxaphene; beta-estradiol; aroclor 1242; 20-hydroxyecdysone; methoxychlor; nonylphenol; permethrin; bifenthrin; ?-cyhalothrin; diazinon; parathion; chlorpyrifos; toluene; phenol; beta-benzene hexachloride; dichlorobenzene; phenanthrene; atrazine; methyl tert-butyl ether; chloroform; acrylonitrile; bis(2-ethylhexyl)phthalate; trichloroethylene; 2-chloroethyl vinyl ether; thapsigargin
Systems biology meets stress ecology: linking molecular and organismal stress responses in <i>Daphnia magna</i>	Heckmann, L. H., Sibly, R. M., Connon, R., Hooper, H. L., Hutchinson, T. H., Maund, S. J., Hill, C. J., Bouetard, A. and Callaghan, A.	2008 qPCR, microarray	<i>Daphnia magna</i>	Ibuprofen
Target gene approaches: Gene expression in <i>Daphnia magna</i> exposed to predator-borne kairomones or to microcystin-producing and microcystin-free <i>Microcystis aeruginosa</i>	Schwarzenberger, A., Courts, C. and von Elert, E.	2009 qPCR	<i>Daphnia magna</i>	fish kairomones; microcystin
Temporal Expression of the Clock Genes in the Water Flea <i>Daphnia pulex</i> (Crustacea: Cladocera)	Bernatowicz, P. P., Kotwica-Rollinska, J., Joachimiak, E., Sikora, A., Polanska, M. A., Pijanowska, J. and Bebas, P.	2016 qPCR	<i>Daphnia pulex</i>	Light Dark Cycle
The evolution of salinity tolerance in <i>Daphnia</i> : a functional genomics approach	Latta, L. C., Weider, L. J., Colbourne, J. K. and Pfrender, M. E.	2012 microarray	<i>Daphnia pulex</i>	salinity
The good, the bad, and the toxic: approaching hormesis in <i>Daphnia magna</i> exposed to an energetic compound	Stanley, J. K., Perkins, E. J., Habib, T., Sims, J. G., Chappell, P., Escalon, B. L., Wilbanks, M. and Garcia-Reyero, N.	2013 microarray	<i>Daphnia magna</i>	Tri Nitro Toluene (TNT)
The potential of dietary polyunsaturated fatty acids to modulate eicosanoid synthesis and reproduction in <i>Daphnia magna</i> : a gene expression approach	Schlotz, N., Sorensen, J. G. and Martin-Creuzburg, D.	2012 qPCR	<i>Daphnia magna</i>	Different algae food
Tissue-specific expression of a bHLH-PAS protein homologous to ARNT during the development of crustacean <i>Daphnia magna</i>	Tokishita, S., Kimura, S., Mandokora, Y., Kato, K., Shiga, Y., Takahashi, Y., Ohta, T. and Yamagata, H.	2006 qPCR	<i>Daphnia magna</i>	hypoxia
Toxicogenomic responses of nanotoxicity in <i>Daphnia magna</i> exposed to silver nitrate and coated silver nanoparticles	Poynton, H. C., Lazorchak, J. M., Impellitteri, C. A., Blalock, B. J., Rogers, K., Allen, H. J., Loguinov, A., Heckman, J. L. and Govindaswamy, S.	2012 microarray	<i>Daphnia magna</i>	Silver nanoparticles
Transcriptional changes during <i>Daphnia pulex</i> development indicate that the maturation decision resembles a rate more than a threshold	Harney, E., Plaistow, S. J. and Paterson, S.	2015 microarray	<i>Daphnia pulex</i>	Developmental Stages
Transcriptional profiling of predator-induced phenotypic plasticity in <i>Daphnia pulex</i>	Rozenberg, A., Parida, M., Leese, F., Weiss, L. C., Tollrian, R. and Manak, J. R.	2015 RNA-Seq	<i>Daphnia pulex</i>	fish kairomones

Transcriptomic alterations in <i>Daphnia magna</i> embryos from mothers exposed to hypoxia	Lai, K. P., Li, J. W., Chan, C. Y., Chan, T. F., Yuen, K. W. and Chiu, J. M.	2016 RNA-Seq	<i>Daphnia magna</i>	hypoxia
De Novo Transcriptome Assembly and Sex-Biased Gene Expression in the Cyclical Parthenogenetic <i>Daphnia galeata</i>	Huylmans, A. K., Lopez Ezquerro, A., Parsch, J. and Cordellier, M.	2016 RNA-Seq	<i>Daphnia galeata</i>	sex biased