

Occupational Health Alert

Occupational Health Alert issue deals with articles published on different subjects i.e. Plastic Degradation, Pesticides and Indoor Air Pollution

Full text articles will be provided on request.

Library & Information Officer

Occupational Health Alert

Plastic Degradation

1st Oct 2019 to 31st Oct 2019

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| 1. | <u>A novel Poly(vinyl alcohol) / carboxymethyl cellulose / yeast double degradable hydrogel with yeast foaming and double degradable property.</u> Zhang M, Wan Y, Wen Y, Li C, Kanwal A. Ecotoxicol Environ Saf. 2019 Oct 26;187:109765 |
| 2. | <u>An experimental and theoretical study of the erosion of semi-crystalline polymers and the subsequent generation of microparticles.</u> Gaillard T, George M, Gastaldi E, Nallet F, Fabre P. Soft Matter. 2019 Oct 23;15(41):8302-8312 |
| 3. | <u>An overview of microplastics characterization by thermal analysis.</u> Peñalver R, Arroyo-Manzanares N, López-García I, Hernández-Córdoba M. Chemosphere. 2019 Oct 23;242:125170 |
| 4. | <u>Bacterial Candidates for Colonization and Degradation of Marine Plastic Debris.</u> Roager L, Sonnenschein EC. Environ Sci Technol. 2019 Oct 15;53(20):11636-11643 |
| 5. | <u>Enhanced biodegradation of coal gasification wastewater with anaerobic biofilm on polyurethane (PU), powdered activated carbon (PAC), and biochar.</u> Shi J, Han Y, Xu C, Han H. Bioresour Technol. 2019 Oct;289:121487 |
| 6. | <u>High Weight-Specific Power Density of Thin-Film Amorphous Silicon Solar Cells on Graphene Papers.</u> Zhang X, Zhang C, Li D, Cao S, Yin M, Wang P, Ding G, Yang L, Cheng J, Lu L. Nanoscale Res Lett. 2019 Oct 16;14(1):324 |
| 7. | <u>Mechanical formation of micro- and nano-plastic materials for environmental studies in agricultural ecosystems.</u> Astner AF, Hayes DG, O'Neill H, Evans BR, Pingali SV, Urban VS, Young TM. Sci Total Environ. 2019 Oct 1;685:1097-1106 |
| 8. | <u>Methodologies to assess biodegradation of bioplastics during aerobic composting and anaerobic digestion: A review.</u> Ruggero F, Gori R, Lubello C. Waste Manag Res. 2019 Oct;37(10):959-975 |
| 9. | <u>Monitoring Microalgal Biofilm Growth and Phenol Degradation with Fiber-optic Sensors.</u> Zhong N, Wu Y, Wang Z, Chang H, Zhong D, Xu Y, Hu X, Huang L. Anal Chem. 2019 Oct 30 |
| 10. | <u>Phthalate Release from Plastic Fragments and Degradation in Seawater.</u> Paluselli A1, Fauville V1, Galgani F2, Sempéré R1 Environ Sci Technol. 2019 Jan 2;53(1):166-175. doi: 10.1021/acs.est.8b05083. Epub 2018 Dec 10. |
| 11. | <u>Plastics: Environmental and Biotechnological Perspectives on Microbial Degradation.</u> Danso D, Chow J, Streit WR. Appl Environ Microbiol. 2019 Sep 17;85(19) |

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| 12. | <u>Polymer-based flexible NO_x sensors with ppb-level detection at room temperature using breath-figure molding.</u> Yu SH, Girma HG, Sim KM, Yoon S, Park JM, Kong H, Chung DS. Nanoscale. 2019 Oct 3;11(38):17709-17717 |
| 13. | <u>Progress and perspective on algal plastics - A critical review.</u> Zhang C, Show PL, Ho SH. Bioresour Technol. 2019 Oct;289:121700 |
| 14. | <u>Public perception of coastal habitat loss and habitat creation using artificial floating islands in the UK.</u> Ware J, Callaway R. PLoS One. 2019 Oct 31;14(10):e022442 |
| 15. | <u>Selective bacterial colonization processes on polyethylene waste samples in an abandoned landfill site.</u> Puglisi E, Romaniello F, Galletti S, Boccaleri E, Frache A, Cocconcelli PS. Sci Rep. 2019 Oct 2;9(1):14138 |
| 16. | <u>Synthesis, Thermal Properties and Decomposition Mechanism of Poly(Ethylene Vanillate) Polyester.</u> Zamboulis A, Papadopoulos L, Terzopoulou Z, Bikaris DN, Patsiaoura D, Chrissafis K, Gazzano M, Lotti N, Papageorgiou GZ. Polymers (Basel). 2019 Oct 14;11(10). pii: E1672. |
| 17. | <u>Toward the Development and Application of an Environmental Risk Assessment Framework for Microplastic.</u> Gouin T, Becker RA, Collot AG, Davis JW, Howard B, Inawaka K, Lampi M, Ramon BS, Shi J, Hopp PW. Environ Toxicol Chem. 2019 Oct;38(10):2087-2100 |
| 18. | <u>Using a marine microalga as a chassis for polyethylene terephthalate (PET) degradation.</u> Moog D, Schmitt J, Senger J, Zarzycki J, Rexer KH, Linne U, Erb T, Maier UG. Microb Cell Fact. 2019 Oct 10;18(1):171 |

Pesticides

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| 1. | <p><u>A new pseudo-partition coefficient based on a weather-adjusted multicomponent model for mushroom uptake of pesticides from soil.</u></p> <p>Li Z. Environ Pollut. 2019 Oct 14:113372</p> |
| 2. | <p><u>Characterization of colloid-size copper-based pesticide and its potential ecological implications.</u></p> <p>Tegenaw A, Sorial GA, Sahle-Demessie E, Han C. Environ Pollut. 2019 Oct;253:278-287</p> |
| 3. | <p><u>Combined anti-androgenic effects of mixtures of agricultural pesticides using in vitro and in silico methods.</u></p> <p>Ma M, Chen C, Yang G, Wang Y, Wang T, Li Y, Qian Y. Ecotoxicol Environ Saf. 2019 Oct 9;186:109652</p> |
| 4. | <p><u>Evaluation of the effectiveness of a bioremediation process in experimental soils polluted with chromium and lindane.</u></p> <p>Aparicio JD, Garcia-Velasco N, Urionabarrenetxea E, Soto M, Alvarez A, Polti MA. Ecotoxicol Environ Saf. 2019 Oct 15;181:255-263</p> |
| 5. | <p><u>Exposure to carbamate and neurodevelopment in children: Evidence from the SMBCS cohort in China.</u></p> <p>Zhang J, Guo J, Wu C, Qi X, Jiang S, Lu D, Feng C, Liang W, Chang X, Zhang Y, Cao Y, Wang G, Zhou Z. Environ Res. 2019 Oct;177:108590.</p> |
| 6. | <p><u>In vitro toxicity of dimethyl phthalate to human erythrocytes: From the aspects of antioxidant and immune functions.</u></p> <p>Li S, Chi Z, Li W. Environ Pollut. 2019 Oct;253:239-245</p> |
| 7. | <p><u>Metabolite of the pesticide DDT and incident type 2 diabetes in urban India.</u></p> <p>Jaacks LM, Yadav S, Panuwet P, Kumar S, Rajacharya GH, Johnson C, Rawal I, Mohan D, Mohan V, Tandon N, Barr DB, Narayan KMV, Prabhakaran D. Environ Int. 2019 Oct 22;133(Pt A):105089.</p> |
| 8. | <p><u>Occupational pesticide use and Parkinson's disease in the Parkinson Environment Gene (PEG) study.</u></p> <p>Narayan S1, Liew Z2, Bronstein JM3, Ritz B4 Environ Int. 2017 Oct;107:266-273</p> |
| 9. | <p><u>Organophosphate pesticide metabolite concentrations in urine during pregnancy and offspring attention-deficit hyperactivity disorder and autistic traits.</u></p> <p>van den Dries MA, Guxens M, Pronk A, Spaan S, El Marroun H, Jusko TA, Longnecker MP, Ferguson KK, Tiemeier H. Environ Int. 2019 Oct;131:105002</p> |
| 10. | <p><u>Telomere dynamic in humans and animals: Review and perspectives in environmental toxicology.</u></p> <p>Louzon M, Coeurdassier M, Gimbert F, Pauget B, de Vaufleury A. Environ Int. 2019 Oct;131:105025</p> |

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| 11. | <p><u>The effect of chronic vitamin deficiency and long term very low dose exposure to 6 pesticides mixture on neurological outcomes - A real-life risk simulation approach.</u></p> <p>Tsatsakis A, Tyshko NV, Docea AO, Shestakova SI, Sidorova YS, Petrov NA, Zlatian O, Mach M, Hartung T, Tutelyan VA. Toxicol Lett. 2019 Oct 15;315:96-106</p> |
| 12. | <p><u>Uptake of atrazine in a paddy crop activates an epigenetic mechanism for degrading the pesticide in plants and environment.</u></p> <p>Ma LY, Zhang N, Liu JT, Zhai XY, Lv Y, Lu FF, Yang H. Environ Int. 2019 Oct;131:105014</p> |

Indoor Air Pollution

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| 1. | <p><u>[Association between low handgrip strength and air pollution among people aged 50 years and over].</u></p> <p>Guo YF, Ruan Y, Lin HL, Ma WJ, Zhang QJ, Sun SY, Huang ZZ, Zheng Y, Shi Y, Wu F. Zhonghua Liu Xing Bing Xue Za Zhi. 2019 Oct;40(10):1240-1244. Chinese.</p> |
| 2. | <p><u>A Mixed Methods Evaluation of Sharing Air Pollution Results with Study Participants via Report-Back Communication.</u></p> <p>Tomsho KS, Schollaert C, Aguilar T, Bongiovanni R, Alvarez M, Scammell MK, Adamkiewicz G. Int J Environ Res Public Health. 2019 Oct 29;16(21)</p> |
| 3. | <p><u>Airborne microplastics: a review study on method for analysis, occurrence, movement and risks.</u></p> <p>Enyoh CE, Verla AW, Verla EN, Ibe FC, Amaobi CE. Environ Monit Assess. 2019 Oct 24;191(11):668</p> |
| 4. | <p><u>Ambient air pollution in gastrointestinal endoscopy unit.</u></p> <p>Bang CS, Lee K, Yang YJ, Baik GH. SurgEndosc. 2019 Oct 3</p> |
| 5. | <p><u>Assessment of occupant-behavior-based indoor air quality and its impacts on human exposure risk: A case study based on the wildfires in Northern California.</u></p> <p>Luo N, Weng W, Xu X, Hong T, Fu M, Sun K. Sci Total Environ. 2019 Oct 10;686:1251-1261.</p> |
| 6. | <p><u>Cardiorespiratory responses to low-level ozone exposure: The inDoor Ozone Study in childrEn (DOSE).</u></p> <p>Huang J, Song Y, Chu M, Dong W, Miller MR, Loh M, Xu J, Yang D, Chi R, Yang X, Wu S, Guo X, Deng F. Environ Int. 2019 Oct;131:10502</p> |
| 7. | <p><u>Coal smoke, gestational cadmium exposure, and fetal growth.</u></p> <p>Barn P, Gombojav E, Ochir C, Boldbaatar B, Beejin B, Naidan G, Galsuren J, Legtseg B, Byambaa T, Hutcheon JA, Janes C, Janssen PA, Lanphear BP, McCandless LC, Takaro TK, Venners SA, Webster GM, Palmer CD, Parsons PJ, Allen RW. Environ Res. 2019 Oct 21;179(Pt B):108830</p> |
| 8. | <p><u>COPD and indoor air pollution.</u></p> <p>Roy MP. BMJ. 2019 Oct 29;367:l6167</p> |
| 9. | <p><u>Increased risk of carotid atherosclerosis for long-term exposure to indoor coal-burning pollution in rural area, Hebei Province, China.</u></p> <p>Pang Y, Zhang B, Xing D, Shang J, Chen F, Kang H, Chu C, Li B, Wang J, Zhou L, Su X, Han B, Ning J, Li P, Ma S, Su D, Zhang R, Niu Y. Environ Pollut. 2019 Oct 3;255(Pt 2):113320</p> |
| 10. | <p><u>Indoor air-related symptoms and volatile organic compounds in materials and air in the hospital environment.</u></p> <p>Rautiainen P, Hyttinen M, Ruokolainen J, Saarinen P, Timonen J, Pasanen P. Int J Environ Health Res. 2019 Oct;29(5):479-488</p> |

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| 11. | <u>Insights into characteristics of light absorbing carbonaceous aerosols over an urban location in Southeast Asia.</u> Adam MG, Chiang AWJ, Balasubramanian R. Environ Pollut. 2019 Oct 19;113425 |
| 12. | <u>Interactions between environmental pollutants and genetic susceptibility in asthma risk.</u> Johansson H, Mersha TB, Brandt EB, Khurana Hershey GK. CurrOpinImmunol. 2019 Oct;60:156-162 |
| 13. | <u>Protective Effect of Breastfeeding on the Adverse Health Effects Induced by Air Pollution: Current Evidence and Possible Mechanisms.</u> Zielinska MA, Hamulka J. Int J Environ Res Public Health. 2019 Oct 29;16(21). |
| 14. | <u>The impact of household air cleaners on the chemical composition and children's exposure to PM2.5 metal sources in suburban Shanghai.</u> Brehmer C, Norris C, Barkjohn KK, Bergin MH, Zhang J, Cui X, Zhang Y, Black M, Li Z, Shafer M, Schauer JJ. Environ Pollut. 2019 Oct;253:190-198 |
| 15. | <u>The use of personal and indoor air pollution monitors in reproductive epidemiology studies.</u> Gaskins AJ, Hart JE. Paediatr Perinat Epidemiol. 2019 Oct 10 |