Supplementary Materials

Application of Ozonation-Biodegradation Hybrid System for Polycyclic Aromatic Hydrocarbons Degradation

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Figure S1 GC spectrum of the culture 1 during the biodegradation process; AZU – azulene, BTP – benzo[b]thiophene, QUI – quinoline, ENP – 1-ethylnaphthalene, ANP – acenaphthylene, ANT – anthracene, FLU – fluorene, PHE – phenanthrene, PYR – pyrene;
Figure S2 GC spectrum of the culture 2 during the biodegradation process; AZU – azulene, BTP – benzo[b]thiophene, QUI – quinoline, ENP – 1-ethylnaphthalene, ANP – acenaphthylene, ANT – anthracene, FLU – fluorene, PHE – phenanthrene, PYR – pyrene;
Figure S3 GC spectrum of the culture 3 during the biodegradation process; AZU – azulene, BTP – benzo[b]thiophene, QUI – quinoline, ENP – 1-ethylnaphthalene, ANP – acenaphthylene, ANT – anthracene, FLU – fluorene, PHE – phenanthrene, PYR – pyrene;
Figure S4 GC spectrum of the culture 4 during the biodegradation process; AZU – azulene, BTP – benzo[b]thiophene, QUI – quinoline, ENP – 1-ethylnaphthalene, ANP – acenaphthylene, ANT – anthracene, FLU – fluorene, PHE – phenanthrene, PYR – pyrene;
Figure S5 GC spectrum of the culture 5 during the biodegradation process; AZU – azulene, BTP – benzo[b]thiophene, QUI – quinoline, ENP – 1-ethylnaphthalene, ANP – acenaphthylene, ANT – anthracene, FLU – fluorene, PHE – phenanthrene, PYR – pyrene;
Figure S6 Degradation of selected hydrocarbons: a) azulene, b) benzo[b]thiophene, c) quinoline, d) 1-ethylnaphthalene, e) acenaphthylene, f) anthracene, g) fluorene, h) phenanthrene, i) pyrene, j) benz[a]anthracene;

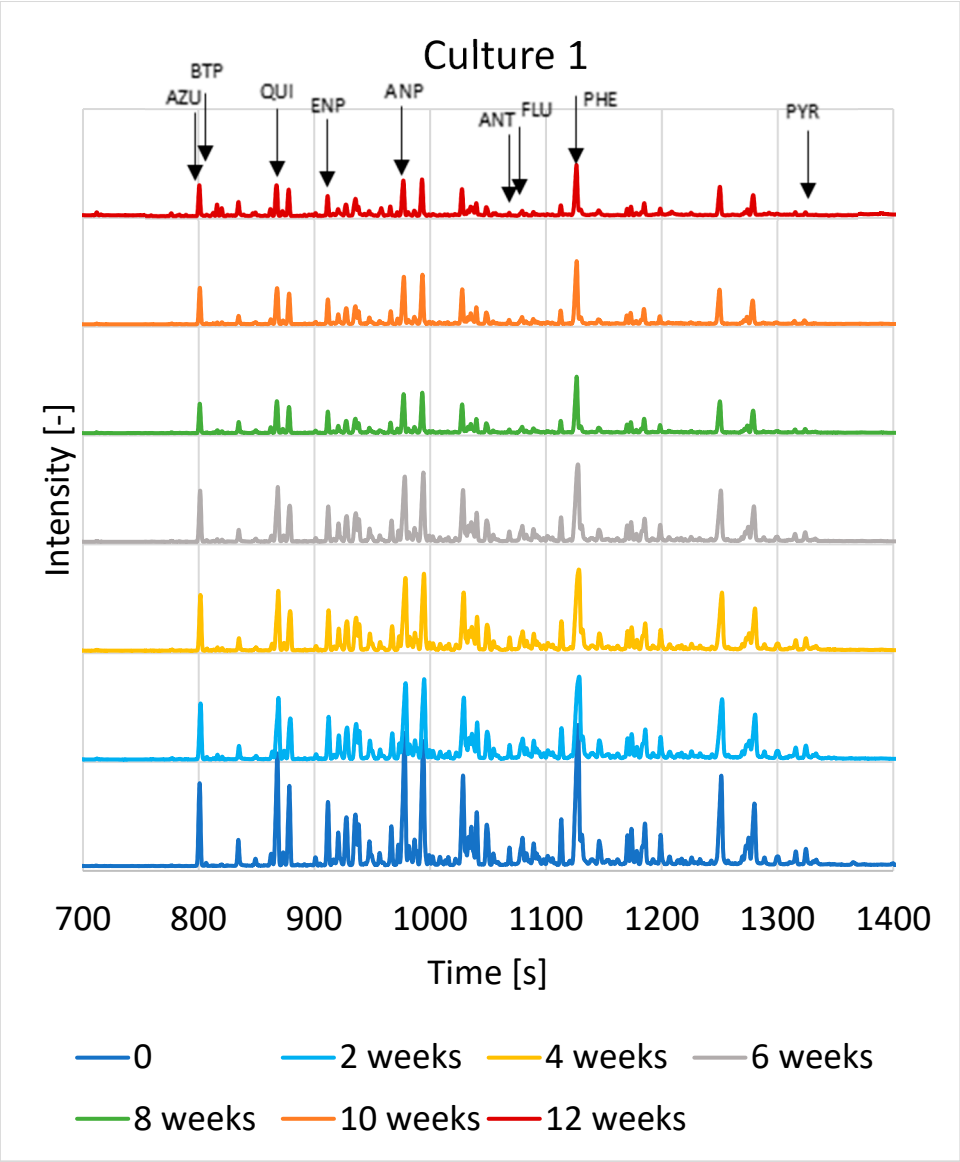


Figure S1. GC spectrum of the culture 1 during the biodegradation process; AZU – azulene, BTP – benzo[b]thiophene, QUI – quinoline, ENP – 1-ethylnaphthalene, ANP – acenaphthylene, ANT – anthracene, FLU – fluorene, PHE – phenanthrene, PYR – pyrene.

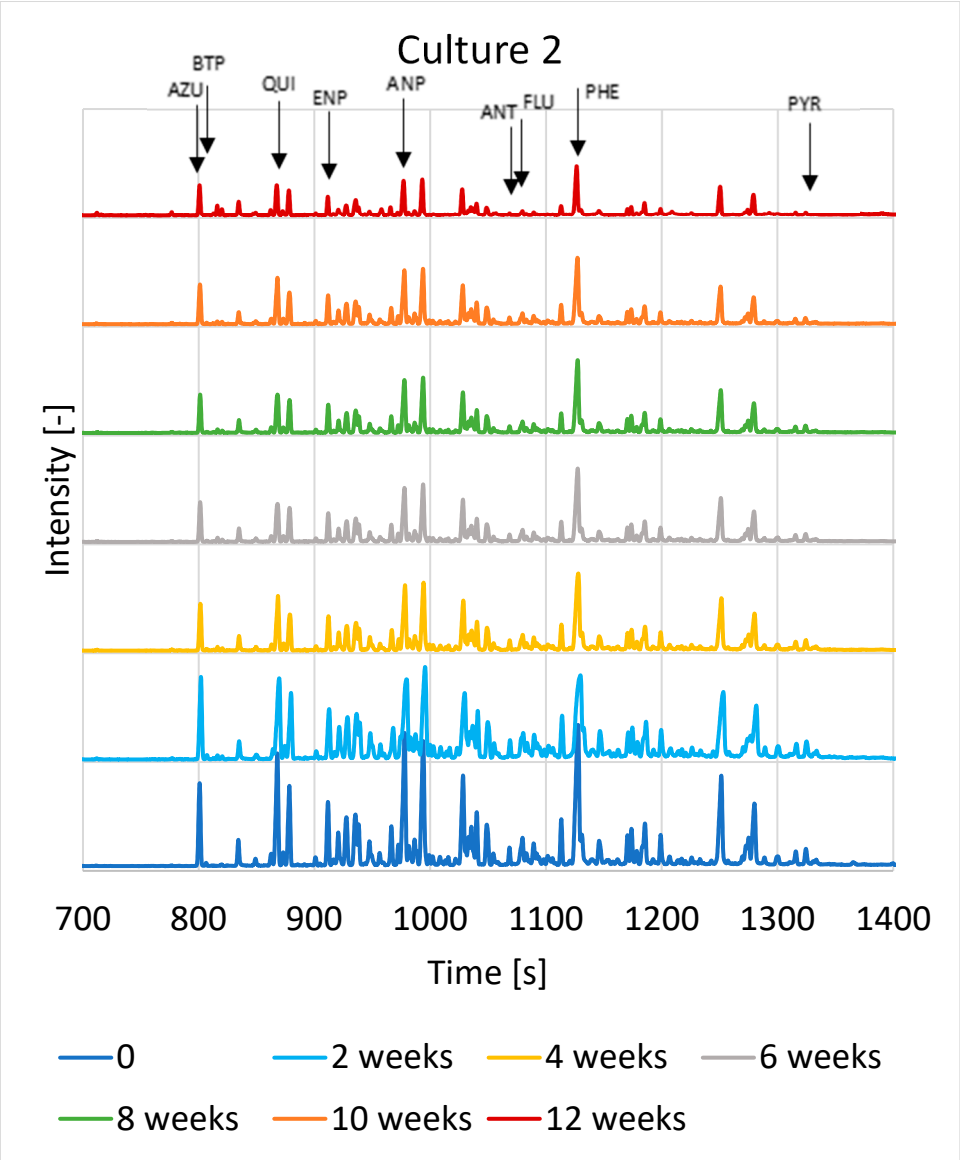


Figure S2. GC spectrum of the culture 2 during the biodegradation process; AZU – azulene, BTP – benzo[b]thiophene, QUI – quinoline, ENP – 1-ethylnaphthalene, ANP – acenaphthylene, ANT – anthracene, FLU – fluorene, PHE – phenanthrene, PYR – pyrene.

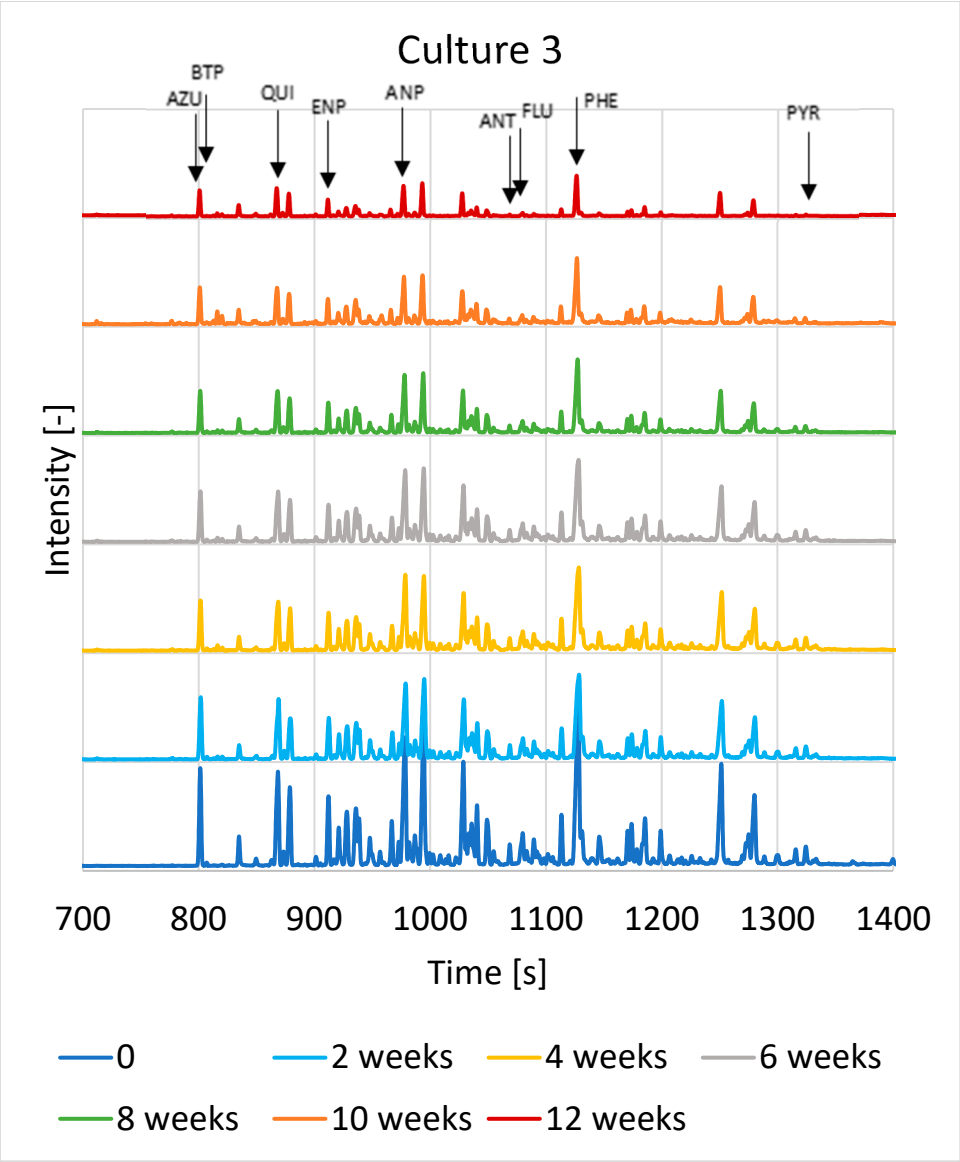


Figure S3. GC spectrum of the culture 3 during the biodegradation process; AZU – azulene, BTP – benzo[b]thiophene, QUI – quinoline, ENP – 1-ethylnaphthalene, ANP – acenaphthylene, ANT – anthracene, FLU – fluorene, PHE – phenanthrene, PYR – pyrene.

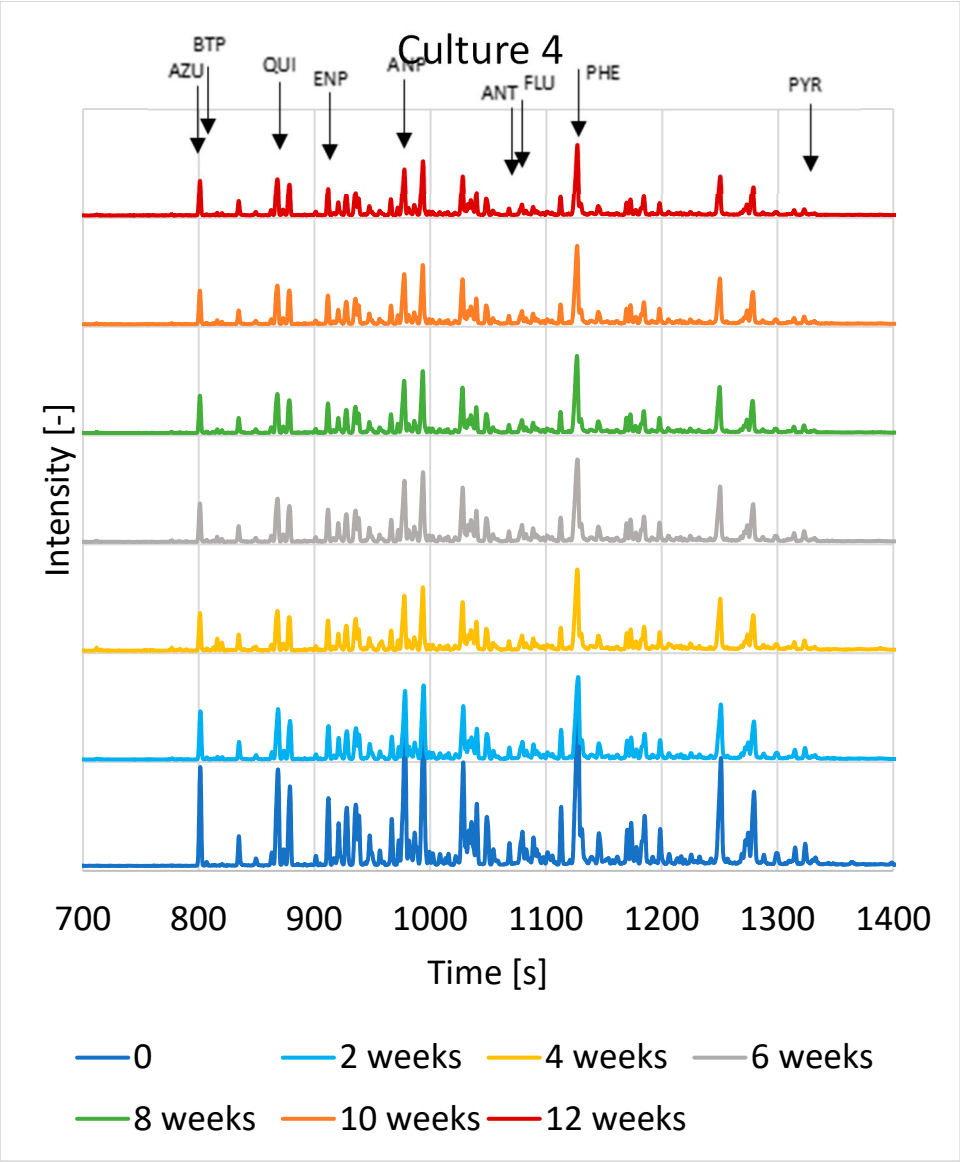


Figure S4. GC spectrum of the culture 4 during the biodegradation process; AZU – azulene, BTP – benzo[b]thiophene, QUI – quinoline, ENP – 1-ethylnaphthalene, ANP – acenaphthylene, ANT – anthracene, FLU – fluorene, PHE – phenanthrene, PYR – pyrene.

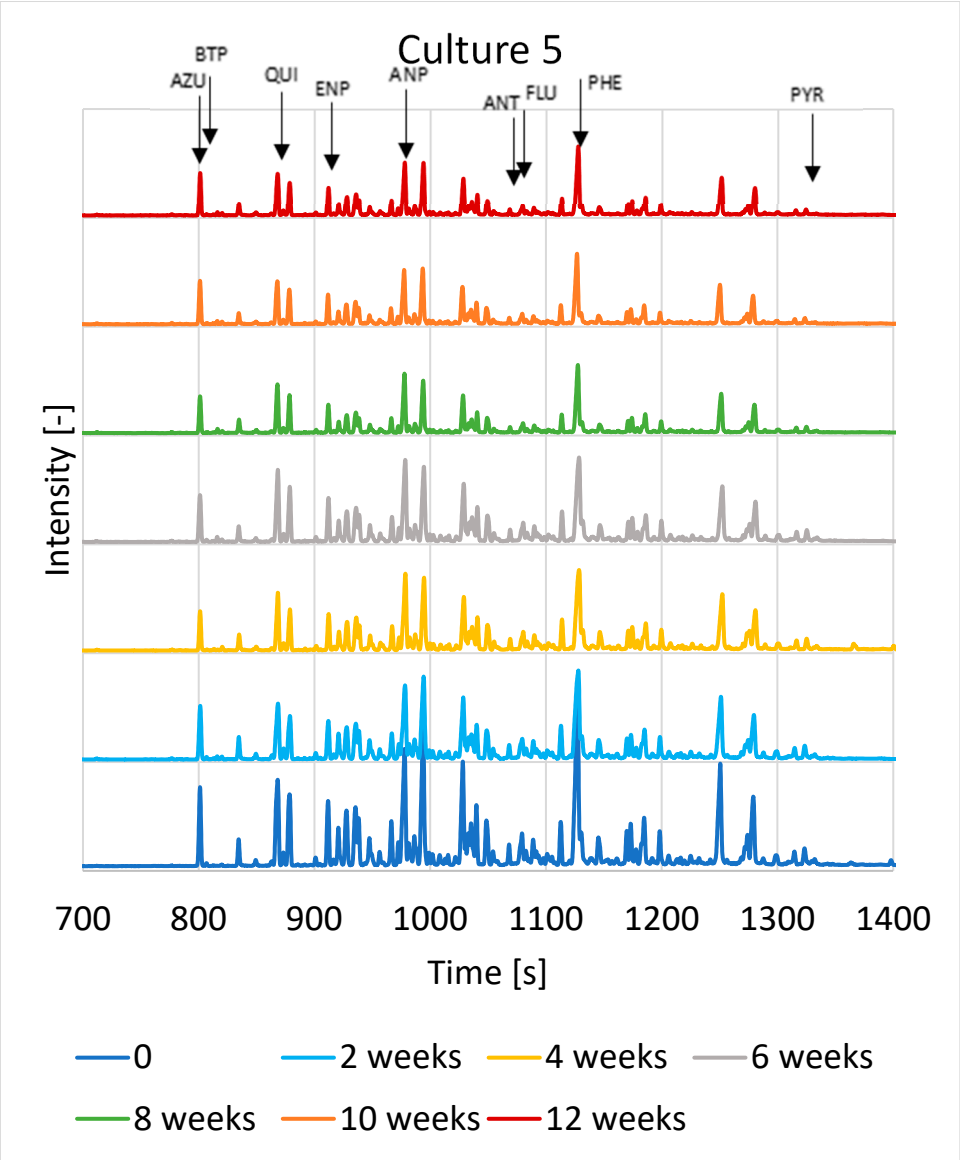


Figure S5. GC spectrum of the culture 5 during the biodegradation process; AZU – azulene, BTP – benzo[b]thiophene, QUI – quinoline, ENP – 1-ethylnaphthalene, ANP – acenaphthylene, ANT – anthracene, FLU – fluorene, PHE – phenanthrene, PYR – pyrene.

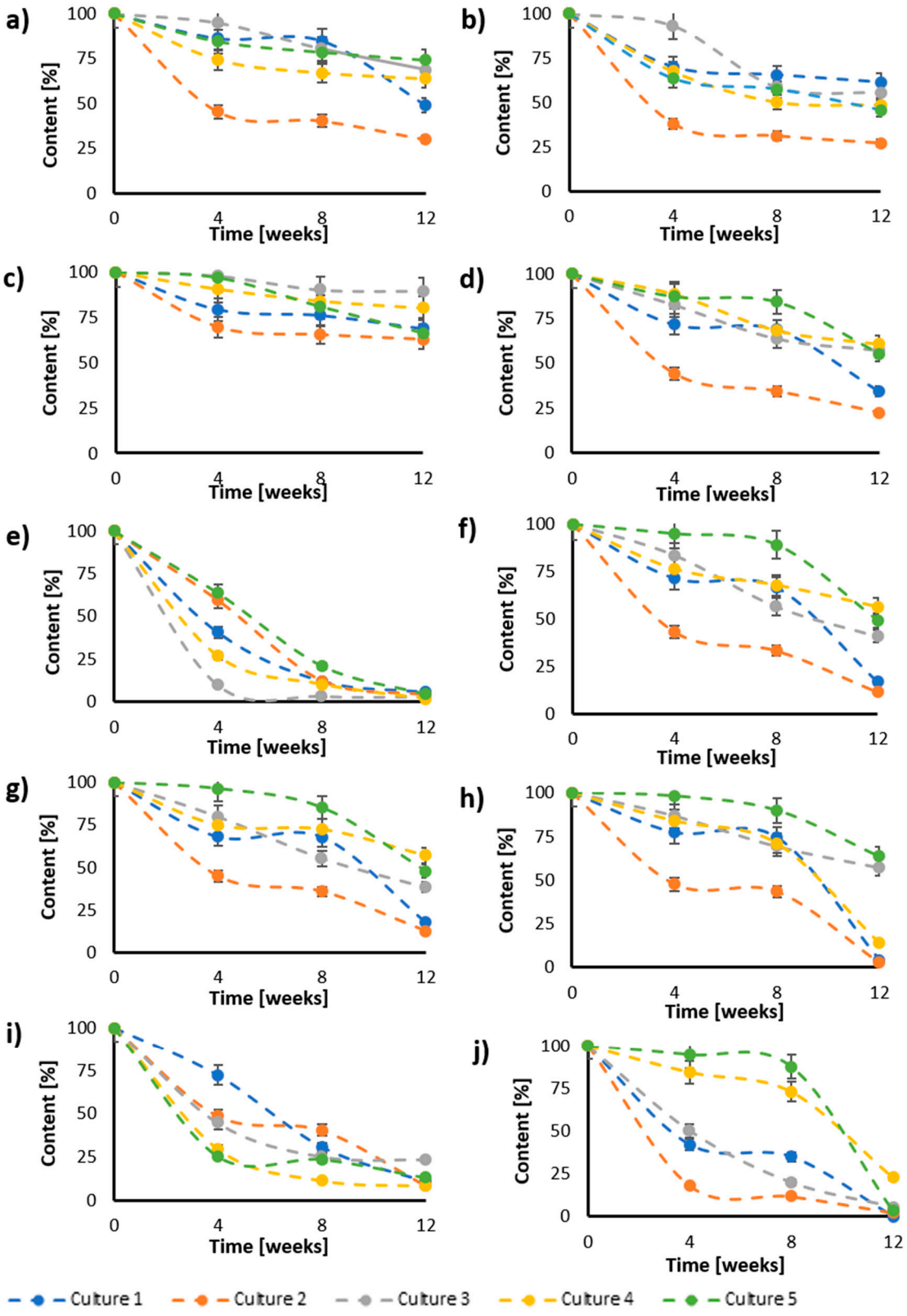


Figure S6. Degradation of selected hydrocarbons: a) azulene, b) benzo[b]thiophene, c) quinoline, d) 1-ethylnaphthalene, e) acenaphthylene, f) anthracene, g) fluorene, h) phenanthrene, i) pyrene, j) benz[a]anthracene.