

Cooking particulate matter: A systematic review on nanoparticle exposure in the indoor cooking environment

Joanna Izabela Lachowicz^{1,*}, Simone Milia¹, Mariusz Jaremko², Enrico Oddone³, Cirrincione Luigi⁴, Marcello Campagna¹, Luigi Isaia Lecca¹

¹ *University of Cagliari, Department of Medical Sciences and Public Health, Division of Occupational Medicine, Cittadella Universitaria, 09042 Monserrato (CA), Italy*

² *Biological and Environmental Sciences & Engineering Division (BESE), King Abdullah University of Science and Technology (KAUST), Thuwal, 23955-6900, Saudi Arabia*

³ *University of Pavia, Department of Public Health, Experimental and Forensic Medicine, 27100 Pavia, Italy*

⁴ *University of Palermo, Promozione della Salute, Materno-Infantile, di Medicina Interna e Specialistica di Eccellenza “G. D’Alessandro”, 90133 Palermo, Italy*

First research string:

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((nanoparticles[Title/Abstract])
OR (ufp[Title/Abstract]))
OR (ultrafine[Title/Abstract]))
OR (PM 0,01[Title/Abstract])
AND (((cook[Title/Abstract])
OR (cooking[Title/Abstract]))
OR (kitchen[Title/Abstract])
OR (smoke[Title/Abstract])
OR (steam[Title/Abstract])
((y_10[Filter]) AND (humans[Filter]))).
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Extending the research string selecting more keywords we collected 731 articles. The final draft is the following:

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OR (fitted kitchen[Title/Abstract])) OR (hob[Title/Abstract])) OR (stovetop[Title/Abstract]))
OR (canteen[Title/Abstract])) Filters: in the last 10 years
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OR "stove"[Title/Abstract] OR "stoves"[Title/Abstract] OR "cook"[Title/Abstract]
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OR "canteen"[Title/t])) AND (y_10[Filter]).

Table S1. List of ambient and laboratory studies analysing stove and fuel type as the main sources of particulate matter, which generation is influenced by the food type, food additives use, and ventilation type. ND = not defined by the authors; NA = not applicable to the studies presented.

DOI	Location	Heating/Cooking/Intervention type	Kitchen type	Stove type	Fuel type	Food type	Additional food ingredients	Ventilation type	Sample number	Sampling time [h]
10.1016/j.scitotenv.2017.01.051	(INDIA) District Fatehgarh Sahib located in South-Eastern part of Punjab state and lies between 30°25' 00" to 30°45' 45" N & 76°04' 30" to 76°35' 00" E	ND	Indoor kitchen with/out partition; Outdoor enclosed kitchen; Outdoor open-air kitchen; Outdoor semi-open air kitchen	ND	agricultural residue; firewood; biogas; Liquefied Petroleum Gas	ND	ND	ND	60	24
10.1016/j.scitotenv.2018.08.381	Kishannagar village in Mahbubnagar district of southern Telangana, India (17.3850° N, 78.4867° E)	ND	Indoor kitchen with partition; Indoor kitchen without partition; Separate enclosed kitchen outside the house and Open kitchen (means open-air cooking)	ND	biomass and LPG	ND	ND	ND	60	24
10.1016/j.chemosphere.2020.127758	Beilin District (within second-ring road area) of Xi'an	barbecuing, Grilling and deep frying	All kitchens were separated from the dining areas, while the kitchen doors were kept open all the time	gas stove	natural gas, except electricity was used for the two Western fast food restaurants	traditional Chinese (three served with the Shaanxi, Szechwan, and Cantonese cuisines, respectively), Modern Chinese (Chinese barbecue and Chinese fast food), and exotic cuisines (Western fast food and Japanese)	ND	umbrella-shaped hoods and electrostatic fume purifiers (EFP) to remove oil fumes before exhausted to ambient.	14	PM2.5 samples were collected in two dining peak periods, including 11:30 - 14:30 LST (lunch) and 18:00 - 21:00 LST (dinner); The background samples (field blank filters) were taken in the break time (15:00 - 18:00 LST; non-dining period) when all cooking activities were terminated for each kitchen using the same sampler

10.1016/j.scitotenv.2018.03.124	Great Wild Goose Pagoda at Qujiang District in southeastern Xi'an	Boil; Stir-fry; bake; grill; Pan-fry;	ground-floor restaurants; The kitchen door was kept closure all the times, and most dishes were transferred through a pick-up window (b0.5 m2) on the wall of kitchen	variable	electricity; alcohol; natural gas;	Various; red peppers; Pork; vegetable; noodles; marinated meat in baked bun; Meats (pork, beef, mutton, chicken), fish, vegetable; Tofu; Bread; Fish; Potato; chicken; Beef	Curry	Electrostatic precipitator; Hydrovent;	8	Gaseous and PM samples were collected in two dining periods (12:00–14:00 and 18:30–20:30 LST for lunch and supper hours, respectively) synchronously. Baseline samples (non-dining period) were taken during break period (15:00–17:00 LST) while no diner was present and cooking activities were terminated
10.1016/j.buildenv.2018.12.060	Beijing; China	Stir-frying; deep-frying; steaming; boiling	ND	gas stove	natural gas	designed an orthogonal test based on a survey of cooking behavior that took into consideration the typical Chinese cooking styles where gas stoves are used. Five key factors were examined (cooking method, the weight of ingredients, the type of meat, the ratio of meat to vegetables, and the type of oil)	ND	forcedly ventilated to ensure that the PM2.5 concentration returned to the background level between each experiment	10	ND
10.1016/j.scitotenv.2013.03.018	Kocaeli, Turkey	ND	ND	ND	Charcoal; Electricity, natural gas, and wood	ND	ND	ND	14	ND

10.1111/j.1600-0668.2011.00730.x	west of Lijiang city in Yunnan, China, at roughly 2700 m elevation in the Hengduan Mountains (N 2652¢, E10006¢)	ND	Some kitchens are enclosed, while others have windows or 20–50 cm gaps between the wall and ceiling	stoves consist of an enclosed combustion chamber with a small sliding metal door for adding fuelwood	biomass	ND	ND	chimney that vents smoke outside the kitchen	335	24
10.1111/ina.12291	Bhutan	heating (metal chimney stove), rice cooking (traditional mud stove), fodder preparation (stone tripod stove), and liquor distillation (traditional mud stove). All the cooking activities involved boiling and steaming, and no frying or grilling was involved.	mainly separately structured kitchen outside the main house	traditional stoves, built mostly from mud; stone tripod stove, the simplest open fire stove, where firewood can be fed from more than one direction	biomass, LPG (1) and electricity (1)	ND	ND	ND	4	The duration of activities was 5 h for heating in H1 (from 17:00 to 22:00, until occupants went to bed), 34 min for cooking in H2 (cooking rice for a family of 5), 50 min for fodder preparation in H3, and 2 h for liquor distillation in H4.
10.1007/s11356-018-1831-7	West Bengal, India	ND	kitchen space having at least the roof on the head, kitchen without any artificial ventilation or chimney setup, and cooking is done on the traditional earthen cook stoves	ND	mixed biomass fuels (dung, crop residues, husk, fire wood) predominated with cow dung cake	ND	ND	any artificial ventilation or chimney	180	ND
10.1007/s11356-013-2062-6	Nouna, Burkina Faso	ND	ND	three-stone and charcoal stoves	wood and charcoal	ND	ND	ND	148	24
10.3390/ijerph17165681	Bhaktapur, Nepal	ND	ND	ND	LPG, wood	ND	ND	ND	19	24
10.1016/j.buildenv.2015.06.024	northern Taiwan	frying, baking and stewing	ND	gas stove	gas	ND	ND	ND	5	24
10.1016/j.envint.2022.107155	Dhaka (Bangladesh); Chennai (India); Nanjing (China); Medellín (Colombia); S'ao Paulo (Brazil); Cairo (Egypt); Sulaymaniyah (Iraq); Addis Ababa (Ethiopia); Akure (Nigeria); Blantyre (Malawi); Dar-es-Salaam (Tanzania) and Nairobi (Kenya)	variable	variable	variable	natural gas, LPG, charcoal, kerosene, electric, ethanol	variable	ND	natural or dual (natural+forced)	60	168

10.1016/j.envpol.2019.113697	La Esperanza, Department of Intibuca, Honduras	variable	variable	30 households with a traditional cookstove and 17 households with Justa cookstove	gathered wood, including split logs and sticks, as the primary fuel; burning small sticks of a local wood called ocote (a species of pine) and corncobs to start the fire	ND	ND	non-insulated open combustion area; sometimes a chimney	47	24
10.3390/ijerph17041287	Sindh, Pakistan	ND	ND	Traditional stove using biomass; Improved stove using biomass; LPG stove	biomass, LPG	ND	ND	ND	39	48
10.1016/j.buildenv.2017.06.021	San Francisco Bay area of California, USA	water boiling	ND	gas stove (cooktop, oven bottom burner, and broiler top burner, as available)	natural gas	water boiling	NA	windows closed, no forced air unit (FAU) operation, and no mechanical exhaust	9	varied from a minimum of 54min to a maximum of overnight
10.1021/es405723w	China	water boiling	NA	gasifier cookstoves	Pelletized fuel	water boiling	NA	with and without chimney	ND	ND
10.1021/acs.est.5b02139	Udaipur, India	Cooking	separated from other rooms	traditional three-stone cookstove	biomass (e.g. wood)	ND	ND	no ventilation	51	22
10.1080/10962247.2020.1823525	Halifax and Edmonton, Canada	cooking	ND	The cooktop fuel type (78% electric, 22% gas) was in general agreement with the responses from the nationwide Canadian Human Activity Pattern Survey 2 (84% electric, 16% gas).	8% electric, 22% gas	ND	ND	The range hood ventilation type was vented (55%), unvented (22%), or unknown (5%). About 18% of the homes did not have a range hood.	132	24
10.1016/j.chemosphere.2020.127758	northwestern China	different cuisine types	ND	gas and electric stove	gas or electric	different cuisine	ND	umbrella-shaped hoods and electrostatic fume purifiers	14	two dining peak periods, including 11:30e14:30 LST (lunch) and 18:00e21:00 LST (dinner)

10.1016/j.envpol.2017.04.033	China	Frying	ND	ND	natural gas	sets of duplicate cooking samples were collected, using the most used 5 types of oil	ND	no ventilation and with the range hood on	35	7
10.1016/j.envres.2022.113032	different locations in Lebanon	Small pieces of beef grilled on both sides; Large pieces of skinned chicken grilled on both sides; Burger grilling, french fries frying, use of vegetables, daily dishes served;	ND	ND	LPG; Charcoal	beef; chicken; french fries; vegetables;	ND	ND	7	0,33
10.3390/ijerph17145256	Aveiro, Portugal	variable	ND	gas; electric	gas, electricity	ND	ND	natural	4	48-72
10.1016/j.scitotenv.2021.146090	Aveiro, Portugal	boiling and grilling	ND	gas; electricity	gas; electricity	poultry	ND	The circular-shaped chimney is equipped with an electric draft inducing fan but does not have any filtration unit or other treatment system of flue gases	3	ND
10.1007/s42452-020-03800-0	Mbarara Municipality western Uganda		Kitchen volumes ranged from 12 to 81 m ³ and their roofs (96.6%) were metallic while only 3.4% were concrete. Kitchen walls were made of mud (5%), wood (20%) or concrete (74%) and floors were wood (3.4%), mud (41%), and cement (56%). 23% of the respondents did not open doors while cooking but only 3.4% did not open doors. 22% of the houses studied were located near the road and only 6.8% showed cross ventilation. 21% of the respondents cooked from the main house and 79% used kitchens.	open fires	biomass (charcoal)	ND	ND	natural	60	24
10.1016/j.envpol.2020.115592	across northern (Shanxi) and southern China (Sichuan and Guizhou)	ND	ND	11 fuel-stove combinations	biomass (Maize stalk, Corn cob, Bean straw, Wood, Brushwood, Corn cob, Bamboo)	ND	ND	chimney that vents smoke outside the kitchen	ND	ND
10.1016/j.envpol.2021.117754	Hong Kong, China	Baking, Frying (pan frying, stir frying), Grilling, Steaming	ND	gas and electric stove	town gas; electricity	common cuisines in Hong Kong	ND	ND	3	1.5-3
10.1021/acs.est.6b05928	laboratory	WBT	NA	open burner stove; evaporative	LPG; alcohol; kerosene; pellet; wood; charcoal; rice hulls	The water boiling test (WBT)	NA	NA	ND	from seconds to minutes

				burner stove; wick stove; natural draft stove; forced draft stove; three stone fire; low moisture wood; high moisture wood		protocol (Version 4.2.2),				
10.1016/j.jes.2016.06.030	laboratory	heating to 265°C	ND	ND	Electric	Four commercial cooking oils	NA	without	ND	within minutes
10.1080/15459624.2012.755864	laboratory	Frying. The temperature in the pan was 200°C when the experiment started, increasing to 270–320°C during the frying period.	NA	electric and gas stoves	gas	Bacon	ND	The canopy hood was wall-mounted centrally. The stove in use was installed under the hood, 65 cm away. During frying, the hood extracted 335 m ³ air/hr. Basic ventilation in the kitchen room was 119 m ³ /hr of air supply, and 112 m ³ /hr outlet (without kitchen hood ventilation).	ND	The standard frying procedure (15 min) was repeated five times during each day of frying. The repetitions were separated by a 25-min break with the ventilation on. There was also a 25-min break after the last repetition.
10.3390/foods11060833	laboratory	grilling	simulatory	ND	high-density bamboo charcoal (HDBC)	meat	pepper, salt, garlic powder, and compound marinade,	40-inch by 50-inch stainless steel hood and ducted to the stack of the facility with an exhaust fan. The exhaust fan had a variable speed drive and controller, which was used to adjust the velocity and flow rates through the stack.	ND	ND
10.1021/es301693f	laboratory	boiling water test (WBT)	NA	twenty-two cookstove types	charcoal, pellets, corn cobs, rice hulls, and plant oil	NA	NA	Two cookstoves were equipped with chimneys (~2 m height). Natural-draft (also termed natural convection) stoves dominated	44	ND

								the cookstove matrix; four forced-draft (fan-provided air) stoves were also tested. Twelve stoves with batch fuel loading (e.g., charcoal stoves) required less time for tending than others that required manual fuel feeding. Four stoves were variations of the “rocket” stove design, and eight were variations of the “gasifier” design. The only traditional cooking system tested was a 3-stone cookfire.		
10.1016/j.scs.2019.101845	laboratory	oils heated in a non-stick aluminum pan until visible smoke was produced	typical open kitchen environment	common electrical stove	electric	cooking oils: vegetable, canola, corn, olive, peanut, and coconut oils	ND	with (wall-mounted exhaust hood/fan) and without a smoke exhaust hood	ND	0.008 (30sec)
10.1016/j.jenvman.2018.12.010	laboratory	pan-frying	NA	electronic induction heater	electronic	salmon; Loin cut to 150 g to fit the pan-frying process was used. The frying was carried out by placing 30 ml of olive oil and a piece of salmon in a pan and heating for 450 s, after which the was salmon burnt to a crisp form.	ND	An exhaust fan and duct were installed at the top of the hood through which particulate and gaseous matter could be emitted. To reduce the impact of the external influence, all doors and windows of the laboratory were closed. After each experiment, all of the doors and windows were opened for ventilation for 30 min until the particle concentration decreased to the initial background concentration.	ND	ND

10.1016/j.jes.2016.06.030	laboratory	heating	The size of the kitchen is 4.5 m (L) × 4.0 m (W) × 3.0 m (H)	gas stove	LPG	Three hundredmilliliter different oil (rapeseed, sunflower, soybean and corn oil) in a Supor nonstick pan was heated by liquid gas	NA	without; The kitchen was refreshed with fresh air thoroughly through the door and the ventilation between each experiment, till the kitchen air returned to background level when there was no cooking.	ND	within minutes
10.1080/02786826.2017.1380779	laboratory	frying	The gasifier cookstove tested in this study was a modular laboratory prototype that allowed design and operational parameters to be precisely controlled	air gasifier cookstove during	LPG; Douglas fir wood chips; kerosene,	pork	ND	ND	ND	within seconds/minutes
10.1016/j.biombioe.2017.10.047	laboratory	NA	NA	The WABI (D2I INVICTA, DONCHERY, FRANCE) firewood stove that was designed, built and purchased in 2012 with a nominal thermal heat output of 6 kW was used.	split beech (Fagus sylvatica) logs of 12 cm of diameter from a 40-year-old beech	NA	NA	ND	ND	ND
10.1016/j.esd.2012.08.008	laboratory	NA	NA	wood and gas stove	wood; gas	NA	NA	constant-volume displacement pump moved air through the hood at 6 m ³ /min with inlet air passing through high efficiency particulate air (HEPA) filters to remove background aerosol	ND	0,75
10.1021/acs.est.8b07019	laboratory	Firepower Sweep Test	NA	Biomass and fossil-fuel	LPG; kerosene; charcoal;	NA	NA	ND	8	ND
10.1016/j.scitotenv.2021.151700	Laboratory	cooking oils	kitchen with a space of ~10 m ² in area	gas stove	butane gas	representative cooking oil (i.e., rapeseed oil)	ND	ND	ND	ND
10.1111/ina.12163	laboratory	heating	ND	Two identical single-coil,	electric	NA	NA	ND	200	2-100

				120-volt alternating current electric burners						
10.1111/ina.12542	laboratory	mixed	laboratory	gas stove	gas	mixed food products danish food	ND	controlled ventilation conditions in a test chamber; two ventilation scenarios that varied the flow rate and location of the ventilation extract	4	time of cooking+30min

Table S2. List of organic and inorganic compounds bound to particulate matter generated during indoor cooking activities together with the sampling and analysis methods.

Matter	Compound name	Classification	Group	Max Concentration	Unit	Food preparation description	Sampling method	Analysis method	DOI
organic	1-Acenaphthenon		OPAHs	168.1	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	1-butene	alkenes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	1-docosanol (C ₂₂)	alcanols		9.6±8.1	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	1-docosanol (C ₂₄)	alcanols		13.4±15.5	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	1-dodecanol (C ₁₂)	alcanols		16.5±12.8	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	1-heneicosanol (C ₂₁)	alcanols		8.9±4.3	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	1-heptacosanol (C ₂₇)	alcanols		38.9±26.1	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	1-heptadecanol (C ₁₇)	alcanols		9.1±5.4	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	1-hexacosanol (C ₂₆)	alcanols		23.9±11.6	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	1-hexadecanol (C ₁₆)	alcanols		81.4±35.9	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	1-hexene	alkenes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	1-icosanol (C ₂₀)	alcanols		7.2±6.7	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	1-Indanone		OPAHs	642.4	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	1-methylnaphthalene	two rings	PAHs	3.9±2.3	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	1-Methylnaphthalene	two rings	PAHs	617.6	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754

organic	1-Methylphenanthrene	three rings	PAHs	481.3	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	1-Naphthaldehyde	two rings	OPAHs	95.8	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	1-nonadecanol (C ₁₉)	alcanols		3.4±1.9	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	1-octacosanol (C ₂₈)	alcanols		33.1±18.5	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	1-octadecanol (C ₁₈)	alcanols		55.9±28.7	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	1-pentacosanol (C ₂₅)	alcanols		15.8±7.5	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	1-pentadecanol (C ₁₅)	alcanols		13.2±7.1	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	1-pentene	alkenes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	1-tetradecanol (C ₁₄)	alcanols		41.7±16.5	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	1-tricosanol (C ₂₃)	alcanols		8.3±9.6	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	1-tridecanol (C ₁₃)	alcanols		8.3±4.7	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	1-undecanol (C ₁₁)	alcanols		262.3±236.3	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	1,2-diethylbenzene	aromatics	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	1,2,3-trimethylbenzene	aromatics	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	1,2,3,4-Tetrahydronaphthalene	two rings	PAHs	435.4	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	1,2,4-trimethylbenzene	aromatics	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019

organic	1,3-diethylbenzene	aromatics	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	1,3-Dimethylnaphthalene	two rings	PAHs	912.8	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	1,3,5-trimethylbenzene	aromatics	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019

organic	1,4-Anthraquinone	three rings	OPAHs	359.6	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	1,4-Chrysenequinone	four rings	OPAHs	291.1	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	1,4-diethylbenzene	aromatics	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019

organic	1,4-Naphthoquinone	two rings	OPAHs	305.9	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	1,8-Naphthalic anhydride	two rings	OPAHs	216.8	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	13 α (H), 17 β (H), 20R-Cholestane (diasterane) (C27)	steranes		33,5	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	13 α (H), 17 β (H), 20S-Cholestane (diasterane) (C27)	steranes		42,7	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	13 β (H), 17 α (H), 20R-Cholestane (diasterane) (C27)	steranes		52,8	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090

organic	13 β (H), 17 α (H), 20S-Cholestane (diasterane) (C27)	steranes		89,2	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	17 α (H)-diahopane			146	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	17 α (H),21 β (H)-30-norhopane			146	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	18 α (H)-22,29,30-trisnorneohopane			80,1	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	18 α (H)-30-norneohopane			24,5	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	2-Biphenylcarboxaldehyde		OPAHs	236.2	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	2-ethyltoluene	aromatics	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	2-methyl-2-butene	alkenes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019

organic	2-Methylanthracene-9,10-dione	three rings	OPAHs	355.8	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	2-methylheptane	alkanes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	2-methylhexane	alkanes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	2-methylnaphthalene	two rings	PAHs	4.5±1.9	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	2-Methylnaphthalene	two rings	PAHs	542.7	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	2-Octadecanone	Ketones and aldehydes		0,411	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	2-Tridecanone	Ketones and aldehydes		2,37	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	2,2,4-trimethylpentane	alkanes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	2,3-dimethylpentane	alkanes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	2,3,4-trimethylpentane	alkanes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019

organic	2,4-dimethylpentane	alkanes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	2,5-dimethylbenzaldehyde	aromatic aldehydes	carbonyls	Numerical data not available	NA	Firepower Sweep Test (FST)	Dinitrophenylhydrazine cartridge (Sep-Pak DNPH-Silica Cartridge; Waters Corp; Milford, MA) placed inline behind an ozone scrubber (Sep-Pak Ozone Scrubber Potassium Iodide Cartridge; Waters Corp; Milford, MA)	HPLC 1050 series; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019
organic	22R 17 α (H),21 β (H)-22R-homohopane			32,3	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	22S 17 α (H),21 β (H)-22S-homohopane			71	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	22S 17 α (H),21 β (H)-22S-homohopane			53,2	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	24-Ethyl-5 α (H), 14 α (H), 17 α (H) 20R-Cholestane (20R,24R) (C29)	steranes		46,7	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	24-Ethyl-5 α (H), 14 α (H), 17 α (H) 20S-Cholestane (20S,24R) (C29)	steranes		43,9	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	24-Ethyl-5 α (H), 14 β (H), 17 β (H) 20R-Cholestane (20R,24R) (C29)	steranes		50,1	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	24-Ethyl-5 α (H), 14 β (H), 17 β (H) 20S-Cholestane (20S,24R) (C29)	steranes		43,6	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	24-Methyl-5 α (H), 14 α (H), 17 α (H) 20R-Cholestane (20R,24R/S) (C28)	steranes		51,7	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	24-Methyl-5 α (H), 14 α (H), 17 α (H) 20S-Cholestane (20S,24S) (C28)	steranes		25,9	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	24-Methyl-5 α (H), 14 β (H), 17 β (H) 20R-Cholestane (20R,24S) (C28)	steranes		25,4	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	24-Methyl-5 α (H), 14 β (H), 17 β (H) 20S-Cholestane (20S,24R) (C28)	steranes		42,3	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090

organic	3-ethyltoluene	aromatics	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	3-methylheptane	alkanes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	3-methylhexane	alkanes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	3-methylpentane	alkanes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	3,6-Dimethylphenanthrene		PAHs	251.6	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754

organic	4-ethyltoluene	aromatics	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	4H-Cyclopenta(d,e,f)phenanthrene		PAHs	2662.8	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	4H-Cyclopenta[d,e,f]phenanthrene-4-one		OPAHs	101.3	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754

organic	6H-benzo[c,d]pyrene-6-one		OPAHs	66.8	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	7,12-Dimethylbenz[a]anthracene	four rings	PAHs	0.0933	ng m-3	General cooking activities	69 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145278
organic	7H-Benz[de]anthracene-7-one	four rings	OPAHs	259.9	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754

organic	9-fluorenone	three rings	PAHs	34.1±18.4	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	9-Fluorenone	three rings	OPAHs	524.7	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	9-methylanthracene	three rings	PAHs	3.1±1.3	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	9,10-Anthraquinone	three rings	OPAHs	413.1	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	Abietic acid	carboxylic acids		0.073	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	Acenaphthene	three rings	PAHs	2	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	Acenaphthene	three rings	PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	Acenaphthene	three rings	PAHs	0.006 ± 0.004	[mg g-1]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032

organic	acenaphthene	two rings	PAHs	1.6±1.4	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Acenaphthene	three rings	PAHs	2096.3	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	Acenaphthylene	three rings	PAHs	0,672	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	Acenaphthylene	three rings	PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	Acenaphthylene	three rings	PAHs	0,101	ng m-3	General cooking activities	57 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145266

organic	acenaphthylene	three rings	PAHs	12.5±13.1	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Acenaphthylene	three rings	PAHs	364.2	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	acephenanthrylene	four rings	PAHs	Numerical data not available	NA	Firepower Sweep Test (FST)	Particle phase: Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY; Gas phase: PUF Replacement P226-92; SKC-West, Inc; Fullerton, CA (two inline)	Agilent 6890/5973 Inert, Agilent Technologies, Santa Clara, CA	10.1021/acs.est.8b07019
organic	acetaldehyde	saturated aldehydes	carbonyls	Numerical data not available	NA	Firepower Sweep Test (FST)	Dinitrophenylhydrazine cartridge (Sep-Pak DNPH-Silica Cartridge; Waters Corp; Milford, MA) placed inline behind an ozone scrubber (Sep-Pak Ozone Scrubber Potassium Iodide Cartridge; Waters Corp; Milford, MA)	HPLC 1050 series; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019

organic	acetone	ketones	carbonyls	Numerical data not available	NA	Firepower Sweep Test (FST)	Dinitrophenylhydrazine cartridge (Sep-Pak DNPH-Silica Cartridge; Waters Corp; Milford, MA) placed inline behind an ozone scrubber (Sep-Pak Ozone Scrubber Potassium Iodide Cartridge; Waters Corp; Milford, MA)	HPLC 1050 series; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019
organic	Acetosyringone	Ketones and aldehydes		0,243	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography–mass spectrometry (GC–MS)	10.1016/j.scitotenv.2021.146090
organic	Acridine		Azaarenes	36	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography–mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	acrolein	unsaturated aldehydes	carbonyls	Numerical data not available	NA	Firepower Sweep Test (FST)	Dinitrophenylhydrazine cartridge (Sep-Pak DNPH-Silica Cartridge; Waters Corp; Milford, MA) placed inline behind an ozone scrubber (Sep-Pak Ozone Scrubber Potassium Iodide Cartridge; Waters Corp; Milford, MA)	HPLC 1050 series; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019

organic	adipic acid (C ₆)	Dicarboxylic acids		162.9±86.1	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
Inorganic	Ag	inorganic ions		0.17 ± 0.11	[mg g-1]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	ICP-Mass Spectrometry (ICP-MS, Agilent 7900, United States of America)	10.1016/j.envres.2022.113032
Inorganic	Al	inorganic ions		16.7 ± 5.9	[mg g-1]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES, iCAP 6000 series, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032
Inorganic	Al		metal ions	171.7	ng m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	alpha-pinene	alkenes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
Inorganic	ammonium (NH ₄ ⁺)	inorganic ions		Numerical data not available	NA	Firepower Sweep Test (FST)		CS-3000 Ion Chromatography System; Dionex; Waltham, MA	10.1021/acs.est.8b07019

Inorganic	ammonium (NH ₄ ⁺)	inorganic ions		35.0 ± 18.7	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	liquid ion chromatography (Dionex™ ICS-900, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032
Inorganic	ammonium (NH ₄ ⁺)	inorganic ions		8.0	ug m ⁻³	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	anteiso-C ₂₉	alcanes		4.9±6.9	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	anteiso-C ₃₀	alcanes		1.1±0.9	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	anteiso-C ₃₁	alcanes		8.5±5.6	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	Anthanthrene		PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	anthracene	three rings	PAHs	Numerical data not available	NA	Firepower Sweep Test (FST)	Particle phase: Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY; Gas phase: PUF Replacement P226-92; SKC-West, Inc; Fullerton, CA (two inline)	Agilent 6890/5973 Inert, Agilent Technologies, Santa Clara, CA	10.1021/acs.est.8b07019
organic	Anthracene	three rings	PAHs	10,5	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	Anthracene		PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	Anthracene	three rings	PAHs	0,0473	ng m-3	General cooking activities	61 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145270
organic	anthracene	three rings	PAHs	30.5±4.7	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	Anthracene		PAHs	273.8	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	arabinose	carbohydrates	carbohydrates	Numerical data not available	NA	Firepower Sweep Test (FST)	Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY	1260 Infinity; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019
Inorganic	As	inorganic ions		0.006 ± 0.001	[mg g-1]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	ICP-Mass Spectrometry (ICP-MS, Agilent 7900, United States of America)	10.1016/j.envres.2022.113032
Inorganic	As	inorganic ions		0.006 ± 0.001	[mg g-1]	sets of duplicate cooking samples were collected, using the most used 5 types of oil	37 mm polypropylene-fiber filter (Pall-Gelman, Ann Arbor, MI, USA)	ICP-MS, Agilent 7500a, Agilent Co, Santa Clara, USA	10.1016/j.envpol.2017.04.033
organic	azelaic acid (C ₉)	Dicarboxylic acids		732.5±804.9	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	b[a]pyrene	four rings	PAHs	Numerical data not available	NA	Firepower Sweep Test (FST)	Particle phase: Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY; Gas phase: PUF Replacement P226-92; SKC-West, Inc; Fullerton, CA (two inline)	Agilent 6890/5973 Inert, Agilent Technologies, Santa Clara, CA	10.1021/acs.est.8b07019
organic	b[b]fluoranthene	five rings	PAHs	Numerical data not available	NA	Firepower Sweep Test (FST)	Particle phase: Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY; Gas phase: PUF Replacement P226-92; SKC-West, Inc; Fullerton, CA (two inline)	Agilent 6890/5973 Inert, Agilent Technologies, Santa Clara, CA	10.1021/acs.est.8b07019
organic	b[e]pyrene	five rings	PAHs	Numerical data not available	NA	Firepower Sweep Test (FST)	Particle phase: Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY; Gas phase: PUF Replacement P226-92; SKC-West, Inc; Fullerton, CA (two inline)	Agilent 6890/5973 Inert, Agilent Technologies, Santa Clara, CA	10.1021/acs.est.8b07019
organic	b[j]fluoranthene	five rings	PAHs	Numerical data not available	NA	Firepower Sweep Test (FST)	Particle phase: Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY; Gas phase: PUF Replacement P226-92; SKC-West, Inc; Fullerton, CA (two inline)	Agilent 6890/5973 Inert, Agilent Technologies, Santa Clara, CA	10.1021/acs.est.8b07019
organic	b[k]fluoranthene	five rings	PAHs	Numerical data not available	NA	Firepower Sweep Test (FST)	Particle phase: Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY; Gas phase: PUF Replacement P226-92; SKC-West, Inc; Fullerton, CA (two inline)	Agilent 6890/5973 Inert, Agilent Technologies, Santa Clara, CA	10.1021/acs.est.8b07019

Inorganic	Ba		metal ions	144.3	ng m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	benz[a]anthracene	four rings	PAHs	0.001 ± 0.000	[mg g-1]	sets of duplicate cooking samples were collected, using the most used 5 types of oil	quartz fiber filter (Pall-Gelman, Ann Arbor, MI, USA)	gas chromatography coupled with mass spectrometry method (GC/MS, trace 2000 GC-MS, Thermo Finnigan, USA)	10.1016/j.envpol.2017.04.033
organic	benz[a]anthracene	four rings	PAHs	Numerical data not available	NA	Firepower Sweep Test (FST)	Particle phase: Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY; Gas phase: PUF Replacement P226-92; SKC-West, Inc; Fullerton, CA (two inline)	Agilent 6890/5973 Inert, Agilent Technologies, Santa Clara, CA	10.1021/acs.est.8b07019

organic	Benz[a]anthracene		PAHs	275.2	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	Benz[a]anthracene-7,12-dione		OPAHs	112.4	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754

organic	benzaldehyde	aromatic aldehydes	carbonyls	Numerical data not available	NA	Firepower Sweep Test (FST)	Dinitrophenylhydrazine cartridge (Sep-Pak DNPH-Silica Cartridge; Waters Corp; Milford, MA) placed inline behind an ozone scrubber (Sep-Pak Ozone Scrubber Potassium Iodide Cartridge; Waters Corp; Milford, MA)	HPLC 1050 series; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019
organic	benzene	aromatics	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	Benzo(a)anthracene		PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	Benzo(a)pyrene		PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592

organic	Benzo(b)fluoranthene		PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	Benzo(c)phenanthrene		PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	Benzo(e)pyrene		PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592

organic	Benzo(g,h,i)perylene	six rings	PAHs	Numerical data not available	NA	Firepower Sweep Test (FST)	Particle phase: Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY; Gas phase: PUF Replacement P226-92; SKC-West, Inc; Fullerton, CA (two inline)	Agilent 6890/5973 Inert, Agilent Technologies, Santa Clara, CA	10.1021/acs.est.8b07019
organic	Benzo(g,h,i)perylene	six rings	PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	Benzo(k)fluoranthene		PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	Benzo[a]anthracene	four rings	PAHs	20,1	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	Benzo[a]anthracene	four rings	PAHs	0,194	ng m-3	General cooking activities	66 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145275

organic	Benzo[a]anthracene	four rings	PAHs	0.02 ± 0.01	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	benzo[a]anthracene	four rings	PAHs	9.1±11.5	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	benzo[a]fluoranthene	five rings	PAHs	4.6±3.2	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Benzo[a]fluorenone		OPAHs	216.1	pg m ⁻³	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	benzo[a]pyrene	six rings	PAHs	0.001 ± 0.000	[mg g ⁻¹]	sets of duplicate cooking samples were collected, using the most used 5 types of oil	quartz fiber filter (Pall-Gelman, Ann Arbor, MI, USA)	gas chromatography coupled with mass spectrometry method (GC/MS, trace 2000 GC-MS, Thermo Finnigan, USA)	10.1016/j.envpol.2017.04.033
organic	Benzo[a]pyrene	five rings	PAHs	10,7	ug g ⁻¹	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090

organic	Benzo[a]pyrene	five rings	PAHs	0,668	ng m-3	General cooking activities	72 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145281
organic	Benzo[a]pyrene	five rings	PAHs	0.009 ± 0.005	[mg g-1]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	benzo[a]pyrene	five rings	PAHs	13.5±8.9	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Benzo[a]pyrene	five rings	PAHs	135	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	benzo[b]fluoranthene	five rings	PAHs	0.002 ± 0.000	[mg g-1]	sets of duplicate cooking samples were collected, using the most used 5 types of oil	quartz fiber filter (Pall-Gelman, Ann Arbor, MI, USA)	gas chromatography coupled with mass spectrometry method (GC/MS, trace 2000 GC-MS, Thermo Finnigan, USA)	10.1016/j.envpol.2017.04.033
organic	Benzo[b]fluoranthene	five rings	PAHs	20,5	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090

organic	Benzo[b]fluoranthene	five rings	PAHs	0.83	ng m-3	General cooking activities	68 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145277
organic	Benzo[b]fluoranthene	five rings	PAHs	0.03 ± 0.02	[mg g-1]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	benzo[b]fluoranthene	five rings	PAHs	18.8±15.3	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Benzo[b+j+k]fluoranthene		PAHs	1404.4	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	benzo[c]phenanthrene	four rings	PAHs	Numerical data not available	NA	Firepower Sweep Test (FST)	Particle phase: Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY; Gas phase: PUF Replacement P226-92; SKC-West, Inc; Fullerton, CA (two inline)	Agilent 6890/5973 Inert, Agilent Technologies, Santa Clara, CA	10.1021/acs.est.8b07019

organic	benzo[e]pyrene	six rings	PAHs	0.001 ± 0.000	[mg g ⁻¹]	sets of duplicate cooking samples were collected, using the most used 5 types of oil	quartz fiber filter (Pall-Gelman, Ann Arbor, MI, USA)	gas chromatography coupled with mass spectrometry method (GC/MS, trace 2000 GC-MS, Thermo Finnigan, USA)	10.1016/j.envpol.2017.04.033
organic	Benzo[e]pyrene	five rings	PAHs	28,5	ug g ⁻¹	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography–mass spectrometry (GC–MS)	10.1016/j.scitotenv.2021.146090
organic	Benzo[e]pyrene	five rings	PAHs	0,665	ng m ⁻³	General cooking activities	71 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145280
organic	benzo[e]pyrene	five rings	PAHs	10.5±6.9	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Benzo[e]pyrene		PAHs	645.6	pg m ⁻³	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography–mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	benzo[g,h,i]perylene	six rings	PAHs	0.002 ± 0.001	[mg g ⁻¹]	sets of duplicate cooking samples were collected, using the most used 5 types of oil	quartz fiber filter (Pall-Gelman, Ann Arbor, MI, USA)	gas chromatography coupled with mass spectrometry method (GC/MS, trace 2000 GC-MS, Thermo Finnigan, USA)	10.1016/j.envpol.2017.04.033

organic	Benzo[g,h,i]perylene	six rings	PAHs	1,05	ng m-3	General cooking activities	76 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145285
organic	benzo[ghi]fluoranthene	five rings	PAHs	Numerical data not available	NA	Firepower Sweep Test (FST)	Particle phase: Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY; Gas phase: PUF Replacement P226-92; SKC-West, Inc; Fullerton, CA (two inline)	Agilent 6890/5973 Inert, Agilent Technologies, Santa Clara, CA	10.1021/acs.est.8b07019
organic	Benzo[ghi]perylene	six rings	PAHs	9,5	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	benzo[ghi]perylene	six rings	PAHs	20.3±17.2	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Benzo[ghi]perylene	six rings	PAHs	832.1	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754

organic	Benzo[h]quinolone	three rings	Azaarenes	41.9	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	Benzo[j]fluoranthene	five rings	PAHs	1,41	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	Benzo[k]fluoranthene	five rings	PAHs	4,75	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	Benzo[k]fluoranthene	five rings	PAHs	0,813	ng m-3	General cooking activities	70 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145279
organic	Benzo[k]fluoranthene	five rings	PAHs	0.02 ± 0.01	[mg g-1]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	benzo[k]fluoranthene	five rings	PAHs	5.5±3.2	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Benzo[thiazole	two rings	Other PAHs	34	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	Benzyl butyl phthalate	phthalate	Plasticisers	0,58	ng m-3	General cooking activities	51 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145260

Inorganic	Bi	inorganic ions	metal ions	0.002 ± 0.001	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	ICP-Mass Spectrometry (ICP-MS, Agilent 7900, United States of America)	10.1016/j.envres.2022.113032
organic	Biphenyl	two rings	PAHs	681.1	pg m ⁻³	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	Bis(2-ethylhexyl) adipate	phthalate	Plasticisers	7,93	ng m ⁻³	General cooking activities	52 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145261
organic	Bis(2-ethylhexyl) phthalate	phthalate	Plasticisers	29,8	ng m ⁻³	General cooking activities	53 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145262
organic	butanone	ketones	carbonyls	Numerical data not available	NA	Firepower Sweep Test (FST)	Dinitrophenylhydrazine cartridge (Sep-Pak DNPH-Silica Cartridge; Waters Corp; Milford, MA) placed inline behind an ozone scrubber (Sep-Pak Ozone Scrubber Potassium Iodide Cartridge; Waters Corp; Milford, MA)	HPLC 1050 series; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019

organic	butyraldehyde	saturated aldehydes	carbonyls	Numerical data not available	NA	Firepower Sweep Test (FST)	Dinitrophenylhydrazine cartridge (Sep-Pak DNPH-Silica Cartridge; Waters Corp; Milford, MA) placed inline behind an ozone scrubber (Sep-Pak Ozone Scrubber Potassium Iodide Cartridge; Waters Corp; Milford, MA)	HPLC 1050 series; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019
organic	c,2-butene	alkenes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	c,2-hexene	alkenes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	c,2-pentene	alkenes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	C ₁ -chrysene	four rings	Alkyl-PAHs	92,2	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	C ₁ -fluoranthenes/C ₁ -pyrenes	four rings	Alkyl-PAHs	673	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	C ₁ -fluorene	three rings	Alkyl-PAHs	115	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	C ₁ -phenantrene	three rings	Alkyl-PAHs	541	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	C ₂ -dibenzothiophene	three rings	Alkyl-PAHs	143	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	C ₂ -fluorene	three rings	Alkyl-PAHs	84,4	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090

organic	C ₂ -naphthalene	two rings	Alkyl-PAHs	2,4	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	C ₂ -phenantrene	three rings	Alkyl-PAHs	304	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	C ₂₃ Tricyclic terpane	Hopanes		33,9	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	C ₂₄ Tricyclic terpane			26	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	C ₃ -dibenzothiophene	three rings	Alkyl-PAHs	190	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	C ₃ -fluorene	three rings	Alkyl-PAHs	0,044	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	C ₃ -naphthalene	two rings	Alkyl-PAHs	3,59	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	C ₃ -phenantrene	three rings	Alkyl-PAHs	117	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	C ₃₀ Tricyclic terpane (22R)			79,4	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	C ₄ -phenantrene	three rings	Alkyl-PAHs	0,03	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
Inorganic	Ca	inorganic ions		Numerical data not available	NA	Firepower Sweep Test (FST)		CS-3000 Ion Chromatography System; Dionex; Waltham, MA	10.1021/acs.est.8b07019
Inorganic	Ca	inorganic ions		1.9 ± 1.0	[mg g-1]	sets of duplicate cooking samples were collected, using the most used 5 types of oil		ICP-OES, Vista-MPX, Varian Co, Palo Alta, CA, USA	10.1016/j.envpol.2017.04.033
Inorganic	Ca	inorganic ions		43.8 ± 39.34	[mg g-1]	General cooking activities	150 mm pure quartz microfibres filters (Florini, France)	Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES, iCAP 6000 series, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032

Inorganic	Ca	inorganic ions		129	ng m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
Inorganic	Ca	inorganic ions		1.6	ng m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
Inorganic	Ca ²⁺	inorganic ions		31.8 ± 15	[mg g-1]	General cooking activities	150 mm pure quartz microfibre filters (Florini, France)	liquid ion chromatography (Dionex™ ICS-900, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032

Inorganic	Ca ²⁺	inorganic ions		0.3	ug m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	Carbazole	three rings	Other PAHs	16,5	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	Carbazole		Azaarenes	87.5	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
Inorganic	Cd	inorganic ions	metal ions	0.002 ± 0.001	[mg g-1]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	ICP-Mass Spectrometry (ICP-MS, Agilent 7900, United States of America)	10.1016/j.envres.2022.113032

Inorganic	Cd	inorganic ions	metal ions	0.001 ± 0.000	[mg g ⁻¹]	sets of duplicate cooking samples were collected, using the most used 5 types of oil	37 mm polypropylene-fiber filter (Pall-Gelman, Ann Arbor, MI, USA)	ICP-MS, Agilent 7500a, Agilent Co, Santa Clara, USA	10.1016/j.envpol.2017.04.033
Inorganic	Cd	inorganic ions	metal ions	0,004	ug m-3	General cooking activities	cellulose/PTFE collection filters fitted in the cyclones of size-selective inlets of diameter 2.5 µm connected to the sampler	ICP-OES (8300 Perkin Elmer, USA)	10.1007/s42452-020-03800-0
Inorganic	Ce	inorganic ions	metal ions	0.03 ± 0.02	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	ICP-Mass Spectrometry (ICP-MS, Agilent 7900, United States of America)	10.1016/j.envres.2022.113032
organic	Cholesterol	Alcohols, sterols and other compounds with OH group		0,979	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography–mass spectrometry (GC–MS)	10.1016/j.scitotenv.2021.146090
organic	cholesterol	Alcohols, sterols and other compounds with OH group		260.8±117.1	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	chrysene	four rings	PAHs	0.001 ± 0.000	[mg g ⁻¹]	sets of duplicate cooking samples were collected, using the most used 5 types of oil	quartz fiber filter (Pall-Gelman, Ann Arbor, MI, USA)	gas chromatography coupled with mass spectrometry method (GC/MS, trace 2000 GC-MS, Thermo Finnigan, USA)	10.1016/j.envpol.2017.04.033
organic	Chrysene	four rings	PAHs	37,9	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography–mass spectrometry (GC–MS)	10.1016/j.scitotenv.2021.146090

organic	Chrysene		PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	Chrysene	four rings	PAHs	0.33	ng m-3	General cooking activities	67 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145276
organic	Chrysene	four rings	PAHs	0.02 ± 0.01	[mg g-1]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	chrysene	four rings	PAHs	11.1±6.6	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	chrysene and triphenylene	four rings	PAHs	Numerical data not available	NA	Firepower Sweep Test (FST)	Particle phase: Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY; Gas phase: PUF Replacement P226-92; SKC-West, Inc; Fullerton, CA (two inline)	Agilent 6890/5973 Inert, Agilent Technologies, Santa Clara, CA	10.1021/acs.est.8b07019

organic	Chrysene and Triphenylene		PAHs	551.1	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
Inorganic	Cl	inorganic ions		Numerical data not available	NA	Firepower Sweep Test (FST)		DX-500 Ion Chromatography System; Dionex; Waltham, MA	10.1021/acs.est.8b07019
Inorganic	Cl	inorganic ions		0.25 ± 0.08	[mg g-1]	sets of duplicate cooking samples were collected, using the most used 5 types of oil		ion chromatograph method (DX-120, Dionex Ltd., Sunnyvale, CA, USA)	10.1016/j.envpol.2017.04.033

Inorganic	Cl	inorganic ions		2882.9	ng m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
Inorganic	Cl ⁻	inorganic ions		12,1	[mg g-1]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	liquid ion chromatography (Dionex™ ICS-900, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032
Inorganic	Cl ⁻	inorganic ions		3.0	ug m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754

Inorganic	Co	inorganic ions	metal ions	0.007 ± 0.006	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	ICP-Mass Spectrometry (ICP-MS, Agilent 7900, United States of America)	10.1016/j.envres.2022.113032
organic	Coronene		PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	coronene	seven rings	PAHs	19.3±16.6	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Coronene		PAHs	675.5	pg m ⁻³	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
Inorganic	Cr	inorganic ions	metal ions	0.064 ± 0.019	[mg g ⁻¹]	sets of duplicate cooking samples were collected, using the	37 mm polypropylene-fiber filter (Pall-Gelman, Ann Arbor, MI, USA)	ICP-MS, Agilent 7500a, Agilent Co, Santa Clara, USA	10.1016/j.envpol.2017.04.033

						most used 5 types of oil			
Inorganic	Cr	inorganic ions	metal ions	0,092	ug m-3	General cooking activities	cellulose/PTFE collection filters fitted in the cyclones of size-selective inlets of diameter 2.5 µm connected to the sampler	ICP-OES (8300 Perkin Elmer, USA)	10.1007/s42452-020-03800-0
Inorganic	Cr	inorganic ions	metal ions	7.6	ng m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	crotonaldehyde	unsaturated aldehydes	carbonyls	Numerical data not available	NA	Firepower Sweep Test (FST)	Dinitrophenylhydrazine cartridge (Sep-Pak DNPH-Silica Cartridge; Waters Corp; Milford, MA) placed inline behind an ozone scrubber (Sep-Pak Ozone Scrubber Potassium Iodide Cartridge; Waters Corp; Milford, MA)	HPLC 1050 series; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019
Inorganic	Cu	inorganic ions	metal ions	0.10 ± 0.06	[mg g-1]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	ICP-Mass Spectrometry (ICP-MS, Agilent 7900, United States of America)	10.1016/j.envres.2022.113032

Inorganic	Cu	inorganic ions	metal ions	0.014 ± 0.006	[mg g ⁻¹]	sets of duplicate cooking samples were collected, using the most used 5 types of oil	37 mm polypropylene-fiber filter (Pall-Gelman, Ann Arbor, MI, USA)	ICP-MS, Agilent 7500a, Agilent Co, Santa Clara, USA	10.1016/j.envpol.2017.04.033
Inorganic	Cu	inorganic ions	metal ions	0,188	ug m ⁻³	General cooking activities	cellulose/PTFE collection filters fitted in the cyclones of size-selective inlets of diameter 2.5 µm connected to the sampler	ICP-OES (8300 Perkin Elmer, USA)	10.1007/s42452-020-03800-0
Inorganic	Cu	inorganic ions	metal ions	28.1	ng m ⁻³	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	cyclohexane	aromatics	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019

organic	Cyclopenta(c,d)pyrene	five rings	PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	cyclopenta[cd]pyrene	five rings	PAHs	Numerical data not available	NA	Firepower Sweep Test (FST)	Particle phase: Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY; Gas phase: PUF Replacement P226-92; SKC-West, Inc; Fullerton, CA (two inline)	Agilent 6890/5973 Inert, Agilent Technologies, Santa Clara, CA	10.1021/acs.est.8b07019
organic	Cyclopenta[cd]pyrene	five rings	PAHs	3,02	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	cyclopentane	aromatics	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019

organic	Decaldehyde (C ₁₀)		Carbonyls		pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	decanoic acid (C ₁₀)	saturated fatty acids		87.2±84.3	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Decanol	Alcohols, sterols and other compounds with OH group		0,651	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	Dehydroabietic acid	carboxylic acids		0,121	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	Di-benzo[a,h]pyrene	six rings	PAH	Numerical data not available	NA	ND	PAHs bounded to PM _{2.5} were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	Di-n-butyl phthalate	phthalate	Plasticisers	56,8	ng m-3	General cooking activities	50 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145259

organic	Di-n-octyl phthalate	phthalate	Plasticisers	2.95	ng m-3	General cooking activities	54 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145263
organic	Dibenz(ah)anthracene	five rings	PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	Dibenz[a,h]anthracene	five rings	PAHs	127.2	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754

organic	Dibenzo (a,l)pyrene	six rings	PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	Dibenzo(a,e)fluoranthene	six rings	PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	Dibenzo(a,e)pyrene	six rings	PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592

organic	Dibenzo(a,i)pyrene	six rings	PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	dibenzo(ah)anthracene elemental carbon	five rings	PAHs	Numerical data not available	NA	Firepower Sweep Test (FST)	Particle phase: Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY; Gas phase: PUF Replacement P226-92; SKC-West, Inc; Fullerton, CA (two inline)	Agilent 6890/5973 Inert, Agilent Technologies, Santa Clara, CA	10.1021/acs.est.8b07019
organic	Dibenzo[a,h]anthracene	five rings	PAHs	1,34	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	Dibenzo[a,h]anthracene	five rings	PAHs	0,122	ng m-3	General cooking activities	75 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145284
organic	dibenzo[a,h]anthracene	five rings	PAHs	7.6±2.4	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Dibenzothiophene	three rings	Other PAHs	0,531	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	Diethyl phthalate	phthalate	Plasticisers	8,87	ng m-3	General cooking activities	48 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145257
organic	Diisobutyl phthalate	phthalate	Plasticisers	76,5	ng m-3	General cooking activities	49 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145258

organic	Diisononyl phthalate	phthalate	Plasticisers	1,31	ng m-3	General cooking activities	55 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145264
organic	Dimethyl phthalate	phthalate	Plasticisers	0,916	ng m-3	General cooking activities	47 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145256
organic	Docosane	alcanes		0.40 ± 0.14	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	docosane (n-C ₂₂)	alcanes		24.8±14.1	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	docosanoic acid (C ₂₂)	carboxylic acids		27.8 ± 12.8	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	docosanoic acid (C ₂₂)	saturated fatty acids		137.4±111.5	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Docosanol	Alcohols, sterols and other compounds with OH group		0,038	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography–mass spectrometry (GC–MS)	10.1016/j.scitotenv.2021.146090
organic	dodecanoic acid (C ₁₂)	carboxylic acids		4.42 ± 4.18	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	dodecanoic acid (C ₁₂)	saturated fatty acids		239.4±266.8	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	dotriacontane (n-C ₃₂)	alkanes		0.46 ± 0.32	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	dotriacontane (n-C ₃₂)	alkanes		11.0±9.2	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Eicosane	alkanes		0.15 ± 0.13	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	eicosanoic acid (C ₂₀)	carboxylic acids		7.9 ± 2.6	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	eicosanoic acid (C ₂₀)	saturated fatty acids		172.8±79.8	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	ethane	alkanes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	ethene	alkenes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019

organic	ethylbenzene	aromatics	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	ethyne	alkynes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
Inorganic	Fe	inorganic ions	metal ions	9,82	ug m-3	General cooking activities	cellulose/PTFE collection filters fitted in the cyclones of size-selective in-lets of diameter 2.5 µm connected to the sampler	ICP-OES (8300 Perkin Elmer, USA)	10.1007/s42452-020-03800-0
Inorganic	Fe	inorganic ions	metal ions	1.1 ± 0.1	[mg g-1]	sets of duplicate cooking samples were collected, using the most used 5 types of oil	37 mm polypropylene-fiber filter (Pall-Gelman, Ann Arbor, MI, USA)	ICP-OES, Vista-MPX, Varian Co, Palo Alta, CA, USA	10.1016/j.envpol.2017.04.033
Inorganic	Fe	inorganic ions	metal ions	7.56 ± 4.16	[mg g-1]	General cooking activities	150 mm pure quartz microfibrers filters (Fiorini, France)	Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES, iCAP 6000 series, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032

Inorganic	Fe	inorganic ions	metal ions	330	ng m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	fluoranthene	four rings	PAHs	0.005 ± 0.001	[mg g-1]	sets of duplicate cooking samples were collected, using the most used 5 types of oil	quartz fiber filter (Pall-Gelman, Ann Arbor, MI, USA)	gas chromatography coupled with mass spectrometry method (GC/MS, trace 2000 GC-MS, Thermo Finnigan, USA)	10.1016/j.envpol.2017.04.033
organic	fluoranthene	four rings	PAHs	Numerical data not available	NA	Firepower Sweep Test (FST)	Particle phase: Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY; Gas phase: PUF Replacement P226-92; SKC-West, Inc; Fullerton, CA (two inline)	Agilent 6890/5973 Inert, Agilent Technologies, Santa Clara, CA	10.1021/acs.est.8b07019
organic	Fluoranthene	four rings	PAHs	53,2	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090

organic	Fluoranthene	four rings	PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	Fluoranthene	four rings	PAHs	0,183	ng m-3	General cooking activities	62 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145271
organic	Fluoranthene	four rings	PAHs	0.02 ± 0.01	[mg g-1]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	fluoranthene	three rings	PAHs	18.5±10.7	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	Fluoranthene	four rings	PAHs	888.7	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	fluorene	three rings	PAHs	0.002 ± 0.000	[mg g-1]	sets of duplicate cooking samples were collected, using the most used 5 types of oil	quartz fiber filter (Pall-Gelman, Ann Arbor, MI, USA)	gas chromatography coupled with mass spectrometry method (GC/MS, trace 2000 GC-MS, Thermo Finnigan, USA)	10.1016/j.envpol.2017.04.033
organic	fluorene	three rings	PAHs	Numerical data not available	NA	Firepower Sweep Test (FST)	Particle phase: Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY; Gas phase: PUF Replacement P226-92; SKC-West, Inc; Fullerton, CA (two inline)	Agilent 6890/5973 Inert, Agilent Technologies, Santa Clara, CA	10.1021/acs.est.8b07019
organic	Fluorene	three rings	PAHs	7,52	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090

organic	Fluorene	three rings	PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	Fluorene	three rings	PAHs	0.0219	ng m-3	General cooking activities	59 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145268
organic	fluorene	three rings	PAHs	8.2±5.4	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Fluorene	three rings	PAHs	734.5	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754

organic	formaldehyde	saturated aldehydes	carbonyls	Numerical data not available	NA	Firepower Sweep Test (FST)	Dinitrophenylhydrazine cartridge (Sep-Pak DNPH-Silica Cartridge; Waters Corp; Milford, MA) placed inline behind an ozone scrubber (Sep-Pak Ozone Scrubber Potassium Iodide Cartridge; Waters Corp; Milford, MA)	HPLC 1050 series; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019
organic	fumaric acid (C ₄ -)	Dicarboxylic acids		17.5±7.2	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	galactosan	carbohydrates	carbohydrates	Numerical data not available	NA	Firepower Sweep Test (FST)	Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY	1260 Infinity; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019
organic	galactose	carbohydrates	carbohydrates	Numerical data not available	NA	Firepower Sweep Test (FST)	Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY	1260 Infinity; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019
organic	glucose	carbohydrates	carbohydrates	Numerical data not available	NA	Firepower Sweep Test (FST)	Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY	1260 Infinity; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019
organic	glutaric acid (C ₅)	Dicarboxylic acids		114.2±70.5	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	glycerol	carbohydrates	carbohydrates	Numerical data not available	NA	Firepower Sweep Test (FST)	Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY	1260 Infinity; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019

organic	Glyoxal		Carbonyls		pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	Heneicosane	alcanes		0.25 ± 0.17	[mg g-1]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	heneicosane (n-C ₂₁)	alcanes		14.8±9.0	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	heneicosanoic acid (C ₂₁)	saturated fatty acids		11.2±8.1	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	hentriacotane (n-C ₃₁)	alcanes		0.60 ± 0.27	[mg g-1]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032

organic	hentriacotane (n-C ₃₁)	alcanes		51.0±41.2	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Heptacosane	alcanes		0.48 ± 0.20	[mg g-1]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	heptacosane (n-C ₂₇)	alcanes		31.5±22.7	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Heptacosanol	Alcohols, sterols and other compounds with OH group		0,008	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	Heptadecane	alcanes		0.06 ± 0.06	[mg g-1]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	heptadecane (n-C ₁₇)	alcanes		10.8±6.5	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	heptadecanoic acid (C ₁₇)	saturated fatty acids		103.7±71.4	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	Heptaldehyde (C ₇)		Carbonyls		pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	heptanoic acid (C ₇)	saturated fatty acids		43.2±61.8	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	hexacosane (n-C ₂₆)	alkanes		0.39 ± 0.10	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	hexacosane (n-C ₂₆)	alkanes		15.8±22.6	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Hexadecane	alkanes		0.07 ± 0.05	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032

organic	hexadecane (n-C ₁₆)	alkanes		2.5±3.8	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Hexadecanoic acid	carboxylic acids		33,6	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	Hexadecanoic acid	carboxylic acids		98 ± 31	[mg g-1]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	hexadecanoic acid (C ₁₆)	saturated fatty acids		6731.3±3279.7	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Hexaldehyde (C ₆)		Carbonyls		pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	hexanoic acid (C ₆)	saturated fatty acids		84.7±45.3	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	hexacosanoic acid (C ₂₆)	saturated fatty acids		8.9±3.9	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	i-butane	alkanes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	i-butene	alkenes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	i-pentane	alkanes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	i-propylbenzene	aromatics	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	icosane (n-C ₂₀)	alkanes		8.7±9.3	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	Indeno (1,2,3-cd)pyrene	aromatics	PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	indeno(1,2,3) cd pyrene	aromatics	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	indeno[1,2,3-c,d]pyrene	six rings	PAHs	0.001 ± 0.001	[mg g ⁻¹]	sets of duplicate cooking samples were collected, using the most used 5 types of oil	quartz fiber filter (Pall-Gelman, Ann Arbor, MI, USA)	gas chromatography coupled with mass spectrometry method (GC/MS, trace 2000 GC-MS, Thermo Finnigan, USA)	10.1016/j.envpol.2017.04.033
organic	Indeno[1,2,3-cd]pyrene	six rings	PAHs	6,45	ug g ⁻¹	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	Indeno[1,2,3-cd]pyrene	six rings	PAHs	1,05	ng m ⁻³	General cooking activities	74 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145283
organic	indeno[1,2,3-cd]pyrene	six rings	PAHs	25.3±25.6	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	Indeno[1,2,3-cd]pyrene	six rings	PAHs	972.4	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	iso-C ₂₉	alkanes		1.7±1.7	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	iso-C ₃₀	alkanes		3.6±3.2	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	iso-C ₃₁	alkanes		13.7±10.5	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	isophthalic acid (1,3)	Dicarboxylic acids		32.1±10.6	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	isovaleraldehyde	ketones	carbonyls	Numerical data not available	NA	Firepower Sweep Test (FST)	Dinitrophenylhydrazine cartridge (Sep-Pak DNPH-Silica Cartridge; Waters Corp; Milford, MA) placed inline behind an ozone scrubber (Sep-Pak Ozone Scrubber Potassium Iodide Cartridge; Waters Corp; Milford, MA)	HPLC 1050 series; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019
Inorganic	K	inorganic ions		Numerical data not available	NA	Firepower Sweep Test (FST)		CS-3000 Ion Chromatography System; Dionex; Waltham, MA	10.1021/acs.est.8b07019
Inorganic	K	inorganic ions		1.1 ± 0.0	[mg g ⁻¹]	sets of duplicate cooking samples were collected, using the most used 5 types of oil		ICP-OES, Vista-MPX, Varian Co, Palo Alto, CA, USA	10.1016/j.envpol.2017.04.033
Inorganic	K	inorganic ions		17	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES, iCAP 6000 series, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032

Inorganic	K	inorganic ions		467.1	ng m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
Inorganic	K ⁺	inorganic ions		3.1 ± 0.8	[mg g-1]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	liquid ion chromatography (Dionex™ ICS-900, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032
Inorganic	La	inorganic ions	metal ions	0.016 ± 0.008	[mg g-1]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	ICP-Mass Spectrometry (ICP-MS, Agilent 7900, United States of America)	10.1016/j.envres.2022.113032
organic	levoglucosan	carbohydrates	carbohydrates	Numerical data not available	NA	Firepower Sweep Test (FST)	Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY	1260 Infinity; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019
organic	Levoglucosan		carbohydrates	14.2 ± 20.2	[mg g-1]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	levoglucosan		carbohydrates	225.9±115.8	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	linoleic acid (C _{18:2})	Unsaturated fatty acids		6567.0±5331.2	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	linoleic acid (C _{18:2})	Unsaturated fatty acids		37.1±17.2	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	m,p-xylene	aromatics	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	maleic acid (C ₄₌)	Dicarboxylic acids		11.9±9.6	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	mannitol	carbohydrates	carbohydrates	Numerical data not available	NA	Firepower Sweep Test (FST)	Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY	1260 Infinity; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019
organic	mannosan	carbohydrates	carbohydrates	Numerical data not available	NA	Firepower Sweep Test (FST)	Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY	1260 Infinity; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019
organic	mannose	carbohydrates	carbohydrates	Numerical data not available	NA	Firepower Sweep Test (FST)	Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY	1260 Infinity; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019
organic	methylcyclohexane	aromatics	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019

organic	Methylglyoxal		Carbonyls		pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
Inorganic	Mg	inorganic ions		0.76 ± 0.30	[mg g-1]	sets of duplicate cooking samples were collected, using the most used 5 types of oil		ICP-OES, Vista-MPX, Varian Co, Palo Alto, CA, USA	10.1016/j.envpol.2017.04.033
Inorganic	Mg	inorganic ions		3.71 ± 1.20	[mg g-1]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES, iCAP 6000 series, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032

Inorganic	Mg	inorganic ions		156.8	ng m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
Inorganic	Mg ²⁺	inorganic ions		0.9 ± 0.2	[mg g-1]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	liquid ion chromatography (Dionex™ ICS-900, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032
Inorganic	Mn	inorganic ions	metal ions	0.013 ± 0.005	[mg g-1]	sets of duplicate cooking samples were collected, using the most used 5 types of oil	37 mm polypropylene-fiber filter (Pall-Gelman, Ann Arbor, MI, USA)	ICP-MS, Agilent 7500a, Agilent Co, Santa Clara, USA	10.1016/j.envpol.2017.04.033
Inorganic	Mn	inorganic ions	metal ions	0.13 ± 0.06	[mg g-1]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES, iCAP 6000 series, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032

Inorganic	Mn	inorganic ions	metal ions	21.1	ng m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	monoolein (18:1)	ester		659.7±303.3	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	monopalmitin (16:0)	ester		595.0±318.1	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	monostearin (18:0)	ester		298.3±436.6	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	n-butane	alkanes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019

organic	n-decane	alkanes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	n-heptane	alkanes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	n-hexane	alkanes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	n-propylbenzene	aromatics	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
Inorganic	Na	inorganic ions		Numerical data not available	NA	Firepower Sweep Test (FST)		CS-3000 Ion Chromatography System; Dionex; Waltham, MA	10.1021/acs.est.8b07019
Inorganic	Na	inorganic ions		2.0 ± 1.0	[mg g ⁻¹]	sets of duplicate cooking samples were collected, using the most used 5 types of oil		ICP-OES, Vista-MPX, Varian Co, Palo Alta, CA, USA	10.1016/j.envpol.2017.04.033
Inorganic	Na	inorganic ions		13.5 ± 4.3	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES, iCAP 6000 series, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032

Inorganic	Na	inorganic ions		1046.7	ng m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
Inorganic	Na ⁺	inorganic ions		2.8 ± 1.2	[mg g-1]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	liquid ion chromatography (Dionex™ ICS-900, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032
Inorganic	Na ⁺	inorganic ions		1.1	ug m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754

organic	Naphthacene-5,12-dione		OPAHs	105.3	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	naphthalene	two rings	PAHs	Numerical data not available	NA	Firepower Sweep Test (FST)	Particle phase: Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY; Gas phase: PUF Replacement P226-92; SKC-West, Inc; Fullerton, CA (two inline)	Agilent 6890/5973 Inert, Agilent Technologies, Santa Clara, CA	10.1021/acs.est.8b07019
organic	Naphthalene	two rings	PAHs	767	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	Naphthalene	two rings	PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592

organic	Naphthalene	two rings	PAHs	1.93	ng m-3	General cooking activities	56 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145265
organic	Naphthalene	two rings	PAHs	2983.5	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	naphthalene	two rings	PAHs	18.4±15.5	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
Inorganic	Nb	inorganic ions	metal ions	0.009 ± 0.004	[mg g-1]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	ICP-Mass Spectrometry (ICP-MS, Agilent 7900, United States of America)	10.1016/j.envres.2022.113032
Inorganic	Ni	inorganic ions	metal ions	0.006 ± 0.002	[mg g-1]	sets of duplicate cooking samples were collected, using the most used 5 types of oil	37 mm polypropylene-fiber filter (Pall-Gelman, Ann Arbor, MI, USA)	ICP-MS, Agilent 7500a, Agilent Co, Santa Clara, USA	10.1016/j.envpol.2017.04.033
Inorganic	Ni	inorganic ions	metal ions	0.30 ± 0.20	[mg g-1]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES, iCAP 6000 series, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032

Inorganic	Ni	inorganic ions	metal ions	6.6	ng m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
Inorganic	Nitrate (NO ₃ ⁻)	inorganic ions		Numerical data not available	NA	Firepower Sweep Test (FST)		DX-500 Ion Chromatography System; Dionex; Waltham, MA	10.1021/acs.est.8b07019
Inorganic	Nitrate (NO ₃ ⁻)	inorganic ions		Numerical data not available	NA	Firepower Sweep Test (FST)		DX-500 Ion Chromatography System; Dionex; Waltham, MA	10.1021/acs.est.8b07019
Inorganic	Nitrate (NO ₃ ⁻)	inorganic ions		1.6 ± 0.0	[mg g ⁻¹]	sets of duplicate cooking samples were collected, using the most used 5 types of oil		ion chromatograph method (DX-120, Dionex Ltd., Sunnyvale, CA, USA)	10.1016/j.envpol.2017.04.033
Inorganic	Nitrate (NO ₃ ⁻)	inorganic ions		22.2 ± 1.8	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	liquid ion chromatography (Dionex™ ICS-900, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032

Inorganic	Nitrate (NO ₃ ⁻)	inorganic ions		23.9	ug m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	nonacosane (n-C ₂₉)	alcanes		0.89 ± 0.39	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	nonacosane (n-C ₂₉)	alcanes		26.7±19.4	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	nonadecane (n-C ₁₉)	alcanes		0.07 ± 0.04	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	nonadecane (n-C ₁₉)	alcanes		8.2±8.2	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	nonadecanoic acid (C ₁₉)	saturated fatty acids		35.1±31.3	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Nonaldehyde (C9)		Carbonyls		pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	nonanoic acid (C ₉)	saturated fatty acids		122.9±100.6	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	o-tolualdehyde	aromatic aldehydes		Numerical data not available	NA	Firepower Sweep Test (FST)	Dinitrophenylhydrazine cartridge (Sep-Pak DNPH-Silica Cartridge; Waters Corp; Milford, MA) placed inline behind an ozone scrubber (Sep-Pak Ozone Scrubber Potassium Iodide Cartridge; Waters Corp; Milford, MA)	HPLC 1050 series; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019

organic	Octacosane	alkanes		0.34 ± 0.15	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	octacosane (n-C ₂₈)	alkanes		9.1±12.5	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Octacosanol	Alcohols, sterols and other compounds with OH group		0,151	ug g ⁻¹	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography–mass spectrometry (GC–MS)	10.1016/j.scitotenv.2021.146090
organic	Octadecane	alkanes		0.06 ± 0.09	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	octadecane (n-C ₁₈)	alkanes		4.6±5.1	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Octadecanoic acid	carboxylic acids		28,5	ug g ⁻¹	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography–mass spectrometry (GC–MS)	10.1016/j.scitotenv.2021.146090
organic	Octadecanoic acid	carboxylic acids		109 ± 48	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	octadecanoic acid (C ₁₈)	saturated fatty acids		3386.2±2117.8	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	Octaldehyde (C ₈)		Carbonyls		pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	octanoic acid (C ₈)	saturated fatty acids		69.6±105.5	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Oleic acid (C _{18:1})	carboxylic acids		11,5	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	oleic acid (C _{18:1})	Unsaturated fatty acids		9820.7±6106.8	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
Inorganic	P	inorganic ions		0.16 ± 0.02	[mg g-1]	sets of duplicate cooking samples were collected, using the most used 5 types of oil		ICP-OES, Vista-MPX, Varian Co, Palo Alta, CA, USA	10.1016/j.envpol.2017.04.033
Inorganic	P	inorganic ions		0.83 ± 0.16	[mg g-1]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES, iCAP 6000 series, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032

organic	<i>p</i> -Terphenyl	three rings	PAHs	2,95	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography–mass spectrometry (GC–MS)	10.1016/j.scitotenv.2021.146090
organic	Palmitoleic acid (C _{16:1})	carboxylic acids		6,89	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography–mass spectrometry (GC–MS)	10.1016/j.scitotenv.2021.146090
Inorganic	Pb	inorganic ions	metal ions	0.016 ± 0.005	[mg g-1]	sets of duplicate cooking samples were collected, using the most used 5 types of oil	37 mm polypropylene-fiber filter (Pall-Gelman, Ann Arbor, MI, USA)	ICP-MS, Agilent 7500a, Agilent Co, Santa Clara, USA	10.1016/j.envpol.2017.04.033
Inorganic	Pb	inorganic ions	metal ions	0,052	ug m-3	General cooking activities	cellulose/PTFE collection filters fitted in the cyclones of size-selective inlets of diameter 2.5 µm connected to the sampler	ICP-OES (8300 Perkin Elmer, USA)	10.1007/s42452-020-03800-0
Inorganic	Pb	inorganic ions		0.55 ± 0.11	[mg g-1]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES, iCAP 6000 series, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032
Inorganic	Pb	inorganic ions	metal ions	38.6	ng m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography–mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754

organic	Pentacosane	alcanes		0.55 ± 0.29	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	pentacosane (n-C ₂₅)	alcanes		22.0±12.7	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	pentacosanoic acid (C ₂₅)	saturated fatty acids		8.1±5.9	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Pentacosanol	Alcohols, sterols and other compounds with OH group		0,093	ug g ⁻¹	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography–mass spectrometry (GC–MS)	10.1016/j.scitotenv.2021.146090
organic	pentadecane (n-C ₁₅)	alcanes		2.6±2.2	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	pentadecanoic acid (C ₁₅)	saturated fatty acids		84.0±49.3	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Pentadecanol	Alcohols, sterols and other compounds with OH group		0,033	ug g ⁻¹	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography–mass spectrometry (GC–MS)	10.1016/j.scitotenv.2021.146090
organic	perylene	five rings	PAHs	Numerical data not available	NA	Firepower Sweep Test (FST)	Particle phase: Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY; Gas phase: PUF Replacement P226-92; SKC-West, Inc; Fullerton, CA (two inline)	Agilent 6890/5973 Inert, Agilent Technologies, Santa Clara, CA	10.1021/acs.est.8b07019
organic	Perylene	five rings	PAHs	0,132	ug g ⁻¹	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography–mass spectrometry (GC–MS)	10.1016/j.scitotenv.2021.146090

organic	Perylene	five rings	PAHs	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	Perylene	five rings	PAHs	0,314	ng m-3	General cooking activities	73 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145282
organic	perylene	five rings	PAHs	2.1±2.2	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Perylene	five rings	PAHs	42.1	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754

organic	phenanthrene	three rings	PAHs	0.006 ± 0.001	[mg g ⁻¹]	sets of duplicate cooking samples were collected, using the most used 5 types of oil	quartz fiber filter (Pall-Gelman, Ann Arbor, MI, USA)	gas chromatography coupled with mass spectrometry method (GC/MS, trace 2000 GC-MS, Thermo Finnigan, USA)	10.1016/j.envpol.2017.04.033
organic	phenanthrene	three rings	PAHs	Numerical data not available	NA	Firepower Sweep Test (FST)	Particle phase: Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY; Gas phase: PUF Replacement P226-92; SKC-West, Inc; Fullerton, CA (two inline)	Agilent 6890/5973 Inert, Agilent Technologies, Santa Clara, CA	10.1021/acs.est.8b07019
organic	Phenanthrene	three rings	PAHs	63.1	ug g ⁻¹	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	Phenanthrene	three rings	PAH	Numerical data not available	NA	ND	PAHs bounded to PM _{2.5} were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	Phenanthrene	three rings	PAHs	0.0415	ng m ⁻³	General cooking activities	60 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145269
organic	Phenanthrene	three rings	PAHs	0.003 ± 0.003	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032

organic	phenanthrene	three rings	PAHs	16.0±6.0	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Phenanthrene	three rings	PAHs	2150.5	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	phthalic acid (1,2)	Dicarboxylic acids		19.0±19.8	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	pimelic acid (C7)	Dicarboxylic acids		52.4±47.6	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	propane	alkanes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	propene	alkenes		Numerical data not available	NA	Firepower Sweep Test (FST)			10.1021/acs.est.8b07019

organic	pyrene	four rings	PAHs	0.005 ± 0.002	[mg g ⁻¹]	sets of duplicate cooking samples were collected, using the most used 5 types of oil	quartz fiber filter (Pall-Gelman, Ann Arbor, MI, USA)	gas chromatography coupled with mass spectrometry method (GC/MS, trace 2000 GC-MS, Thermo Finnigan, USA)	10.1016/j.envpol.2017.04.033
organic	pyrene	four rings	PAHs	Numerical data not available	NA	Firepower Sweep Test (FST)	Particle phase: Tissuquartz #2500QAT-UP; Pall Corporation; Port Washington, NY; Gas phase: PUF Replacement P226-92; SKC-West, Inc; Fullerton, CA (two inline)	Agilent 6890/5973 Inert, Agilent Technologies, Santa Clara, CA	10.1021/acs.est.8b07019
organic	Pyrene	four rings	PAHs	40	ug g ⁻¹	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	Pyrene	four rings	PAH	Numerical data not available	NA	ND	PAHs bounded to PM _{2.5} were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	Pyrene	four rings	PAHs	0,188	ng m ⁻³	General cooking activities	63 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145272
organic	Pyrene	four rings	PAHs	0.02 ± 0.01	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032

organic	pyrene	four rings	PAHs	31.5±24.1	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Pyrene	four rings	PAHs	1917.8	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	Quinoline		Azaarenes	97.9	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754

Inorganic	Rb	inorganic ions		0.007 ± 0.003	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	ICP-Mass Spectrometry (ICP-MS, Agilent 7900, United States of America)	10.1016/j.envres.2022.113032
organic	Retene	three rings	PAHs	1,56	ug g ⁻¹	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	Retene	three rings	PAH	Numerical data not available	NA	ND	PAHs bounded to PM2.5 were collected on unloaded quartz fiber filters (QFFs, Tissuquartz 2500QAT-UP, PALL Corporation, USA) using a cascade impactor (PEM, SKC, PA, USA) connected to an active pump (SKC, PA, USA).	deuterated standards prior to detection. PAHs was analyzed using a gas chromatograph coupled with a mass spectrometer (GC-MS, Agilent GC 6890, MS 5973, USA) with a HP-5MS capillary column in the electron ionization (EI) mode.	10.1016/j.envpol.2020.115592
organic	Retene	three rings	PAHs	0,136	ng m ⁻³	General cooking activities	65 mm diameter quartz filters	GC-MS from Agilent (Santa Clara, CA, USA) with single quadrupole	10.3390/ijerph17145274
organic	retene	three rings	PAHs	13.4±6.3	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	Retene	three rings	PAHs	2210.6	pg m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
Inorganic	S	inorganic ions		41.8 ± 19.5	[mg g-1]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES, iCAP 6000 series, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032
Inorganic	S	inorganic ions		3459.0	ng m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754

Inorganic	Sb	inorganic ions	metal ions	0.02 ± 0.01	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	ICP-Mass Spectrometry (ICP-MS, Agilent 7900, United States of America)	10.1016/j.envres.2022.113032
Inorganic	Sb	inorganic ions	metal ions	48.7	ng m ⁻³	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	sebacic acid (C ₁₀)	Dicarboxylic acids		65.7±56.3	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Sinapinaldehyde	Ketones and aldehydes		0.112	ug g ⁻¹	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090

Inorganic	Sinapinaldehyde	Ketones and aldehydes		279.9	ng m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	squalane	alcanes		10.4±11.2	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
Inorganic	Sr	inorganic ions	metal ions	0.11 ± 0.07	[mg g-1]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES, iCAP 6000 series, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032
organic	Stigmasterol	Alcohols, sterols and other compounds with OH group		0,206	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	stigmasterol	lipid		279.8±181.1	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	styrene	aromatics	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019

organic	suberic acid (C ₈)	Dicarboxylic acids		232.7±219.9	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	succinic acid (C ₄)	Dicarboxylic acids		285.5±212.2	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
Inorganic	sulphate (SO ₄ ²⁻)	inorganic ions		Numerical data not available	NA	Firepower Sweep Test (FST)		DX-500 Ion Chromatography System; Dionex; Waltham, MA	10.1021/acs.est.8b07019
Inorganic	sulphate (SO ₄ ²⁻)	inorganic ions		1.8 ± 1.0	[mg g ⁻¹]	sets of duplicate cooking samples were collected, using the most used 5 types of oil		ion chromatograph method (DX-120, Dionex Ltd., Sunnyvale, CA, USA)	10.1016/j.envpol.2017.04.033
Inorganic	sulphate (SO ₄ ²⁻)	inorganic ions		109 ± 58	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	liquid ion chromatography (Dionex™ ICS-900, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032
Inorganic	sulphate (SO ₄ ²⁻)	inorganic ions		10.0	ug m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754

organic	t,2-butene	alkenes	VOCs	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019
organic	t,2-pentene	alkenes		Numerical data not available	NA	Firepower Sweep Test (FST)			10.1021/acs.est.8b07019
organic	terephthalic acid (1,4)	Dicarboxylic acids		16.7±13.7	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Tetracosane	alkanes		0.72 ± 0.13	[mg g-1]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	tetracosane (n-C ₂₄)	alkanes		30.6±13.1	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Tetracosanoic acid	carboxylic acids		4.9 ± 4.2	[mg g-1]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	tetracosanoic acid (C ₂₄)	carboxylic acids		5.65 ± 3.87	[mg g-1]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	tetracosanoic acid (C ₂₄)	saturated fatty acids		62.5±46.6	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	tetradecanoic acid (C ₁₄)	carboxylic acids		8,95	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090

organic	tetradecanoic acid (C ₁₄)	saturated fatty acids		770.3±683.6	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	tetratriactane (n-C ₃₄)	alkanes		5.2±4.0	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
Inorganic	Ti	inorganic ions	metal ions	1.05 ± 0.60	[mg g-1]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES, iCAP 6000 series, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032
Inorganic	Ti	inorganic ions	metal ions	8.0	ng m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	toluene	aromatics	VOCs ultrafine particles	Numerical data not available	NA	Firepower Sweep Test (FST)	Vacuum canister fitted with a critical orifice (CS1200ES Sampler; ENTECH Instruments, Inc.; Simi Valley, CA)	Gas chromatograph mass spectrometer (GC-17A); Shimadzu; Kyoto, Japan	10.1021/acs.est.8b07019

organic	triacontane (n-C ₃₀)	alkanes		0.26 ± 0.09	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	triacontane (n-C ₃₀)	alkanes		10.3±8.0	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Triacantanol	Alcohols, sterols and other compounds with OH group		0,062	ug g ⁻¹	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography–mass spectrometry (GC–MS)	10.1016/j.scitotenv.2021.146090
organic	tricosane (n-C ₂₃)	alkanes		0.65 ± 0.40	[mg g ⁻¹]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	high-resolution gas chromatography coupled to a high-resolution mass spectrometer (HRGC/HRMS).	10.1016/j.envres.2022.113032
organic	tricosane (n-C ₂₃)	alkanes		28.5±21.5	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	tricosanoic acid (C ₂₃)	saturated fatty acids		11.0±5.5	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	Tricosanol	Alcohols, sterols and other compounds with OH group		0,387	ug g ⁻¹	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography–mass spectrometry (GC–MS)	10.1016/j.scitotenv.2021.146090
organic	tridecanoic acid (C ₁₃)	saturated fatty acids		26.2±13.7	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
organic	tritriactotane (n-C ₃₃)	alkanes		17.4±10.8	ng m ⁻³	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758

organic	undecanoic acid (C ₁₁)	saturated fatty acids		61.9±50.9	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758
Inorganic	V	inorganic ions	metal ions	0.24 ± 0.17	[mg g-1]	General cooking activities	150 mm pure quartz microfibre filters (Fiorini, France)	ICP-Mass Spectrometry (ICP-MS, Agilent 7900, United States of America)	10.1016/j.envres.2022.113032
Inorganic	V	inorganic ions	metal ions	10.3	ng m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	valeraldehyde	saturated aldehydes		Numerical data not available	NA	Firepower Sweep Test (FST)		HPLC 1050 series; Agilent Technologies; Santa Clara, CA	10.1021/acs.est.8b07019
Inorganic	Zn	inorganic ions	metal ions	0.14 ± 0.06	[mg g-1]	sets of duplicate cooking samples were collected, using the most used 5 types of oil	37 mm polypropylene-fiber filter (Pall-Gelman, Ann Arbor, MI, USA)	ICP-MS, Agilent 7500a, Agilent Co, Santa Clara, USA	10.1016/j.envpol.2017.04.033
Inorganic	Zn	inorganic ions	metal ions	10,296	ug m-3	General cooking activities	cellulose/PTFE collection filters fitted in the cyclones of size-selective inlets of diameter 2.5 µm connected to the sampler	ICP-OES (8300 Perkin Elmer, USA)	10.1007/s42452-020-03800-0

Inorganic	Zn	inorganic ions	metal ions	1.05 ± 0.57	[mg g-1]	General cooking activities	150 mm pure quartz microfibres filters (Fiorini, France)	Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES, iCAP 6000 series, Thermo Scientific, United Kingdom)	10.1016/j.envres.2022.113032
Inorganic	Zn	inorganic ions	metal ions	132.8	ng m-3	Hong Kong based restaurants and two simulated cooking experiments	Teflon-membrane (47 mm), Nuclepore polycarbonate membrane and quartz-fiber filter (47 mm)	The inorganic elements and water soluble ions were analysed by the Energy Dispersive X-ray Fluorescence Analyser (ED-XRF) and ion chromatography system, respectively. The polycyclic aromatic compounds (PACs) in the filters were extracted with organic solvents and determined by gas chromatography-mass spectrometry (GC-MS)	10.1016/j.envpol.2021.117754
organic	ααα (20R)-Cholestane (C ₂₇)	steranes		87,3	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	ααα (20S)-Cholestane (C ₂₇)	steranes		65,4	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	αββ (20R)-Cholestane (C ₂₇)	steranes		75	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	αββ (20S)-Cholestane (C ₂₇)	steranes		68,9	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	β-Sitosterol	Alcohols, sterols and other compounds with OH group		0,367	ug g-1	poultry cooking and grilling	47 mm diameter quartz fibre filters	chromatography-mass spectrometry (GC-MS)	10.1016/j.scitotenv.2021.146090
organic	β-sitosterol	lipid		803.2±398.1	ng m-3	seven different cuisine types	quartz-fiber filters	solvent extraction-gas chromatography mass spectrometry (SE-GC/MS) method	10.1016/j.chemosphere.2020.127758