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Correction: Confocal Raman microspectroscopy for skin characterization: a comparative study between human skin and pig skin

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Correction for 'Confocal Raman microspectroscopy for skin characterization: a comparative study between human skin and pig skin' by Sana Tfaili *et al.*, *Analyst*, 2012, **137**, 3673–3682, DOI: 10.1039/C2AN16292J.

The authors regret that the assignment of the Raman vibration at 1047 cm⁻¹ in Table 2 is incorrect in the original article. The correct version of Table 2 is shown below.

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

Table 2 Raman band assignment^a

SC surface		SC/epidermis		Epidermis		Assignment
Transkin	Pig skin	Transkin	Pig skin	Transkin	Pig skin	
	427					Cholesterol ¹²
459	457	457		457		Polysaccharides ¹³
	486	486		486		Glycogen ¹⁴
	519	519				Phospholipids ¹³
	529	529		527		ν (S–S) in keratin, ν (S–S) disulfide in proteins, ^{14,15} ceramides, ¹⁶ ν (S–S) <i>gauche-gauche-trans</i> (amino acid cysteine) ¹⁷
546	545	541		543		Glucose–saccharide band, cholesterol ¹⁷
	564	564		564		Polysaccharides ¹³
		582		582		δ OH out of plane ¹⁸
		597		597		Phospholipids ¹⁷
		605	607	605		Glycerol ¹⁷
				619		γ _t C–C (protein) ¹⁹
624	622	624	622	624		γ _t C–C mode of phenylalanine (proteins) ^{14,15,20}
	646	646		646		γ _t C–C mode of tyrosine, cysteine ¹²
	667	667		667		T, G (DNA/RNA) ²⁰
	701	701		701		ν (C–S) <i>trans</i> (amino acid methionine), ²¹ cholesterol, cholesterol ester ¹⁷
	724	722		724		DNA ²²
	745	747	749	749		T (ring breathing mode of DNA/RNA bases), ¹⁹ DNA, ²² symmetric breathing of tryptophan (protein assignment) ^{12,14,15,23}
	803	803		803		Uracil-based ring breathing mode ²⁴
829	828	828	826	828	827	Out-of-plane ring breathing, tyrosine (1 st peak of the Fermi doublet), ^{14,15} phosphodiester, ²⁵ ν O–P–O DNA/RNA ²⁰
	854	854		854		Tyrosine (1 st peak of the Fermi doublet) and polysaccharide ²⁶
	897	898		896	898	Saccharide band, ¹⁷ monosaccharides (β -glucose), (C–O–C) skeletal mode, ²⁵ phosphodiester, deoxyribose ²¹
		930				ν (C–C), probably in amino acids (protein band) ²⁷
936	937	937		936	937	ν (C–C), α -helix (proteins), amino acid side chain vibrations ¹²
	987	987		983		ν (C–C), β -sheet (proteins) ²⁰
	1003	1003		1003		Phenylalanine ¹²

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Table 2 (Contd.)

SC surface		SC/epidermis		Epidermis		Assignment
Transkin	Pig skin	Transkin	Pig skin	Transkin	Pig skin	
	1031		1031		1031	O-CH ₃ ν of methoxy groups ¹⁸ δ (C-H), phenylalanine (protein assignment) Phenylalanine, ν (C-N) of proteins ²³
1047						ν PO ₄ ³⁻ , ¹² C-C and C-O stretching in HA
	1062	1062	1059		1062	ν (C-C) skeletal, lipids ²⁸
	1082		1082		1082	ν (C-C) or ν (C-O), phospholipids (lipid assignment), ²³ phosphate vibrations (phosphodiester groups in nucleic acids), ²⁹ nucleic acids ³⁰
			1095		1095	Lipid, ³¹ ν (C-N), ¹² phosphodioxy group in nucleic acids ²⁰
	1128		1128	1127	1129	ν (C-N), ³² ν (C-C) skeletal <i>trans</i> conformation, ³³ phospholipid ³⁴
	1155		1155		1155	ν (C-C) & (C-N) of proteins (also carotenoids), ^{14,15} glycogen ³⁰
1173	1175		1175	1173	1175	Cytosine, guanine ²⁵
	1207	1206	1205		1205	ν (C-C ₆ H ₅), tryptophan, phenylalanine (protein assignment) ^{23,26}
			1244		1244	One of the two most distinct peaks for RNA (with 813 cm ⁻¹), ¹⁹ (C, T) ¹⁴
	1255		1255		1256	Lipids ³⁰ (doublet with the 1297 peak), amide III, adenine, cytosine ¹⁴
	1271	1268	1271		1271	Amide III, ¹⁴ C-H (lipid) ²⁹
					1294	Cytosine ²⁵
	1297	1299	1301		1302	δ CH ₂ lipid, ¹³ adenine, cytosine ¹⁴
					1309	γ_t CH ₃ /CH ₂ ²¹
	1339	1336	1339	1338	1339	Nucleic acid mode ^{6,35}
	1389		1387		1389	CH ₃ band, ¹⁴ δ CH ₃ symmetric (lipid) ²⁶
			1393		1393	CH rocking ²⁰
	1416					ν (C=O) of COO ⁻ (amino acids aspartic & glutamic acid) ²¹
1442	1441					Cholesterol, ³² fatty acids, ^{30,37} δ CH ₂ , δ CH ₃ ³⁸
		1449	1451	1449	1451	δ CH ₂ , δ CH ₃ , ^{12,29,38} C-H vibration (proteins), C-H vibration (lipids) ²⁰
1526		1526		1526		-C=C- carotenoid ¹⁴
	1545		1545		1546	Tryptophan ^{14,15}
	1561				1562	Tryptophan ²⁷
	1588		1585		1586	δ C=C mode of phenylalanine, ^{12,27} ν (C=C) olefinic (protein assignment) ²⁶
	1604		1604		1604	δ C=C in-plane mode of phenylalanine & tyrosine, ^{14,15} cytosine (NH ₂) ²⁵
	1613		1613		1613	Tyrosine ¹²
1652	1653		1653		1653	ν (C=O) amide I, ²³ amide I α -helix, ³⁹ lipid ν (C=C), ^{14,29} carbonyl ν (C=O) ²⁴ and elastin (protein assignment) ^{23,26}
	1671		1671		1671	Amide I band (ν C=O coupled to a δ N-H), ^{17,40} ceramides ¹⁷
			1724		1724	
	1742		1742		1742	ν (C=O)OH (amino acids aspartic & glutamic acid) ²¹
	2724		2727		2724	ν CH ⁴¹
	2724		2727		2724	ν CH ₂ symmetric of lipids, ν CH ₃ symmetric of lipids ⁴²
	2849		2850		2849	ν CH ₂ asymmetric of lipids and proteins ⁴²
	2880		2880		2880	ν CH ₂ asymmetric of lipids and proteins ⁴²
	2889		2889		2889	ν CH ₂ asymmetric ⁴²
	2934		2934		2934	ν CH ⁴³

^a γ_t : twisting (torsion), δ : bending or deformation, ν : stretching, ρ : rocking, A: adenine, C: cytosine, G: guanine, T: thymine.