Estimation of optical pathlength through tissue from direct time of flight measurement

DOI: 10.1088/0031-9155/33/12/008
Physics in Medicine and Biology, 1988, 33, 1433-42.

#	Paper	IF	Citations
1804	A gradient-based optimisation scheme for optical tomography. **1998**, 2, 213		
1803	A gradient-based optimisation scheme for optical tomography. **1998**, 2, 213		
1802	A gradient-based optimisation scheme for optical tomography. **1998**, 2, 213		
1801	A gradient-based optimisation scheme for optical tomography. **1998**, 2, 213		
1800	A gradient-based optimisation scheme for optical tomography. **1998**, 2, 213		
1799	A gradient-based optimisation scheme for optical tomography. **1998**, 2, 213		
1798	A gradient-based optimisation scheme for optical tomography. **1998**, 2, 213		
1797	Non-invasive optical mapping of the piglet brain in real time. **1999**, 4, 308		
1796	Near-infrared spectral imaging of the female breast for quantitative oximetry in optical mammography. **2009**, 48, D225		
1795	A gradient-based optimisation scheme for optical tomography. **1998**, 2, 213		
1794	Cotside measurement of cerebral blood flow in ill newborn infants by near infrared spectroscopy. **1988**, 2, 770-1		282
1793	Magnetic resonance and near infrared spectroscopy for investigation of perinatal hypoxic-ischaemic brain injury. **1989**, 64, 953-63		140
1792	Report on the photodynamic therapy dosimetry meeting: April 1989. **1989**, 4, 211-220		3
1791	Time-resolved reflectance spectroscopy in turbid tissues. **1989**, 36, 1155-61		90
1790	Time resolved propagation of ultrashort laser pulses within turbid tissues. **1989**, 28, 2223-9		95
1789	Time resolved reflectance and transmittance for the non-invasive measurement of tissue optical properties. **1989**, 28, 2331-6		1368
1788	Similarity relations for the interaction parameters in radiation transport. **1989**, 28, 5243-9		43

1787	Quantitation of cerebral blood volume in human infants by near-infrared spectroscopy. **1990**, 68, 1086-91		407
1786	Optical path length of 754nm and 816nm light emitted into the head of infants.		
1785	The effect of optode positioning on optical pathlength in near infrared spectroscopy of brain. **1990**, 277, 79-84		40
1784	Effects of indomethacin on cerebral haemodynamics in very preterm infants. **1990**, 335, 1491-5		247
1783	.		
1782	Time-resolved transillumination for medical diagnostics. **1990**, 15, 1179-81		200
1781	. **1990**, 26, 2186-2199		262
1780	Regional cerebrovascular oxygen saturation measured by optical spectroscopy in humans. **1991**, 22, 596-602		214
1779	Time resolved imaging through a highly scattering medium. **1991**, 30, 788-94		112
1778	Monte Carlo simulation of light transmission through living tissues. **1991**, 30, 4515-20		79
1777	Differential pathlength factor for diffuse photon scattering through tissue by a pulse-response method. **1991**, 107, 73-82		5
1776	Monte Carlo modelling of light propagation in breast tissue. *Physics in Medicine and Biology*, **1991**, 36, 591-602	3.8	39
1775	Near-Infrared Spectroscopy. **1991**, 18, 519-534		34
1774	Photon migration in a model of the head measured using time- and frequency-domain techniques: potentials of spectroscopy and imaging. **1991**,		17
1773	Tumor detection using time-resolved light transillumination. **1991**,		0
1772	Detection and localization of absorbers in scattering media using frequency-domain principles. **1991**,		10
1771	Differential time-resolved detection of absorbance changes in composite structures. **1991**,		2
1770	Simulation of time-resolved optical-CT imaging. **1991**,		8

1769	Measuring photon pathlengths by quasielastic light scattering in a multiply scattering medium. **1991**,		2
1768	Quantitation of time- and frequency-resolved optical spectra for the determination of tissue oxygenation. **1991**, 195, 330-51		315
1767	Cerebral oxygen monitoring with near infrared spectroscopy: clinical application to neonates. **1991**, 7, 325-34		38
1766	The propagation of optical radiation in tissue. II: Optical properties of tissues and resulting fluence distributions. **1991**, 6, 379-390		119
1765	Effects of hypoxaemia and bradycardia on neonatal cerebral haemodynamics. **1991**, 66, 376-80		116
1764	Response of cerebral blood volume to changes in arterial carbon dioxide tension in preterm and term infants. **1991**, 29, 553-7		184
1763	Intracerebral penetration of infrared light. Technical note. **1992**, 76, 315-8		149
1762	Measurement of cerebral blood flow in adult humans using near infrared spectroscopy--methodology and possible errors. **1992**, 317, 235-45		67
1761	Photon migration in disordered media. **1992**, 45, 7511-7519		7
1760	Noninvasive measurement and imaging of tissue structure and oxygenation using infrared time-of-flight absorbance (TOFA) spectrophotometry. **1992**,		
1759	Advances in frequency-domain fluorometry, gigahertz instrumentation, time-dependent photomigration, and fluorescence lifetime imaging. **1992**,		1
1758	Improvement of spatial resolution in reflectance near-infrared imaging by laser-beam interference. **1992**, 1640, 405		
1757	Changes in human fetal cerebral hemoglobin concentration and oxygenation during labor measured by near-infrared spectroscopy. **1992**, 166, 1369-73		86
1756	The theoretical basis for the determination of optical pathlengths in tissue: temporal and frequency analysis. *Physics in Medicine and Biology*, **1992**, 37, 1531-60	3.8	455
1755	Fluctuations in cerebral oxygenation and blood volume during endotracheal suctioning in premature infants. **1992**, 120, 769-74		67
1754	Near-infrared spectroscopy in newborn infants. **1992**, 14, 135-43		46
1753	. **1992**, 80, 918-930		78
1752	Non-invasive optical monitoring of cerebral blood oxygenation in the foetus and newborn: preliminary investigation. **1992**, 14, 303-6		19

1751	Interference of diffusive light waves. **1992**, 9, 1832-43	56
1750	Transmission of a pulsed thin light beam through thick turbid media: experimental results. **1992**, 31, 2141-7	19
1749	Long-time behavior of photon diffusion in an absorbing medium: application to time-resolved spectroscopy. **1992**, 31, 2678-83	12
1748	Use of polarized light to discriminate short-path photons in a multiply scattering medium. **1992**, 31, 6535-46	191
1747	Measuring and Imaging in Tissue Using Near-IR Light. **1992**, 3, 27	1
1746	Effects of graded hypotension on cerebral blood flow, blood volume, and mean transit time in dogs. **1992**, 262, H1908-14	18
1745	Recovery from exercise-induced desaturation in the quadriceps muscles of elite competitive rowers. **1992**, 262, C766-75	368
1744	IEEE Power Electronics Society Information. **1992**, 7, c3-c3	
1743	Scaling relationships for anisotropic random walks. **1992**, 69, 35-53	44
1742	Effects of optical constants on time-gated transillumination of tissue and tissue-like media. **1992**, 16, 155-67	31
1741	Optical computed tomography for biomedical objects based on coherent detection imaging method. **1992**, 75, 1-17	
1740	Time-resolved spectroscopy of the human forearm. **1992**, 16, 141-53	99
1739	Subsurface Microscopical visualization of brain tissue in vivo: Present, problems and prospects. **1993**, 24, 611-622	4
1738	Random walk analysis of time-resolved transillumination measurements in optical imaging. **1993**, 200, 212-221	7
1737	Laser tomography of heterogeneous scattering media using spatial and temporal resolution. **1993**, 31, 157-64	6
1736	Near-infrared monitoring of the cerebral circulation. **1993**, 9, 163-70	78
1735	Application of the finite-element method for the forward and inverse models in optical tomography. **1993**, 3, 263-283	111
1734	Location of objects in multiple-scattering media. **1993**, 10, 1209	69

1733	Spatial localization of absorbing bodies by interfering diffusive photon-density waves. **1993**, 32, 381-9		53
1732	Spectral dependence of temporal point spread functions in human tissues. **1993**, 32, 418-25		151
1731	Condensed Monte Carlo simulations for the description of light transport. **1993**, 32, 426-34		125
1730	Scaling relationships for theories of anisotropic random walks applied to tissue optics. **1993**, 32, 504-16		54
1729	Ultrafast laser-pulse transmission and imaging through biological tissues. **1993**, 32, 554-8		85
1728	Medical transillumination imaging using short-pulse diode lasers. **1993**, 32, 574-9		56
1727	Properties of photon density waves in multiple-scattering media. **1993**, 32, 607-16		150
1726	Numerical method for studying the detectability of inclusions hidden in optically turbid tissue. **1993**, 32, 617-27		14
1725	Simulation of fan-beam-type optical computed-tomography imaging of strongly scattering and weakly absorbing media. **1993**, 32, 4808-14		11
1724	Transmission of a pulsed polarized light beam through thick turbid media: numerical results. **1993**, 32, 6142-50		57
1723	Resolution limits for imaging through turbid media with diffuse light. **1993**, 18, 1591-3		54
1722	PHOTON DIFFUSION IN BREAST AND BRAIN: SPECTROSCOPY AND IMAGING. **1993**, 4, 9		8
1721	Cerebral hemodynamics during cardiopulmonary bypass in children using near-infrared spectroscopy. **1993**, 56, 1473-7		43
1720	Measurement of the optical properties of the skull in the wavelength range 650-950 nm. *Physics in Medicine and Biology*, **1993**, 38, 503-10	3.8	227
1719	A Monte Carlo investigation of optical pathlength in inhomogeneous tissue and its application to near-infrared spectroscopy. *Physics in Medicine and Biology*, **1993**, 38, 1859-76	3.8	271
1718	Increased spatial resolution in transillumination using collimated light. **1993**, 12, 751-7		9
1717	Photon path-length distributions for transmission through optically turbid slabs. **1993**, 48, 810-818		44
1716	Near infrared spectroscopy (NIRS): a new tool to study hemodynamic changes during activation of brain function in human adults. **1993**, 154, 101-4		827

1715	Highly sensitive object location in tissue models with linear in-phase and anti-phase multi-element optical arrays in one and two dimensions. **1993**, 90, 3423-7		87
1714	Some Effects of Beam Thickness on Photon Migration in a Turbid Medium. **1993**, 40, 841-859		4
1713	Effect of indomethacin on cerebral oxidized cytochrome oxidase in preterm infants. **1993**, 33, 603-8		53
1712	Optical time-of-flight and absorbance imaging of biologic media. **1993**, 259, 1463-6		188
1711	Near-infrared spectroscopic localization of intracranial hematomas. **1993**, 79, 43-7		114
1710	Cerebral oxygen metabolism during hypothermic circulatory arrest in humans. **1993**, 79, 810-5		85
1709	Acousto-optic scanning and interfering photon density waves for precise localization of an absorbing (or fluorescent) body in a turbid medium. **1993**, 64, 638-644		27
1708	Cognition-activated low-frequency modulation of light absorption in human brain. **1993**, 90, 3770-4		310
1707	Simulation of time-resolved optical computer tomography imaging. **1993**, 32, 634		7
1706	Imaging (NIRI) and quantitation (NIRS) in tissue using time-resolved spectrophotometry: the impact of statistically and dynamically variable optical path lengths. **1993**, 1888, 10		3
1705	Time-resolved spectroscopy and the determination of photon scattering, pathlength, and brain vascular hemoglobin saturation in a population of normal volunteers. **1993**,		4
1704	Spatial localization using interfering photon density waves: contrast enhancement and limitations. **1993**,		1
1703	Inverse methods for Optical Tomography. **1993**, 259-277		9
1702	Near-infrared Spectroscopy in Asphyxial Brain Injury. **1993**, 20, 369-378		44
1701	Investigation of the effects of hypocapnia upon cerebral haemodynamics in normal volunteers and anaesthetised subjects by near infrared spectroscopy (NIRS). **1994**, 361, 475-82		8
1700	Absolute quantification of deoxyhaemoglobin concentration in tissue near infrared spectroscopy. *Physics in Medicine and Biology*, **1994**, 39, 1295-312	3.8	112
1699	Frequency-domain optical absorption spectroscopy of finite tissue volumes using diffusion theory. *Physics in Medicine and Biology*, **1994**, 39, 1157-80	3.8	136
1698	Diffusion approximation for a dissipative random medium and the applications. **1994**, 50, 3634-3640		126

1697	Non-invasive monitoring of brain oxygen sufficiency on cardiopulmonary bypass patients by near-infra-red laser spectrophotometry. **1994**, 32, S151-6		8
1696	Non-invasive measurement of respiratory chain dysfunction following hypothermic renal storage and transplantation. **1994**, 45, 1489-96		29
1695	Relation between frequency of uterine contractions and human fetal cerebral oxygen saturation studied during labour by near infrared spectroscopy. **1994**, 101, 44-8		84
1694	. **1994**, 13, 347-357		19
1693	Use of the water absorption spectrum to quantify tissue chromophore concentration changes in near-infrared spectroscopy. *Physics in Medicine and Biology*, **1994**, 39, 177-96	3.8	212
1692	Authors' reply. **1994**, 8, 766-767		
1691	Time-gated transillumination of biological tissues and tissuelike phantoms. **1994**, 33, 6699-710		96
1690	Concentration measurements of a light absorber localized in a scattering medium. **1994**, 33, 7541-6		
1689	The assessment of cerebral oxygenation during carotid endarterectomy utilising near infrared spectroscopy. **1994**, 8, 590-4		23
1688	Time-gated viewing studies on tissuelike phantoms. **1994**, 2081, 137		0
1687	Quadriceps oxygenation changes during walking and running on a treadmill. **1995**, 2387, 249		2
1686	Effect of Fresnel reflection on time-resolved transmission measurements. **1995**,		1
1685	Frequency-domain multisource optical spectrometer and oximeter. **1995**,		
1684	Is allopurinol beneficial in the prevention of renal ischaemia-reperfusion injury in the rat?: evaluation by near-infrared spectroscopy. **1995**, 88, 359-64		16
1683	Early clinical results of time-of-flight optical tomography in a neonatal intensive care unit. **1995**, 2389, 582		14
1682	Modeling of noise for near-infrared transillumination imaging. **1995**,		
1681	A comparative study of two near infrared spectrophotometers for the assessment of cerebral haemodynamics. **1995**, 107, 101-5		30
1680	Determination of oxygen consumption in muscle during exercise using near infrared spectroscopy. **1995**, 107, 151-5		53

1679	Cerebral oxygen supply and utilization during infant cardiac surgery. **1995**, 37, 488-97		99
1678	Transcranial optical path length in infants by near-infrared phase-shift spectroscopy. **1995**, 11, 109-17		43
1677	Age dependency of changes in cerebral hemoglobin oxygenation during brain activation: a near-infrared spectroscopy study. **1995**, 15, 1103-8		138
1676	Measurement of changes in optical pathlength through human muscle during cuff occlusion on the arm. **1995**, 27, 269-274		8
1675	Development of a portable tissue oximeter using near infra-red spectroscopy. **1995**, 33, 622-6		50
1674	Customised optrode holder for clinical near-infra-red spectroscopy measurements. **1995**, 33, 627-8		4
1673	Cerebral and muscle oxygen saturation measurement by frequency-domain near-infra-red spectrometer. **1995**, 33, 228-30		62
1672	Near infrared spectroscopy: Blood and tissue oxygenation in renal ischemia-reperfusion injury in rats. **1995**, 4, 25-30		9
1671	Light propagation through teeth containing simulated caries lesions. *Physics in Medicine and Biology* , **1995**, 40, 1375-87	3.8	17
1670	Simple NIR instrument for diagnostic purposes. **1995**,		0
1669	The cerebral hemodynamic response to electrically induced seizures in man. **1995**, 673, 93-100		60
1668	Measurement of the blood supply to the abdominal testis by means of near infrared spectroscopy. **1995**, 27, 160-6		12
1667	Some characteristics of the fluorescence lifetime of reduced pyridine nucleotides in isolated mitochondria, isolated hepatocytes, and perfused rat liver in situ. **1995**, 118, 1151-60		94
1666	Optical diffusion imaging using a direct inversion method. **1995**, 52, 4361-4365		20
1665	A dynamic phantom brain model for near-infrared spectroscopy. *Physics in Medicine and Biology*, **1995**, 40, 2079-92	3.8	60
1664	Near-infrared spectroscopy (NIRS) monitoring of brain oxygenation during cardiopulmonary bypass.		
1663	Development of time-resolved spectroscopy system for quantitative noninvasive tissue measurement. **1995**, 2389, 142		23
1662	Experimental measurements on phantoms and Monte Carlo simulation to evaluate the effect of inhomogeneity on optical pathlength. **1995**, 2389, 174		1

1661	Near-infrared spectroscopy use in patients with head injury. **1995**, 83, 963-70		116
1660	Measurement and FEM calculation of light pulse propagtion through cylindrical homogeneous and inhomogeneous phantoms. **1995**,		2
1659	Measurements of the optical properties of breast tissue using time-resolved transillumination. **1995**,		9
1658	The effect of overlying tissue on the spatial sensitivity profile of near-infrared spectroscopy. *Physics in Medicine and Biology*, **1995**, 40, 2093-108	3.8	88
1657	Statistical basis for the determination of optical pathlength in tissue. *Physics in Medicine and Biology*, **1995**, 40, 1539-58	3.8	37
1656	An observational study of near-infrared spectroscopy during carotid endarterectomy. **1995**, 82, 756-63		93
1655	Postoperative neuropsychological dysfunction and cerebral oxygenation during cardiac surgery. **1995**, 43, 260-4		82
1654	[Near infrared spectroscopy. Limits and problems in the intensive care unit]. **1995**, 40, 128-32		3
1653	Measurement of Tissue Optical Properties: Methods and Theories. **1995**, 233-303		19
1652	Optical pathlength measurements on adult head, calf and forearm and the head of the newborn infant using phase resolved optical spectroscopy. *Physics in Medicine and Biology*, **1995**, 40, 295-304	3.8	510
1651	Determination of optical properties and blood oxygenation in tissue using continuous NIR light. *Physics in Medicine and Biology*, **1995**, 40, 1983-93	3.8	128
1650	Frequency-domain multichannel optical detector for noninvasive tissue spectroscopy and oximetry. **1995**, 34, 32		267
1649	Direct calculation of the moments of the distribution of photon time of flight in tissue with a finite-element method. **1995**, 34, 2683-7		60
1648	Low-coherence optical tomography in turbid tissue: theoretical analysis. **1995**, 34, 6564-74		97
1647	Photon-measurement density functions. Part I: Analytical forms. **1995**, 34, 7395-409		210
1646	Absorbance measurements in turbid media by the photon correlation method. **1995**, 34, 7419-27		8
1645	V: Random Walk and Diffusion-Like Models of Photon Migration in Turbid Media. **1995**, 333-402		43
1644	Absolute quantification methods in tissue near-infrared spectroscopy. **1995**,		156

1643	A novel near-infrared spectroscopy (NIRS) system for measuring regional oxygen saturation.		3
1642	Quantitative optical spectroscopy for tissue diagnosis. **1996**, 47, 555-606		982
1641	Non-invasive, continuous monitoring of cerebral oxygenation changes during cardiopulmonary bypass by near-infrared spectroscopy (NIRS).		
1640	Method of calculating the image resolution of a near-infrared time-of-flight tissue-imaging system. **1996**, 35, 752-7		8
1639	Experimental validation of Monte Carlo and finite-element methods for the estimation of the optical path length in inhomogeneous tissue. **1996**, 35, 3362-71		25
1638	Time-gated viewing studies on tissuelike phantoms. **1996**, 35, 3432-40		16
1637	A simple and novel algorithm for time-resolved multiwavelength oximetry. *Physics in Medicine and Biology*, **1996**, 41, 551-62	3.8	33
1636	Near infrared spectroscopy applied to intrapartum fetal monitoring. **1996**, 10, 307-24		4
1635	Near-infrared spectroscopy: theory and applications. **1996**, 10, 406-18		166
1634	[Spectroscopic measurement of the intracerebral cytochrome system]. **1996**, 31, 374-8		
1633	Validation in volunteers of a near-infrared spectroscope for monitoring brain oxygenation in vivo. **1996**, 82, 269-77		60
1632	The Influence of Carbon Dioxide and Body Position on Near-Infrared Spectroscopic Assessment of Cerebral Hemoglobin Oxygen Saturation. **1996**, 82, 278-287		0
1631	Validation in Volunteers of a Near-Infrared Spectroscope for Monitoring Brain Oxygenation In Vivo. **1996**, 82, 269-277		159
1630	Recent developments in cerebral monitoring--near-infrared light spectroscopy. An overview. **1996**, 12, 263-71		21
1629	An evaluation of the effects of susceptibility changes on the water chemical shift method of temperature measurement in human peripheral muscle. **1996**, 36, 366-74		58
1628	Influence of respiration and changes in expiratory pressure on cerebral haemoglobin concentration measured by near infrared spectroscopy. **1996**, 16, 353-7		36
1627	Cerebral oxygenation and hemodynamic changes during infant cardiac surgery: measurements by near infrared spectroscopy. **1996**, 1, 373-86		5
1626	Characterization of female breasts in vivo by time-resolved and spectroscopic measurements in the near infrared spectroscopy. **1996**, 1, 425-34		54

1625	Cerebral blood oxygenation changes induced by visual stimulation in humans. **1996**, 1, 399-404		32
1624	Use of near infrared spectroscopy for the clinical monitoring of adult brain. **1996**, 1, 363-72		23
1623	Multimodal monitoring in neurointensive care. **1996**, 60, 131-9		33
1622	Error assessment of a wavelength tunable frequency domain system for noninvasive tissue spectroscopy. **1996**, 1, 311-23		20
1621	Photodynamic therapy of brain tumors. **1996**, 14, 251-61		50
1620	Licht-Mammographie mit Modulationstechnik. **1996**, 63, 220-233		1
1619	The influence of carbon dioxide and body position on near-infrared spectroscopic assessment of cerebral hemoglobin oxygen saturation. **1996**, 82, 278-87		77
1618	Measurement of tissue temporal point spread function (TPSF) by use of a gain-modulated avalanche photodiode detector. *Physics in Medicine and Biology*, **1996**, 41, 939-49	3.8	3
1617	The effect of scalp ischaemia on measurement of cerebral blood volume by near-infrared spectroscopy. **1996**, 17, 279-86		52
1616	Transcranial cerebral oximetry in random normal subjects. **1997**, 2979, 397		
1615	Relationship between time-resolved and non-time-resolved Beer-Lambert law in turbid media. *Physics in Medicine and Biology*, **1997**, 42, 1009-22	3.8	39
1614	The finite-element method for the propagation of light in scattering media: frequency domain case. **1997**, 24, 895-902		50
1613	Comparison of two methods of measuring forearm oxygen consumption (VO2) by near infrared spectroscopy. **1997**, 2, 171-5		40
1612	Study of an algorithm based on model experiments and diffusion theory for a portable tissue oximeter. **1997**, 2, 154-61		63
1611	Neonatal intensive care: an obvious, yet difficult area for cerebral near-infrared spectroscopy. **1997** , 2, 7-14		6
1610	Age dependency of cerebral oxygenation assessed with near infrared spectroscopy. **1997**, 2, 162-70		6
1609	Coherent detection techniques in optical imaging of tissues. *Physics in Medicine and Biology*, **1997**, 42, 855-67	3.8	12
1608	Experimental studies on brain hematoma detection and oxygenation monitoring using PRM/NIR sensors. **1997**,		

1607	PRM/NIR sensor for brain hematoma detection and oxygenation monitoring. **1997**,	
1606	Changes in tissue oxyhaemoglobin concentration measured using multichannel near infrared spectroscopy during internal carotid angiography. **1997**, 63, 660-4	9
1605	The relation between arterial oxygen tension and cerebral blood flow during cardiopulmonary bypass. **1997**, 11, 633-9	14
1604	Cerebral Hemoglobin and Optical Pathlength Influence Near-Infrared Spectroscopy Measurement of Cerebral Oxygen Saturation. **1997**, 84, 1297-1305	49
1603	Chromophore detection by fluorescence spectroscopy in tissue-like phantoms. **1997**, 2979, 139	1
1602	Effect of local and global absorption perturbation in layered media on NIR signal. **1997**,	
1601	Infrared analysis in clinical chemistry: its use in the laboratory and in non-invasive near patient testing. **1997**, 34 (Pt 3), 215-21	4
1600	Cerebral hemoglobin and optical pathlength influence near-infrared spectroscopy measurement of cerebral oxygen saturation. **1997**, 84, 1297-305	39
1599	Design and fabrication of a solid simplified head phantom. **1997**,	2
1598	A Numerical Simulation of the Diffusion of Near Infrared Light Through Brain Tissue. **1997**, 1, 1-14	
1597	Fast and localized event-related optical signals (EROS) in the human occipital cortex: comparisons with the visual evoked potential and fMRI. **1997**, 6, 168-80	96
1596	A novel near infra-red spectrophotometry system using microprobes: its evaluation and application for monitoring neuronal activity in the visual cortex. **1997**, 28, 299-309	4
1595	Cerebral oxygenation and haemodynamics in the foetus and newborn infant. **1997**, 352, 697-700	12
1594	Image reconstruction in optical tomography. **1997**, 352, 717-26	90
1593	Cerebral haemoglobin oxygenation during sustained visual stimulation--a near-infrared spectroscopy study. **1997**, 352, 743-50	53
1592	Optical imaging in medicine: I. Experimental techniques. *Physics in Medicine and Biology*, **1997**, 42, 825-40	327
1591	Oxy-hemoglobin measurement in tissue layers.	
1590	Detailed evidence of cerebral hemoglobin oxygenation changes in response to motor cortical activation revealed by a continuous-wave spectrophotometer with 10-Hz temporal resolution. **1997**, 2979, 390	18

1589	Theoretical and experimental investigation of near-infrared light propagation in a model of the adult head. **1997**, 36, 21-31	311
1588	Design and testing of a white-light, steady-state diffuse reflectance spectrometer for determination of optical properties of highly scattering systems. **1997**, 36, 93-104	114
1587	Direct calculation with a finite-element method of the Laplace transform of the distribution of photon time of flight in tissue. **1997**, 36, 9042-9	18
1586	Light diffusion and diffusing-wave spectroscopy in nematic liquid crystals. **1997**, 14, 156	26
1585	Progress in head injury management. **1997**, 4, 9-15	6
1584	Loss of functional hemispheric asymmetry in Alzheimer's dementia assessed with near-infrared spectroscopy. **1997**, 6, 67-72	107
1583	Non-invasive optical spectroscopy and imaging of human brain function. **1997**, 20, 435-42	1200
1582	Cerebral Hemodynamics and Oxygenation in the Fetus. **1997**, 24, 547-565	6
1581	Redox behavior of cytochrome oxidase in the rat brain measured by near-infrared spectroscopy. **1997**, 83, 1842-8	81
1580	Decrease in parietal cerebral hemoglobin oxygenation during performance of a verbal fluency task in patients with Alzheimer's disease monitored by means of near-infrared spectroscopy (NIRS)--correlation with simultaneous rCBF-PET measurements. **1997**, 755, 293-303	310
1579	Comparison of changes in cerebral blood flow and cerebral oxygen saturation measured by near infrared spectroscopy (NIRS) after acetazolamide. **1997**, 139, 58-62	29
1578	Cerebral and circulatory haemodynamics before vasovagal syncope induced by orthostatic stress. **1997**, 17, 83-94	51
1577	Fetal cerebral oxygenation and hemodynamics during labour measured by near-infrared spectroscopy. **1997**, 3, 59-68	
1576	Sensitivity of near infrared spectroscopy to cerebral and extra-cerebral oxygenation changes is determined by emitter-detector separation. **1998**, 14, 353-60	32
1575	Regional Imager for Low-Resolution Functional Imaging of the Brain with Diffusing Near-Infrared Light. **1998**, 67, 33-40	37
1574	Stationary Headband for Clinical Time-of-Flight Optical Imaging at the Bedside. **1998**, 68, 361-369	22
1573	Noninvasive measurement of regional cerebral blood flow by near-infrared spectroscopy and indocyanine green. **1998**, 18, 445-56	160
1572	Measurement of cerebral blood flow during cardiopulmonary bypass with near-infrared spectroscopy. **1998**, 115, 94-102	41

1571	Frontal brain activation during the Wisconsin Card Sorting Test assessed with two-channel near-infrared spectroscopy. **1998**, 248, 245-9		91
1570	Multichannel laser-Doppler probe for blood perfusion measurements with depth discrimination. **1998**, 36, 740-7		30
1569	Recovery of the Absorption Coefficient from Diffused Reflected Light Using a Discrete Diffusive Model. **1998**, 59, 58-71		5
1568	Near infrared spectroscopy for non-invasive assessment of intracranial haemoglobin oxygenation in an in vitro model of the calf head. **1998**, 65, 103-9		9
1567	Phase measurement of light absorption and scatter in human tissue. **1998**, 69, 3457-3481		189
1566	A theoretical study of the signal contribution of regions of the adult head to near-infrared spectroscopy studies of visual evoked responses. **1998**, 8, 69-78		151
1565	Influence of adipose tissue on near infrared oxygenation monitoring in muscle.		1
1564	Investigation of two-layered turbid media with time-resolved reflectance. **1998**, 37, 6852-62		62
1563	Separation of changes in light scattering and chromophore concentrations during cortical spreading depression in rats. **1998**, 23, 555-7		42
1562	High-resolution near-infrared tomographic imaging simulations of the rat cranium by use of a priori magnetic resonance imaging structural information. **1998**, 23, 1716-8		107
1561	A gradient-based optimisation scheme foroptical tomography. **1998**, 2, 213-26		154
1560	Near-infrared optical properties of ex vivo human skin and subcutaneous tissues measured using the Monte Carlo inversion technique. *Physics in Medicine and Biology*, **1998**, 43, 2465-78	3.8	496
1559	Characterization of the pulse signal over the human head by near infrared spectroscopy. **1998**, 454, 115-23		13
1558	Defining thresholds for critical ischemia by using near-infrared spectroscopy in the adult brain. **1998**, 89, 389-94		84
1557	Near-infrared muscle oximeter that can correct the influence of a subcutaneous fat layer. **1998**,		3
1556	Determination of the wavelength dependence of the differential pathlength factor from near-infrared pulse signals. *Physics in Medicine and Biology*, **1998**, 43, 1771-82	3.8	79
1555	Simple Subtraction Method for Determining the Mean Path Length Traveled by Photons in Turbid Media. **1998**, 37, 700-704		18
1554	Prefrontal hypooxygenation during language processing assessed with near-infrared spectroscopy. **1998**, 37, 215-8		29

1553	Novel NIR instrument for noninvasive monitoring and quantification of cerebral tissue blood supply and oxygenation. **1998**,		
1552	Skeletal muscle deoxygenation during exercise assessed by near-infrared spectroscopy and its relation to expired gas analysis parameters. **1998**, 62, 649-57		22
1551	Energy metabolism and interstitial fluid displacement in human gastrocnemius during short ischemic cycles. **1998**, 85, 1244-51		48
1550	Experimental and theoretical comparison of NIR spectroscopy measurements of cerebral hemoglobin changes. **1998**, 85, 1915-21		26
1549	Fluorescence measurement of calcium transients in perfused rabbit heart using rhod 2. **1998**, 274, H728-41		49
1548	Blood lactate accumulation and muscle deoxygenation during incremental exercise. **1999**, 87, 348-55		166
1547	Neonatal Intensive Care Applications of Near-Infrared Spectroscopy. **1999**, 26, 893-903		31
1546	Fetal Pulse Oximetry and Other Monitoring Modalities: Future Directions. **1999**, 26, 881-892		6
1545	Recovery of region boundaries of piecewise constant coefficients of an elliptic PDE from boundary data. **1999**, 15, 1375-1391		84
1544	Application of temporal filters to time resolved data in optical tomography. *Physics in Medicine and Biology*, **1999**, 44, 1699-717	3.8	87
1543	Higher-order brain function analysis by trans-cranial dynamic near-infrared spectroscopy imaging. **1999**, 4, 403-13		133
1542	Tissue oxygenation monitor using NIR spatially resolved spectroscopy. **1999**,		284
1541	Assessment of spatially resolved spectroscopy during cardiopulmonary bypass. **1999**, 4, 208-16		10
1540	Near infrared spectroscopy and transcranial Doppler in monohemispheric stroke. **1999**, 41, 159-62		37
1539	Real-time optical imaging of experimental brain ischemia and hemorrhage in neonatal piglets. **1999** , 27, 279-86		16
1538	Noninvasive assessment of changes in cytochrome-c oxidase oxidation in human subjects during visual stimulation. **1999**, 19, 592-603		85
1537	Non-invasive optical monitoring of the newborn piglet brain using continuous-wave and frequency-domain spectroscopy. *Physics in Medicine and Biology*, **1999**, 44, 1543-63	3.8	180
1536	Human motor-cortex oxygenation changes induced by cyclic coupled movements of hand and foot. **1999**, 129, 457-61		100

1535	A multiwavelength frequency-domain near-infrared cerebral oximeter. *Physics in Medicine and Biology*, **1999**, 44, 727-40	3.8	47
1534	Time-gated transillumination of objects in highly scattering media using a subpicosecond optical amplifier. **1999**, 5, 895-901		12
1533	Neurophysiologic monitoring and outcomes in cardiovascular surgery. **1999**, 13, 600-13		34
1532	Near-infrared oximetry of the brain. **1999**, 58, 541-60		269
1531	Retrograde cerebral perfusion versus selective cerebral perfusion as evaluated by cerebral oxygen saturation during aortic arch reconstruction. **1999**, 67, 1091-6		76
1530	Discussion. **1999**, 67, 1096		
1529	Spectroscopic analysis of changes in remitted illumination: the response to increased neural activity in brain. **1999**, 10, 304-26		116
1528	Non-invasive optical mapping of the piglet brain in real time. **1999**, 4, 308-14		33
1527	Noninvasive optical method of measuring tissue and arterial saturation: an application to absolute pulse oximetry of the brain. **1999**, 24, 829-31		43
1526	Realistic dynamic brain phantom and time-resolved measurement. **1999**, 3597, 108		1
1525	Quantifying tissue hemodynamics by NIRS versus DOT: global versus focal changes in cerebral hemodynamics. **1999**, 3863, 81		
1524	Near-infrared diffuse tomography combined with a priori MRI structural information: testing a hybrid image reconstruction methodology with functional imaging of the rat cranium. **1999**,		10
1523	Measurement of hepatic tissue hypoxia using near infrared spectroscopy: comparison with hepatic vein oxygen partial pressure. **2000**, 32, 207-14		27
1522	Determination of a quantitative algorithm for the measurement of muscle oxygenation using cw near-infrared spectroscopy: mean optical pathlength without the influence of the adipose tissue. **2000**,		3
1521	Orthostatic tolerance, cerebral oxygenation, and blood velocity in humans with sympathetic failure. **2000**, 31, 1608-14		97
1520	Cerebral oxygenation declines in healthy elderly subjects in response to assuming the upright position. **2000**, 31, 1615-20		100
1519	Preliminary tests on a new near-infrared continuous-wave tissue oximeter. **2000**, 4160, 170		1
1518	Development of 200-channel mapping system for tissue oxygenation measured by near-infrared spectroscopy. **2000**,		6

1517	Imaged backscatter from three-dimensional tissue structure. **2000**,		
1516	Escherichia coli endotoxin reduces cytochrome aa3 redox status in pig skeletal muscle. **2000**, 28, 3491-7		20
1515	The influence of positioning on spectroscopic measurements of brain oxygenation. **2000**, 12, 75-80		31
1514	Effects of endotracheal suctioning in high-frequency oscillatory and conventionally ventilated low birth weight neonates on cerebral hemodynamics observed by near infrared spectroscopy (NIRS). **2000**, 29, 270-5		25
1513	Saccadic suppression induces focal hypooxygenation in the occipital cortex. **2000**, 20, 1103-10		63
1512	Intracerebral hemodynamics probed by near infrared spectroscopy in the transition between wakefulness and sleep. **2000**, 866, 313-25		38
1511	Reproducibility of parameters of postocclusive reactive hyperemia measured by near infrared spectroscopy and transcutaneous oximetry. **2000**, 28, 168-73		48
1510	Explanation of Human Skin Color by Multiple Linear Regression Analysis Based on the Modified Lambert-Beer Law. **2000**, 7, 348-352		44
1509	Recent books. **2000**, 37, 24I8-64R10		
1508	Noninvasive Characterization of Tissue Optical Properties Using Frequency Domain Photon Migration. **2000**, 116-132		2
1507	A modular NIRS system for clinical measurement of impaired skeletal muscle oxygenation. **2000**, 88, 315-25		28
1506	Muscle oxygen kinetics at onset of intense dynamic exercise in humans. **2000**, 279, R899-906		148
1505	New optical method for analyzing cortical blood flow heterogeneity in small animals: validation of the method. **2000**, 279, H1291-8		13
1504	Optical coherence tomography: a new imaging technology for dentistry. **2000**, 131, 511-4		123
1503	Noninvasive measures of muscle metabolism. **2000**, 485-509		2
1502	Influence of a fat on muscle oxygenation measurement using near-IR spectroscopy: quantitative analysis based on two-layered phantom experiments and Monte Carlo simulation. **2000**, 10, 43-58		19
1501	Transillumination imaging of physiological functions by NIR light.		0
1500	Oxygen consumption through metabolism and photodynamic reactions in cells cultured on microbeads. *Physics in Medicine and Biology*, **2000**, 45, 103-19	3.8	58

1499	Brain perfusion monitoring with frequency-domain and continuous-wave near-infrared spectroscopy: a cross-correlation study in newborn piglets. *Physics in Medicine and Biology*, **2000**, 45, 3143-58	3.8	19
1498	Local determination of hemoglobin concentration and degree of oxygenation in tissue by pulsed photoacoustic spectroscopy. **2000**,		13
1497	Calibration of near-infrared frequency-domain tissue spectroscopy for absolute absorption coefficient quantitation in neonatal head-simulating phantoms. **2000**, 5, 185-93		44
1496	Polarization imaging through scattering media. **2000**,		29
1495	Quantification of ischemic muscle deoxygenation by near infrared time-resolved spectroscopy. **2000**, 5, 102-5		76
1494	Blood flow and oxygen consumption with near-infrared spectroscopy and venous occlusion: spatial maps and the effect of time and pressure of inflation. **2000**, 5, 269-76		53
1493	Consequences of scattering for spectral imaging of turbid biologic tissue. **2000**, 5, 300-6		9
1492	Equivalent isotropic scattering formulation for transient short-pulse radiative transfer in anisotropic scattering planar media. **2000**, 39, 4411-7		31
1491	Visuospatial imagery is a fruitful strategy for the digit span backward task: a study with near-infrared optical tomography. **2000**, 9, 339-42		161
1490	Non-invasive in vivo characterization of breast tumors using photon migration spectroscopy. **2000**, 2, 26-40		468
1489	A study of polarization decay as applied to improved imaging in scattering media. **2000**, 2, 200-208		18
1488	Quantitative measurement of muscle hemoglobin oxygenation using near-infrared spectroscopy with correction for the influence of a subcutaneous fat layer. **2000**, 71, 4571		57
1487	Determination of sea-water cut-off frequency by backscattering transfer function measurement. **2000**, 33, 349-354		34
1486	Physical model for the spectroscopic analysis of cortical intrinsic optical signals. *Physics in Medicine and Biology*, **2000**, 45, 3749-64	3.8	137
1485	Multidimensional Monte Carlo Simulation of Short-Pulse Laser Transport in Scattering Media. **2000**, 14, 504-511		60
1484	In vivo near-infrared spectroscopy. **2000**, 2, 715-54		186
1483	Electrocortical brain activity, cerebral haemodynamics and oxygenation during progressive hypotension in newborn piglets. **2001**, 112, 52-9		24
1482	Theoretical and experimental studies on linear and nonlinear algorithms for the measurement of muscle oxygenation using continuous-wave near-infrared spectroscopy. **2001**, 40, 2293		11

1481	Corrections for inhomogeneities in biological tissue caused by blood vessels. **2001**, 18, 932-9	28
1480	Depolarization and blurring of optical images by biological tissue. **2001**, 18, 948-60	64
1479	The accuracy of near infrared spectroscopy and imaging during focal changes in cerebral hemodynamics. **2001**, 13, 76-90	350
1478	Linear aspects of changes in deoxygenated hemoglobin concentration and cytochrome oxidase oxidation during brain activation. **2001**, 13, 520-30	83
1477	Quantitative imaging of diffuse medium using near-axis scattered light.	
1476	Ventilatory response in metabolic acidosis and cerebral blood volume in humans. **2001**, 124, 105-15	4
1475	Simultaneous near-infrared spectroscopy monitoring of left and right occipital areas reveals contra-lateral hemodynamic changes upon hemi-field paradigm. **2001**, 41, 97-102	45
1474	Performance of near-infrared spectroscopy in measuring local O(2) consumption and blood flow in skeletal muscle. **2001**, 90, 511-9	420
1473	Imaging: Developing Techniques. **2001**,	
1472	Functional imaging of muscle oxygenation using a 200-channel cw NIRS system. **2001**,	6
1471	Adult head modeling based on time-resolved measurement for NIR instrument. **2001**,	1
1470	Local measurement of venous saturation in tissue with noninvasive near-infrared respiratory oximetry. **2001**, 4250, 164	3
1469	Near-infrared spectroscopy determined brain and muscle oxygenation during exercise with normal and resistive breathing. **2001**, 171, 63-70	11
1468	Reproducibility of orthostatic changes in cerebral oxygenation in healthy subjects aged 70 years or older. **2001**, 21, 77-84	30
1467	Parameters of postocclusive reactive hyperemia measured by near infrared spectroscopy in patients with peripheral vascular disease and in healthy volunteers. **2001**, 29, 311-20	56
1466	Can cerebral blood volume be measured reproducibly with an improved near infrared spectroscopy system?. **2001**, 21, 110-3	21
1465	Analysis of the spatial distribution of detector sensitivity in a multilayer randomly inhomogeneous medium with strong light scattering and absorption by the Monte Carlo method. **2001**, 91, 654-659	52
1464	Near-infrared spectroscopy determined brain and muscle oxygenation during exercise with normal and resistive breathing. **2001**, 171, 63-70	43

1463	A path-integral model of light scattered by turbid media. **2001**, 34, 1453-1472		11
1462	Determining changes in NIR absorption using a layered model of the human head. *Physics in Medicine and Biology*, **2001**, 46, 879-96	3.8	198
1461	Evaluation of a near-infrared spectrometer (NIRO 300) for the detection of intracranial oxygenation changes in the adult head. **2001**, 32, 2492-500		234
1460	Melanin and blood concentration in a human skin model studied by multiple regression analysis: assessment by Monte Carlo simulation. *Physics in Medicine and Biology*, **2001**, 46, 2397-406	3.8	38
1459	Melanin and blood concentration in human skin studied by multiple regression analysis: experiments. *Physics in Medicine and Biology*, **2001**, 46, 2385-95	3.8	36
1458	Comparison of near infrared spectroscopy (NIRS) signal quantitation by multilinear regression and neural networks.		1
1457	Comparison of the Maxwell and Boltzmann theory for multilayered dielectric random media. **2002**, 65, 051917		8
1456	Penetration depth of light re-emitted by a diffusive medium: theoretical and experimental investigation. *Physics in Medicine and Biology*, **2002**, 47, 4131-44	3.8	80
1455	Cerebral oxygenation during exercise in patients with terminal lung disease. **2002**, 122, 445-50		30
1454	Quantitative near infrared spectroscopy measurement of cerebral hemodynamics in newborn piglets. **2002**, 51, 564-70		86
1453	Influence of hypoxia on wavelength dependence of differential pathlength and near-infrared quantification. *Physics in Medicine and Biology*, **2002**, 47, 1573-89	3.8	10
1452	Maps of optical differential pathlength factor of human adult forehead, somatosensory motor and occipital regions at multi-wavelengths in NIR. *Physics in Medicine and Biology*, **2002**, 47, 2075-93	3.8	114
1451	Quantification of optical properties of a breast tumor using random walk theory. **2002**, 7, 80-7		48
1450	Implementation of near-infrared spectroscopy in a rat model of cardiac arrest and resuscitation. **2002**,		1
1449	Evaluation of hepatic venous congestion: proposed indication criteria for hepatic vein reconstruction. **2002**, 236, 241-7		231
1448	Noninvasive measurement of cerebral blood flow in adults using near-infrared spectroscopy and indocyanine green: a pilot study. **2002**, 14, 218-22		56
1447	In vivo brain spectroscopy with femtosecond white light continuum. **2002**, 4613, 188		
1446	Application of Time-of-Flight Near-Infrared Spectroscopy to Wood with Anisotropic Cellular Structure. **2002**, 56, 869-876		28

1445	Different time evolution of oxyhemoglobin and deoxyhemoglobin concentration changes in the visual and motor cortices during functional stimulation: a near-infrared spectroscopy study. **2002**, 16, 704-12	156
1444	A Quantitative Comparison of Simultaneous BOLD fMRI and NIRS Recordings during Functional Brain Activation. **2002**, 17, 719-731	870
1443	Functional frequency-domain near-infrared spectroscopy detects fast neuronal signal in the motor cortex. **2002**, 17, 1868-75	75
1442	Impaired postural cerebral hemodynamics in young patients with chronic fatigue with and without orthostatic intolerance. **2002**, 140, 412-7	65
1441	Reassessment of activity-related optical signals in somatosensory cortex by an algorithm with wavelength-dependent path length. **2002**, 52, 301-12	21
1440	Near-infrared spiroximetry: noninvasive measurements of venous saturation in piglets and human subjects. **2002**, 92, 372-84	81
1439	Near-Infrared Optical Imaging by Time-Resolved Spectroscopy.. **2002**, 30, 642-647	2
1438	Transcranial cerebral oximetry, transcranial Doppler sonography, and heart rate variability: useful neuromonitoring tools in anaesthesia and intensive care?. **2002**, 19, 543-9	5
1437	Technical foundations for noninvasive assessment of changes in the width of the subarachnoid space with near-infrared transillumination-backscattering sounding (NIR-TBSS). **2002**, 49, 887-904	26
1436	Oxygen saturation measurement of calf muscle during exercise in intermittent claudication. **2002**, 23, 388-92	20
1435	Simultaneous measurements of cerebral oxygenation changes during brain activation by near-infrared spectroscopy and functional magnetic resonance imaging in healthy young and elderly subjects. **2002**, 16, 14-23	193
1434	Near-infrared spectroscopy grades the severity of intermittent claudication in diabetics more accurately than ankle pressure measurement. **2000**, 87, 459-66	63
1433	In vivo spectroscopy: a novel approach for simultaneously estimating nitric oxide and hemodynamic parameters in the rat brain. **2002**, 119, 151-61	7
1432	Point scatterer phase approximation for electromagnetic and intensity waves in random media. **2002**, 205, 25-35	4
1431	Measurement of Cerebral Optical Pathlength as a Function of Oxygenation Using Near-infrared Time-resolved Spectroscopy in a Piglet Model of Hypoxia. **2003**, 10, 466-469	12
1430	A new subdural probe for combined intracranial pressure (ICP) and cerebral blood flow (CBF) monitoring. **2003**, 145, 1111-5; discussion 1115	9
1429	Computer simulation of the skin reflectance spectra. **2003**, 70, 179-86	102
1428	Assessment of local changes of cerebral perfusion and blood concentration by ultrasound harmonic B-mode contrast measurement in piglet. **2003**, 29, 1253-60	7

1427	Inhibition of NADH oxidation by chloramphenicol in the freely moving rat measured by picosecond time-resolved emission spectroscopy. **2003**, 84, 633-42	20
1426	Cerebral oxygenation responses to standing in elderly patients with predominantly diastolic dysfunction. **2003**, 23, 92-7	3
1425	Cerebral oxygenation monitor during head-up and -down tilt using near-infrared spatially resolved spectroscopy. **2003**, 23, 177-81	26
1424	Diffuse optical tomography of cerebral blood flow, oxygenation, and metabolism in rat during focal ischemia. **2003**, 23, 911-24	305
1423	Influences of diffusive reflection intensity and pulse shaping of ultrashort lasers on turbid media. **2003**, 78, 602-605	
1422	Advances in optical imaging of the newborn infant brain. **2003**, 40, 501-10	59
1421	Functional near-infrared optical imaging: utility and limitations in human brain mapping. **2003**, 40, 511-20	360
1420	Fast cerebral functional signal in the 100-ms range detected in the visual cortex by frequency-domain near-infrared spectrophotometry. **2003**, 40, 521-8	64
1419	Hemodynamic evoked response of the sensorimotor cortex measured noninvasively with near-infrared optical imaging. **2003**, 40, 548-60	221
1418	Localized irregularities in hemoglobin flow and oxygenation in calf muscle in patients with peripheral vascular disease detected with near-infrared spectrophotometry. **2003**, 37, 1017-26	51
1417	Wall shear stress and strain modulate experimental aneurysm cellularity. **2003**, 37, 1067-74	67
1416	Factors affecting the accuracy of near-infrared spectroscopy concentration calculations for focal changes in oxygenation parameters. **2003**, 18, 865-79	396
1415	Noninvasive measurement of regional cerebral blood flow and regional cerebral blood volume by near-infrared spectroscopy and indocyanine green dye dilution. **2003**, 20, 828-39	109
1414	Spatiotemporal characteristics of hemodynamic changes in the human lateral prefrontal cortex during working memory tasks. **2003**, 20, 1493-504	75
1413	Monte Carlo prediction of near-infrared light propagation in realistic adult and neonatal head models. **2003**, 42, 2881-7	208
1412	Near-infrared light propagation in an adult head model. I. Modeling of low-level scattering in the cerebrospinal fluid layer. **2003**, 42, 2906-14	186
1411	Near-infrared light propagation in an adult head model. II. Effect of superficial tissue thickness on the sensitivity of the near-infrared spectroscopy signal. **2003**, 42, 2915-22	256
1410	Optical topography: practical problems and new applications. **2003**, 42, 3054-62	109

1409	Breast cancer detection by mapping hemoglobin concentration and oxygen saturation. **2003**, 42, 6412-21	56
1408	Validity conditions for the radiative transfer equation. **2003**, 20, 2046-56	27
1407	Cerebral cortical oxygenation changes during OPCAB surgery. **2003**, 76, 1516-22; discussion 1522	23
1406	Laserspectroscopy in the fetus during labour. **2003**, 110 Suppl 1, S127-31	4
1405	Frontal activation during a verbal-fluency task as measured by near-infrared spectroscopy. **2003**, 61, 51-6	148
1404	Skeletal muscle oxygenation during incremental exercise. **2003**, 111, 475-8	8
1403	Interplay of tumor vascular oxygenation and tumor pO2 observed using near-infrared spectroscopy, an oxygen needle electrode, and 19F MR pO2 mapping. **2003**, 8, 53-62	58
1402	Monitoring cerebral perfusion using near-infrared spectroscopy and laser Doppler flowmetry. **2003**, 24, N35-40	20
1401	Optical clearing effect on gastric tissues immersed with biocompatible chemical agents investigated by near infrared reflectance spectroscopy. **2003**, 36, 1707-1713	29
1400	Transcutaneous oxygen pressure measurements on the buttocks during exercise to detect proximal arterial ischemia: comparison with arteriography. **2003**, 107, 1896-900	104
1399	Continuous wave optical spectroscopic system for use in magnetic resonance imaging scanners for the measurement of changes in hemoglobin oxygenation states in humans. **2003**, 74, 4150-4157	2
1398	Near-infrared spectroscopy measurement of oxygen extraction fraction and cerebral metabolic rate of oxygen in newborn piglets. **2003**, 54, 861-7	52
1397	Tissue characterization by quantitative optical imaging methods. **2003**, 2, 537-51	18
1396	Near-infrared measurements of hemodynamic and oxygenation changes on the frontal cortex during breath holding, hyperventilation, and natural sleep. **2003**,	1
1395	Clinical evaluation of a near-infrared tissue spectrometer in peripheral vascular disease. **2003**, 4955, 431	
1394	Feasibility of NIR tomographic reconstruction with multispectral continuous wave data by mapping into frequency domain data. **2003**,	2
1393	Noninvasive monitoring of cerebral oxygenation during vasomotor reactivity tests by a new near-infrared spectroscopy device. **2003**, 16, 36-41	32
1392	Discrepancy between cardiorespiratory system and skeletal muscle in elite cyclists after hypoxic training. **2003**, 2, 4	25

1391	Near-infrared spectroscopy and imaging. **2003**, 490-518		
1390	Does the regional oxygen uptake measured by near infrared spectroscopy reflect the phase II pulmonary oxygen uptake at the onset of exercise?. **2003**, 22, 137-42		1
1389	Optical tomographic mapping of cerebral haemodynamics by means of time-domain detection: methodology and phantom validation. *Physics in Medicine and Biology*, **2004**, 49, 1055-78	3.8	28
1388	Near-infrared spectroscopy and imaging of tumor vascular oxygenation. **2004**, 386, 349-78		20
1387	Near-infrared spectroscopy in evaluation of cerebral oxygenation during vasovagal syncope. **2004**, 25, 823-36		28
1386	Assessment of the hypoxic-ischemic encephalopathy in neonates using non-invasive near-infrared spectroscopy. **2004**, 25, 749-61		23
1385	Preliminary research on feasibility of noninvasive sensing of blood multifunction using optical method.		
1384	Hemodynamic response of the frontal cortex elicited by intravenous thiamine propyldisulphide administration. **2004**, 29, 247-51		18
1383	Effect of cardiopulmonary bypass on cortical cerebral oxygenation during coronary artery bypass grafting. **2004**, 26, 676-81		13
1382	Spatial distribution of vastus lateralis blood flow and oxyhemoglobin saturation measured at the end of isometric quadriceps contraction by multichannel near-infrared spectroscopy. **2004**, 9, 413-20		33
1381	Mapping of calf muscle oxygenation and haemoglobin content during dynamic plantar flexion exercise by multi-channel time-resolved near-infrared spectroscopy. *Physics in Medicine and Biology*, **2004**, 49, 685-99	3.8	45
1380	Productivity and fatigue. **2004**, 14 Suppl 7, 126-33		53
1379	Spatial Localization of Biosensor Fluorescence Signals in Human Skin under the Effect of Eequalization of the Refractive Index of the Surrounding Medium. **2004**, 96, 946-951		6
1378	Optical measurement of nasal swellings. **2004**, 51, 1673-9		18
1377	Muscle oxygenation kinetics at the onset of exercise do not depend on exercise intensity. **2004**, 91, 712-5		11
1376	[Near-infrared spectroscopy in psychiatry]. **2004**, 75, 911-6		44
1375	Reduction of physiological interference in optical functional neuroimaging using eigenvector-based spatial filtering.		
1374	Comment on the modified Beer-Lambert law for scattering media. *Physics in Medicine and Biology*, **2004**, 49, N255-7	3.8	189

1373	Neonatal electrocortical brain activity and cerebral tissue oxygenation during non-acidotic, normocarbic and normotensive graded hypoxemia. **2004**, 115, 282-8		5
1372	Synergistic effect of hyperosmotic agents of dimethyl sulfoxide and glycerol on optical clearing of gastric tissue studied with near infrared spectroscopy. *Physics in Medicine and Biology*, **2004**, 49, 457-68	3.8	54
1371	Past, present and future of arterial endofibrosis in athletes: a point of view. **2004**, 34, 419-25		25
1370	Cerebral oxygenation during intermittent supramaximal exercise. **2004**, 140, 165-72		36
1369	Relation between asymmetry of prefrontal cortex activities and the autonomic nervous system during a mental arithmetic task: near infrared spectroscopy study. **2004**, 369, 69-74		162
1368	Noninvasive Imaging of the Brain. **2004**, 15, 52		7
1367	Noninvasive measurement of neuronal activity with near-infrared optical imaging. **2004**, 21, 372-86		185
1366	Evoked-cerebral blood oxygenation changes in false-negative activations in BOLD contrast functional MRI of patients with brain tumors. **2004**, 21, 1464-71		119
1365	Practicality of wavelength selection to improve signal-to-noise ratio in near-infrared spectroscopy. **2004**, 21, 1554-62		104
1364	Separability and cross talk: optimizing dual wavelength combinations for near-infrared spectroscopy of the adult head. **2004**, 22, 583-9		82
1363	Diffuse optical imaging of brain activation: approaches to optimizing image sensitivity, resolution, and accuracy. **2004**, 23 Suppl 1, S275-88		511
1362	The effect of maximal finger tapping on cerebral activation. **2004**, 23, 105-10		28
1361	Novel integrated bio-optical system for oxygen saturation measurement. **2004**,		13
1360	Optical systems in ultrafast biophotonics. **2004**,		
1359	Assessment of cerebral tissue oxygenation in patients with sickle cell disease: effect of transfusion therapy. **2004**, 26, 279-83		30
1358	Quantitative determination of localized tissue oxygen concentration in vivo by two-photon excitation phosphorescence lifetime measurements. **2004**, 97, 1962-9		53
1357	Sensors for Fetal and Neonatal Monitoring. **2004**, 187-242		1
1356	Noninvasive monitoring of deterioration in skeletal muscle function with forearm cast immobilization and the prevention of deterioration. **2004**, 3, 2		40

1355	Diffuse Optical Imaging. **2005**, 77-129	8
1354	Diffuse optical tomography with an amplified ultrafast laser and a single-shot streak camera: application to real-time in vivo songbird neuro-imaging. **2005**, 5964, 183	1
1353	Arginine vasopressin reduces cerebral oxygenation and cerebral blood volume during intact circulation in swine - a near infrared spectroscopy study. **2005**, 22, 62-66	9
1352	Studying brain function with near-infrared spectroscopy concurrently with electroencephalography. **2005**, 5693, 444	3
1351	Changes in Intramuscular Blood Volume Induced by Continuous Shortwave Diathermy. **2005**, 17, 71-79	9
1350	Does handgrip exercise training increase forearm ischemic vasodilator responses in patients receiving hemodialysis?. **2005**, 207, 303-12	13
1349	Study on the measurement method of a dynamic spectrum. **2005**, 13, 284-288	4
1348	Arginine vasopressin reduces cerebral oxygenation and cerebral blood volume during intact circulation in swine---a near infrared spectroscopy study. **2005**, 22, 62-6	7
1347	Numerical developments for short-pulsed Near Infra-Red laser spectroscopy. Part I: direct treatment. **2005**, 91, 189-209	37
1346	Telegrapher□ equation for light derived from the transport equation. **2005**, 255, 184-195	5
1345	Transabdominal fetal pulse oximetry with near-infrared spectroscopy. **2005**, 192, 129-33	23
1344	Eigenvector-based spatial filtering for reduction of physiological interference in diffuse optical imaging. **2005**, 10, 11014	222
1343	Simultaneous detection of blood volume, oxygenation, and intracellular calcium changes during cerebral ischemia and reperfusion in vivo using diffuse reflectance and fluorescence. **2005**, 25, 1078-92	25
1342	Assessment of local changes of cerebral perfusion and blood concentration by near infrared spectroscopy and ultrasound contrast densitometry. **2005**, 27, 406-14	4
1341	Near-infrared spectroscopy in peripheral vascular disease. **1991**, 78, 405-8	107
1340	Effect of Japanese sitting style (seiza) on the center of foot pressure after standing. **2005**, 24, 167-73	5
1339	Relationship between cerebral activity and movement frequency of maximal finger tapping. **2005**, 24, 201-8	27
1338	Spatial and spectral information in optical mammography. **2005**, 4, 471-82	15

1337	Advances in Electromagnetic Fields in Living Systems. **2005**,		8
1336	Bilateral prefrontal cortex oxygenation responses to a verbal fluency task: a multichannel time-resolved near-infrared topography study. **2005**, 10, 11012		57
1335	Effects of skin on bias and reproducibility of near-infrared spectroscopy measurement of cerebral oxygenation changes in porcine brain. **2005**, 10, 44003		7
1334	Assessment of optical path length in tissue using neodymium and water absorptions for application to near-infrared spectroscopy. **2005**, 10, 024023		8
1333	Intersubject variability of near-infrared spectroscopy signals during sensorimotor cortex activation. **2005**, 10, 44001		84
1332	A haemodynamic response function model in spatio-temporal diffuse optical tomography. *Physics in Medicine and Biology*, **2005**, 50, 4625-44	3.8	29
1331	Developmental changes of optical properties in neonates determined by near-infrared time-resolved spectroscopy. **2005**, 58, 568-73		99
1330	A frequency multiplexed near-infrared topography system for imaging functional activation in the brain. **2005**, 76, 093705		88
1329	Study on the error in the dynamic spectrum method relative with the pathlength factor as a function of wavelength. **2005**, 2005, 6679-82		1
1328	Cerebral hemodynamic reactivity measured by near-infrared spectroscopy in migraineurs. **2005**, 2005, 1484-7		
1327	NIR spectroscopic detection of breast cancer. **2005**, 4, 497-512		63
1326	Reevaluation of near-infrared light propagation in the adult human head: implications for functional near-infrared spectroscopy. **2005**, 10, 064032		59
1325	Noninvasive monitoring of red blood cell transfusion in very low birthweight infants using diffuse optical spectroscopy. **2005**, 10, 051401		21
1324	The fast optical signal--robust or elusive when non-invasively measured in the human adult?. **2005**, 26, 996-1008		69
1323	Properties of a diffused photon-pair density wave in a multiple-scattering medium. **2005**, 44, 1416-25		8
1322	Detection of cortical activation with time-resolved diffuse optical methods. **2005**, 44, 1942-7		41
1321	Practical and adequate approach to modeling light propagation in an adult head with low-scattering regions by use of diffusion theory. **2005**, 44, 2094-103		18
1320	Design and implementation of dynamic near-infrared optical tomographic imaging instrumentation for simultaneous dual-breast measurements. **2005**, 44, 2140-53		93

1319	In vivo and noninvasive measurement of a songbird head's optical properties. **2005**, 44, 6197-204		7
1318	Estimated fraction of tumor vascular blood contents sampled by near infrared spectroscopy and 19F magnetic resonance spectroscopy. **2005**, 13, 1724-33		11
1317	Functional near-infrared spectroscopy: potential and limitations in neuroimaging studies. **2005**, 66, 237-66		80
1316	Development and validation of a multiwavelength spatial domain near-infrared oximeter to detect cerebral hypoxia-ischemia. **2006**, 11, 064022		25
1315	Oxygen Transport to Tissue XXVII. **2006**,		2
1314	Quantitative evaluation of interrelations between spontaneous low-frequency oscillations in cerebral hemodynamics and systemic cardiovascular dynamics. **2006**, 31, 1592-600		113
1313	Review of tissue simulating phantoms for optical spectroscopy, imaging and dosimetry. **2006**, 11, 041102		443
1312	Resting hypofrontality in schizophrenia: A study using near-infrared time-resolved spectroscopy. **2006**, 84, 411-20		30
1311	A comparison of transcranial Doppler with near infrared spectroscopy and indocyanine green during hemorrhagic shock: a prospective experimental study. **2006**, 10, R18		21
1310	The modified Beer-Lambert law revisited. *Physics in Medicine and Biology*, **2006**, 51, N91-8	3.8	307
1309	Time-resolved absorption and hemoglobin concentration difference maps: a method to retrieve depth-related information on cerebral hemodynamics. **2006**, 14, 12271-87		20
1308	Effects of the surface boundary on the determination of the optical properties of a turbid medium with time-resolved reflectance. **2006**, 45, 4756-64		10
1307	Changes of cerebral blood oxygenation and optical pathlength during activation and deactivation in the prefrontal cortex measured by time-resolved near infrared spectroscopy. **2006**, 78, 2734-41		41
1306	Detection of cerebral oxyhaemoglobin changes during vestibular Coriolis cross-coupling stimulation using near infrared spectroscopy. **2006**, 394, 83-7		4
1305	Cerebrovascular dynamics in patients with migraine: near-infrared spectroscopy study. **2006**, 400, 86-91		34
1304	Oxygenation in the motor cortex during exhaustive pinching exercise. **2006**, 153, 261-6		16
1303	Near infrared spectroscopy in carotid endarterectomy. 372-386		
1302	Near-Infrared Spectroscopic Imaging. **2006**,		

1301	Dual-wavelength phosphorimetry for determination of cortical and subcortical microvascular oxygenation in rat kidney. **2006**, 100, 1301-10	65
1300	Monitoring of cerebral oxygenation with near infrared spectroscopy and tissue oxygen partial pressure during cardiopulmonary resuscitation in pigs. **2006**, 23, 501-9	18
1299	Two-distance partial pathlength method for accurate measurement of muscle oxidative metabolism using fNIRS. **2006**, 6084, 163	
1298	Bio-Optical Signals. **2006**,	
1297	Metabolites, NonInvasive Optical Measurements of. **2006**,	1
1296	The utility of quantitative calf muscle near-infrared spectroscopy in the follow-up of acute deep vein thrombosis. **2006**, 4, 800-6	15
1295	Measurement of cerebral oxidative metabolism with near-infrared spectroscopy: a validation study. **2006**, 26, 722-30	34
1294	Direct imaging of turbid media using long-time back-scattered photons, a numerical study. **2006**, 45, 537-552	6
1293	Illuminating the BOLD signal: combined fMRI-fNIRS studies. **2006**, 24, 495-505	236
1292	A near infrared spectroscopy study investigating oxygen utilisation in hydrocephalic rats. **2006**, 175, 127-38	4
1291	Cerebrovascular reactivity to hypercapnia in migraine patients measured with near-infrared spectroscopy. **2006**, 1107, 206-14	25
1290	A new near-infrared spectrometer developed for dynamic spectroscopy. **2006**, 6047, 470	
1289	Use of light absorbers to alter optical interrogation with epi-illumination and transillumination in three-dimensional cardiac models. **2006**, 11, 024019	10
1288	Noncontact backscatter-mode near-infrared time-resolved imaging system: Preliminary study for functional brain mapping. **2006**, 11, 054006	14
1287	Quantitative spatial comparison of diffuse optical imaging with blood oxygen level-dependent and arterial spin labeling-based functional magnetic resonance imaging. **2006**, 11, 064018	60
1286	Within-subject reproducibility of near-infrared spectroscopy signals in sensorimotor activation after 6 months. **2006**, 11, 014021	42
1285	Image analysis methods for diffuse optical tomography. **2006**, 11, 33001	68
1284	Monitoring cerebral oxygen saturation during cardiopulmonary bypass using near-infrared spectroscopy: the relationships with body temperature and perfusion rate. **2006**, 11, 024016	33

1283	Fast optical signals in the peripheral nervous system. **2006**, 11, 044014		5
1282	Noncontact tissue oxygenation measurement using near-infrared spectroscopy. **2006**, 77, 073102		10
1281	Inspection of Separability of Normal and Migraine fNIRS Data using LDA and PCA.		
1280	Measurement of Cerebral Blood Flow with Near Infrared Spectroscopy and Indocyanine Green Dye Dilution. **2007**, 3, 139-150		5
1279	DC-magnetoencephalography and time-resolved near-infrared spectroscopy combined to study neuronal and vascular brain responses. **2007**, 28, 651-64		22
1278	Impact of norepinephrine and fluid on cerebral oxygenation in experimental hemorrhagic shock. **2007**, 62, 440-4		12
1277	Bioluminescence imaging of point sources implanted in small animals post mortem: evaluation of a method for estimating source strength and depth. *Physics in Medicine and Biology*, **2007**, 52, 5415-28	3.8	12
1276	Investigation of in vivo measurement of cerebral cytochrome-c-oxidase redox changes using near-infrared spectroscopy in patients with orthostatic hypotension. **2007**, 28, 199-211		28
1275	Measuring and Mapping Optical Properties and Chromophore Changes During Brain Injury in the Near-Infrared Spectral Range Using Spatial Modulation of Light: Initial Results. **2007**,		
1274	Adaptive filtering to reduce global interference in evoked brain activity detection: a human subject case study. **2007**, 12, 064009		102
1273	Using noninvasive multispectral imaging to quantitatively assess tissue vasculature. **2007**, 12, 051604		61
1272	Near-infrared spectroscopic quantification of changes in the concentration of oxidized cytochrome c oxidase in the healthy human brain during hypoxemia. **2007**, 12, 024002		51
1271	Progress of near-infrared spectroscopy and topography for brain and muscle clinical applications. **2007**, 12, 062104		358
1270	Functional optical signal analysis: a software tool for near-infrared spectroscopy data processing incorporating statistical parametric mapping. **2007**, 12, 064010		63
1269	Functional near-infrared spectroscopy: current status and future prospects. **2007**, 12, 062106		228
1268	Variation of haemoglobin extinction coefficients can cause errors in the determination of haemoglobin concentration measured by near-infrared spectroscopy. *Physics in Medicine and Biology*, **2007**, 52, 6295-322	3.8	43
1267	Adaptive filtering for global interference cancellation and real-time recovery of evoked brain activity: a Monte Carlo simulation study. **2007**, 12, 044014		117
1266	Light-induced autofluorescence of animal skin used in tissue optical modeling. **2007**,		

1265	The isometric torque at which knee-extensor muscle reoxygenation stops. **2007**, 39, 443-53	54
1264	Modulated imaging: a novel method for quantifying tissue chromophores in evolving cerebral ischemia. **2007**,	
1263	Post mortem evaluation of a new approach for quantitative bioluminescence imaging in small animals. **2007**,	
1262	Mapping tissue chromophore changes in cerebral ischemia: a pilot study. **2007**,	
1261	High frequency oscillations in brain hemodynamic response. **2007**,	
1260	Effects of assuming constant optical scattering on measurements of muscle oxygenation by near-infrared spectroscopy during exercise. **2007**, 102, 358-67	66
1259	Quantitative spectrophotometry of scattering media via frequency-domain and constant-intensity measurements. **2007**, 24, 1969-74	3
1258	Improving depth resolution of diffuse optical tomography with a layer-based sigmoid adjustment method. **2007**, 15, 4018-29	10
1257	Quantitative measurement of muscle oxygen saturation without influence from skin and fat using continuous-wave near infrared spectroscopy. **2007**, 15, 13715-30	32
1256	Linear 3D reconstruction of time-domain diffuse optical imaging differential data: improved depth localization and lateral resolution. **2007**, 15, 16400-12	33
1255	Reduction of error in spectrophotometry of scattering media using polarization techniques. **2007**, 61, 1379-89	10
1254	Gender difference in hemodynamic responses of prefrontal area to emotional stress by near-infrared spectroscopy. **2007**, 178, 172-6	47
1253	Does dorsolateral prefrontal cortex (DLPFC) activation return to baseline when sexual stimuli cease? The role of DLPFC in visual sexual stimulation. **2007**, 416, 55-60	32
1252	A lasting post-stimulus activation on dorsolateral prefrontal cortex is produced when processing valence and arousal in visual affective stimuli. **2007**, 422, 147-52	29
1251	The oxygenation response to functional stimulation: is there a physiological meaning to the lag between parameters?. **2007**, 36, 100-7	42
1250	Brain tissue oxygen concentration measurements. **2007**, 9, 1207-19	106
1249	A Simple and Novel Integrated Opto-Electronic System for Blood Volume Pulse Sensing and Heart Rate Monitoring. **2007**, 1, 392-403	2
1248	Regional differences of hemodynamics and oxygenation in the human calf muscle detected with near-infrared spectrophotometry. **2007**, 18, 1094-101	18

1247	Effects of acute hypoxia on cerebral and muscle oxygenation during incremental exercise. **2007**, 103, 177-83		188
1246	Indoor Temperature, Productivity, and Fatigue in Office Tasks. **2007**, 13, 623-633		50
1245	Optical brain imaging in vivo: techniques and applications from animal to man. **2007**, 12, 051402		291
1244	Optical tomography in the diagnosis of rheumatoid arthritis method and implementation. **2007**, 22, 15-22		4
1243	Investigation on the reflection at the boundaries for reconstruction laser-based imaging. **2007**, 104, 238-247		4
1242	Laser induced autofluorescence studies of animal skin used in modeling of human cutaneous tissue spectroscopic measurements. **2007**, 13, 350-9		13
1241	Human motor cortex oxygenation during exhaustive pinching task. **2007**, 1156, 120-4		24
1240	Brain haemodynamic effects of nasal continuous airway pressure in preterm infants of less than 30 weeks' gestation. **2007**, 96, 1421-5		18
1239	Temporal classification of multichannel near-infrared spectroscopy signals of motor imagery for developing a brain-computer interface. **2007**, 34, 1416-27		444
1238	Elevated haemoglobin levels in the motor cortex following 1 Hz transcranial magnetic stimulation: a preliminary study. **2007**, 181, 555-60		14
1237	Electrostimulation improves muscle perfusion but does not affect either muscle deoxygenation or pulmonary oxygen consumption kinetics during a heavy constant-load exercise. **2008**, 102, 289-97		5
1236	Is muscle StO2 an appropriate variable for investigating early compensatory tissue mechanisms under physiological and pathological conditions?. **2008**, 34, 1557-9		7
1235	Optical imaging of infants' neurocognitive development: recent advances and perspectives. **2008**, 68, 712-28		99
1234	An overview on recent radiation transport algorithm development for optical tomography imaging. **2008**, 109, 2743-2766		44
1233	Hemoglobin plus myoglobin concentrations and near infrared light pathlength in phantom and pig hearts determined by diffuse reflectance spectroscopy. **2008**, 382, 107-15		14
1232	The physics, biophysics and technology of photodynamic therapy. *Physics in Medicine and Biology*, **2008**, 53, R61-109	3.8	703
1231	Near-infrared spectroscopy extended with indocyanine green dye dilution for cerebral blood flow measurement: Median values in healthy volunteers. **2008**, 16,		3
1230	Validation of cerebral venous oxygenation measured using near-infrared spectroscopy and partial jugular venous occlusion in the newborn lamb. **2008**, 28, 74-80		14

1229	Quantification of delayed oxygenation in ipsilateral primary motor cortex compared with contralateral side during a unimanual dominant-hand motor task using near-infrared spectroscopy. **2008**, 1210, 142-7	31
1228	Evaluation of near infrared spectroscopy in monitoring postoperative regional tissue oxygen saturation for fibular flaps. **2008**, 61, 289-96	39
1227	Non-invasive NIR spectroscopy of human brain function during exercise. **2008**, 45, 289-99	205
1226	Investigation of biphasic tumor oxygen dynamics induced by hyperoxic gas intervention: the dynamic phantom approach. **2008**, 47, 242-52	12
1225	Estimation of optical properties of turbid media: experimental comparison of spatially and temporally resolved reflectance methods. **2008**, 47, 1734-9	4
1224	Mid-infrared diffuse reflection of a strongly absorbing analyte on non-absorbing and absorbing matrices. Part I: homogeneous powders. **2008**, 62, 377-82	12
1223	Assessment of near-infrared path length in fibrous phantom and muscle tissue. **2008**, 62, 671-6	11
1222	Photonic textiles for pulse oximetry. **2008**, 16, 12973-86	85
1221	The hemodynamics of cognitive control: the level of concentration of oxygenated hemoglobin in the superior prefrontal cortex varies as a function of performance in a modified Stroop task. **2008**, 193, 248-56	51
1220	Dynamics of cortical neurovascular coupling analyzed by simultaneous DC-magnetoencephalography and time-resolved near-infrared spectroscopy. **2008**, 39, 979-86	37
1219	Development, set-up and first results for a one-channel near-infrared spectroscopy system. **2008**, 53, 36-43	82
1218	Low-volume muscular endurance and strength training during 3-week forearm immobilization was effective in preventing functional deterioration. **2008**, 7, 1	17
1217	Crosstalk and error analysis of fat layer on continuous wave near-infrared spectroscopy measurements. **2008**, 13, 064019	5
1216	Direct estimation of evoked hemoglobin changes by multimodality fusion imaging. **2008**, 13, 054031	22
1215	Measurement of blood flow index during antegrade selective cerebral perfusion with near-infrared spectroscopy in newborn piglets. **2008**, 106, 795-803, table of contents	16
1214	Regional and local brain oxygenation during hemorrhagic shock: a prospective experimental study on the effects of small-volume resuscitation with norepinephrine. **2008**, 64, 641-8; discussion 648-9	15
1213	Auditory stimulus repetition effects on cortical hemoglobin oxygenation: a near-infrared spectroscopy investigation. **2008**, 19, 161-5	3
1212	Human respiratory muscle blood flow measured by near-infrared spectroscopy and indocyanine green. **2008**, 104, 1202-10	56

1211 Depolarization increases cellular light transmission. **2008**,

1210 Wireless near-infrared spectroscopy of skeletal muscle oxygenation and hemodynamics during exercise and ischemia. **2009**, 23, 233-241 39

1209 Bilateral motor control during motor tasks involving the nondominant hand. **2009**, 28, 165-71 2

1208 [Not Available]. **2009**, 3, 12 15

1207 Monitoring brain oxygenation in head-injury patients. **2009**, 37, 107-37

1206 Measurement of brain activity using optical and electrical method. **2009**, 0

1205 An analysis framework for Near InfraRed Spectroscopy based brain-computer interface and prospective application to robotic surgery. **2009**, 1

1204 Noninvasive Tissue Blood Oxygenation Measurement Based on Near Infrared Spectroscopy (NIRS). **2009**, 1

1203 Near-infrared spectroscopy: shedding light on the injured brain. **2009**, 108, 1055-7 41

1202 Hemodynamic changes in rat leg muscles during tourniquet-induced ischemia-reperfusion injury observed by near-infrared spectroscopy. **2009**, 30, 529-40 25

1201 Topographic localization of brain activation in diffuse optical imaging using spherical wavelets. *Physics in Medicine and Biology*, **2009**, 54, 6383-413 3.8 25

1200 [In vitro determination of substance concentration in scattering media with NIR laser remssionspectroscopy]. **1998**, 43 Suppl, 116-7

1199 Is mean blood saturation a useful marker of tissue oxygenation?. **2009**, 296, H1289-95 42

1198 Diffuse optical monitoring of hemodynamic changes in piglet brain with closed head injury. **2009**, 14, 034015 128

1197 Imaging cortical absorption, scattering, and hemodynamic response during ischemic stroke using spatially modulated near-infrared illumination. **2009**, 14, 024033 63

1196 Quantitative study on cerebral blood volume determined by a near-infrared spectroscopy during postural change in children. **2009**, 98, 466-71 11

1195 Infrared and Raman Instrumentation for Mapping and Imaging. 1-64 13

1194 Estimating cerebral oxygen metabolism from fMRI with a dynamic multicompartment Windkessel model. **2009**, 30, 1548-67 38

1193	Theory of optical analysis of inhomogeneous turbid textures. **2009**, 16, 262-268		1
1192	Relationship between wavelength combination and signal-to-noise ratio in measuring hemoglobin concentrations using visible or near-infrared light. **2009**, 16, 442-448		10
1191	Single-trial classification of NIRS signals during emotional induction tasks: towards a corporeal machine interface. **2009**, 6, 39		97
1190	Social perception in infancy: a near infrared spectroscopy study. **2009**, 80, 986-99		152
1189	Prognostic impact of calf muscle near-infrared spectroscopy in patients with a first episode of deep vein thrombosis. **2009**, 7, 1506-13		9
1188	Quantitative measurements of absorption spectra in scattering media by low-coherence spectroscopy. **2009**, 34, 3746-8		26
1187	Hemodynamic Responses of Rat Brain Measured by Near-infrared Spectroscopy During Various Whisker Stimulations. **2009**, 13, 166-170		3
1186	Transcranial optical monitoring of cerebrovascular hemodynamics in acute stroke patients. **2009**, 17, 3884-902		113
1185	Chi2 analysis for estimating the accuracy of optical properties derived from time resolved diffuse-reflectance. **2009**, 17, 20521-37		3
1184	Near-infrared spectral imaging of the female breast for quantitative oximetry in optical mammography. **2009**, 48, D225-35		13
1183	HomER: a review of time-series analysis methods for near-infrared spectroscopy of the brain. **2009**, 48, D280-98		744
1182	Spectroscopic technique with wide range of wavelength information improves near-infrared spectroscopy. **2009**,		
1181	Three-wavelength technique for the measurement of oxygen saturation in arterial blood and in venous blood. **2009**, 14, 024046		18
1180	A wearable diffuse reflectance sensor for continuous monitoring of cutaneous blood content. *Physics in Medicine and Biology*, **2009**, 54, 5301-20	3.8	14
1179	. **2009**,		1
1178	Real-time imaging of human brain function by near-infrared spectroscopy using an adaptive general linear model. **2009**, 46, 133-43		144
1177	Task complexity relates to activation of cortical motor areas during uni- and bimanual performance: a functional NIRS study. **2009**, 46, 1105-13		63
1176	Sex differences in prefrontal hemodynamic response to mental arithmetic as assessed by near-infrared spectroscopy. **2009**, 6, 565-74		19

1175	Diffuse reflectance spectroscopy characterization of hemoglobin and intralipid solutions: in vitro measurements with continuous variation of absorption and scattering. **2009**, 14, 034026	11
1174	The effect on cerebral tissue oxygenation index of changes in the concentrations of inspired oxygen and end-tidal carbon dioxide in healthy adult volunteers. **2009**, 109, 906-13	54
1173	Application of a multicompartment dynamical model to multimodal optical imaging for investigating individual cerebrovascular properties. **2009**,	
1172	A Portable Multi-Wavelength near Infrared Photon Time-of-flight Instrument for Measuring Light Scattering. **2009**, 17, 167-176	0
1171	Multi-wavelength measurement of cytochrome oxidase and water in biomedical tissues using optical topography system. **2009**,	
1170	Non-invasive measurements of hemoglobin + myoglobin, their oxygenation and NIR light pathlength in heart in vivo by diffuse reflectance spectroscopy. **2009**,	1
1169	First derivative of NIR light diffuse reflectance spectra as an approach to analyze muscle tissue chromophores and light pathlength. **2009**,	1
1168	Cerebral arterial and venous contributions to tissue oxygenation index measured using spatially resolved spectroscopy in newborn lambs. **2010**, 113, 1385-91	39
1167	Near-infrared spectroscopy with Spectroscopic technique with wide range of wavelength information detects tissue oxygenation level clearly. **2010**,	
1166	Time-resolved near-infrared spectroscopy and imaging of the adult human brain. **2010**, 662, 143-8	47
1165	Modified Beer's Law historical perspectives and relevance in near-infrared monitoring of optical properties of human tissue. **2010**, 40, 125-134	69
1164	Effects of spatial variation of skull and cerebrospinal fluid layers on optical mapping of brain activities. **2010**, 17, 410-420	17
1163	Slow vasogenic fluctuations of intracranial pressure and cerebral near infrared spectroscopy--an observational study. **2010**, 152, 1763-9	35
1162	Maternal breast milk odour induces frontal lobe activation in neonates: a NIRS study. **2010**, 86, 541-5	42
1161	Testing the potential of a virtual reality neurorehabilitation system during performance of observation, imagery and imitation of motor actions recorded by wireless functional near-infrared spectroscopy (fNIRS). **2010**, 7, 57	58
1160	Intact neurovascular coupling during executive function in migraine without aura: interictal near-infrared spectroscopy study. **2010**, 30, 457-66	19
1159	Assessment of ultrasound modulation of near infrared light on the quantification of scattering coefficient. **2010**, 37, 3744-51	7
1158	CHANGES IN CEREBRAL OXYGENATION DURING A SINGLE BOUT OF COMBINED CIRCUIT TRAINING. **2010**, 59, 529-540	

1157	Wavelength optimization for rapid chromophore mapping using spatial frequency domain imaging. **2010**, 15, 061716		72
1156	Comparison of time-resolved and continuous-wave near-infrared techniques for measuring cerebral blood flow in piglets. **2010**, 15, 057004		42
1155	How to detect and reduce movement artifacts in near-infrared imaging using moving standard deviation and spline interpolation. **2010**, 31, 649-62		316
1154	Phasor representation of oxy- and deoxyhemoglobin concentrations: what is the meaning of out-of-phase oscillations as measured by near-infrared spectroscopy?. **2010**, 15, 040512		20
1153	Non-linear characteristic of human blood NIR spectra. **2010**,		
1152	Transcranial magnetic stimulation of the parietal cortex facilitates spatial working memory: near-infrared spectroscopy study. **2010**, 20, 1037-45		46
1151	Cerebral hemodynamic responses to seizure in the mouse brain: simultaneous near-infrared spectroscopy-electroencephalography study. **2010**, 15, 037010		14
1150	Tissue oxygenation and haemodynamics measurement with spatially resolved NIRS. **2010**,		
1149	Effects of improper source coupling in frequency-domain near-infrared spectroscopy. *Physics in Medicine and Biology*, **2010**, 55, 2941-60	3.8	9
1148	Quality control and assurance in functional near infrared spectroscopy (fNIRS) experimentation. *Physics in Medicine and Biology*, **2010**, 55, 3701-24	3.8	93
1147	Diffuse Optics for Tissue Monitoring and Tomography. **2010**, 73,		627
1146	[Near-infrared spectroscopy in the postanesthesia recovery care unit: noninvasive monitoring of peripheral perfusion]. **2010**, 57, 364-73		3
1145	The effect of different anesthetics on neurovascular coupling. **2010**, 51, 1367-77		110
1144	Fast-gated SPAD for ultra-wide dynamic range optical investigations. **2010**,		1
1143	Noncontact brain activity measurement system based on near-infrared spectroscopy. **2010**, 96, 123701		10
1142	An update on novel non-invasive approaches for periodontal diagnosis. **2010**, 81, 186-98		67
1141	Near infrared transillumination imaging of breast cancer with vasoactive inhalation contrast. **2010**, 1, 295		5
1140	Investigation of spectral interferences on the accuracy of broadband CW-NIRS tissue SO(2) determination. **2010**, 1, 748-761		11

1139	Spectral and spatial dependence of?diffuse optical signals in response to?peripheral nerve stimulation. **2010**, 1, 923-942	6
1138	Estimation of directional coupling between cortical areas using Near-Infrared Spectroscopy (NIRS). **2010**, 18, 5730-9	25
1137	A novel first principles approach for the estimation of the sieve factor of blood samples. **2010**, 18, 7456-69	6
1136	Prefrontal hemodynamic changes produced by anodal direct current stimulation. **2010**, 49, 2304-10	123
1135	Oxygen Transport to Tissue XXXI. **2010**,	17
1134	NIRS study of cerebral oxygenation and hemodynamics in neonate at birth. **2011**, 2011, 1229-32	2
1133	The effect of blood content on the optical and dielectric skin properties. **2011**, 32, 131-49	16
1132	Quantification of light reflectance spectroscopy and its application: determination of hemodynamics on the rat spinal cord and brain induced by electrical stimulation. **2011**, 56, 1316-28	14
1131	Improved recovery of the hemodynamic response in diffuse optical imaging using short optode separations and state-space modeling. **2011**, 56, 1362-71	180
1130	Influence of skin blood flow on near-infrared spectroscopy signals measured on the forehead during a verbal fluency task. **2011**, 57, 991-1002	316
1129	Near-infrared spectroscopy: a methodology-focused review. **2011**, 16, 42-9	128
1128	In vivo functional near-infrared spectroscopy measures mood-modulated cerebral responses to a positive emotional stimulus in sheep. **2011**, 54, 1625-33	27
1127	Intraoperative Brain Monitoring in Cardiac Surgery. **2011**, 83-111	6
1126	Brain Protection in Cardiac Surgery. **2011**,	6
1125	Diffuse optical cortical mapping using the boundary element method. **2011**, 2, 568-78	6
1124	Quantitative investigation of the effect of the extra-cerebral vasculature in diffuse optical imaging: a simulation study. **2011**, 2, 680-95	21
1123	Path-length resolved reflectance in tendon and muscle. **2011**, 19, 8879-87	5
1122	Fast-gated single-photon counting technique widens dynamic range and speeds up acquisition time in time-resolved measurements. **2011**, 19, 10735-46	68

1121	Optical scanning system for light-absorption measurement of deep biological tissue. **2011**, 82, 093101	2
1120	Study of neurovascular coupling by modulating neuronal activity with GABA. **2011**, 1372, 1-12	12
1119	Inconsistent detection of changes in cerebral blood volume by near infrared spectroscopy in standard clinical tests. **2011**, 110, 1646-55	38
1118	Changes in hemodynamics and tissue oxygenation saturation in the brain and skeletal muscle induced by speech therapy - a near-infrared spectroscopy study. **2011**, 11, 1206-15	10
1117	Simultaneous measurement of time-domain fNIRS and physiological signals during a cognitive task. **2011**,	
1116	Effects of changes in colored light on brain and calf muscle blood concentration and oxygenation. **2011**, 11, 1216-25	2
1115	Optical system for monitoring the internal image of foods and the human body. **2011**,	
1114	Mortality and regional oxygen saturation index in septic shock patients: a pilot study. **2011**, 70, 1145-52	20
1113	Robot-assisted motor activation monitored by time-domain optical brain imaging. **2011**,	
1112	Effect of Muscle Strength Training and Muscle Endurance Training on Muscle Deoxygenation Level and Endurance Performance. **2011**, 23, 349-355	6
1111	Simultaneous measurement of time-domain fNIRS and physiological signals during a cognitive task. **2011**,	1
1110	Optical Instrumentation for the Measurement of Blood Perfusion, Concentration, and Oxygenation in Living Microcirculation. **2011**, 573-604	1
1109	Understanding inverse oxygenation responses during motor imagery: a functional near-infrared spectroscopy study. **2011**, 33, 2318-28	21
1108	Frontal cerebral cortex blood flow, oxygen delivery and oxygenation during normoxic and hypoxic exercise in athletes. **2011**, 589, 4027-39	58
1107	Asymmetric alternation of the hemodynamic response at the prefrontal cortex in patients with schizophrenia during electroconvulsive therapy: a near-infrared spectroscopy study. **2011**, 1410, 132-40	16
1106	Characterization of the acute effects of alcohol on asymmetry of inferior frontal cortex activity during a Go/No-Go task using functional near-infrared spectroscopy. **2011**, 217, 595-603	15
1105	Single-trial classification of motor imagery differing in task complexity: a functional near-infrared spectroscopy study. **2011**, 8, 34	80
1104	Advanced Optical Methods for Functional Brain Imaging: Time-Domain Functional Near-Infrared Spectroscopy. **2011**, 287-305	3

1103	In vivo near-infrared spectroscopy and magnetic resonance imaging monitoring of tumor response to combretastatin A-4-phosphate correlated with therapeutic outcome. **2011**, 80, 574-81	22
1102	Near-infrared spectroscopy: a report from the McDonnell infant methodology consortium. **2011**, 1, 22-46	238
1101	Noncontact Optical Brain Activity Measurement System Using Phosphor Placed on Skin. **2011**, 50, 077001	2
1100	Towards the next generation of near-infrared spectroscopy. **2011**, 369, 4425-39	43
1099	Effect of deep breathing on extracted oxygen and cerebral hemoglobin levels. **2011**, 2011, 1021-4	1
1098	Selective cortical mapping of biological motion processing in young infants. **2011**, 23, 2521-32	69
1097	Development of motion resistant instrumentation for ambulatory near-infrared spectroscopy. **2011** , 16, 087008	26
1096	Slow spontaneous hemodynamic oscillations during sleep measured with near-infrared spectroscopy. **2011**,	
1095	Correlation of functional and resting state connectivity of cerebral oxy-, deoxy-, and total hemoglobin concentration changes measured by near-infrared spectrophotometry. **2011**, 16, 087013	15
1094	Resting-state functional connectivity assessed with two diffuse optical tomographic systems. **2011**, 16, 046006	36
1093	Synchronous activity of two people's prefrontal cortices during a cooperative task measured by simultaneous near-infrared spectroscopy. **2011**, 16, 077011	125
1092	USING FUNCTIONAL NEAR-INFRARED SPECTROSCOPY TO MEASURE COGNITIVE FUNCTION: WHEN WILL IT BECOME AN ACCEPTED CLINICAL TOOL FOR COGNITIVE AGING AND PRODROMAL DEMENTIA SCREENING?. **2011**, 04, 373-383	4
1091	THE EVOLUTION OF FIELD DEPLOYABLE fNIR SPECTROSCOPY FROM BENCH TO CLINICAL SETTINGS. **2011**, 04, 239-250	41
1090	Application of near-infrared spectroscopy to measurement of hemodynamic signals accompanying stimulated saliva secretion. **2011**, 16, 047002	23
1089	Role of the prefrontal cortex in the cognitive control of reaching movements: near-infrared spectroscopy study. **2011**, 16, 127003	10
1088	Correlation of within-individual fluctuation of depressed mood with prefrontal cortex activity during verbal working memory task: optical topography study. **2011**, 16, 126007	32
1087	Spatial sensitivity of acousto-optic and optical near-infrared spectroscopy sensing measurements. **2011**, 16, 127005	13
1086	FUNCTIONAL NEAR-INFRARED SPECTROSCOPYBASED ASSESSMENT OF ATTENTION IMPAIRMENTS AFTER TRAUMATIC BRAIN INJURY. **2011**, 04, 251-260	22

1085	Noninvasive monitoring of treatment response in a rabbit cyanide toxicity model reveals differences in brain and muscle metabolism. **2012**, 17, 105005	9
1084	Diffuse near-infrared reflectance spectroscopy during heatstroke in a mouse model: pilot study. **2012**, 17, 105009	6
1083	Low-frequency oscillations measured in the periphery with near-infrared spectroscopy are strongly correlated with blood oxygen level-dependent functional magnetic resonance imaging signals. **2012**, 17, 106004	63
1082	Multispectral reflectance imaging of brain activation in rodents: methodological study of the differential path length estimations and first in vivo recordings in the rat olfactory bulb. **2012**, 17, 016012	5
1081	Diffuse optical imaging using spatially and temporally modulated light. **2012**, 17, 071311	132
1080	Noninvasive diffuse optical monitoring of head and neck tumor blood flow and oxygenation during radiation delivery. **2012**, 3, 259-72	20
1079	Broadband continuous-wave technique to measure baseline values and changes in the tissue chromophore concentrations. **2012**, 3, 2761-70	35
1078	Development of a real-time optical imaging system for monitoring food quality and assessing human body parts using diffused light. **2012**,	
1077	A fast neuronal signal-sensitive continuous-wave near-infrared imaging system. **2012**, 83, 094301	19
1076	RLS adaptive filtering for physiological interference reduction in NIRS brain activity measurement: a Monte Carlo study. **2012**, 33, 925-42	21
1075	Impaired motor learning by a pursuit rotor test reduces functional outcomes during rehabilitation of poststroke ataxia. **2012**, 26, 293-300	25
1074	The emergence of cerebral specialization for the human voice over the first months of life. **2012**, 7, 317-30	50
1073	Review article: cerebral near-infrared spectroscopy in adults: a work in progress. **2012**, 115, 1373-83	195
1072	Validation of diffuse correlation spectroscopic measurement of cerebral blood flow using phase-encoded velocity mapping magnetic resonance imaging. **2012**, 17, 037007	55
1071	Relation between working memory performance and evoked cerebral blood oxygenation changes in the prefrontal cortex evaluated by quantitative time-resolved near-infrared spectroscopy. **2012**, 34, 114-9	17
1070	Principles and Applications of Diffuse Optical Imaging for the Brain. **2012**, 8, 157-173	2
1069	Diffuse Correlation Spectroscopy (DCS): A Diagnostic Tool for Assessing Tissue Blood Flow in Vascular-Related Diseases and Therapies. **2012**, 8, 194-210	25
1068	Quantifying the cortical contribution to the NIRS signal using simultaneous NIRS-BOLD measurements. **2012**,	

1067	Biomedical applications of wireless continuous wave near infrared spectroscopy. **2012**, 1, 205-222		12
1066	Brain and Muscle near Infrared Spectroscopy/Imaging Techniques. **2012**, 20, 15-27		28
1065	The Evolution of Wireless near Infrared Spectroscopy Applications in Urology and Rationale for Clinical Use. **2012**, 20, 57-73		3
1064	An ABC of near Infrared Photon Migration in Tissues: The Diffusive Regime of Propagation. **2012**, 20, 29-42		19
1063	. **2012**, 18, 1343-1354		4
1062	A brief review on the history of human functional near-infrared spectroscopy (fNIRS) development and fields of application. **2012**, 63, 921-35		1167
1061	New developments in tools for periodontal diagnosis. **2012**, 62, 57-64		21
1060	Experimental estimation of the photons visiting probability profiles in time-resolved diffuse reflectance measurement. *Physics in Medicine and Biology*, **2012**, 57, 7973-81	3.8	13
1059	Trial-to-trial variability differentiates motor imagery during observation between low versus high responders: a functional near-infrared spectroscopy study. **2012**, 229, 29-40		27
1058	Extension of mental preparation positively affects motor imagery as compared to motor execution: a functional near-infrared spectroscopy study. **2012**, 48, 593-603		25
1057	The utility of amplitude-integrated EEG and NIRS measurements as indices of hypoxic ischaemia in the newborn pig. **2012**, 123, 1668-75		7
1056	Development and validation of a cerebral oximeter capable of absolute accuracy. **2012**, 26, 1007-14		47
1055	Cerebral oximetry during cardiac surgery: the association between cerebral oxygen saturation and perioperative patient variables. **2012**, 26, 1015-21		14
1054	Between-brain coherence during joint n-back task performance: a two-person functional near-infrared spectroscopy study. **2012**, 234, 212-22		68
1053	Short separation channel location impacts the performance of short channel regression in NIRS. **2012**, 59, 2518-28		224
1052	Quantification of the cortical contribution to the NIRS signal over the motor cortex using concurrent NIRS-fMRI measurements. **2012**, 59, 3933-40		148
1051	Normative database of judgment of complexity task with functional near infrared spectroscopy--application for TBI. **2012**, 60, 879-83		27
1050	Calibrating the BOLD signal during a motor task using an extended fusion model incorporating DOT, BOLD and ASL data. **2012**, 61, 1268-76		16

1049	Between-brain connectivity during imitation measured by fNIRS. **2012**, 63, 212-22	124
1048	Phase-amplitude investigation of spontaneous low-frequency oscillations of cerebral hemodynamics with near-infrared spectroscopy: a sleep study in human subjects. **2012**, 63, 1571-84	62
1047	Functional Neuroimaging in Exercise and Sport Sciences. **2012**,	10
1046	Cortical neurovascular coupling driven by stimulation of channelrhodopsin-2. **2012**, 7, e46607	12
1045	Cerebral hemodynamics in newborn infants exposed to speech sounds: a whole-head optical topography study. **2012**, 33, 2092-103	120
1044	NIR spectroscopic imaging to map hemoglobin + myoglobin oxygenation, their concentration and optical pathlength across a beating pig heart during surgery. **2012**, 5, 128-39	3
1043	Functional near-infrared spectroscopy for the assessment of speech related tasks. **2012**, 121, 90-109	75
1042	Nonlinear hemodynamic responses in human epilepsy: a multimodal analysis with fNIRS-EEG and fMRI-EEG. **2012**, 204, 326-40	46
1041	Remote preconditioning improves hepatic oxygenation after ischaemia reperfusion injury. **2012**, 25, 783-91	20
1040	Enhancement of motor imagery-related cortical activation during first-person observation measured by functional near-infrared spectroscopy. **2012**, 35, 1513-21	8
1039	Quantitative effect of the neonatal fontanel on synthetic near infrared spectroscopy measurements. **2013**, 34, 878-89	14
1038	Location-dependent coronary artery diffusive and convective mass transport properties of a lipophilic drug surrogate measured using nonlinear microscopy. **2013**, 30, 1147-60	7
1037	Application of Near Infrared Spectroscopy in Biomedicine. **2013**,	16
1036	A portable wireless near-infrared spatially resolved spectroscopy system for use on brain and muscle. **2013**, 35, 1692-7	22
1035	. **2013**, 15, 1001-1013	24
1034	Deep subsurface cavities in skin utilizing mechanical optical clearing and femtosecond laser ablation. **2013**, 45, 383-90	7
1033	Enhanced visible light absorption by TiO2 film patterned with Ag nanoparticles arrays. **2013**, 54, 326-330	19
1032	Optical Methods and Instrumentation in Brain Imaging and Therapy. **2013**,	8

1031	Gas in scattering media absorption spectroscopy From basic studies to biomedical applications. **2013**, 7, 779-796	32
1030	A NIRS-fMRI investigation of prefrontal cortex activity during a working memory task. **2013**, 83, 158-73	222
1029	Recognition of hemodynamic responses for mental arithmetic using support vector machine. **2013**,	
1028	An fNIRS study of taste cortical areas in human brain: Sweetness and sourness. **2013**,	
1027	Translating fMRI to fNIRS. **2013**,	2
1026	The role of near-infrared spectroscopy in Alzheimer's disease. **2013**, 4, 33-36	15
1025	Principles and Instrumentation. **2013**, 1-19	1
1024	Photon Migration in NIRS Brain Imaging. **2013**, 37-58	
1023	In-Vivo NIRS and Muscle Oxidative Metabolism. **2013**, 75-91	
1022	Evaluating the effects of systemic low frequency oscillations measured in the periphery on the independent component analysis results of resting state networks. **2013**, 76, 202-15	53
1021	History of Diffuse Optical Spectroscopy of Human Tissue. **2013**, 23-56	1
1020	Diffuse Optical Tomography for Brain Imaging: Continuous Wave Instrumentation and Linear Analysis Methods. **2013**, 57-85	2
1019	Oxygen Transport to Tissue XXXIV. **2013**,	10
1018	The teaching and the learning brain: A cortical hemodynamic marker of teacher Student interactions in the Socratic dialog. **2013**, 59, 1-10	95
1017	The effect of blood transfusion on cerebral hemodynamics in preterm infants. **2013**, 53, 1459-67	12
1016	Optical sensing of a pulsating liquid in a brain-mimicking phantom. **2013**,	8
1015	Improving the depth sensitivity of time-resolved measurements by extracting the distribution of times-of-flight. **2013**, 4, 447-59	21
1014	Optical imaging of resting-state functional connectivity in a novel arterial stiffness model. **2013**, 4, 2332-46	16

1013	Textile integrated sensors and actuators for near-infrared spectroscopy. **2013**, 21, 3213-24	37
1012	General equation for the differential pathlength factor of the frontal human head depending on wavelength and age. **2013**, 18, 105004	168
1011	Optical imaging of acute epileptic networks in mice. **2013**, 18, 76021	18
1010	Comparison of Optical and Concentration Feature Used for fNIRS-Based BCI System Using HMM. **2013**, 385-386, 1443-1448	0
1009	Impaired cerebral haemodynamic function associated with chronic traumatic brain injury in professional boxers. **2013**, 124, 177-89	96
1008	Duty Ratio Thresholds for Regular Transmission at Human Tissue of Near-Infrared Square-Wave Pulse. **2013**, 333-335, 555-558	
1007	Laser spectroscopy in medical diagnostics. **2013**, 286-324	3
1006	Coherent Derivation of Equations for Differential Spectroscopy and Spatially Resolved Spectroscopy: An Undergraduate Tutorial. **2013**, 46, 243-249	6
1005	Continuous correction of differential path length factor in near-infrared spectroscopy. **2013**, 18, 56001	19
1004	Acute effects of physical exercise on prefrontal cortex activity in older adults: a functional near-infrared spectroscopy study. **2013**, 765, 293-298	47
1003	Influence of cutaneous and muscular circulation on spatially resolved versus standard Beer-Lambert near-infrared spectroscopy. **2013**, 1, e00179	40
1002	Influences of blood flow changes in cerebrospinal fluid and skin layers on optical mapping. **2013**, 2013, 2632-5	1
1001	. **2013**,	
1000	Infant cortex responds to other humans from shortly after birth. **2013**, 3, 2851	56
999	Spatial and Temporal Frequency Domain Tissue Optical Imaging. **2013**, 109-136	0
998	An overview of time-domain diffuse fluorescence imaging: instrumentation and applications. **2013**,	1
997	Measurement of oxygen consumption during muscle flaccidity exercise by near-infrared spectroscopy. **2013**,	0
996	Near-Infrared Spectroscopy in Studies of Brain Oxygenation. **2013**, 14, 167-171	1

995 Assessment of Infant Brain Development. **2013**, 743

994 Opto-physiological modeling applied to photoplethysmographic cardiovascular assessment. **2013**, 4, 505-28 19

993 A new optical probe for the detection of the sentinel lymph node using patent blue V dye in breast cancer: A preliminary study. **2013**, 1, 143-147 2

992 Multimodal phantom of liver tissue. **2013**, 8, e64180 23

991 Monitoring attentional state with fNIRS. **2013**, 7, 861 31

990 Continuous monitoring of brain dynamics with functional near infrared spectroscopy as a tool for neuroergonomic research: empirical examples and a technological development. **2013**, 7, 871 158

989 OPTIMIZATION FOR BRAIN ACTIVITY MONITORING WITH NEAR INFRARED LIGHT IN A FOUR-LAYERED MODEL OF THE HUMAN HEAD. **2013**, 140, 277-295 6

988 Optical Oximetry. **2013**, 445

987 Self-Organization of Waveguides Toward Luminescent Targets in Novel Organic/Inorganic Hybrid Materials. **2014**,

986 Replication of the correlation between natural mood states and working memory-related prefrontal activity measured by near-infrared spectroscopy in a German sample. **2014**, 8, 37 24

985 Words in the bilingual brain: an fNIRS brain imaging investigation of lexical processing in sign-speech bimodal bilinguals. **2014**, 8, 606 11

984 The evolution of near infrared spectroscopy in urology. **2014**, 3, 311-344 5

983 Resting-state functional brain connectivity: lessons from functional near-infrared spectroscopy. **2014**, 20, 173-88 53

982 Acute exercise stress reveals cerebrovascular benefits associated with moderate gains in cardiorespiratory fitness. **2014**, 34, 1873-6 35

981 Infrared and Raman Instrumentation for Mapping and Imaging. **2014**, 1-56 3

980 A Bayesian Algorithm for Anxiety Index Prediction Based on Cerebral Blood Oxygenation in the Prefrontal Cortex Measured by Near Infrared Spectroscopy. **2014**, 2, 2200110 4

979 Monitoring cerebral oxygenation during balloon occlusion with multichannel NIRS. **2014**, 34, 347-56 14

978 Development of a near infrared multi-wavelength, multi-channel, time-resolved spectrometer for measuring brain tissue haemodynamics and metabolism. **2014**, 812, 181-186 7

977	Sensitivity of near-infrared spectroscopy and diffuse correlation spectroscopy to brain hemodynamics: simulations and experimental findings during hypercapnia. **2014**, 1,		82
976	Greater contribution of cerebral than extracerebral hemodynamics to near-infrared spectroscopy signals for functional activation and resting-state connectivity in infants. **2014**, 1, 025003		17
975	Dispersed Ag nanoparticles on TiO2 nanowire clusters for photodetection. **2014**,		2
974	Spatial sensitivity and penetration depth of three cerebral oxygenation monitors. **2014**, 5, 2896-912		36
973	Modified Beer-Lambert law for blood flow. **2014**, 5, 4053-75		115
972	Quantitative material decomposition using spectral computed tomography with an energy-resolved photon-counting detector. *Physics in Medicine and Biology*, **2014**, 59, 5457-82	3.8	21
971	Changes in ipsilateral motor cortex activity during a unilateral isometric finger task are dependent on the muscle contraction force. **2014**, 35, 417-28		21
970	A near-infrared spectroscopy system for cerebral oxygenation monitoring. **2014**,		
969	Twenty-four-hour ambulatory recording of cerebral hemodynamics, systemic hemodynamics, electrocardiography, and actigraphy during people's daily activities. **2014**, 19, 47003		12
968	Optimal optode montage on electroencephalography/functional near-infrared spectroscopy caps dedicated to study epileptic discharges. **2014**, 19, 026010		23
967	Sensitivity correction for the influence of the fat layer on muscle oxygenation and estimation of fat thickness by time-resolved spectroscopy. **2014**, 19, 067005		18
966	Estimating the spatial resolution of fNIRS sensors for BCI purposes. **2014**,		2
965	Regional changes in cerebral blood flow oxygenation can indicate global changes in cerebral blood flow during coronary artery occlusion in juvenile pigs. **2014**, 35, 1439-50		2
964	Activation of the prefrontal cortex while performing a task at preferred slow pace and metronome slow pace: a functional near-infrared spectroscopy study. **2014**, 2014, 269120		5
963	An Exploration of the Effect of Hemodynamic Changes Due to Normal Aging on the fNIRS Response to Semantic Processing of Words. **2014**, 5, 249		17
962	Highly cited articles in Physics in Medicine and Biology. *Physics in Medicine and Biology*, **2014**, 59, 4461-3	3.8	1
961	Reducing motion artifacts for long-term clinical NIRS monitoring using collodion-fixed prism-based optical fibers. **2014**, 85 Pt 1, 192-201		43
960	A review on continuous wave functional near-infrared spectroscopy and imaging instrumentation and methodology. **2014**, 85 Pt 1, 6-27		926

959	Evoked hemodynamic response estimation using ensemble empirical mode decomposition based adaptive algorithm applied to dual channel functional near infrared spectroscopy (fNIRS). **2014**, 224, 13-25	11
958	Analysis of task-evoked systemic interference in fNIRS measurements: insights from fMRI. **2014**, 87, 490-504	45
957	Functional near-infrared spectroscopy for the measurement of propofol effects in conscious sedation during outpatient elective colonoscopy. **2014**, 85 Pt 1, 626-36	13
956	Similar scaling of contralateral and ipsilateral cortical responses during graded unimanual force generation. **2014**, 85 Pt 1, 471-7	56
955	Molecular concentration of deoxyHb in human prefrontal cortex predicts the emergence and suppression of consciousness. **2014**, 85 Pt 1, 616-25	17
954	Quantitative evaluation of deep and shallow tissue layers' contribution to fNIRS signal using multi-distance optodes and independent component analysis. **2014**, 85 Pt 1, 150-65	119
953	Detection of optical neuronal signals in the visual cortex using continuous wave near-infrared spectroscopy. **2014**, 87, 190-8	16
952	Oxygen Transport to Tissue XXXVI. **2014**,	3
951	Multimodal integration of electrophysiological and hemodynamic signals. **2014**,	4
950	Light Propagation in NIR Spectroscopy of the Human Brain. **2014**, 20, 289-298	31
949	Online binary decision decoding using functional near-infrared spectroscopy for the development of brain-computer interface. **2014**, 232, 555-64	149
948	The relationship between hyperlactatemia and microcirculation in the thenar eminence as measured using near-infrared spectroscopy in patients with sepsis. **2014**, 31, 654-8	9
947	Laser spectroscopy for medical applications. **2014**, 421-460	2
946	Noninvasive Optical Monitoring of Bladder Filling to Capacity Using a Wireless Near Infrared Spectroscopy Device. **2014**, 8, 325-33	14
945	Verbal working memory impairments following traumatic brain injury: an fNIRS investigation. **2014**, 8, 446-59	28
944	Measuring tissue hemodynamics and oxygenation by continuous-wave functional near-infrared spectroscopy--how robust are the different calculation methods against movement artifacts?. **2014** , 35, 717-34	48
943	Depth-compensated diffuse optical tomography enhanced by general linear model analysis and an anatomical atlas of human head. **2014**, 85 Pt 1, 166-80	35
942	Somatosensory evoked changes in cerebral oxygen consumption measured non-invasively in premature neonates. **2014**, 85 Pt 1, 279-86	61

941	Association of decreased prefrontal hemodynamic response during a verbal fluency task with EGR3 gene polymorphism in patients with schizophrenia and in healthy individuals. **2014**, 85 Pt 1, 527-34	20
940	Cerebral blood flow, fatigue, mental effort, and task performance in offices with two different pollution loads. **2014**, 71, 153-164	20
939	Reconstructing functional near-infrared spectroscopy (fNIRS) signals impaired by extra-cranial confounds: an easy-to-use filter method. **2014**, 95, 69-79	65
938	Developmental changes in frontal lobe function during a verbal fluency task: a multi-channel near-infrared spectroscopy study. **2014**, 36, 844-52	12
937	fNIRS derived hemodynamic signals and electrodermal responses in a sequential risk-taking task. **2014**, 1557, 141-54	10
936	Fast optical signals in the sensorimotor cortex: General Linear Convolution Model applied to multiple source-detector distance-based data. **2014**, 85 Pt 1, 245-54	24
935	Simultaneous quantitative assessment of cerebral physiology using respiratory-calibrated MRI and near-infrared spectroscopy in healthy adults. **2014**, 85 Pt 1, 255-63	33
934	Motion artifacts in functional near-infrared spectroscopy: a comparison of motion correction techniques applied to real cognitive data. **2014**, 85 Pt 1, 181-91	298
933	Time domain functional NIRS imaging for human brain mapping. **2014**, 85 Pt 1, 28-50	262
932	Automatic segmentation of newborns□skull and fontanel from CT data using model-based variational level set. **2014**, 8, 377-387	12
931	Further improvement in reducing superficial contamination in NIRS using double short separation measurements. **2014**, 85 Pt 1, 127-35	136
930	Validation of a novel hemodynamic model for coherent hemodynamics spectroscopy (CHS) and functional brain studies with fNIRS and fMRI. **2014**, 85 Pt 1, 222-33	23
929	Fluorescence lifetime imaging in turbid media. **2014**, 300-341	
928	Lumbar sympathicolysis in patients with severe peripheral artery disease: hemodynamics of the lower limbs determined by near-infrared spectroscopy, color coded duplex sonography, and temperature measurement. **2014**, 8, 29-36	3
927	Hemodynamic measurements in deep brain tissues of humans by near-infrared time-resolved spectroscopy. **2014**,	
926	Mid-infrared diffuse reflection on ultrafast time scales. **2014**, 68, 1-4	7
925	Impaired prefrontal cortical response by switching stimuli in autism spectrum disorders. **2015**, 10, 087-094	3
924	Accuracy of Noninvasive Glucose Sensing Based on Near-Infrared Spectroscopy. **2015**, 69, 1313-8	25

923	On the geometry dependence of differential pathlength factor for near-infrared spectroscopy. I. Steady-state with homogeneous medium. **2015**, 20, 105005	15
922	Validating a bimodal intravascular ultrasound (IVUS) and near-infrared fluorescence (NIRF) catheter for atherosclerotic plaque detection in rabbits. **2015**, 6, 3989-99	26
921	Social Function and Frontopolar Activation during a Cognitive Task in Patients with Bipolar Disorder. **2015**, 72, 81-90	33
920	Comparison of cortical activation in an upper limb added-purpose task versus a single-purpose task: a near-infrared spectroscopy study. **2015**, 27, 3891-4	1
919	Decoding Answers to Four-Choice Questions Using Functional near Infrared Spectroscopy. **2015**, 23, 23-31	59
918	Near-infrared spectroscopy: NIRS. **2015**, 74, 552-556	2
917	fNIRS in the developmental sciences. **2015**, 6, 263-83	84
916	Dorsolateral prefrontal hemodynamic responses during a verbal fluency task in hypomanic bipolar disorder. **2015**, 17, 172-83	42
915	Moving target imaging based on sparse SIMO radar with multiple carrier frequencies. **2015**,	
914	The Prefrontal Cortex Activity and Psychological Effects of Viewing Forest Landscapes in Autumn Season. **2015**, 12, 7235-43	51
913	Correlates of Near-Infrared Spectroscopy Brain-Computer Interface Accuracy in a Multi-Class Personalization Framework. **2015**, 9, 536	12
912	Children's belief- and desire-reasoning in the temporoparietal junction: evidence for specialization from functional near-infrared spectroscopy. **2015**, 9, 560	11
911	Interstitial diffuse radiance spectroscopy of gold nanocages and nanorods in bulk muscle tissues. **2015**, 10, 1307-20	
910	A synchrony-dependent influence of sounds on activity in visual cortex measured using functional near-infrared spectroscopy (fNIRS). **2015**, 10, e0122862	15
909	Infants' neural responses to facial emotion in the prefrontal cortex are correlated with temperament: a functional near-infrared spectroscopy study. **2015**, 6, 922	30
908	Dynamic causal modelling for functional near-infrared spectroscopy. **2015**, 111, 338-49	35
907	A validation study of the use of near-infrared spectroscopy imaging in primary and secondary motor areas of the human brain. **2015**, 49, 118-25	16
906	Near-Infrared Spectroscopy. **2015**, 387-396	3

905	Attention level quantification during a modified stroop color word experiment: an fNIRS based study. **2015**,	6
904	Assessment of variations in air-dry wood density using time-of-flight near-infrared spectroscopy. **2015**, 10, 57-68	11
903	Pressure modulation algorithm to separate cerebral hemodynamic signals from extracerebral artifacts. **2015**, 2, 035004	43
902	Differential pathlength factor informs evoked stimulus response in a mouse model of Alzheimer's disease. **2015**, 2, 045001	3
901	Concurrent fNIRS-fMRI measurement to validate a method for separating deep and shallow fNIRS signals by using multidistance optodes. **2015**, 2, 015003	15
900	Optimized multimodal functional magnetic resonance imaging/near-infrared spectroscopy probe for ultrahigh-resolution mapping. **2015**, 2, 045004	1
899	Self-contained diffuse optical imaging system for real-time detection and localization of vascular occlusions. **2015**, 2015, 5884-7	1
898	Wearable near-infrared spectroscopy neuroimaging and its applications. **2015**, 2015, 4025-8	2
897	Melanosome distribution patterns affecting skin reflectance: Implications for the in vivo estimation of epidermal melanin content. **2015**, 2015, 4415-8	3
896	Calibration of diffuse correlation spectroscopy blood flow index with venous-occlusion diffuse optical spectroscopy in skeletal muscle. **2015**, 20, 125005	15
895	Differential effects of early postinjury treatment with neuroprotective drugs in a mouse model using diffuse reflectance spectroscopy. **2015**, 2, 015001	5
894	Exploring the capability of wireless near infrared spectroscopy as a portable seizure detection device for epilepsy patients. **2015**, 26, 43-8	28
893	Near-Infrared Spectroscopy in the Monitoring of Adult Traumatic Brain Injury: A Review. **2015**, 32, 933-41	90
892	Designing Implicit Interfaces for Physiological Computing. **2015**, 21, 1-27	29
891	Prospects and limitations of non-invasive blood glucose monitoring using near-infrared spectroscopy. **2015**, 18, 214-227	165
890	Pushing to the limits: the dynamics of cognitive control during exhausting exercise. **2015**, 68, 71-81	39
889	Using social epidemiology and neuroscience to explore the relationship between job stress and frontotemporal cortex activity among workers. **2015**, 10, 230-42	9
888	Culturally non-preferred cognitive tasks require compensatory attention: a functional near infrared spectroscopy (fNIRS) investigation. **2015**, 3, 53-67	29

887	Absolute Quantifications of Oxy- and Deoxyhemoglobin Concentrations by Combination of Differentially Resolved Spectroscopy and Spatially Resolved Spectroscopy. **2015**, 48, 170-172	2
886	Spectral data quality assessment based on variability analysis: application to noninvasive hemoglobin measurement by dynamic spectrum. **2015**, 7, 5565-5573	17
885	Usability and performance-informed selection of personalized mental tasks for an online near-infrared spectroscopy brain-computer interface. **2015**, 2, 025001	16
884	Adaptations of motor neural structures' activity to lapses in attention. **2015**, 25, 66-74	28
883	Influence of skin blood flow and source-detector distance on near-infrared spectroscopy-determined cerebral oxygenation in humans. **2015**, 35, 237-44	38
882	Near-infrared noninvasive blood glucose prediction without using multivariate analyses: introduction of imaginary spectra due to scattering change in the skin. **2015**, 20, 047003	41
881	Real-time imaging of tissue optical properties and surface profile using 3D-SSOP. **2015**,	
880	Cortical motor output decreases after neuromuscular fatigue induced by electrical stimulation of the plantar flexor muscles. **2015**, 214, 124-34	9
879	Inferring deep-brain activity from cortical activity using functional near-infrared spectroscopy. **2015** , 6, 1074-89	42
878	Computational Intelligence and Efficiency in Engineering Systems. **2015**,	1
877	Transcutaneous Bladder Spectroscopy: Computer Aided Near Infrared Monitoring of Physiologic Function. **2015**, 275-291	2
876	fNIRS-based brain-computer interfaces: a review. **2015**, 9, 3	400
875	Specificity of hemodynamic brain responses to painful stimuli: a functional near-infrared spectroscopy study. **2015**, 5, 9469	71
874	Recent progress of non-invasive optical modality to brain computer interface: A review study. **2015**,	3
873	A hybrid BCI based on EEG and fNIRS signals improves the performance of decoding motor imagery of both force and speed of hand clenching. **2015**, 12, 036004	66
872	Towards next-generation time-domain diffuse optics for extreme depth penetration and sensitivity. **2015**, 6, 1749-60	70
871	Functional near-infrared spectroscopy caps for brain activity monitoring: a review. **2015**, 54, 576	17
870	Short separation regression improves statistical significance and better localizes the hemodynamic response obtained by near-infrared spectroscopy for tasks with differing autonomic responses. **2015**, 2, 035005	57

869	Local and remote thermoregulatory changes affect NIRS measurement in forearm muscles. **2015**, 115, 2281-91	10
868	Single Fiber Optical Systems for Monitoring Brain Dynamics in Deep Structures. **2015**,	
867	Novel near infrared sensors for hybrid BCI applications. **2015**,	
866	Optical diagnosis of lower urinary tract infection: a pilot study in children. **2015**, 11, 74.e1-7	1
865	Subcutaneous and Intramuscular Hemodynamics and Oxygenation After Cold-Spray Application as Monitored by Near-Infrared Spectroscopy. **2015**, 50, 800-5	3
864	Optical hyperspectral imaging in microscopy and spectroscopy - a review of data acquisition. **2015**, 8, 441-56	99
863	Body-monitoring and health supervision by means of optical fiber-based sensing systems in medical textiles. **2015**, 4, 330-55	85
862	Validation of EGOS-600 Near Infrared Spectroscopy to Measure Cerebral Oxygen Saturation by Comparing to NIRO-200nx In Vitro and In Vivo. **2016**, 07,	0
861	Analysis of Different Classification Techniques for Two-Class Functional Near-Infrared Spectroscopy-Based Brain-Computer Interface. **2016**, 2016, 5480760	64
860	Human Auditory and Adjacent Nonauditory Cerebral Cortices Are Hypermetabolic in Tinnitus as Measured by Functional Near-Infrared Spectroscopy (fNIRS). **2016**, 2016, 7453149	18
859	Informal Face-to-Face Interaction Improves Mood State Reflected in Prefrontal Cortex Activity. **2016**, 10, 194	6
858	Altered Frontal Lateralization Underlies the Category Fluency Deficits in Older Adults with Mild Cognitive Impairment: A Near-Infrared Spectroscopy Study. **2016**, 8, 59	36
857	NIRS-Based Hyperscanning Reveals Inter-brain Neural Synchronization during Cooperative Jenga Game with Face-to-Face Communication. **2016**, 10, 82	102
856	Determining Optimal Feature-Combination for LDA Classification of Functional Near-Infrared Spectroscopy Signals in Brain-Computer Interface Application. **2016**, 10, 237	90
855	Dynamic filtering improves attentional state prediction with fNIRS. **2016**, 7, 979-1002	8
854	Bundled-optode implementation for 3D imaging in functional near-infrared spectroscopy. **2016**, 7, 3491-3507	63
853	Monitoring cerebral oxygenation and local field potential with a variation of isoflurane concentration in a rat model. **2016**, 7, 4114-4124	6
852	Multi-wavelength photoplethysmography method for skin arterial pulse extraction. **2016**, 7, 4313-4326	43

851	Reduction of global interference of scalp-hemodynamics in functional near-infrared spectroscopy using short distance probes. **2016**, 141, 120-132	80
850	. **2016**,	2
849	The role of perfusion in the oxygen extraction capability of skin and skeletal muscle. **2016**, 310, H1277-84	4
848	Broadband optical mammography instrument for depth-resolved imaging and local dynamic measurements. **2016**, 87, 024302	1
847	Roadmap on neurophotonics. **2016**, 18,	16
846	A review on the non-invasive evaluation of skeletal muscle oxygenation. **2016**,	
845	Research on reflective pulse oximetry based on fiber optic spectrometer. **2016**,	
844	Interpersonal frontopolar neural synchronization in group communication: An exploration toward fNIRS hyperscanning of natural interactions. **2016**, 133, 484-497	106
843	Hemodynamic correlates of spontaneous neural activity measured by human whole-head resting state EEG+fNIRS. **2016**, 138, 76-87	20
842	Toward more intuitive brain-computer interfacing: classification of binary covert intentions using functional near-infrared spectroscopy. **2016**, 21, 091303	29
841	Preliminary investigation of multispectral retinal tissue oximetry mapping using a hyperspectral retinal camera. **2016**, 146, 330-340	21
840	Simultaneous spectroscopic measurements of the interior temperature and induced cargo release from pore-restricted mesoporous silica nanoparticles. **2016**, 8, 10558-63	4
839	Estimating Consumers' Subjective Preference Using Functional near Infrared Spectroscopy: A Feasibility Study. **2016**, 24, 433-441	6
838	Automatic detection of noisy channels in fNIRS signal based on correlation analysis. **2016**, 271, 128-38	10
837	Low-power transimpedance amplifier for near infrared spectroscopy. **2016**,	4
836	NIRS-EEG joint imaging during transcranial direct current stimulation: Online parameter estimation with an autoregressive model. **2016**, 274, 71-80	22
835	A machine learning approach to identify functional biomarkers in human prefrontal cortex for individuals with traumatic brain injury using functional near-infrared spectroscopy. **2016**, 6, e00541	18
834	Development of Portable, Wireless and Smartphone Controllable Near-Infrared Spectroscopy System. **2016**, 923, 385-392	7

833	Hemodynamic changes in cortical sensorimotor systems following hand and orofacial motor tasks and pulsed pneumotactile stimulation. **2016**, 33, 145-155	3
832	Relation Between Prefrontal Cortex Activity and Respiratory Rate During Mental Stress Tasks: A Near-Infrared Spectroscopic Study. **2016**, 923, 209-214	8
831	Overview of diffuse optical tomography and its clinical applications. **2016**, 21, 091312	91
830	. **2016**,	
829	Mayer waves reduce the accuracy of estimated hemodynamic response functions in functional near-infrared spectroscopy. **2016**, 7, 3078-88	72
828	Optical-imaging-based neurofeedback to enhance therapeutic intervention in adolescents with autism: methodology and initial data. **2017**, 4, 011003	16
827	Evaluation on the detection limit of blood hemoglobin using photolepthysmography based on path-length optimization. **2016**,	
826	Reduced Frontal Activations at High Working Memory Load in Mild Cognitive Impairment: Near-Infrared Spectroscopy. **2016**, 42, 278-296	28
825	Muscle Near-Infrared Spectroscopy Signals versus Venous Blood Hemoglobin Oxygen Saturation in Skeletal Muscle. **2016**, 48, 2013-20	7
824	Hemodynamic signals in fNIRS. **2016**, 225, 153-79	34
823	Parallel processing of cognitive and physical demands in left and right prefrontal cortices during smartphone use while walking. **2016**, 17, 9	27
822	Modulation of Functional Connectivity and Activation during Preparation for Hand Movement. **2016**, 4, 175-187	6
821	From JÖbsis to the present day: a review of clinical near-infrared spectroscopy measurements of cerebral cytochrome-c-oxidase. **2016**, 21, 091307	98
820	In´vivo oximetry of human bulbar conjunctival and episcleral microvasculature using snapshot multispectral imaging. **2016**, 149, 48-58	30
819	Spatial distributions of hemoglobin signals from superficial layers in the forehead during a verbal-fluency task. **2016**, 21, 66009	4
818	Sensor space group analysis for fNIRS data. **2016**, 264, 103-112	37
817	The prognostic value of muscle regional oxygen saturation index in severe community-acquired pneumonia: a prospective observational study. **2016**, 4, 7	8
816	T-prepared velocity selective labelling: A novel idea for full-brain mapping of oxygen saturation. **2016**, 139, 65-73	3

815	Comparison of peripheral near-infrared spectroscopy low-frequency oscillations to other denoising methods in resting state functional MRI with ultrahigh temporal resolution. **2016**, 76, 1697-1707	24
814	New frontiers in time-domain diffuse optics, a review. **2016**, 21, 091310	112
813	Near-infrared spectroscopy determined cerebral oxygenation with eliminated skin blood flow in young males. **2016**, 30, 243-50	17
812	Oxygen Transport to Tissue XXXVII. **2016**,	4
811	Tutorial on platform for optical topography analysis tools. **2016**, 3, 010801	43
810	Time-Divided Spread-Spectrum Code-Based 400 fW-Detectable Multichannel fNIRS IC for Portable Functional Brain Imaging. **2016**, 51, 484-495	25
809	Prediction of meat spectral patterns based on optical properties and concentrations of the major constituents. **2016**, 4, 269-83	11
808	A novel semi-immersive virtual reality visuo-motor task activates ventrolateral prefrontal cortex: a functional near-infrared spectroscopy study. **2016**, 13, 036002	14
807	Near-infrared spectroscopy for medical applications: Current status and future perspectives. **2016**, 455, 181-8	98
806	Estimation of partial optical path length in the brain in subject-specific head models for near-infrared spectroscopy. **2016**, 23, 316-322	7
805	Disparity in Frontal Lobe Connectivity on a Complex Bimanual Motor Task Aids in Classification of Operator Skill Level. **2016**, 6, 375-88	22
804	Multichannel continuous electroencephalography-functional near-infrared spectroscopy recording of focal seizures and interictal epileptiform discharges in human epilepsy: a review. **2016**, 3, 031402	15
803	Complementary activation of the ipsilateral primary motor cortex during a sustained handgrip task. **2016**, 116, 171-8	4
802	Prefrontal Cortex Activation While Walking Under Dual-Task Conditions in Stroke: A Multimodal Imaging Study. **2016**, 30, 591-9	72
801	The movement time analyser task investigated with functional near infrared spectroscopy: an ecologic approach for measuring hemodynamic response in the motor system. **2017**, 29, 311-318	3
800	Cortical specialisation to social stimuli from the first days to the second year of life: A rural Gambian cohort. **2017**, 25, 92-104	84
799	Effect of lingual gauze swab placement on pulse oximeter readings in anaesthetised dogs and cats. **2017**, 180, 49	5
798	Liposome-Encapsulated Hemoglobin Improves Tumor Oxygenation as Detected by Near-Infrared Spectroscopy in Colon Carcinoma in Mice. **2017**, 41, 327-335	10

797	A semi-learning algorithm for noise rejection: an fNIRS study on ADHD children. **2017**,	
796	Bayesian Estimation of Intrinsic Tissue Oxygenation and Perfusion From RGB Images. **2017**, 36, 1491-1501	9
795	Decreased prefrontal brain activation during verbal fluency task in patients with somatoform pain disorder: An exploratory multi-channel near-infrared spectroscopy study. **2017**, 78, 153-160	12
794	Low-resolution mapping of the effective attenuation coefficient of the human head: a multidistance approach applied to high-density optical recordings. **2017**, 4, 021103	10
793	Multimodal optical setup based on spectrometer and cameras combination for biological tissue characterization with spatially modulated illumination. **2017**, 22, 46007	2
792	Preliminary Clinical Validation of a Differential Correction Method for Improving Measurement Accuracy in Noninvasive Measurement of Blood Glucose Using Near-Infrared Spectroscopy. **2017**, 71, 2177-2186	4
791	Comparison of Hemodynamic Responses in the Prefrontal Cortex According to Differences in Self-Efficacy. **2017**, 19, 450-455	3
790	Investigation of different approaches for noise reduction in functional near-infrared spectroscopy signals for brain–computer interface applications. **2017**, 28, 2889-2903	16
789	Detection of blood in fish muscle by constrained spectral unmixing of hyperspectral images. **2017**, 212, 252-261	23
788	Near infrared spectroscopy for measuring changes in bone hemoglobin content after exercise in individuals with spinal cord injury. **2018**, 36, 183-191	12
787	Transient increase in systemic interferences in the superficial layer and its influence on event-related motor tasks: a functional near-infrared spectroscopy study. **2017**, 22, 35008	6
786	Increased cerebral blood volume pulsatility during head-down tilt with elevated carbon dioxide: the SPACECOT Study. **2017**, 123, 62-70	10
785	Optical monitoring of spinal cord hemodynamics, a feasibility study. **2017**,	2
784	A new approach to estimating the evoked hemodynamic response applied to dual channel functional near infrared spectroscopy. **2017**, 84, 9-19	8
783	Dynamic spectrum extraction method based on independent component analysis combined dual-tree complex wavelet transform. **2017**, 7, 11198-11205	11
782	Intracardiac light catheter for rapid scanning transmural absorbance spectroscopy of perfused myocardium: measurement of myoglobin oxygenation and mitochondria redox state. **2017**, 313, H1199-H1208	7
781	Determination of the moisture content of fresh meat using visible and near-infrared spatially resolved reflectance spectroscopy. **2017**, 162, 40-56	7
780	Increased tissue oxygenation explains the attenuation of hyperemia upon repetitive pneumatic compression of the lower leg. **2017**, 123, 1451-1460	11

779	fNIRS can robustly measure brain activity during memory encoding and retrieval in healthy subjects. **2017**, 7, 9533	25
778	Altered cortical brain activity in end stage liver disease assessed by multi-channel near-infrared spectroscopy: Associations with delirium. **2017**, 7, 9258	2
777	A PPG sensor for continuous cuffless blood pressure monitoring with self-adaptive signal processing. **2017**,	6
776	Decoding human mental states by whole-head EEG+fNIRS during category fluency task performance. **2017**, 14, 066003	13
775	Development of Hybrid Small Sensor Module for Measuring Both Electroencephalogram and Cortical Hemoglobin Concentration. **2017**, 100, 3-15	
774	Differences in forearm strength, endurance, and hemodynamic kinetics between male boulderers and lead rock climbers. **2017**, 17, 1177-1183	19
773	Evaluation of light detector surface area for functional Near Infrared Spectroscopy. **2017**, 89, 68-75	13
772	Optical mapping of the dominant frequency of brain signal oscillations in motor systems. **2017**, 7, 14703	8
771	Neuroimaging with functional near infrared spectroscopy: From formation to interpretation. **2017**, 85, 225-237	4
770	The Spatial Release of Cognitive Load in Cocktail Party Is Determined by the Relative Levels of the Talkers. **2017**, 18, 457-464	14
769	Imagined Hand Clenching Force and Speed Modulate Brain Activity and Are Classified by NIRS Combined With EEG. **2017**, 25, 1641-1652	17
768	Let There Be Light□Optoprobes for Neural Implants. **2017**, 105, 101-138	41
767	Detecting Motor Learning-Related fNIRS Activity by Applying Removal of Systemic Interferences. **2017**, E100.D, 242-245	2
766	Integration of Teaching Processes and Learning Assessment in the Prefrontal Cortex during a Video Game Teaching-learning Task. **2016**, 7, 2052	23
765	Combined multi-distance frequency domain and diffuse correlation spectroscopy system with simultaneous data acquisition and real-time analysis. **2017**, 8, 3993-4006	40
764	Detection and classification of three-class initial dips from prefrontal cortex. **2017**, 8, 367-383	80
763	Enhancing Classification Performance of Functional Near-Infrared Spectroscopy- Brain-Computer Interface Using Adaptive Estimation of General Linear Model Coefficients. **2017**, 11, 33	33
762	Developmental Changes in Sensory-Evoked Optical Intrinsic Signals in the Rat Barrel Cortex. **2017**, 11, 392	6

761	Imaging Brain Function with Functional Near-Infrared Spectroscopy in Unconstrained Environments. **2017**, 11, 258	82
760	Functional Magnetic Resonance Imaging and Functional Near-Infrared Spectroscopy: Insights from Combined Recording Studies. **2017**, 11, 419	90
759	Multi-Modal Integration of EEG-fNIRS for Brain-Computer Interfaces - Current Limitations and Future Directions. **2017**, 11, 503	42
758	Altered Functional Connectivity Following an Inflammatory White Matter Injury in the Newborn Rat: A High Spatial and Temporal Resolution Intrinsic Optical Imaging Study. **2017**, 11, 358	7
757	Near-infrared spectroscopy can reveal increases in brain activity related to animal-assisted therapy. **2017**, 29, 1429-1432	2
756	An acute bout of housework activities has beneficial effects on executive function. **2018**, 14, 61-72	7
755	Simultaneous functional near-infrared spectroscopy and electroencephalography for monitoring of human brain activity and oxygenation: a review. **2017**, 4, 041411	52
754	Rearrangeable and exchangeable optical module with system-on-chip for wearable functional near-infrared spectroscopy system. **2018**, 5, 011007	4
753	Splanchnic NIRS monitoring in neonatal care: rationale, current applications and future perspectives. **2018**, 38, 431-443	24
752	Self-Calibration Phenomenon for Near-Infrared Clinical Measurements: Theory, Simulation, and Experiments. **2018**, 3, 2837-2844	7
751	Dynamic causal modelling on infant fNIRS data: A validation study on a simultaneously recorded fNIRS-fMRI dataset. **2018**, 175, 413-424	16
750	The application of mobile fNIRS to □hopper neuroscience□□first insights from a merchandising communication study. **2018**, 52, 244-259	40
749	Visual evoked nerve cerebral oxygen characteristics analysis based on NIRS-EEG. **2018**, 160, 168-175	1
748	Complex amplitude reconstruction by iterative amplitude-phase retrieval algorithm with reference. **2018**, 105, 54-59	15
747	Cortical Processing Related to Intensity of a Modulated Noise Stimulus-a Functional Near-Infrared Study. **2018**, 19, 273-286	11
746	Hyperspectral imaging solutions for brain tissue metabolic and hemodynamic monitoring: past, current and future developments. **2018**, 20, 044009	17
745	Time Resolved Diffuse Optical Tomography model. **2018**, 162, 133-139	
744	Investigation of optical neuro-monitoring technique for detection of maintenance and emergence states during general anesthesia. **2018**, 32, 147-163	12

743	Prefrontal cortex activation during a dual task in patients with stroke. **2018**, 59, 193-198	26
742	Diminished socially selective neural processing in 5-month-old infants at high familial risk of autism. **2018**, 47, 720-728	49
741	Cortical responses before 6´months of life associate with later autism. **2018**, 47, 736-749	71
740	Multichannel wearable fNIRS-EEG system for long-term clinical monitoring. **2018**, 39, 7-23	39
739	Process-specific analysis in episodic memory retrieval using fast optical signals and hemodynamic signals in the right prefrontal cortex. **2018**, 15, 015001	1
738	Increased activity in the right prefrontal cortex measured using near-infrared spectroscopy during a flower arrangement task. **2018**, 22, 34-39	1
737	Functional near-infrared spectroscopy to probe sensorimotor region activation during electrical stimulation-evoked movement. **2018**, 38, 816-822	3
736	Non-invasive assessment of cerebral hemodynamics with CWNIRS-ICG and application of EEMD-SSE in PPG signal extraction. **2018**, 156, 22-30	5
735	Cerebral Hemodynamic Response During Concealment of Information About a Mock Crime: Application of a General Linear Model With an Adaptive Hemodynamic Response Function. **2018**, 60, 311-326	3
734	The meaning of "coherent" and its quantification in coherent hemodynamics spectroscopy. **2018**, 11,	5
733	Physiology, intervention, and outcome: three critical questions about cerebral tissue oxygen saturation monitoring. **2018**, 84, 599-614	13
732	Removing Task-Induced Superficial-Tissue Hemodynamics and Head Motion-Induced Artifacts in Functional Near-Infrared Spectroscopy. **2018**, 60, 337-346	0
731	Initial-Dip Existence and Estimation in Relation to DPF and Data Drift. **2018**, 12, 96	4
730	Multi-task multiple kernel machines for personalized pain recognition from functional near-infrared spectroscopy brain signals. **2018**,	7
729	Transcranial Direct Current Stimulation Does Not Counteract Cognitive Fatigue, but Induces Sleepiness and an Inter-Hemispheric Shift in Brain Oxygenation. **2018**, 9, 2351	13
728	Adaptive filtering of physiological noises in fNIRS data. **2018**, 17, 180	19
727	Applications of Functional Near-Infrared Spectroscopy (fNIRS) Neuroimaging in Exercise?Cognition Science: A Systematic, Methodology-Focused Review. **2018**, 7,	145
726	Sensory manipulation results in increased dorsolateral prefrontal cortex activation during static postural balance in sedentary older adults: An fNIRS study. **2018**, 8, e01109	13

725	The effect of poor source code lexicon and readability on developers' cognitive load. **2018**,	28
724	Assessing bimanual motor skills with optical neuroimaging. **2018**, 4, eaat3807	35
723	From the Laboratory to the Classroom: The Potential of Functional Near-Infrared Spectroscopy in Educational Neuroscience. **2018**, 9, 1840	17
722	Increase in prefrontal cortex oxygenation during static muscular endurance performance is modulated by self-regulation strategies. **2018**, 8, 15756	31
721	Assessment of cerebral autoregulation using continuous-wave near-infrared spectroscopy during squat-stand maneuvers in subjects with symptoms of orthostatic intolerance. **2018**, 8, 13257	18
720	Functional Connectivity During Handgrip Motor Fatigue in Older Adults Is Obesity and Sex-Specific. **2018**, 12, 455	21
719	The Application of Mobile fNIRS in Marketing Research-Detecting the " Effect. **2018**, 12, 433	19
718	Somatosensory Response to Trigeminal Stimulation: A Functional Near-Infrared Spectroscopy (fNIRS) Study. **2018**, 8, 13771	4
717	Coherent Hemodynamics Spectroscopy: A New Technique to Characterize the Dynamics of Blood Perfusion and Oxygenation in Tissue. **2018**, 183-207	
716	Medical applications of reflectance spectroscopy in the diffusive and sub-diffusive regimes. **2018**, 26, 337-350	7
715	WearLight: Toward a Wearable, Configurable Functional NIR Spectroscopy System for Noninvasive Neuroimaging. **2019**, 13, 91-102	6
714	Within- and Between-Session Prefrontal Cortex Response to Virtual Reality Exposure Therapy for Acrophobia. **2018**, 12, 362	22
713	Effect of leg immersion in mild warm carbonated water on skin and muscle blood flow. **2018**, 6, e13859	4
712	The Age of Neuroergonomics: Towards Ubiquitous and Continuous Measurement of Brain Function with fNIRS. **2018**, 60, 374-386	42
711	Digital Image Watermarking using Tenth Root of Exponential Function. **2018**,	1
710	A Configurable Wireless Optical Brain Monitor Based on Internet-of-Things Services. **2018**,	0
709	Optimal design of validation experiments based on informatic entropy. **2018**,	
708	Resting-state functional connectivity analysis of the mouse brain using intrinsic optical signal imaging of cerebral blood volume dynamics. **2018**, 39, 054003	6

707	Neuronal Activation Detection Using Vector Phase Analysis with Dual Threshold Circles: A Functional Near-Infrared Spectroscopy Study. **2018**, 28, 1850031	40
706	Development of a Mobile Functional Near-infrared Spectroscopy Prototype and its Initial Evaluation. **2018**,	1
705	Frontal Underactivation During Working Memory Processing in Adults With Acute Partial Sleep Deprivation: A Near-Infrared Spectroscopy Study. **2018**, 9, 742	16
704	Physiological Aging Influence on Brain Hemodynamic Activity during Task-Switching: A fNIRS Study. **2017**, 9, 433	9
703	Shining a Light on Awareness: A Review of Functional Near-Infrared Spectroscopy for Prolonged Disorders of Consciousness. **2018**, 9, 350	23
702	vs. Over the Clouds: On-the-Fly Mental State Estimation of Aircraft Pilots, Using a Functional Near Infrared Spectroscopy Based Passive-BCI. **2018**, 12, 187	55
701	Differential Path-Length Factor's Effect on the Characterization of Brain's Hemodynamic Response Function: A Functional Near-Infrared Study. **2018**, 12, 37	14
700	Brain Electrodynamic and Hemodynamic Signatures Against Fatigue During Driving. **2018**, 12, 181	40
699	Automated Processing of fNIRS Data-A Visual Guide to the Pitfalls and Consequences. **2018**, 11,	37
698	Real-Time Reduction of Task-Related Scalp-Hemodynamics Artifact in Functional Near-Infrared Spectroscopy with Sliding-Window Analysis. **2018**, 8, 149	2
697	The Validity of Functional Near-Infrared Spectroscopy Recordings of Visuospatial Working Memory Processes in Humans. **2018**, 8,	2
696	Cortical Speech Processing in Postlingually Deaf Adult Cochlear Implant Users, as Revealed by Functional Near-Infrared Spectroscopy. **2018**, 22, 2331216518786850	17
695	Assessment of user voluntary engagement during neurorehabilitation using functional near-infrared spectroscopy: a preliminary study. **2018**, 15, 27	12
694	Decreased prefrontal oxygenation elicited by stimulation of limb mechanosensitive afferents during cycling exercise. **2018**, 315, R230-R240	6
693	Evaluation of classification performance of functional near infrared spectroscopy signals during movement execution for developing a brain□omputer interface application using optimal channels. **2018**, 26, 209-221	3
692	Use of bi-level pulsed frequency-division excitation for improving blood oxygen saturation precision. **2018**, 129, 523-529	7
691	Optical windows for head tissues in near-infrared and short-wave infrared regions: Approaching transcranial light applications. **2018**, 11, e201800141	73
690	Optimal positioning of optodes on the scalp for personalized functional near-infrared spectroscopy investigations. **2018**, 309, 91-108	19

689	An increase in prefrontal oxygenation at the start of voluntary cycling exercise was observed independently of exercise effort and muscle mass. **2018**, 118, 1689-1702	9
688	Using noninvasive methods to drive brain□omputer interface (BCI): the role of electroencephalography and functional near-infrared spectroscopy in BCI. **2018**, 33-63	0
687	Wireless optical monitoring system identifies limb induration characteristics in patients with Kawasaki disease. **2018**, 142, 710-711	5
686	Near-Infrared Spectroscopy. **2018**, 179-233	3
685	MAESTROS: A Multiwavelength Time-Domain NIRS System to Monitor Changes in Oxygenation and Oxidation State of Cytochrome-C-Oxidase. **2019**, 25, 7100312	24
684	Anticipation of a mentally effortful task recruits Dorsolateral Prefrontal Cortex: An fNIRS validation study. **2019**, 123, 106-115	23
683	Hand motor learning in a musical context and prefrontal cortex hemodynamic response: a functional near-infrared spectroscopy (fNIRS) study. **2019**, 20, 507-513	5
682	Frontal haemodynamic responses in depression and the effect of electroconvulsive therapy. **2019**, 33, 1003-1014	3
681	Activity of Prefrontal Cortex in Teachers and Students during Teaching of an Insight Problem. **2019**, 13, 167-175	5
680	Influence of trap level on an Al0.6Ga0.4N/Al0.5Ga0.5N metal□emiconductor□metal UV photodetector. **2019**, 58, SCCC26	1
679	Neural Compensatory Response During Complex Cognitive Function Tasks in Mild Cognitive Impairment: A Near-Infrared Spectroscopy Study. **2019**, 2019, 7845104	11
678	Prediction of epileptic seizures with convolutional neural networks and functional near-infrared spectroscopy signals. **2019**, 111, 103355	25
677	A Spectral Filter Array Camera for Clinical Monitoring and Diagnosis: Proof of Concept for Skin Oxygenation Imaging. **2019**, 5,	4
676	Reward motivation and neurostimulation interact to improve working memory performance in healthy older adults: A simultaneous tDCS-fNIRS study. **2019**, 202, 116062	18
675	Recommendations for motion correction of infant fNIRS data applicable to multiple data sets and acquisition systems. **2019**, 200, 511-527	52
674	Physiological interference reduction for near infrared spectroscopy brain activity measurement based on recursive least squares adaptive filtering and least squares support vector machines. **2019**, 1-7	
673	The difference in cortical activation pattern for complex motor skills: A functional near- infrared spectroscopy study. **2019**, 9, 14066	9
672	Neural Activity and Decoding of Action Observation Using Combined EEG and fNIRS Measurement. **2019**, 13, 357	11

671	Right-lateralized frontal activation underlies successful updating of verbal working memory in adolescents with high-functioning autism spectrum disorder. **2019**, 148, 107743	13
670	Media Characterization under Scattering Conditions by Nanophotonics Iterative Multiplane Spectroscopy Measurements. **2019**, 4, 14301-14306	4
669	Convolutional Neural Networks for Spectroscopic Analysis in Retinal Oximetry. **2019**, 9, 11387	3
668	A Functional Near-Infrared Spectroscopy Study on the Cortical Haemodynamic Responses During the Maastricht Acute Stress Test. **2019**, 9, 13459	11
667	The impact of physiological noise on hemodynamic-derived estimates of directed functional connectivity. **2019**, 224, 3145-3157	2
666	Virtual training leads to real acute physical, cognitive, and neural benefits on healthy adults: study protocol for a randomized controlled trial. **2019**, 20, 559	7
665	Methodologies on the Enhanced Spatial Resolution of Non-Invasive Optical Brain Imaging: A Review. **2019**, 7, 130044-130066	1
664	Working Memory-Related Prefrontal Hemodynamic Responses in University Students: A Correlation Study of Subjective Well-Being and Lifestyle Habits. **2019**, 13, 213	1
663	Neural Efficiency of Human-Robotic Feedback Modalities Under Stress Differs With Gender. **2019**, 13, 287	8
662	Noninvasive Optical Studies of the Brain: Contributions From Systemic Physiology. **2019**, 25-52	5
661	The Quest for Functional Biomarkers in the Prefrontal Cortex Using Functional Near-Infrared Spectroscopy (fNIRS). **2019**, 123-136	1
660	Neural Substrates of Cognitive Motor Interference During Walking; Peripheral and Central Mechanisms. **2018**, 12, 536	13
659	Hand or spoon? Exploring the neural basis of affective touch in 5-month-old infants. **2019**, 35, 28-35	52
658	Physiological interference reduction for near infrared spectroscopy brain activity measurement based on recursive least squares adaptive filtering and least squares support vector machines. **2019**, 24, 160-166	
657	A new blind source separation framework for signal analysis and artifact rejection in functional Near-Infrared Spectroscopy. **2019**, 200, 72-88	18
656	Shining new light on mammalian diving physiology using wearable near-infrared spectroscopy. **2019**, 17, e3000306	29
655	Electroencephalography and near-infrared spectroscopy-based hybrid biomarker for brain imaging. **2019**, 145-181	
654	Low-Cost Functional Near Infrared Spectroscopy (fNIRS) Applied on Brain-Computer Interfaces (BCIs). **2019**, 495-500	

653	Brain cytochrome-c-oxidase as a marker of mitochondrial function: A pilot study in major depression using NIRS. **2019**, 36, 766-779	14
652	Pre-frontal Cortical Activity During Walking and Turning Is Reliable and Differentiates Across Young, Older Adults and People With Parkinson's Disease. **2019**, 10, 536	27
651	Computational time-of-flight diffuse optical tomography. **2019**, 13, 575-579	36
650	Delta-9-tetrahydrocannabinol intoxication is associated with increased prefrontal activation as assessed with functional near-infrared spectroscopy: A report of a potential biomarker of intoxication. **2019**, 197, 575-585	3
649	Enhancing neural efficiency of cognitive processing speed via training and neurostimulation: An fNIRS and TMS study. **2019**, 198, 73-82	25
648	Trait Self-Control Outperforms Trait Fatigue in Predicting MS Patients' Cortical and Perceptual Responses to an Exhaustive Task. **2019**, 2019, 8527203	13
647	Effect of assuming constant tissue scattering on measured tissue oxygenation values during tissue ischemia and vascular reperfusion. **2019**, 127, 22-30	7
646	Optical Assessment of Spinal Cord Tissue Oxygenation Using a Miniaturized Near Infrared Spectroscopy Sensor. **2019**, 36, 3034-3043	10
645	Understanding near infrared spectroscopy and its application to skeletal muscle research. **2019**, 126, 1360-1376	98
644	Infant brain responses to social sounds: A longitudinal functional near-infrared spectroscopy study. **2019**, 36, 100638	12
643	Wireless, battery-free optoelectronic systems as subdermal implants for local tissue oximetry. **2019** , 5, eaaw0873	65
642	Distinct Methylphenidate-Evoked Response Measured Using Functional Near-Infrared Spectroscopy During Go/No-Go Task as a Supporting Differential Diagnostic Tool Between Attention-Deficit/Hyperactivity Disorder and Autism Spectrum Disorder Comorbid Children. **2019**, 13, 7	12
641	Time-Domain Near-Infrared Spectroscopy and Imaging: A Review. **2019**, 9, 1127	32
640	Classification of human gingival sulcus using swept-source optical coherence tomography: In vivo imaging. **2019**, 98, 155-160	9
639	Decreased prefrontal connectivity parallels cognitive fatigue-related performance decline after sleep deprivation. An optical imaging study. **2019**, 144, 115-124	21
638	Frontal lobe dysfunction underlies the differential word retrieval impairment in adolescents with high-functioning autism. **2019**, 12, 600-613	11
637	Habituation and novelty detection fNIRS brain responses in 5- and 8-month-old infants: The Gambia and UK. **2019**, 22, e12817	56
636	Usability Evaluation the Prague Geoportal : Comparison of Methods. **2019**,	

635 Magnetic-Thermal Coupled Analysis of Eletromagnets for Medium-speed Maglev Train. **2019**,

634 A Process Study of Laser Patterning of Different Conductive Layers for Printed Electronics. **2019**,

633 . **2019**,

632 Private Pliable Index Coding. **2019**, 2

631 Building a Cloud Solution for Energy Management using Raspberry Pi. **2019**, 1

630 Stochastic Ranking for Offline Data-Driven Evolutionary Optimization Using Radial Basis Function Networks with Multiple Kernels. **2019**, 5

629 Defending against ROP Attacks with Nearly Zero Overhead. **2019**, 1

628 Organizing Committee. **2019**,

627 Adaptive Adversarial Videos on Roadside Billboards: Dynamically Modifying Trajectories of Autonomous Vehicles. **2019**, 7

626 Improved Overmodulation Scheme of a Three-phase Inverter for Enhanced Output Torque of AC Motors. **2019**, 2

625 Fast BIST Mechanism for Faster Validation of Memory Array. **2019**, 0

624 Integrating Demand Response Aggregators with Negawatt Trading Mechanisms in Electricity Markets. **2019**, 1

623 Obstacle Avoidance Using Stereo Vision and Deep Reinforcement Learning in an Animal-like Robot. **2019**,

622 Pain Detection with fNIRS-Measured Brain Signals: A Personalized Machine Learning Approach Using the Wavelet Transform and Bayesian Hierarchical Modeling with Dirichlet Process Priors. **2019**, 6

621 FBMC and UFMC: The Modulation Techniques for 5G. **2019**, 5

620 Analytical Assessment of the Modulation Depth of Photoplethysmographic Signal Based on the Modified Beer-Lambert Law. **2019**, 2

619 Bibliometric Analysis of Salvia Miltiorrhiza Research Based on CNKI Chinese Academic Journal Database. **2019**, 0

618 Designing Through Value Co-creation: A Study of Actors, Practices and Possibilities. **2019**, 2

617	Speed Control Strategy of Permanent Magnet Synchronous Motor Drive Using SPWM Technique. **2019**,	1
616	. **2019**,	
615	Study on A Modified Adaptive Compressed Sensing Algorithm in Wireless Sensor Network of Microgrid. **2019**,	
614	StoryGAN: A Sequential Conditional GAN for Story Visualization. **2019**,	29
613	RepNet: Weakly Supervised Training of an Adversarial Reprojection Network for 3D Human Pose Estimation. **2019**,	56
612	Analysis, Modeling and Implementation of Novel DC-DC Converter Based on Interleaved and Cascaded Topology for Fuel Cell Vehicles. **2019**,	
611	Relation Structure-Aware Heterogeneous Graph Neural Network. **2019**,	10
610	Research and implementation of intelligent vehicle path planning based on four-layer neural network. **2019**,	2
609	Action Learning for Coral Detection and Species Classification. **2019**,	
608	Validation of HY-2A Satellite Sea Level Measurements Offshore Hong Kong Using Jason-2 Satellite and Tide Gauge Data. **2019**,	
607	Research on Digital Forensics Framework for Malicious Behavior in Cloud. **2019**,	1
606	DEKF to Estimate Hemodynamic Response and Path-length in fNIRS Data. **2019**,	
605	Modeling on the Feasibility of Camera-Based Blood Glucose Measurement. **2019**,	3
604	Prefrontal Asymmetry during Cognitive Tasks and its Relationship with Suicide Ideation in Major Depressive Disorder: An fNIRS Study. **2019**, 9,	10
603	Design of Multi-Wavelength Optical Sensor Module for Depth-Dependent Photoplethysmography. **2019**, 19,	4
602	Investigating Performance in a Strenuous Physical Task from the Perspective of Self-Control. **2019**, 9,	4
601	The Interplay of Achievement Motive-Goal Incongruence and State and Trait Self-Control: A Pilot Study Considering Cortical Correlates of Self-Control. **2019**, 13, 235	3
600	Estimating the Dependence of Differential Pathlength Factor on Blood Volume and Oxygen Saturation using Monte Carlo method. **2019**, 2019, 75-78	0

599	. **2019**, 7, 143250-143262	14
598	The effects of 4 weeks normobaric hypoxia training on microvascular responses in the forearm flexor. **2019**, 37, 1235-1241	2
597	Monitoring multiple cortical regions during walking in young and older adults: Dual-task response and comparison challenges. **2019**, 135, 63-72	21
596	Objective assessment of surgical skill transfer using non-invasive brain imaging. **2019**, 33, 2485-2494	9
595	Technology Development for Simultaneous Wearable Monitoring of Cerebral Hemodynamics and Blood Pressure. **2019**, 23, 1952-1963	5
594	Infant brain response to affective and discriminative touch: A longitudinal study using fNIRS. **2019**, 14, 571-582	15
593	Ready, set, go: Cortical hemodynamics during self-controlled sprint starts. **2019**, 41, 21-28	7
592	Polymer Optical Fiber-Based Sensor System for Smart Walker Instrumentation and Health Assessment. **2019**, 19, 567-574	14
591	Current Status and Issues Regarding Pre-processing of fNIRS Neuroimaging Data: An Investigation of Diverse Signal Filtering Methods Within a General Linear Model Framework. **2018**, 12, 505	126
590	The Use of Functional Near-Infrared Spectroscopy in Neuroergonomics. **2019**, 17-25	10
589	Hemispheric mPFC asymmetry in decision making under ambiguity and risk: An fNIRS study. **2019**, 359, 657-663	7
588	Non-invasive methods for measuring vascular changes in neurovascular headaches. **2019**, 39, 633-649	7
587	Perception of Caucasian and African faces in 5- to 9-month-old Caucasian infants: A functional near-infrared spectroscopy study. **2019**, 126, 3-9	4
586	Brain mechanisms for processing discriminative and affective touch in 7-month-old infants. **2019**, 35, 20-27	46
585	Validation of a Second-Generation Near-Infrared Spectroscopy Monitor in Children With Congenital Heart Disease. **2019**, 128, 661-668	8
584	Monitoring the Depth of Anesthesia Through the Use of Cerebral Hemodynamic Measurements Based on Sample Entropy Algorithm. **2020**, 67, 807-816	12
583	Near-Infrared Spectroscopy in Pediatric Congenital Heart Disease. **2020**, 34, 489-500	14
582	Measuring the impact of lexical and structural inconsistencies on developers□ cognitive load during bug localization. **2020**, 25, 2140-2178	4

581	Behavioral response to tactile stimuli relates to brain response to affective touch in 12-month-old infants. **2020**, 62, 107-115	10
580	The effects of exercise on mood and prefrontal brain responses to emotional scenes in smokers. **2020**, 213, 112721	4
579	A Newcomer's Guide to Functional Near Infrared Spectroscopy Experiments. **2020**, 13, 292-308	12
578	Improved physiological noise regression in fNIRS: A multimodal extension of the General Linear Model using temporally embedded Canonical Correlation Analysis. **2020**, 208, 116472	29
577	Using Wireless Near-Infrared Spectroscopy to Predict Wound Prognosis in Diabetic Foot Ulcers. **2020**, 33, 1-12	4
576	Reactive Oxygen Species Explicit Dosimetry for Photofrin-mediated Pleural Photodynamic Therapy. **2020**, 96, 340-348	7
575	Language Experience Impacts Brain Activation for Spoken and Signed Language in Infancy: Insights From Unimodal and Bimodal Bilinguals. **2020**, 1, 9-32	9
574	Assessment of cerebrovascular dysfunction after traumatic brain injury with fMRI and fNIRS. **2020**, 25, 102086	14
573	Assessing Neural Compensation With Visuospatial Working Memory Load Using Near-Infrared Imaging. **2020**, 28, 13-22	5
572	A Review of Photoplethysmography-based Physiological Measurement and Estimation, Part 1: Single Input Methods. **2020**, 2020, 923-927	2
571	Open Access Multimodal fNIRS Resting State Dataset With and Without Synthetic Hemodynamic Responses. **2020**, 14, 579353	1
570	A consensus guide to using functional near-infrared spectroscopy in posture and gait research. **2020**, 82, 254-265	29
569	Virtual training leads to physical, cognitive and neural benefits in healthy adults. **2020**, 222, 117297	17
568	Bandgap Modulation of Glancing Angle Deposition Aided Ag Nanoparticles Covered TiO_2 Thin Film by High Temperature Annealing. **2020**, 20, 7636-7643	11
567	EEG spectro-temporal amplitude modulation as a measurement of cortical hemodynamics: an EEG-fNIRS study. **2020**, 2020, 3481-3484	1
566	Cognition-based Evaluation of Commercial Advertisement Videos using Functional Near-Infrared Spectroscopy. **2020**,	1
565	Functional Near-Infrared Spectroscopy to Assess Central Pain Responses in a Nonpharmacologic Treatment Trial of Osteoarthritis. **2020**, 30, 808-814	1
564	Systematic Analysis for fNIRS Measurement Combining Sensitivity and SNR Based on the Colin27 Brain Template. **2020**, 12, 1-13	

563	A Multichannel fNIRS System for Prefrontal Mental Task Classification with Dual-level Excitation and Deep Forest Algorithm. **2020**, 2020, 1-10	2
562	Brain correlates of motor complexity during observed and executed actions. **2020**, 10, 10965	9
561	Shedding Light on the Effects of Moderate Acute Exercise on Working Memory Performance in Healthy Older Adults: An fNIRS Study. **2020**, 10,	5
560	A Unified Analytical Framework With Multiple fNIRS Features for Mental Workload Assessment in the Prefrontal Cortex. **2020**, 28, 2367-2376	3
559	Brief Relaxation Practice Induces Significantly More Prefrontal Cortex Activation during Arithmetic Tasks Comparing to Viewing Greenery Images as Revealed by Functional Near-Infrared Spectroscopy (fNIRS). **2020**, 17,	4
558	Infants understand collaboration: Neural evidence for 9-month-olds' attribution of shared goals to coordinated joint actions. **2020**, 15, 655-667	1
557	Effortful Control and Prefrontal Cortex Functioning in Children with Autism Spectrum Disorder: An fNIRS Study. **2020**, 10,	6
556	Investigation of Functional Connectivity During Working Memory Task and Hemispheric Lateralization in Left- and Right- Handers Measured by fNIRS. **2020**, 221, 165347	4
555	Contextually-aware Fetal Sensing in Transabdominal Fetal Pulse Oximetry. **2020**,	4
554	. **2020**,	0
553	SHADE: Absorption spectroscopy enhancement with ambient light estimation and narrow-band detection. **2020**, 220, 165116	1
552	Estimation of the hemoglobin concentration and the anatomic structure of muscle by analyzing the near infrared scattering images. **2020**, 61, 102058	1
551	Continuous Optical Monitoring of Spinal Cord Oxygenation and Hemodynamics during the First Seven Days Post-Injury in a Porcine Model of Acute Spinal Cord Injury. **2020**, 37, 2292-2301	4
550	There is No test-retest reliability of brain activation induced by robotic passive hand movement: A functional NIRS study. **2020**, 10, e01788	2
549	Functional Near-Infrared Spectroscopy Adaptive Cognitive Training System (FACTS) for Cognitive Underload and Overload Prevention: A Feasibility Study. **2020**, 8, 172939-172950	1
548	Cortical fNIRS Responses Can Be Better Explained by Loudness Percept than Sound Intensity. **2020**, 41, 1187-1195	6
547	The Various Oximetric Techniques Used for the Evaluation of Blood Oxygenation. **2020**, 20,	16
546	Optimal Spectral Combination of a Hyperspectral Camera for Intraoperative Hemodynamic and Metabolic Brain Mapping. **2020**, 10, 5158	3

545	On Your Mark, Get Set, Self-Control, Go: A Differentiated View on the Cortical Hemodynamics of Self-Control during Sprint Start. **2020**, 10,	1
544	Effect of Picture-Book Reading With Additive Audio on Bilingual Preschoolers' Prefrontal Activation: A Naturalistic Functional Near-Infrared Spectroscopy Study. **2020**, 11, 1939	3
543	Reliability of fNIRS for noninvasive monitoring of brain function and emotion in sheep. **2020**, 10, 14726	2
542	Near-Infrared Optical Technologies in Brain-Computer Interface Systems. **2020**,	
541	Compact, Portable, High-Density Functional Near-Infrared Spectroscopy System for Brain Imaging. **2020**, 8, 128224-128238	7
540	A Systematic Review of Cerebral Functional Near-Infrared Spectroscopy in Chronic Neurological Diseases-Actual Applications and Future Perspectives. **2020**, 10,	10
539	Effects of Daily Stress in Mental State Classification. **2020**, 8, 201360-201370	1
538	Hybrid EEG-fNIRS BCI Fusion Using Multi-Resolution Singular Value Decomposition (MSVD). **2020**, 14, 599802	4
537	Neural Correlates of Mental Rotation in Preschoolers With High or Low Working Memory Capacity: An fNIRS Study. **2020**, 11, 568382	0
536	Enhancing Classification Performance of fNIRS-BCI by Identifying Cortically Active Channels Using the z-Score Method. **2020**, 20,	6
535	Performance Improvement for Detecting Brain Function Using fNIRS: A Multi-Distance Probe Configuration With PPL Method. **2020**, 14, 569508	1
534	Feasibility and efficacy of remotely supervised cranial electrical stimulation for pain in older adults with knee osteoarthritis: A randomized controlled pilot study. **2020**, 77, 128-133	2
533	Fiberless, Multi-Channel fNIRS-EEG System Based on Silicon Photomultipliers: Towards Sensitive and Ecological Mapping of Brain Activity and Neurovascular Coupling. **2020**, 20,	8
532	The effects of hypoxia on muscle deoxygenation and recruitment in the flexor digitorum superficialis during submaximal intermittent handgrip exercise. **2020**, 12, 16	1
531	Classifying Major Depressive Disorder Using fNIRS During Motor Rehabilitation. **2020**, 28, 961-969	18
530	Cortical Activation Patterns of Different Masking Noises and Correlation With Their Masking Efficacy, Determined by Functional Near-Infrared Spectroscopy. **2020**, 14, 149	2
529	Future Applications of Real-World Neuroimaging to Clinical Psychology. **2021**, 124, 2403-2426	3
528	Human Discrimination and Categorization of Emotions in Voices: A Functional Near-Infrared Spectroscopy (fNIRS) Study. **2020**, 14, 570	5

527	Neurocognitive development of flanker and Stroop interference control: A near-infrared spectroscopy study. **2020**, 143, 105585	2
526	Design of Smart Brain Oxygenation Monitoring System for Estimating Cardiovascular Disease Severity. **2020**, 8, 98422-98429	3
525	Task-Specific Stimulation Duration for fNIRS Brain-Computer Interface. **2020**, 8, 89093-89105	11
524	Applications of Resting-State fNIRS in the Developing Brain: A Review From the Connectome Perspective. **2020**, 14, 476	10
523	Model for Semantic Base Structuring of Digital Data to Support Agricultural Management. **2020**,	1
522	. **2020**, 41, 709-712	22
521	Forecast Based Handover in an Extensible Multi-Layer LEO Mobile Satellite System. **2020**, 8, 42768-42783	13
520	Metamaterials and Metasurfaces□Historical Context, Recent Advances, and Future Directions. **2020**, 68, 1223-1231	26
519	IEEE SSIT 3rd Conference on Norbert Wiener in the 21st Century (21CW). **2020**, 39, C3-C3	
518	Optics Based Label-Free Techniques and Applications in Brain Monitoring. **2020**, 10, 2196	7
517	Non-Invasive Fluidic Glucose Detection Based on Dual Microwave Complementary Split Ring Resonators With a Switching Circuit for Environmental Effect Elimination. **2020**, 20, 8520-8527	30
516	Classification from Triplet Comparison Data. **2020**, 32, 659-681	5
515	Using the General Linear Model to Improve Performance in fNIRS Single Trial Analysis and Classification: A Perspective. **2020**, 14, 30	22
514	Investigating the origin of photoplethysmography using a multiwavelength Monte Carlo model. **2020**, 41, 084001	9
513	Monte Carlo simulation driven time resolved photon fluence analysis. **2020**, 16, 237-240	
512	Validation of a Novel Transabdominal Fetal Oximeter in a Hypoxic Fetal Lamb Model. **2020**, 27, 1960-1966	3
511	Prefrontal cortex hypoactivity distinguishes severe from mild-to-moderate social anxiety as revealed by a palm-sized near-infrared spectroscopy system. **2020**, 127, 1305-1313	2
510	. **2020**, 8, 8-21	7

509	Functional near-infrared spectroscopy reveals decreased resting oxygenation levels and task-related oxygenation changes in mild cognitive impairment and dementia: A systematic review. **2020**, 124, 58-76	21
508	Effects of Processing Methods on fNIRS Signals Assessed During Active Walking Tasks in Older Adults. **2020**, 28, 699-709	20
507	Atypical Dynamic-Connectivity Recruitment in Attention-Deficit/Hyperactivity Disorder Children: An Insight Into Task-Based Dynamic Connectivity Through an fNIRS Study. **2020**, 14, 3	8
506	The neural correlates of reaching focal points. **2020**, 140, 107397	2
505	Infant brain responses to live face-to-face interaction with their mothers: Combining functional near-infrared spectroscopy (fNIRS) with a modified still-face paradigm. **2020**, 58, 101410	7
504	. **2020**, 10, 237-245	4
503	Use of prefrontal cortex activity as a measure of learning curve in surgical novices: results of a single blind randomised controlled trial. **2020**, 34, 5604-5615	7
502	Evaluating advanced driver-assistance system trainings using driver performance, attention allocation, and neural efficiency measures. **2020**, 84, 103036	12
501	Time-of-flight resolved light field fluctuations reveal deep human tissue physiology. **2020**, 11, 391	9
500	Optical spectroscopy-based imaging techniques for the diagnosis of breast cancer: A novel approach. **2020**, 55, 778-804	8
499	Frontal brain activity in individuals at risk for schizophrenic psychosis and bipolar disorder during the emotional Stroop task - an fNIRS study. **2020**, 26, 102232	2
498	Prognostication of neurological outcome after cardiac arrest using wavelet phase coherence analysis of cerebral oxygen. **2020**, 150, 41-49	2
497	Static Explosion Field Reconstruction Based on the Improved Biharmonic Spline Interpolation. **2020** , 20, 7235-7240	2
496	Special Issue on New Horizons in Time Domain Diffuse Optical Spectroscopy and Imaging. **2020**, 10, 2752	
495	Quantitative Estimation of Differentiated Mental Fatigue between Self-Rising Transfer and Multiple Welfare Robots-Assisted Rising Transfer. **2020**, 9, 594	0
494	A General Time-Domain Method for Harmonic Distortion Estimation in CMOS Circuits. **2021**, 40, 157-170	3
493	Design and In Vivo Evaluation of a Non-Invasive Transabdominal Fetal Pulse Oximeter. **2021**, 68, 256-266	2
492	Neurophysiological correlates of age differences in driving behavior during concurrent subtask performance. **2021**, 225, 117492	6

491	Altered prefrontal cortex responses in older adults with subjective memory complaints and dementia during dual-task gait: An fNIRS study. **2021**, 53, 1324-1333	1
490	Hazard differentiation embedded in the brain: A near-infrared spectroscopy-based study. **2021**, 122, 103473	7
489	Skin erythema and pigmentation: a review of optical assessment techniques. **2021**, 33, 102127	4
488	Using functional near-infrared spectroscopy to study word production in the brain: A picture-word interference study. **2021**, 57, 100957	1
487	Functional imaging of the developing brain with wearable high-density diffuse optical tomography: A new benchmark for infant neuroimaging outside the scanner environment. **2021**, 225, 117490	18
486	Novel Technique for Noninvasive Detection of Localized Dynamic Brain Signals by Using Transcranial Static Magnetic Fields. **2021**, 9, 4900106	1
485	Hemodynamic Changes in Response to Aerobic Exercise: Near-infrared Spectroscopy Study. **2021**, 42, 377-385	0
484	An fNIRS examination of executive function in bilingual young children. **2021**, 25, 516-530	1
483	A Systematic Review of the Application of Functional Near-Infrared Spectroscopy to the Study of Cerebral Hemodynamics in Healthy Aging. **2021**, 31, 139-166	11
482	Frontal lobe oxyhemoglobin levels in patients with lower extremity burns assessed using a functional near-Infrared spectroscopy device during usual walking: a pilot study. **2021**, 24, 115-121	1
481	Decoding Three Different Preference Levels of Consumers Using Convolutional Neural Network: A Functional Near-Infrared Spectroscopy Study. **2020**, 14, 597864	3
480	The rostro-caudal gradient in the prefrontal cortex and its modulation by subthalamic deep brain stimulation in Parkinson's disease. **2021**, 11, 2138	1
479	Optimizing Mental Workload Estimation by Detecting Baseline State Using Vector Phase Analysis Approach. **2021**, 29, 597-606	0
478	Optical brain imaging and its application to neurofeedback. **2021**, 30, 102577	8
477	Best practices for fNIRS publications. **2021**, 8, 012101	39
476	A Functional Near-Infrared Spectroscopy Examination of the Neural Correlates of Cognitive Shifting in Dimensional Change Card Sort Task. **2020**, 14, 561223	0
475	Multi-Channel-Based Differential Pathlength Factor Estimation for Continuous-Wave fNIRS. **2021**, 9, 37386-37396	2
474	Cerebral oxygenation is stable in preterm infants transitioning to heated humidified high-flow nasal cannula therapy. **2021**, 110, 2059-2064	

473	Language Familiarity and Proficiency Leads to Differential Cortical Processing During Translation Between Distantly Related Languages. **2021**, 15, 593108	2
472	High density optical neuroimaging predicts surgeons's subjective experience and skill levels. **2021**, 16, e0247117	3
471	An optical window into brain function in children and adolescents: A systematic review of functional near-infrared spectroscopy studies. **2021**, 227, 117672	7
470	Diffuse optical reconstructions of fNIRS data using Maximum Entropy on the Mean.	1
469	Functional Near Infrared Spectroscopy (fNIRS) based Odor Detection and Classification using Functional Data Analysis.	
468	Negative mood is associated with decreased prefrontal cortex functioning during working memory in young adults. **2021**, 58, e13802	1
467	Enhanced Written vs. Verbal Recall Accuracy Associated With Greater Prefrontal Activation: A Near-Infrared Spectroscopy Study. **2021**, 15, 601698	1
466	Design and validation of a mechanically flexible and ultra-lightweight high-density diffuse optical tomography system for functional neuroimaging of newborns. **2021**, 8, 015011	6
465	Cerebral haemodynamics during simulated driving: Changes in workload are detectable with functional near infrared spectroscopy. **2021**, 16, e0248533	0
464	Development of optical depth-sensing technology with a mechanical control lens and diffuser. **2021**, 60, B125-B134	1
463	Skin erythema assessment techniques. **2021**, 39, 591-604	0
462	Differentiation of tumoral and non-tumoral breast lesions using back reflection diffuse optical tomography: A pilot clinical study. **2021**, 31, 2023	3
461	Decoding of semantic categories of imagined concepts of animals and tools in fNIRS. **2021**, 18,	1
460	Neuroimaging of depression with diffuse optical tomography during repetitive transcranial magnetic stimulation. **2021**, 11, 7328	0
459	Immersive virtual prism adaptation therapy with depth-sensing camera: A feasibility study with functional near-infrared spectroscopy in healthy adults.	
458	Disrupted signal variability of spontaneous neural activity in children with attention-deficit/hyperactivity disorder. **2021**, 12, 3037-3049	1
457	Incongruous effect of phenylephrine on changes in cerebral blood volume measured by near-infrared spectroscopy (NIRS) indicating extracranial contamination. **2021**, 1	1
456	Validating the use of functional Near-Infrared Spectroscopy in monkeys: The case of brain activation lateralization in Papio anubis. **2021**, 403, 113133	1

455	The Validation of a Portable Functional NIRS System for Assessing Mental Workload. **2021**, 21,	1
454	Photobiomodulation Enhances Memory Processing in Older Adults with Mild Cognitive Impairment: A Functional Near-Infrared Spectroscopy Study. **2021**, 83, 1471-1480	5
453	Data Processing in Functional Near-Infrared Spectroscopy (fNIRS) Motor Control Research. **2021**, 11,	1
452	Repeated Exposure to Illusory Sense of Body Ownership and Agency Over a Moving Virtual Body Improves Executive Functioning and Increases Prefrontal Cortex Activity in the Elderly. **2021**, 15, 674326	7
451	Comparison of Classification Accuracies Between Different Brain Areas During a Two-Class Motor Imagery in a fNIRS Based BCI**This work was supported by a Discovery Grant from the Natural Science and Engineering Research Council of Canada [NSERC RGPIN 2016-04669]. **2021**,	0
450	Classification of Prefrontal Cortex Activity Based on Functional Near-Infrared Spectroscopy Data upon Olfactory Stimulation. **2021**, 11,	1
449	Prefrontal Functional Connectivity During the Verbal Fluency Task in Patients With Major Depressive Disorder: A Functional Near-Infrared Spectroscopy Study. **2021**, 12, 659814	2
448	Hearing brain evaluated using near-infrared spectroscopy in congenital toxoplasmosis. **2021**, 11, 10135	2
447	Neuroprotection of the Perinatal Brain by Early Information of Cerebral Oxygenation and Perfusion Patterns. **2021**, 22,	1
446	An implantable optogenetic stimulator wirelessly powered by flexible photovoltaics with near-infrared (NIR) light. **2021**, 180, 113139	6
445	The impact of acute exercise on implicit cognitive reappraisal in association with left dorsolateral prefronta activation: A fNIRS study. **2021**, 406, 113233	2
444	Maternal Sensitivity and Infant Neural Response to Touch: an fNIRS Study. **2021**,	1
443	Hemodynamics of the sternocleidomastoid measured with frequency domain near-infrared spectroscopy towards non-invasive monitoring during mechanical ventilation. **2021**, 12, 4147-4162	
442	Optical characterization of 3D printed PLA and ABS filaments for diffuse optics applications. **2021**, 16, e0253181	4
441	Neurobehavioral assessment of force feedback simulation in industrial robotic teleoperation. **2021**, 126, 103674	4
440	Controlling the optical pathlength in continuous-wave reflectance spectroscopy using polarization. **2021**, 12, 4401-4413	1
439	Prefrontal Inter-brain Synchronization Reflects Convergence and Divergence of Flow Dynamics in Collaborative Learning: A Pilot Study. **2021**, 2,	2
438	A novel wireless optical technique for quantitative evaluation of cerebral perfusion pressure in a fluid percussion animal model of traumatic brain injury. **2021**, 11, 2388-2396	0

437	Reduced left ventrolateral prefrontal cortex activation during verbal fluency tasks is associated with suicidal ideation severity in medication-naïve young adults with major depressive disorder: A functional near-infrared spectroscopy study. **2021**, 312, 111288	3
436	Assessment of cerebral oxygenation response to hemodialysis using near-infrared spectroscopy (NIRS): Challenges and solutions.. **2021**, 14,	3
435	Multichannel near-infrared spectroscopy brain imaging system for small animals in mobile conditions. **2021**, 8, 025013	1
434	Brain Activity-Based Metrics for Assessing Learning States in VR under Stress among Firefighters: An Explorative Machine Learning Approach in Neuroergonomics. **2021**, 11,	5
433	fNIRS & e-drum: An ecological approach to monitor hemodynamic and behavioural effects of rhythmic auditory cueing training. **2021**, 151, 105753	1
432	A comprehensive survey on non-invasive wearable bladder volume monitoring systems. **2021**, 59, 1373-1402	1
431	Wireless Addressable Cortical Microstimulators Powered by Near-Infrared Harvesting. **2021**, 6, 2728-2737	2
430	The Challenges and Pitfalls of Detecting Sleep Hypopnea Using a Wearable Optical Sensor: Comparative Study. **2021**, 23, e24171	2
429	Application of Near-Infrared Spectroscopy for Evidence-Based Psychotherapy. **2021**, 12, 527335	0
428	Acute VR competitive cycling exercise enhanced cortical activations and brain functional network efficiency in MA-dependent individuals. **2021**, 757, 135969	4
427	Volume elastic modulus with exponential function of transmural pressure as a valid stiffness measure derived by photoplethysmographic volume-oscillometry in human finger and radial arteries: potential for arteriosclerosis screening. **2021**, 59, 1585-1596	0
426	A hyperspectral imaging system for mapping haemoglobin and cytochrome-c-oxidase concentration changes in the exposed cerebral cortex. **2021**, 27,	3
425	Widespread nociceptive maps in the human neonatal somatosensory cortex.	0
424	Odor-classification based on Convolutional Neural Network using Hemodynamic Responses of Rat Olfactory Bulb. **2021**, 19, 133-140	1
423	Working Memory Performance under a Negative Affect Is More Susceptible to Higher Cognitive Workloads with Different Neural Haemodynamic Correlates. **2021**, 11,	0
422	Photoneuromodulation makes a difficult cognitive task less arduous. **2021**, 11, 13688	3
421	Secondary rewards acquire enhanced incentive motivation via increasing anticipatory activity of the lateral orbitofrontal cortex. **2021**, 226, 2339-2355	0
420	The use of broad vs restricted regions of interest in functional near-infrared spectroscopy for measuring cortical activation to auditory-only and visual-only speech. **2021**, 406, 108256	3

419	Antidepressant Monotherapy and Combination Therapy with Acupuncture in Depressed Patients: A Resting-State Functional Near-Infrared Spectroscopy (fNIRS) Study. **2021**, 1	2
418	Changes in muscle activation, oxygenation, and morphology following a fatiguing repetitive forward reaching task in young adult males and females. **2021**, 59, 102564	1
417	Prefrontal activation and pupil dilation during n-back task performance: A combined fNIRS and pupillometry study. **2021**, 159, 107954	3
416	Cerebral hemodynamic response during a live action-observation and action-execution task: A fNIRS study. **2021**, 16, e0253788	1
415	Evaluation of a personalized functional near infra-red optical tomography workflow using maximum entropy on the mean. **2021**, 42, 4823-4843	4
414	Multi-modal diffuse optical spectroscopy for high-speed monitoring and wide-area mapping of tissue optical properties and hemodynamics. **2021**, 26,	1
413	Why he buys it and she doesn't Exploring self-reported and neural gender differences in the perception of eCommerce websites. **2021**, 121, 106809	7
412	Effect of one-session focused attention meditation on the working memory capacity of meditation novices: A functional near-infrared spectroscopy study. **2021**, 11, e2288	2
411	The effect of robot-assisted gait training on cortical activation in stroke patients: A functional near-infrared spectroscopy study. **2021**, 49, 65-73	2
410	Optical Hemodynamic Imaging of Jugular Venous Dynamics During Altered Central Venous Pressure. **2021**, 68, 2582-2591	2
409	Central command-related increases in blood velocity of anterior cerebral artery and prefrontal oxygenation at the onset of voluntary tapping. **2021**, 321, H518-H531	0
408	Identification of impulsive adolescents with a functional near infrared spectroscopy (fNIRS) based decision support system. **2021**, 18,	1
407	Investigating Language and Domain-General Processing in Neurotypicals and Individuals With Aphasia - A Functional Near-Infrared Spectroscopy Pilot Study. **2021**, 15, 728151	2
406	Prefrontal cortex alterations in major depressive disorder, generalized anxiety disorder and their comorbidity during a verbal fluency task assessed by multi-channel near-infrared spectroscopy. **2021**, 306, 114229	1
405	Fast diffuse correlation spectroscopy with a low-cost, fiber-less embedded diode laser. **2021**, 12, 6686-6700	1
404	Most favorable stimulation duration in the sensorimotor cortex for fNIRS-based BCI. **2021**, 12, 5939-5954	2
403	Wayfinding Information Cognitive Load Classification Based on Functional Near-Infrared Spectroscopy. **2021**, 35, 04021016	1
402	Wearable Near-Infrared Spectroscopy as a Physiological Monitoring Tool for Seals under Anaesthesia. **2021**, 13, 3553	0

401	Is left-behind a real reason for children's social cognition deficit? An fNIRS study on the effect of social interaction on left-behind preschooler's prefrontal activation. **2021**, 16, e0254010	0
400	Time-domain NIRS system based on supercontinuum light source and multi-wavelength detection: validation for tissue oxygenation studies. **2021**, 12, 6629-6650	2
399	Contribution of Somatosensory and Parietal Association Areas in Improving Standing Postural Stability Through Standing Plantar Perception Training in Community-Dwelling Older Adults. **2021**, 29, 761-770	0
398	Photodynamic therapy: light delivery and dosage for second-generation photosensitizers. **1989**, 146, 60-73; discussion 73-7	14
397	Quantification of adult cerebral blood volume using the NIRS tissue oxygenation index. **2006**, 578, 237-43	6
396	Preliminary results of oxygen saturation with a prototype of continuous wave laser oximeter. **2006**, 578, 55-60	2
395	NEAR INFRARED IMAGING AND SPECTROSCOPY FOR BRAIN ACTIVITY MONITORING. **2006**, 341-372	11
394	Optimal data types in optical tomography. **1997**, 71-84	5
393	Changes in the attenuation of near infrared spectra by the healthy adult brain during hypoxaemia cannot be accounted for solely by changes in the concentrations of oxy- and deoxy-haemoglobin. **2008**, 614, 217-25	11
392	Relationship between brain tissue haemodynamics, oxygenation and metabolism in the healthy human adult brain during hyperoxia and hypercapnea. **2009**, 645, 315-20	31
391	Optical Imaging. **2011**, 735-780	3
390	Active muscle oxygenation dynamics measured during high-intensity exercise by using two near-infrared spectroscopy methods. **2010**, 662, 225-30	8
389	A General Framework for Iterative Reconstruction Algorithms in Optical Tomography, Using a Finite Element Method. **1999**, 45-70	5
388	How tissue optics influences reflectance pulse oximetry. **1996**, 388, 117-32	12
387	Cerebral oxygenation changes during motor and somatosensory stimulation in humans, as measured by near-infrared spectroscopy. **1996**, 388, 219-24	31
386	NIRS: Theoretical Background and Practical Aspects. **2012**, 213-235	2
385	The effect of venous and arterial occlusion of the arm on changes in tissue hemodynamics, oxygenation, and ultra-weak photon emission. **2013**, 765, 257-264	3
384	Absolute frequency-domain pulse oximetry of the brain: methodology and measurements. **2003**, 530, 61-73	13

383	Mapping of hemodynamics on the human calf with near infrared spectroscopy and the influence of the adipose tissue thickness. **2003**, 510, 225-30	28
382	An automated system for the measurement of the response of cerebral blood volume and cerebral blood flow to changes in arterial carbon dioxide tension using near infrared spectroscopy. **1994**, 361, 143-55	8
381	Quantitation of absolute concentration change in scattering media by the time-resolved microscopic Beer-Lambert law. **1994**, 345, 861-70	16
380	Non-invasive cerebral oxygen monitoring and intracellular redox state during surfactant administration. **1994**, 345, 603-8	1
379	Resolution of near infrared time-of-flight brain oxygenation imaging. **1994**, 345, 609-17	15
378	Measurement of changes in cerebral haemodynamics during inspiration and expiration using near infrared spectroscopy. **1994**, 345, 619-26	15
377	Light intensity attenuation in the rat brain tissue assessed by television photometry. **1994**, 345, 643-50	1
376	Picosecond time of flight measurement of living tissue: time resolved Beer-Lambert law. **1992**, 316, 131-6	4
375	Experimentally measured optical pathlengths for the adult head, calf and forearm and the head of the newborn infant as a function of inter optode spacing. **1992**, 316, 143-53	312
374	Muscle oxygenation by fast near infrared spectrophotometry (NIRS) in ischemic forearm. **1992**, 316, 163-72	9
373	Quantitation of tissue optical characteristics and hemoglobin desaturation by time- and frequency-resolved multi-wavelength spectrophotometry. **1992**, 317, 297-304	19
372	Laser Reflectance Spectroscopy of Tissue. **1991**, 73-87	2
371	Cortical blood oxygenation changes in the left and right occipital area induced by selective visual stimuli in humans. **1999**, 471, 35-41	6
370	A three wavelength study on arterial occlusion in skin tissue. **1999**, 471, 661-70	2
369	Bold MRI vs. NIR Spectrophotometry. **1998**, 103-113	20
368	Measurement of absolute cerebral haemoglobin concentration in adults and neonates. **1997**, 428, 219-27	20
367	Measurement of cerebral venous saturation in adults using near infrared spectroscopy. **1997**, 411, 453-60	19
366	Length of resting period between stimulation cycles modulates hemodynamic response to a motor stimulus. **1997**, 411, 471-80	20

365	Modelling and Measurements of Light Propagation in Tissue for Diagnostic and Therapeutic Applications. **1991**, 13-27	4
364	Brain oxygenation monitoring during cardiopulmonary bypass by near infrared spectroscopy. **1997**, 413, 97-104	5
363	A role for near infrared spectroscopy in psychiatry?. **1997**, 413, 105-23	10
362	Near-infrared spectroscopy in functional activation studies. Can NIRS demonstrate cortical activation?. **1997**, 413, 113-27	39
361	Towards brain mapping combining near-infrared spectroscopy and high resolution 3D MRI. **1997**, 413, 139-47	15
360	NMR and time-resolved optical studies of brain imaging. **1993**, 333, 1-7	8
359	Wavelength dependence of the differential pathlength factor and the log slope in time-resolved tissue spectroscopy. **1993**, 333, 9-20	55
358	Optical CT imaging of hemoglobin oxygen-saturation using dual-wavelength time gate technique. **1993**, 333, 43-6	10
357	Changes in cerebral blood oxygenation induced by active standing test in children with POTS and NMS. **2014**, 812, 253-261	11
356	Optical Imaging. **2015**, 1033-1079	1
355	Hemodynamic Measurements of the Human Adult Head in Transmittance Mode by Near-Infrared Time-Resolved Spectroscopy. **2016**, 876, 399-406	3
354	Reduced Optical Path Length in the Vastus Lateralis During Ramp Cycling Exercise. **2020**, 1232, 239-244	1
353	Multimodal Analysis Using Neuroimaging and Eye Movements to Assess Cognitive Workload. **2020**, 50-63	4
352	Online Classification of Motor Imagery Using EEG and fNIRS: A Hybrid Approach with Real Time Human-Computer Interaction. **2020**, 231-238	3
351	Hyperspectral Imaging of the Hemodynamic and Metabolic States of the Exposed Cortex: Investigating a Commercial Snapshot Solution. **2018**, 1072, 13-20	2
350	Near-Infrared Spectroscopy for Studying Higher Cognition. **2009**, 83-93	6
349	Improving Depth Resolution of Diffuse Optical Tomography with Intelligent Method. **2008**, 514-520	1
348	Functional Near-Infrared Spectroscopy and Electroencephalography: A Multimodal Imaging Approach. **2009**, 417-426	6

347	Biometric Identification System Performance Enhancement by Improving Registration Progress. **2012**, 288-299	1
346	Near infrared spectroscopy as possible non-invasive monitor of slow vasogenic ICP waves. **2012**, 114, 181-5	31
345	Measurement of adult cerebral haemodynamics using near infrared spectroscopy. **1993**, 59, 74-80	16
344	Early Clinical Results of Time-of-Flight Optical Tomography in a Neonatal Intensive Care Unit. **1996**, 305-324	2
343	Photon migration and imaging of biological tissues. **1996**, 51-61	2
342	Diffusion Tomography in Dense Media. **2002**, 920-936	3
341	Funktionelle Nahinfrarotspektroskopie in der sportpsychologischen Forschung. **2017**, 24, 17-28	3
340	Inter-Method Reliability of Pulse Volume Related Measures Derived Using Finger-Photoplethysmography. **2018**, 32, 182-190	6
339	Influence of Critical Variables on Prefrontal Cortex Activity in Hazard Search. **2020**,	1
338	Enhancing classification accuracy of fNIRS-BCI using features acquired from vector-based phase analysis. **2020**, 17, 056025	17
337	Cerebral oxygenation monitoring by near-infrared spectroscopy is not clinically useful in patients with severe closed-head injury: a comparison with jugular venous bulb oximetry. **1996**, 24, 1334-8	115
336	Redox status of cytochrome a,a3: a noninvasive indicator of dysoxia in regional hypoxic or ischemic hypoxia. **1999**, 27, 576-82	29
335	Transcranial cerebral oximetry, transcranial Doppler sonography, and heart rate variability: useful neuromonitoring tools in anaesthesia and intensive care?. **2002**, 19, 543-549	7
334	Therapy of patients with head injuries: key parameters for management. **1997**, 42, S10-8	30
333	Effect of mannitol and polyethylene glycol on the action of frusemide during renal storage and transplantation. **1996**, 62, 575-82	5
332	Assessing bimanual motor skills with optical neuroimaging.	1
331	Human discrimination and categorization of emotions in voices: a functional Near-Infrared Spectroscopy (fNIRS) study.	1
330	Change of tumor vascular reactivity during tumor growth and postchemotherapy observed by near-infrared spectroscopy. **2017**, 22, 121603	4

329	Partial correlation-based functional connectivity analysis for functional near-infrared spectroscopy signals. **2017**, 22, 1-10	4
328	Miniaturized pulsed laser source for time-domain diffuse optics routes to wearable devices. **2017**, 22, 1-9	22
327	Spatially extended versus frontal cerebral near-infrared spectroscopy during cardiac surgery: a case series identifying potential advantages. **2018**, 23, 1-11	4
326	Test-retest reliability of brain mitochondrial cytochrome-c-oxidase assessed by functional near-infrared spectroscopy. **2018**, 23, 1-9	7
325	Investigating optical path and differential pathlength factor in reflectance photoplethysmography for the assessment of perfusion. **2018**, 23, 1-11	13
324	Early diagnosis of traumatic intracranial hematomas. **2019**, 24, 1-10	15
323	Multi-spectral laser speckle contrast images using a wavelength-swept laser. **2019**, 24, 1-9	2
322	Investigation of the quantification of hemoglobin and cytochrome-c-oxidase in the exposed cortex with near-infrared hyperspectral imaging: a simulation study. **2020**, 25, 1-25	3
321	Characterization of a fiber-less, multichannel optical probe for continuous wave functional near-infrared spectroscopy based on silicon photomultipliers detectors: assessment of primary sensorimotor response. **2017**, 4, 035002	17
320	Evaluation of evoked responses to pulse-matched high frequency and intermittent theta burst transcranial magnetic stimulation using simultaneous functional near-infrared spectroscopy. **2017**, 4, 041405	8
319	Investigation of data-driven optical neuromonitoring approach during general anesthesia with sevoflurane. **2017**, 4, 041408	8
318	Turbo-Satori: a neurofeedback and brain-computer interface toolbox for real-time functional near-infrared spectroscopy. **2017**, 4, 041504	7
317	Are ventrolateral and dorsolateral prefrontal cortices involved in the computerized Corsi block-tapping test execution? An fNIRS study. **2018**, 5, 011019	13
316	Concurrent measurement of cerebral hemodynamics and electroencephalography during transcranial direct current stimulation. **2018**, 5, 015001	12
315	Motion artifact detection and correction in functional near-infrared spectroscopy: a new hybrid method based on spline interpolation method and Savitzky-Golay filtering. **2018**, 5, 015003	59
314	Motion correction for infant functional near-infrared spectroscopy with an application to live interaction data. **2018**, 5, 015004	16
313	Evaluating motion processing algorithms for use with functional near-infrared spectroscopy data from young children. **2018**, 5, 025008	4
312	Adaptive algorithm utilizing acceptance rate for eliminating noisy epochs in block-design functional near-infrared spectroscopy data: application to study in attention deficit/hyperactivity disorder children. **2018**, 5, 045001	2

311	Noninvasive continuous optical monitoring of absolute cerebral blood flow in critically ill adults. **2018**, 5, 045006	32
310	Denoising of neuronal signal from mixed systemic low-frequency oscillation using peripheral measurement as noise regressor in near-infrared imaging. **2019**, 6, 015001	10
309	Functional near-infrared spectroscopy evidence for the development of topological asymmetry between hemispheric brain networks from childhood to adulthood. **2019**, 6, 025005	9
308	Quantification of the severity of hypoxic-ischemic brain injury in a neonatal preclinical model using measurements of cytochrome-c-oxidase from a miniature broadband-near-infrared spectroscopy system. **2019**, 6, 045009	10
307	Exploring attentive task-based connectivity for screening attention deficit/hyperactivity disorder children: a functional near-infrared spectroscopy study. **2019**, 6, 045013	4
306	Functional near-infrared spectroscopy for speech protocols: characterization of motion artifacts and guidelines for improving data analysis. **2020**, 7, 015001	16
305	Longitudinal effect of transcranial direct current stimulation on knee osteoarthritis patients measured by functional infrared spectroscopy: a pilot study. **2020**, 7, 025004	3
304	Functional neuroimaging of sensorimotor cortices in postmenopausal women with type II diabetes. **2020**, 7, 035007	2
303	Towards real-time non contact spatial resolved oxygenation monitoring using a multi spectral filter array camera in various light conditions. **2018**,	2
302	Optode Design Space Exploration for Clinically-robust Non-invasive Fetal Oximetry. **2019**, 18, 1-22	7
301	Determinants of cerebral oxygenation during cardiac surgery. **1995**, 92, II327-33	63
300	Can cerebrovascular reactivity be measured with near-infrared spectroscopy?. **1995**, 26, 2285-92	91
299	Tissue Diagnostics Using Lasers. **2001**, 135-169	5
298	Delayed vasodilation and altered oxygenation after cerebral ischemia in fetal sheep. **1996**, 39, 48-54	58
297	Measurement of cranial optical path length as a function of age using phase resolved near infrared spectroscopy. **1996**, 39, 889-94	309
296	Cerebral oxygenation measured by near infrared spectroscopy during cardiopulmonary bypass and deep hypothermic circulatory arrest in piglets. **1996**, 40, 790-6	32
295	Cold-Induced Contraction of Newborn Lamb Cerebral Arteries: Role of Na+,K+-ATPase and Ca2+-ATPase in the Potentiation by Sodium Orthovanadate 358. **1998**, 43, 63-63	1
294	Near infrared spectroscopy detects cerebral ischemia during hypotension in piglets. **1998**, 44, 591-5	150

293	Looking for the fast signal: Neuronal and hemodynamic evoked responses of the sensory-motor cortex.. **2002**,	1
292	Validation of Optical Measurements of Cerebral Blood Flow and Volume with SPION and ASL fMRI. **2008**,	1
291	How does the differential pathlength factor for steady-state near-infrared spectroscopy of homogeneous medium vary with geometry?. **2015**,	1
290	Is it possible to measure hemodynamic changes in the prefrontal cortex through the frontal sinus using continuous wave DOT systems?. **2019**, 10, 817-837	3
289	Algorithm for detection of tissue type from multiple scattering light phase images. **2019**, 10, 2909-2917	3
288	Approach to optimize 3-dimensional brain functional activation image with high resolution: a study on functional near-infrared spectroscopy. **2019**, 10, 4684-4710	4
287	Prefrontal functional connectivity analysis of cognitive decline for early diagnosis of mild cognitive impairment: a functional near-infrared spectroscopy study. **2020**, 11, 1725-1741	11
286	Remitted photon path lengths in human skin: measurement data. **2020**, 11, 2866-2873	2
285	Diffuse optical tomography to measure functional changes during motor tasks: a motor imagery study. **2020**, 11, 6049-6067	1
284	Single wavelength measurements of absorption coefficients based on iso-pathlength point. **2020**, 11, 5760-5771	4
283	Signal quality index: an algorithm for quantitative assessment of functional near infrared spectroscopy signal quality. **2020**, 11, 6732-6754	5
282	Novel near infrared sensors for hybrid BCI applications. **2015**,	2
281	Dual-slope method for enhanced depth sensitivity in diffuse optical spectroscopy. **2019**, 36, 1743-1761	15
280	Accurate measurement method for refractive index in a high efficiency interaction-free measurement system. **2020**, 28, 21916-21925	1
279	Optical method to extract the reduced scattering coefficient from tissue: theory and experiments. **2018**, 43, 5299-5302	8
278	Nonlinear photoacoustic waves for light guiding to deep tissue sites. **2019**, 44, 3006-3009	4
277	Spontaneous hemodynamic oscillations during human sleep and sleep stage transitions characterized with near-infrared spectroscopy. **2011**, 6, e25415	27
276	Towards a near infrared spectroscopy-based estimation of operator attentional state. **2014**, 9, e92045	30

275	Real-time state estimation in a flight simulator using fNIRS. **2015**, 10, e0121279	102
274	Bundled-Optode Method in Functional Near-Infrared Spectroscopy. **2016**, 11, e0165146	45
273	Roles of the prefrontal cortex in learning to time the onset of pre-existing motor programs. **2020**, 15, e0241562	4
272	Objective measurement of tinnitus using functional near-infrared spectroscopy and machine learning. **2020**, 15, e0241695	8
271	Comparing fNIRS signal qualities between approaches with and without short channels. **2020**, 15, e0244186	12
270	Absorber's effect projected directly above improves spatial resolution in near infrared backscattered imaging. **2004**, 54, 79-86	4
269	Application of Near-Infrared Spectroscopy to Monitoring of Cerebral Oxygenation and Its Limitation. **2005**, 25, 42-50	2
268	Randomised controlled trial of ketamine augmentation of electroconvulsive therapy to improve neuropsychological and clinical outcomes in depression (Ketamine-ECT study). **2017**, 4, 1-112	6
267	Activation of Human Prefrontal Cortex to Pleasant and Aversive Taste Using Functional Near-Infrared Spectroscopy. **2014**, 05, 236-244	4
266	An fNIRS Research on Prefrontal Cortex Activity Response to Pleasant Taste. **2013**, 03, 617-623	2
265	Developmental and Condition-Related Changes in the Prefrontal Cortex Activity during Rest. **2016**, 06, 485-497	7
264	High-speed Sampling Measurements of Tissue Oxygenation by the Portable Near-infrared Monitoring System. **2010**, 80, 189-195	4
263	Joint Analysis of EEG and Other Simultaneously Recorded Brain Functional Neuroimaging Modalities. **2021**, 631-679	
262	Oxygen Saturation Measurement using Hyperspectral Imaging targeting Real-Time Monitoring. **2021**,	0
261	Frequency-Dependent Effects on Coordination and Prefrontal Hemodynamics During Finger Force Production Tasks. **2021**, 15, 721679	
260	Application of time-resolved measurement technique to the detection of near-axis scattered light. **2000**,	
259	Maps of cerebral hemoglobin concentration changes obtained by near-infrared spectroscopy. Characterization of phase shifts among locations. **2000**,	
258	Forward Modelling of Light Propagation in a Brain.. **2002**, 30, 630-635	

257	Correlation between total hemoglobin concentration and blood volume of breast tumors measured by NIR spectroscopy and 19F MRS of PFOB. **2002**,	
256	A Time-Resolved Photon-Counting Imager for Photon Migration Tomography. **2002**,	
255	SUBJECTIVE EXPERIMENTS ON PRODUCTIVITY UNDER MODERATELY HOT ENVIRONMENT. **2003**, 68, 33-39	8
254	The Assessment of Determinants of Cerebral Oxygenation and Microcirculation. **2003**, 149-164	
253	Multi-channel near-infrared spectroscopy on the human forehead during hypo- and hypercapnia. **2004**,	
252	Cerebral Blood Flow in Premature Infants: Regulation, Measurement, and Pathophysiology of Intraventricular Hemorrhage. **2004**, 1745-1756	
251	Improved localization of evoked hemodynamic response in diffuse optical functional imaging using a spatial subspace approach. **2004**,	
250	Cerebral blood flow is reduced by neuronal inhibition induced by transcranial magnetic stimulation □A none-invasive functional optical imaging study on adults. **2004**,	
249	Low Coherence Spectroscopy (LCS) for depth resolved measurements of optical properties in tissue.. **2004**,	
248	??????????????????????????????. **2005**, 26, 222-228	
247	Comparison of Spatially Integral and Time-Resolved Reflectance for the Determination of the Optical Properties on Two Kinds of Optical Phantoms. **2006**,	
246	Principal component analysis and LMS filtering in removing surface effects from near-infrared spectroscopy signals. **2006**,	
245	GENDER DIFFERENCES IN MUSCLE FORCE AND OXYGENATION RECOVERY FROM INTERMITTENT HANDGRIP EXERCISE. **2006**, 55, 433-442	
244	Application of NIRS in mice: a study comparing the oxygenation of cerebral blood and main tissue oxygenation of mice and rat. **2006**, 578, 197-202	1
243	Low-cost four-wavelength continuous-wave near-infrared spectroscopy instrument for noninvasive studies of the human brain. **2006**,	
242	Coherences of Slow Oscillations in Near-Infrared Spectroscopy Signals and Other Cardiovascular Parameters. **2006**,	
241	Specialized Studies in the Neurological Evaluation. **2008**, 154-202	1
240	Measurement of Brain Activity by MEG, Brain Activation by NIRS. **2008**, 111, 904-907	

239 Cortical and Superficial Responses to Motor Activation Retrieved by Time-Domain Optical Brain Imaging. **2010**,

238 References. **2010**, 149-166

237 Quantitative Effects of the Sagittal Sinus Vein on Occipital Cortex Measurements in Diffuse Optical Imaging. **2010**,

236 Measurements of Wavelength Dependent Scattering Coefficients by Low Coherence Spectroscopy. **2010**,

235 Assessment of Tissue Oxygenation. 210-217

234 Cerebral Blood Flow in Premature Infants. **2011**, 1820-1830

233 Feasibility Study on Visualization of Hemoglobin Concentration Using the Near-infrared Spectral Reflectance Motion-Image. **2011**, 31, 57

232 Noncontact Optical Brain Activity Measurement System Using Phosphor Placed on Skin. **2011**, 50, 077001

231 Realistic head model design and 3D brain imaging of NIRS signals using audio stimuli on preterm neonates for intra-ventricular hemorrhage diagnosis. **2012**, 15, 172-9 1

230 Evaluation of Muscle Activities in Human Forearms under Exercises by Diffuse Optical Tomography. **2012**, 132, 374-383 0

229 Normative database of judgment of complexity task with functional near infrared spectroscopy Application for TBI. **2012**,

228 Implications of NIRS Brain Signals. **2013**, 120-128 1

227 Portable Point-of-Care Optical Device to Detect Brain Injury. **2013**, 193-202

226 A NEW AND MODERN DIGNOSTIC TECHNIQUE: SWEPT-SOURCE OPTICAL COHERENCE TOMOGRAPHY (SS-OCT). **2013**, 5, 31-33

225 Near Infrared Spectroscopy. **1991**, 147-160

224 Time Gated near Infrared Tissue Imaging. **1991**, 2, 2-3

223 Monte-Carlo-Simulationen zur Transillumination. **1992**, 355-358 1

222 Analysis of multiple multipole scattering by time-resolved spectroscopy and angular dependent spectrometry. **1992**, 317, 261-6

221	Aspects of Clinical Infra Red Absorption Imaging. **1992**, 411-423	
220	Noninvasive Measurement of Brain Vascular Hemoglobin Saturation. **1993**, 93-102	
219	Near Infrared Spectroscopy: From Clinical Research to Clinical Application. **1995**, 652-660	
218	Near-Infrared Spectroscopy at the Sagittal Sinus Region: Comparison with Jugular Bulb Oxymetry. **1995**, 211-217	
217	Validation of a Noninvasive Measurement of Regional Hemoglobin Oxygen Saturation. **1995**, 193-203	
216	Monitoring of Multiple Pathophysiological Parameters in the Severely Head-Injured Patient. **1997**, 177-208	
215	Spatial resolution enhancement through time gated measurements. **1997**, 413, 75-83	
214	Cerebral oxygenation during cardiac surgery. **1997**, 157-169	
213	Investigation of Cortical Spreading Depression in Rats by Near Infrared Spectroscopy: Scattering and oxygenation changes. **1998**,	
212	Tissue oxygenation-monitoring using Near Infra Red Spectroscopy. **1998**, 25-31	
211	Spectrophotometry in turbid media using small optical fiber probes. **1999**,	
210	Encyclopedia of Applied and Computational Mathematics. **2015**, 1092-1096	
209	Development of Hybrid Small Sensor Module for Measuring Both Electroencephalogram and Cortical Hemoglobin Concentration. **2016**, 136, 515-524	
208	Multichannel Signal Processing Method for Disturbance Cancelation in Brain Function Measurements Using Near-Infrared Spectroscopy. **2016**, 5, 49-55	2
207	Reproducibility of parameters of postocclusive reactive hyperemia measured by diffuse optical tomography. **2016**, 21, 66012	
206	Preparation for mental effort recruits Dorsolateral Prefrontal Cortex: an fNIRS investigation.	
205	Transmission versus reflectance spectroscopy for quantitation. **2018**, 23, 1-8	2
204	In-vivo quantitative measurement of tissue oxygen saturation of human webbing using a transmission type continuous-wave near-infrared spectroscopy. **2018**,	

203	Neurobiological Basis of Brain Blood Oxygenation Responses Correlated with Cognitive Stroop Task Performance Before and After an Acute Bout of Aerobic Exercise.	
202	Design of coded structured light based on square-shaped primitives. **2018**,	
201	Đc cap tđh vˆanh hưởng cua Marshal 200sc lđn hoat tđh cholinesterase vˆsinh trưởng cđ phi (Oreochoromis niloticus). **2019**, 55(Environment), 135	
200	An optical method to detect tissue scattering: theory, experiments and biomedical applications. **2019**,	2
199	Depth dependent coherent hemodynamics during induced blood pressure oscillations. **2019**,	
198	Water and lipid contents measured at various parts of the human body with a six-wavelength time-resolved spectroscopy system. **2019**,	1
197	Tomography-based multi-distance near-infrared spectroscopy for measuring muscle oxygen saturation in real-time. **2019**, 55, 731-733	1
196	Development of a near-infrared spectroscopy interface able to assess oxygen recovery kinetics in the right and left sides of the pelvic floor. **2019**, 24, 1-5	0
195	A near-infrared hyperspectral imaging system for quantitative monitoring of hemodynamics and metabolism on the exposed cortex of mice. **2019**,	
194	Skin-remitted photon path lengths: experimental study. **2020**,	
193	Neural Correlation of Brain Activities and Gaming Using Functional Near-Infrared Spectroscopy and Iowa Gambling Task. **2021**, 16-22	1
192	LIONirs: flexible Matlab toolbox for fNIRS data analysis.	
191	Beer-Lambert law for optical tissue diagnostics: current state of the art and the main limitations. **2021**, 26,	6
190	Assessment of the brain ischemia during orthostatic stress and lower body negative pressure in air force pilots by near-infrared spectroscopy. **2020**, 11, 1043-1060	0
189	Neural Functional Analysis in Virtual Reality Simulation: Example of a Human-Robot Collaboration Tasks. **2020**,	0
188	Diffuse optical tomography in the human brain: A briefly review from the neurophysiology to its applications. **2020**, 6, 289-305	1
187	Secondary rewards acquire enhanced incentive motivation via increasing anticipatory activity of the lateral orbitofrontal cortex.	
186	Attenuation correction technique for fluorescence analysis of biological tissues with significantly different optical properties. **2020**, 13, 360-370	2

185	Non-Invasive Functional Evaluation of the Human Spinal Cord by Assessing the Peri-Spinal Neurovascular Network With Near Infrared Spectroscopy. **2021**, 29, 2312-2321	0
184	hNIR: a hyperspectral imaging system for mapping changes in haemoglobin and cytochrome-c-oxidase on the exposed cerebral cortex of mice. **2021**,	
183	Use of functional near-infrared spectroscopy to evaluate cognitive change when using healthcare simulation tools.. **2020**, 6, 360-364	1
182	Consumers Prefer Abstract Design in Digital Signage: An Application of Fuzzy-Trace Theory in NeuroIS. **2021**, 148-161	
181	Low cost wireless cerebral oximeter using Bluetooth Low Energy technology. **2020**,	
180	Neuroergonomic Applications in Information Visualization. **2020**, 435-449	
179	Exploring Gender Differences on eCommerce Websites: A Behavioral and Neural Approach Utilizing fNIRS. **2020**, 220-232	
178	Why We Love Blue Hues on Websites: A fNIRS Investigation of Color and Its Impact on the Neural Processing of Ecommerce Websites. **2020**, 1-15	2
177	Spectroscopy measurements of opaque material by nanophotonics iterative multi-plane technique. **2020**,	
176	Improved estimation of hemodynamic response in fNIRS using protocol constraint and wavelet transform decomposition based adaptive algorithm.	
175	Near Infrared Spectroscopy for High-Temporal Resolution Cerebral Physiome Characterization in TBI: A Narrative Review of Techniques, Applications, and Future Directions. **2021**, 12, 719501	2
174	Brain activation lateralization in monkeys (Papio Anubis) following asymmetric motor and auditory stimulations through functional Near Infrared Spectroscopy.	
173	Spatial Sensitivity of NIRS Tissue Oxygenation Measurement using a Simplified Instrument. **2008**, 377-380	2
172	Decreased low-frequency brain effective connectivity in seafarers during voyages: a functional near-infrared spectroscopy study. **2020**, 41, 095003	2
171	Exploring the feasibility of wavelength modulated near-infrared spectroscopy. **2020**, 25,	1
170	Changes in Optical Path Length Reveal Significant Potential Errors of Muscle Oxygenation Evaluation during Exercise in Humans. **2021**, 53, 853-859	
169	Near infrared transillumination imaging of breast cancer with vasoactive inhalation contrast. **2010**, 1, 295-309	2
168	Modeling time resolved light propagation inside a realistic human head model. **2014**, 4, 49-60	4

167	The origin of photoplethysmography. **2022**, 17-43	0
166	Machine learning-based feature combination analysis for odor-dependent hemodynamic responses of rat olfactory bulb. **2022**, 197, 113782	1
165	The Effects of Virtual Reality (VR) Treatment on Prefrontal Cortex Activity in Patients with Social Anxiety Disorder: fNIRS measurement for VR-derived video exposure. **2021**,	0
164	Central and Peripheral Oxygen Distribution in Two Different Modes of Interval Training. **2021**, 11,	
163	Investigation of effect of modulation frequency on high-density diffuse optical tomography image quality. **2021**, 8, 045002	1
162	Prefrontal fNIRS-based clinical data analysis of brain functions in individuals abusing different types of drugs. **2021**, 12, 21	1
161	Decreased Right Prefrontal Synchronization Strength and Asymmetry During Joint Attention in the Left-Behind Children: A Functional Near-Infrared Spectroscopy Study. **2021**, 12, 759788	0
160	Depressive and anxiety symptoms are related to decreased lateral prefrontal cortex functioning during cognitive control in older people. **2021**, 166, 108224	0
159	Quantification of cytochrome c oxidase and tissue oxygenation using CW-NIRS in a mouse cerebral cortex.. **2021**, 12, 7632-7656	1
158	What Does Sleeping Brain Tell About Stress? A Pilot Functional Near-Infrared Spectroscopy Study Into Stress-Related Cortical Hemodynamic Features During Sleep. 3,	
157	Functional Monitoring and Imaging in Deep Brain Structures. **2021**, 1-32	
156	Multi-scattering software part II: experimental validation for the light intensity distribution.. **2022**, 30, 1261-1279	1
155	A Study on fNIRS-Based Working Memory Load Assessment and Potential Issues with Extracerebral Artifacts. **2020**,	
154	The Effects of Virtual Reality Treatment on Prefrontal Cortex Activity in Patients With Social Anxiety Disorder: Participatory and Interactive Virtual Reality Treatment Study (Preprint).	
153	An N-of-1 Investigation into Stress-Related Hemodynamics in the Prefrontal Cortex During the First Sleep Cycle*. **2021**,	
152	EEG Electrode Selection for a Two-Class Motor Imagery Task in a BCI Using fNIRS Prior Data. **2021**, 2021, 6627-6630	
151	Feasibility study of immersive virtual prism adaptation therapy with depth-sensing camera using functional near-infrared spectroscopy in healthy adults.. **2022**, 12, 767	1
150	Optical properties of human brain and tumour tissue: An ex vivo study spanning the visible range to beyond the second near-infrared window.. **2022**,	2

149	Reducing false discoveries in resting-state functional connectivity using short channel correction: an fNIRS study.. **2022**, 9, 015001	1
148	Effects of working memory load on frontal connectivity in children with autism spectrum disorder: a fNIRS study.. **2022**, 12, 1522	0
147	Accuracy of retrieving optical properties from liquid tissue phantoms using a single integrating sphere.. **2022**, 61, 375-385	
146	Smart walker's instrumentation and development with compliant optical fiber sensors. **2022**, 245-261	
145	Detecting Fear of Heights Response to a Virtual Reality Environment Using Functional Near-Infrared Spectroscopy. **2022**, 3,	1
144	Categorization and discrimination of human and non-human primate affective vocalizations: investigation of the frontal cortex activity through fNIRS.	
143	Different brain activation patterns in the prefrontal area between self-paced and high-speed driving tasks.. **2022**, e202100295	0
142	A deep convolutional neural network for estimating hemodynamic response function with reduction of motion artifacts in fNIRS.. **2022**,	0
141	LIONirs: flexible Matlab toolbox for fNIRS data analysis.. **2022**, 370, 109487	2
140	Diffuse optical reconstructions of functional near infrared spectroscopy data using maximum entropy on the mean.. **2022**, 12, 2316	0
139	Characteristics of frontal activity relevant to cognitive function in bipolar depression: an fNIRS study.. **2022**, 13, 1551-1563	0
138	Identifying Individuals by fNIRS-Based Brain Functional Network Fingerprints.. **2022**, 16, 813293	0
137	Effects of Acute Exercise on Craving and Cortical Hemodynamics Under Drug-Cue Exposure in MA-Dependent Individuals.	
136	Not Just a Matter of Accuracy: A fNIRS Pilot Study into Discrepancy Between Sleep Data and Subjective Sleep Experience in Quantified-Self Sleep Tracking. **2022**, 74-87	0
135	Reconstruction of optical coefficients in turbid media using time-resolved reflectance and calibration-free instrument response functions.. **2022**, 13, 1595-1608	0
134	Skin chromophore mapping by smartphone RGB camera under spectral band and spectral line illumination.. **2022**, 27,	1
133	Effects of Tongue Pressure on Cerebral Blood Volume Dynamics: A Functional Near-Infrared Spectroscopy Study.. **2022**, 12,	
132	In Vivo Measurement Strategy for Near-Infrared Noninvasive Glucose Detection and Human Body Verification.. **2022**, 37028221092474	0

131	Gaming behavior and brain activation using functional near-infrared spectroscopy, Iowa gambling task, and machine learning techniques.. **2022**, e2536	0
130	LASSO Homotopy-Based Sparse Representation Classification for fNIRS-BCI.. **2022**, 22,	2
129	Greater prefrontal activation during sitting toe tapping predicts severer freezing of gait in Parkinson's disease: an fNIRS study.. **2022**,	0
128	A dilated causal convolutional model for surgical skill assessment using optical neuroimaging. **2022**,	
127	Involvement of the Rostromedial Prefrontal Cortex in Human-Robot Interaction: fNIRS Evidence From a Robot-Assisted Motor Task.. **2022**, 16, 795079	0
126	Thermometric lateral flow immunoassay with colored latex beads as reporters for COVID-19 testing.. **2022**, 12, 3905	4
125	Analyzing Classification Performance of fNIRS-BCI for Gait Rehabilitation Using Deep Neural Networks.. **2022**, 22,	2
124	Frequency-domain analysis of fNIRS fluctuations induced by rhythmic mental arithmetic.. **2022**, e14063	0
123	Increased Prefrontal Activation During Verbal Fluency Task After Repetitive Transcranial Magnetic Stimulation Treatment in Depression: A Functional Near-Infrared Spectroscopy Study.. **2022**, 13, 876136	0
122	Monte Carlo simulation of photon transport in a scattering-dominated medium with refractive index gradient for acoustic light-guiding.	
121	Negative affective processing is associated with cognitive control in early childhood: An fNIRS study. **2021**, 2021, 3423-3426	
120	The Effect of Socioeconomic Disparities on Prefrontal Activation in Initiating Joint Attention: A Functional Near-Infrared Spectroscopy Evidence From Two Socioeconomic Status Groups.. **2021**, 15, 741872	1
119	Assessment of fNIRS Signal Processing Pipelines: Towards Clinical Applications. **2022**, 12, 316	3
118	Quantitative Changes in Muscular and Capillary Oxygen Desaturation Measured by Optical Sensors during Continuous Positive Airway Pressure Titration for Obstructive Sleep Apnea.. **2021**, 12,	0
117	Speech token detection and discrimination in individual infants using functional near-infrared spectroscopy.. **2021**, 11, 24006	0
116	Evaluation of fNIRS signal components elicited by cognitive and hypercapnic stimuli. **2021**, 11, 23457	2
115	Data_Sheet_1.docx. **2019**,	
114	Data_Sheet_1.pdf. **2018**,	

113	Table_1.xlsx. **2019**,	
112	Table_2.DOCX. **2019**,	
111	Table_3.XLSX. **2019**,	
110	Table_4.DOCX. **2019**,	
109	Data_Sheet_1.pdf. **2019**,	
108	Table_1.XLSX. **2020**,	
107	DataSheet1.doc. **2018**,	
106	Table_1.DOCX. **2020**,	
105	Image_1.JPEG. **2018**,	
104	Image_2.JPEG. **2018**,	
103	Video_1.MP4. **2018**,	
102	Video_2.MP4. **2018**,	
101	Video_3.MP4. **2018**,	
100	Image_1.PDF. **2020**,	
99	Image_2.PDF. **2020**,	
98	Table_1.DOCX. **2020**,	
97	Effects of degraded speech processing and binaural unmasking investigated using functional near-infrared spectroscopy (fNIRS).. **2022**, 17, e0267588	0
96	Widespread nociceptive maps in the human neonatal somatosensory cortex.. **2022**, 11,	1

95	Machine Learning Approach for Classifying College Scholastic Ability Test Levels with Unsupervised Features from Prefrontal Functional Near-Infrared Spectroscopy Signals. **2022**, 1-1	
94	Cerebral activity in monkeys Papio anubis during the perception of conspecific and heterospecific agonistic vocalizations: A functional Near Infrared Spectroscopy study.	
93	Non-Invasive and Minimally-Invasive Cerebral Autoregulation Assessment: A Narrative Review of Techniques and Implications for Clinical Research.. **2022**, 13, 872731	0
92	Reduced temporal activation during a verbal fluency test in clinical high risk of psychosis: a functional near-infrared spectroscopy-based study.. **2022**, 35, e100702	0
91	Structured sparse multiset canonical correlation analysis of simultaneous fNIRS and EEG provides new insights into the human action-observation network.. **2022**, 12, 6878	0
90	Brain Melody Interaction: Understanding Effects of Music on Cerebral Hemodynamic Responses. **2022**, 6, 35	
89	Effects of acute exercise on craving and cortical hemodynamics under drug-cue exposure in MA-dependent individuals.. **2022**, 781, 136672	0
88	Prefrontal Activation During Effortful Processing Differentiates Memory Abilities in Adults with Memory Complaints. **2022**, 1-10	
87	Ultra-compact snapshot spectral light-field imaging.. **2022**, 13, 2732	5
86	Machine Learning Approach in Brain Imaging. **2022**, 203-230	
85	Effects of neural monitoring and control of visceral signals on heart rate, respiration rate, and frontal hemodynamics.	1
84	Processing third-party social interactions in the human infant brain. **2022**, 68, 101727	0
83	Quantifying tissue optical properties of human heads in vivo using continuous-wave near-infrared spectroscopy and subject-specific three-dimensional Monte Carlo models. **2022**, 27,	0
82	The Effects of Silicone Enclosure Colour on the Function of Optical Sensors. **2022**, 11, 932	0
81	Differences in Brain Activity and Body Movements between Virtual Reality and Offline Exercise: A Randomized Crossover Trial (Preprint).	
80	A General and Scalable Vision Framework for Functional Near-Infrared Spectroscopy Classification. **2022**, 1-1	0
79	Skin-Interfaced Deep-Tissue Sensing Patch via Microneedle Waveguides. 2200468	1
78	Shedding Light on the Effects of Orienteering Exercise on Spatial Memory Performance in College Students of Different Genders: An fNIRS Study. **2022**, 12, 852	0

77	Development and validation of quantitative optical index of skin blood content. **2022**, 27,	
76	The Role of Neuroglobin in Retinal Hemodynamics and Metabolism: A Real-Time Study. **2022**, 11, 2	0
75	A Prototype NIRS Device to Increase Safety of Diving. **2023**, 43-54	
74	Four-Class Classification of Neuropsychiatric Disorders by Use of Functional Near-Infrared Spectroscopy Derived Biomarkers. **2022**, 22, 5407	0
73	Influence of the Somatic Rubber Hand Illusion on Maximum Grip Aperture. 1-19	
72	NIRS: Past, Present, and Future in Functional Urology.	1
71	Intraoperative Cerebral Hemodynamic Monitoring during Carotid Endarterectomy via Diffuse Correlation Spectroscopy and Near-Infrared Spectroscopy. **2022**, 12, 1025	
70	Global Network Analysis of Alzheimer Disease with Minimum Spanning Trees. **2022**, 1-11	0
69	fNIRS-based brain state transition features to signify functional degeneration after Parkinson disease. **2022**, 19, 046038	1
68	fNIRS: Non-stationary preprocessing methods. **2023**, 79, 104110	0
67	Optical bone densitometry insensitive to skin thickness. **2022**,	0
66	Neural and Kinematic Metrics of Handwriting in Neurotypical Adults. **2022**, 12, 433-454	0
65	Investigating effortful speech perception using fNIRS and pupillometry measures. **2022**, 3, 100052	0
64	Monitoring stimulus-evoked hemodynamic response during deep brain stimulation with single fiber spectroscopy.	0
63	Development and validation of immersive hand rehabilitation system using a VR rhythm game with vibrotactile feedback: an fNIRS pilot study.	0
62	Multispectral near-infrared imaging for wetness estimation. **2022**, 39, 1958	0
61	Nonlinearity parameter in the pathlength dimension to improve the scattering in the transmission spectra. **2022**, 93, 104101	0
60	Analysis on mechanisms of idea generation: evidences from fNIRS hyperscanning. **2022**,	0

59	Differences in Brain Activity and Body Movements between Virtual Reality and Offline Exercise: A Randomized Crossover Trial (Preprint).	0
58	Rehabilitation exercise based on brain-machine interaction with wearable robot. **2022**,	0
57	Portable neuroimaging differentiates novices from those with experience for the Fundamentals of Laparoscopic Surgery (FLS) suturing with intracorporeal knot tying task.	0
56	Detectability of low-oxygenated regions in human muscle tissue using near-infrared spectroscopy and phantom models. **2022**, 13, 6182	0
55	Real time detection of cognitive load using fNIRS: A deep learning approach. **2023**, 80, 104227	1
54	How distraction affects pedestrian response: Evidence from behavior patterns and cortex oxyhemoglobin changes. **2022**, 91, 414-430	0
53	Increased Inertia Triggers Linear Responses in Motor Cortices during Large-Extent Movements: A fNIRS Study. **2022**, 12, 1539	0
52	Demographic Reporting and Phenotypic Exclusion in fNIRS.	0
51	Resting-state functional connectivity for determining outcomes in upper extremity function after stroke: A functional near-infrared spectroscopy study. 13,	0
50	Hemodynamic response to intestinal pH stimulation measured with spectroscopic video imaging.	0
49	Resting-State fNIRS Classification Using Connectivity and Convolutional Neural Networks. **2022**,	0
48	Effect of Single Session of Anodal M1 Transcranial Direct Current Stimulation (tDCS) on Cortical Hemodynamic Activity: A Pilot Study in Fibromyalgia. **2022**, 12, 1569	1
47	Recent Advances and Design Strategies Towards Wearable Near-infrared Spectroscopy. **2022**, 1-27	0
46	Are advanced methods necessary to improve infant fNIRS data analysis? An assessment of baseline-corrected averaging, general linear model (GLM) and multivariate pattern analysis (MVPA) based approaches. **2023**, 265, 119756	0
45	Cortical Activation in Response to Speech Differs between Prelingually Deafened Cochlear Implant Users with Good or Poor Speech-in-Noise Understanding: An fNIRS Study. **2022**, 12, 12063	0
44	Screening for Alzheimer's disease using prefrontal resting-state functional near-infrared spectroscopy. 16,	0
43	Confounding effects of heart rate, breathing rate, and frontal fNIRS on interoception. **2022**, 12,	1
42	Modulation of cerebral cortex activity by acupuncture in patients with prolonged disorder of consciousness: An fNIRS study. 16,	0

41	Neural mechanisms underlying rule selection based on response evaluation: a near-infrared spectroscopy study. **2022**, 12,	0
40	Serum vascular endothelial growth factor independently affects tissue fluid accumulation and is related to deteriorating tissue perfusion and oxygenation in severe sepsis: a prospective observational study.	0
39	Cerebral Activity in Female Baboons (Papio anubis) During the Perception of Conspecific and Heterospecific Agonistic Vocalizations: a Functional Near Infrared Spectroscopy Study. **2022**, 3, 783-791	0
38	Whole-Head Functional Near-Infrared Spectroscopy as an Ecological Monitoring Tool for Assessing Cortical Activity in Parkinson's Disease Patients at Different Stages. **2022**, 23, 14897	0
37	Estimation of Respiratory Rate from Functional Near-Infrared Spectroscopy (fNIRS): A New Perspective on Respiratory Interference. **2022**, 12, 1170	1
36	Dose-response relationship between iTBS and prefrontal activation during executive functioning: A fNIRS study. 13,	0
35	The identification of interacting brain networks during robot-assisted training with multimodal stimulation.	1
34	Low-dissipation optimization of the prefrontal cortex in the 12° head-down tilt position: A functional near-infrared spectroscopy study. 13,	0
33	Insomniacs show greater prefrontal activation during verbal fluency task compared to non-insomniacs: A functional near-infrared spectroscopy investigation of depression in patients.	0
32	Fetal Brain Oxygenation during Labor studied by Frequency Domain Spectroscopy. **2006**,	0
31	Assessing Functional Brain Network Dynamics in Dyslexia From fNIRS Data.	0
30	Estimation of the Differential Pathlength Factor for Human Skin Using Monte Carlo Simulations. **2023**, 13, 309	0
29	Prediction of Time-Series Brain Activity Changes Before and After Near-Miss Events in Snow Traffic Conditions. **2022**,	0
28	Functional Monitoring and Imaging in Deep Brain Structures. **2023**, 3055-3086	0
27	An fNIRS-Based Dynamic Functional Connectivity Analysis Method to Signify Functional Neurodegeneration of Parkinson's Disease. **2023**, 31, 1199-1207	0
26	Time Resolved Photon Migration Tomography with a Novel Remote Ultra Low Light Imager (RULLI). **1999**,	0
25	Distinct inter-brain synchronization patterns underlying group decision-making under uncertainty with partners in different interpersonal relationships. **2023**, 272, 120043	0
24	Inefficient frontal and parietal brain activation during dual-task walking in a virtual environment in older adults. **2023**, 273, 120070	0

23	Trigeminal stimulation is required for neural representations of bimodal odor localization: A time-resolved multivariate EEG and fNIRS study. **2023**, 269, 119903	0
22	Connections between spatially distant primary language regions strengthen with age during infancy, as revealed by resting-state fNIRS. **2023**, 20, 016053	0
21	Transcranial direct current stimulation over the right dorsolateral prefrontal cortex increases oxyhemoglobin concentration and cognitive performance dependent on cognitive load. **2023**, 443, 114343	0
20	Reconstructing absorber images in a three-dimensional scattering medium by using photon-path data. **1996**,	0
19	Locating Objects with Diffuse Light. **2022**,	0
18	Photon Migration in Biological Tissue. **1992**,	0
17	Near-Infrared Spectroscopy for the In Vivo Monitoring of Biodegradable Implants in Rats. **2023**, 23, 2297	1
16	Derivation of chromophore concentrations in turbid media using the rate of change of optical attenuation with respect to wavelength. **2023**, 2, 616	0
15	Increased Right Dorsolateral Prefrontal Cortex Connectivity During Emotion Recognition Task in Adolescents With Self-Injurious Behavior: A Functional Near-Infrared Spectroscopy Study. **2023**, 20, 137-143	0
14	Methodological issues of the central mechanism of two classic acupuncture manipulations based on fNIRS: suggestions for a pilot study. 16,	0
13	Benchmarking framework for machine learning classification from fNIRS data. 4,	0
12	Using functional near-infrared spectroscopy to measure prefrontal cortex activity during dual-task walking and navigated walking: A feasibility study. **2023**, 13,	0
11	A novel model extended from the Bouguer-Lambert-Beer law can describe the non-linear absorbance of potassium dichromate solutions and microalgae suspensions. 11,	0
10	Near Infrared Spectroscopy. **2013**, 327-335.e3	0
9	Intelligent Systems for Muscle Tracking: A Review on Sensor-Algorithm Synergy. 2200351	0
8	Neural Processing of Sexist Comments: Associations between Perceptions of Sexism and Prefrontal Activity. **2023**, 13, 529	0
7	Insomniacs show greater prefrontal activation during verbal fluency task compared to non-insomniacs: a functional near-infrared spectroscopy investigation of depression in patients. **2023**, 23,	0
6	Estimation of Respiratory Rate during Biking with a Single Sensor Functional Near-Infrared Spectroscopy (fNIRS) System. **2023**, 23, 3632	0

5	Robust, motion-free optical characterization of samples using actively-tunable Twyman Green interferometry. **2023**, 13,	0
4	The Influence of Extracerebral Tissue on Continuous Wave Near-Infrared Spectroscopy in Adults: A Systematic Review of In Vivo Studies. **2023**, 12, 2776	0
3	Watching the human retina breath in real time and the slowing of mitochondrial respiration with age. **2023**, 13,	0
2	Serum vascular endothelial growth factor affects tissue fluid accumulation and is associated with deteriorating tissue perfusion and oxygenation in severe sepsis: a prospective observational study. **2023**, 28,	0
1	Deep neural network to differentiate internet gaming disorder from healthy controls during stop-signal task: a multichannel near-infrared spectroscopy study. **2023**,	0