Martin Maiwald

List of Publications by Year
in descending order

42 papers	546 citations	567281 15 h-index	677142 22 g-index
42 all docs	42 docs citations	42 times ranked	228 citing authors

#	Article	IF	Citations
1	Detection of calcium phosphate species in soil by confocal Î¼â€Raman spectroscopy[#]. Journal of Plant Nutrition and Soil Science, 2022, 185, 221-231.	1.9	5
2	Determination of Soil Constituents Using Shifted Excitation Raman Difference Spectroscopy. Applied Spectroscopy, 2022, , 000370282110649.	2.2	11
3	Electrically wavelength adjustable DBR laser for background-free Raman spectroscopy at 785 nm. , 2022, , .		2
4	On-site shifted excitation Raman difference spectroscopy for soil investigations. , 2022, , .		0
5	Diode laser based light sources for shifted excitation resonance Raman difference spectroscopy in the spectral range between 450 nm and 532 nm. , 2022, , .		1
6	Comparison of individual and common wavelength-operation for 785â€‰â€‰nm Y-branch DBR ridge waveguide diode lasers with adjustable spectral distance. Applied Optics, 2022, 61, 5419.	1.8	1
7	Portable shifted excitation Raman difference spectroscopy for onâ€site soil analysis. Journal of Raman Spectroscopy, 2022, 53, 1560-1570.	2.5	11
8	Shifted excitation Raman difference spectroscopy: A promising tool for the investigation of soil. European Journal of Soil Science, 2021, 72, 120-124.	3.9	19
9	Accurate <i>in vivo</i> tumor detection using plasmonic-enhanced shifted-excitation Raman difference spectroscopy (SERDS). Theranostics, 2021, 11, 4090-4102.	10.0	20
10	Shifted excitation Raman difference spectroscopy as enabling technique for the analysis of animal feedstuff. Journal of Raman Spectroscopy, 2021, 52, 1418-1427.	2.5	7
11	783 nm wavelength stabilized DBR tapered diode lasers with a 7 W output power. Applied Optics, 2021, 60, 5418.	1.8	8
12	Wide Field Spectral Imaging with Shifted Excitation Raman Difference Spectroscopy Using the Nod and Shuffle Technique. Sensors, 2020, 20, 6723.	3.8	8
13	Direct SERDS sensing of molecular biomarkers in plants under field conditions. Analytical and Bioanalytical Chemistry, 2020, 412, 3457-3466.	3.7	6
14	Portable Shifted Excitation Raman Difference Spectroscopy - From Laboratory Investigations to in-situ Agri-Photonics. , 2020, , .		0
15	Narrow-band multiple-wavelengths DBR-ridge waveguide diode lasers customized for sensor applications. , 2020, , .		0
16	Compact Diode Laser-Based Dual-Wavelength Master Oscillator Power Amplifier at 785 nm. IEEE Photonics Technology Letters, 2019, 31, 1120-1123.	2.5	5
17	Shifted Excitation Raman Difference Spectroscopy with Charge-Shifting Charge-Coupled Device (CCD) Lock-In Detection. Applied Spectroscopy, 2019, 73, 000370281985935.	2.2	8
18	Tunable Y-branch dual-wavelength diode lasers in the VIS and NIR range for sensor applications. , 2019, , .		1

#	Article	IF	Citations
19	Tailored diode lasers: enabling Raman spectroscopy in the presence of disturbing fluorescence and background light. , 2019, , .		2
20	Shiftedâ€excitation Raman difference spectroscopy for the detection of SERSâ€encoded gold nanostar probes. Journal of Raman Spectroscopy, 2018, 49, 1961-1967.	2.5	8
21	Shifted excitation resonance Raman difference spectroscopy system suitable for the quantitative <i>in vivo</i> detection of carotenoids in human skin. Laser Physics Letters, 2018, 15, 115601.	1.4	9
22	Rapid and adjustable shifted excitation Raman difference spectroscopy using a dualâ€wavelength diode laser at 785Ânm. Journal of Raman Spectroscopy, 2018, 49, 1765-1775.	2.5	19
23	Shifted excitation Raman difference spectroscopy: from diode lasers to in situ applications. , 2018, , .		0
24	Design and Realization of a Miniaturized DFB Diode Laser-Based SHG Light Source With a 2-nm Tunable Emission at 488 nm. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2017, 7, 720-725.	2.5	9
25	A portable shifted excitation Raman difference spectroscopy system: device and field demonstration. Journal of Raman Spectroscopy, 2016, 47, 1180-1184.	2.5	25
26	Dual-wavelength diode laser with electrically adjustable wavelength distance at 785â€‰â€‰nm. Optics Letters, 2016, 41, 3694.	3.3	28
27	5,000 h reliable operation of 785nm dual-wavelength DBR-RW diode lasers suitable for Raman spectroscopy and SERDS. Proceedings of SPIE, 2016, , .	0.8	1
28	Compact Handheld Probe for Shifted Excitation Raman Difference Spectroscopy with Implemented Dual-Wavelength Diode Laser at 785 Nanometers. Applied Spectroscopy, 2015, 69, 1144-1151.	2.2	12
29	Comparison of two concepts for dual-wavelength DBR ridge waveguide diode lasers at 785Ânm suitable for shifted excitation Raman difference spectroscopy. Applied Physics B: Lasers and Optics, 2015, 120, 261-269.	2.2	42
30	785-nm dual wavelength DBR diode lasers and MOPA systems with output powers up to 750 mW. Proceedings of SPIE, 2015, , .	0.8	0
31	Capability of shifted excitation Raman difference spectroscopy under ambient daylight. Applied Optics, 2015, 54, 5520.	2.1	22
32	Dual-Wavelength Master Oscillator Power Amplifier Diode-Laser System at 785 nm. IEEE Photonics Technology Letters, 2014, 26, 1120-1123.	2.5	6
33	Wavelength stabilized 785 nm DBR-ridge waveguide lasers with an output power of up to 215 mW. Semiconductor Science and Technology, 2014, 29, 045025.	2.0	18
34	Dual-Wavelength Y-Branch Distributed Bragg Reflector Diode Laser at 785 Nanometers for Shifted Excitation Raman Difference Spectroscopy. Applied Spectroscopy, 2014, 68, 838-843.	2.2	36
35	Dual-wavelength monolithic Y-branch distributed Bragg reflection diode laser at 671 nm suitable for shifted excitation Raman difference spectroscopy. Laser and Photonics Reviews, 2013, 7, L30-L33.	8.7	22
36	Miniaturized diode laser-based light sources forin-situshifted excitation Raman difference spectroscopy. , 2013, , .		6

#	Article	IF	Citations
37	Second-harmonic-generation microsystem light source at 488 nm for Raman spectroscopy. Optics Letters, 2009, 34, 217.	3.3	28
38	Microsystem 671 nm light source for shifted excitation Raman difference spectroscopy. Applied Optics, 2009, 48, 2789.	2.1	32
39	Microsystem Light Source at 488 nm for Shifted Excitation Resonance Raman Difference Spectroscopy. Applied Spectroscopy, 2009, 63, 1283-1287.	2.2	27
40	Wavelength-Stabilized Compact Diode Laser System on a Microoptical Bench With 1.5-W Optical Output Power at 671 nm. IEEE Photonics Technology Letters, 2008, 20, 1627-1629.	2.5	17
41	5.6-W Broad-Area Lasers With a Vertical Far-Field Angle of 31^{circ} Emitting at 670 nm. IEEE Photonics Technology Letters, 2008, 20, 575-577.	2.5	16
42	600 mW optical output power at 488 nm by use of a high-power hybrid laser diode system and a periodically poled MgO:LiNbO3 bulk crystal. Optics Letters, 2006, 31, 802.	3.3	48