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	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
2	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
3	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
4	Microsystem 671 nm light source for shifted excitation Raman difference spectroscopy. Applied Optics, 2009, 48, 2789.	2.1	32
5	Second-harmonic-generation microsystem light source at 488 nm for Raman spectroscopy. Optics Letters, 2009, 34, 217.	3.3	28
6	Dual-wavelength diode laser with electrically adjustable wavelength distance at 785â€‰â€‰nm. Optics Letters, 2016, 41, 3694.	3.3	28
7	Microsystem Light Source at 488 nm for Shifted Excitation Resonance Raman Difference Spectroscopy. Applied Spectroscopy, 2009, 63, 1283-1287.	2.2	27
8	A portable shifted excitation Raman difference spectroscopy system: device and field demonstration. Journal of Raman Spectroscopy, 2016, 47, 1180-1184.	2.5	25
9	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
10	Capability of shifted excitation Raman difference spectroscopy under ambient daylight. Applied Optics, 2015, 54, 5520.	2.1	22
11	Accurate <i>in vivo</i> tumor detection using plasmonic-enhanced shifted-excitation Raman difference spectroscopy (SERDS). Theranostics, 2021, 11, 4090-4102.	10.0	20
12	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
13	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
14	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
15	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
16	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
17	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
18	Determination of Soil Constituents Using Shifted Excitation Raman Difference Spectroscopy. Applied Spectroscopy, 2022, , 000370282110649.	2.2	11

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19	Portable shifted excitation Raman difference spectroscopy for onâ€site soil analysis. Journal of Raman Spectroscopy, 2022, 53, 1560-1570.	2.5	11
20	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
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	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
23	Shifted Excitation Raman Difference Spectroscopy with Charge-Shifting Charge-Coupled Device (CCD) Lock-In Detection. Applied Spectroscopy, 2019, 73, 000370281985935.	2.2	8
24	Wide Field Spectral Imaging with Shifted Excitation Raman Difference Spectroscopy Using the Nod and Shuffle Technique. Sensors, 2020, 20, 6723.	3.8	8
25	783 nm wavelength stabilized DBR tapered diode lasers with a 7 W output power. Applied Optics, 2021, 60, 5418.	1.8	8
26	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
27	Miniaturized diode laser-based light sources forin-situshifted excitation Raman difference spectroscopy. , 2013, , .		6
28	Dual-Wavelength Master Oscillator Power Amplifier Diode-Laser System at 785 nm. IEEE Photonics Technology Letters, 2014, 26, 1120-1123.	2.5	6
29	Direct SERDS sensing of molecular biomarkers in plants under field conditions. Analytical and Bioanalytical Chemistry, 2020, 412, 3457-3466.	3.7	6
30	Compact Diode Laser-Based Dual-Wavelength Master Oscillator Power Amplifier at 785 nm. IEEE Photonics Technology Letters, 2019, 31, 1120-1123.	2.5	5
31	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
32	Tailored diode lasers: enabling Raman spectroscopy in the presence of disturbing fluorescence and background light. , 2019, , .		2
33	Electrically wavelength adjustable DBR laser for background-free Raman spectroscopy at 785 nm. , 2022, , .		2
34	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
35	Tunable Y-branch dual-wavelength diode lasers in the VIS and NIR range for sensor applications. , 2019, , .		1
36	Diode laser based light sources for shifted excitation resonance Raman difference spectroscopy in the spectral range between 450 nm and 532 nm. , 2022, , .		1

#	Article	IF	Citations
37	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
38	785-nm dual wavelength DBR diode lasers and MOPA systems with output powers up to 750 mW. Proceedings of SPIE, 2015, , .	0.8	0
39	Shifted excitation Raman difference spectroscopy: from diode lasers to in situ applications. , 2018, , .		0
40	Portable Shifted Excitation Raman Difference Spectroscopy - From Laboratory Investigations to in-situ Agri-Photonics. , 2020, , .		0
41	Narrow-band multiple-wavelengths DBR-ridge waveguide diode lasers customized for sensor applications. , 2020, , .		0
42	On-site shifted excitation Raman difference spectroscopy for soil investigations. , 2022, , .		0