All Databases

<< Back to results list | Record 11 of 16 | Record from Web of Science®

Coupling characteristics of two uniform microfibers

Author(s): Zulkifli, AZ (Zulkifli, A. Z.)[1] ; Jasim, AA (Jasim, A. A.)[1] ; Harun, SW (Harun, S. W.)[1,2] ; Arof, H (Arof, H.)[1] ; Dimyati, K (Dimyati, K.)[3] ; Ahmad, H (Ahmad, H.)[2]

Source: OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS **Volume:** 7 **Issue:** 3-4 **Pages:** 244-247 **Published:** MAR-APR 2013

Times Cited: 0 (from Web of Science)

Cited References: 9 [view related records] Citation Map

Abstract: The coupling characteristics of two uniform microfibers are experimentally demonstrated. The uniform microfiber is fabricated from a silica-based single mode fiber (SMF) using an oxy-butane flame-brushing method. With the reduction of the overlapping length, the optical power oscillation is more obvious due to the improvement in the coupling coefficient. The output spectrum is also shifted to a shorter wavelength as the overlapping length is reduced. It is observed that the average wavelength shift of 0.88 nm is obtained for every reduction of overlapping length in the order of 0.02 mm. These characteristics are useful for designing micro-scale photonic filters.

Accession Number: WOS:000319787800016

Document Type: Article

Language: English

Author Keywords: Tapered fiber; Coupler; Flame brushing technique

KeyWords Plus: TAPERED FIBER; RESONATOR; FABRICATION; SENSOR

Reprint Address: Harun, SW (reprint author)
Univ Malaya, Dept Elect Engn, Kuala Lumpur 50603, Malaysia.

Addresses:
[1] Univ Malaya, Dept Elect Engn, Kuala Lumpur 50603, Malaysia
[2] Univ Malaya, Photon Res Ctr, Kuala Lumpur 50603, Malaysia
[3] Natl Def Univ Malaysia, Fac Engn, Dept Elect & Elect Engn, Kuala Lumpur 57000, Malaysia

E-mail Addresses: swharun@gmail.com

Author Identifiers:

Author	ResearcherID Number [?]	ORCID Number [?]
Ahmad, Harith	A-3387-2009 [View profile at ResearcherID.com]	

Funding:

Funding Agency	Grant Number
University of Malaya PPP grant	PV030/2012A

[Show funding text]

Publisher: NATL INST OPTOELECTRONICS, 1 ATOMISTILOR ST, PO BOX MG-5, BUCHAREST-MAGURELE 76900, ROMANIA

Web of Science Categories: Materials Science, Multidisciplinary; Optics

Research Areas: Materials Science; Optics

IDS Number: 155YX

ISSN: 1842-6573

<< Back to results list | Record 11 of 16 | Record from Web of Science®